UNIVERSITY OF TORONTO

3 1761 01421221 1

**FOR USE IN
LIBRARY
ONLY**

Digitized by the Internet Archive
in 2008 with funding from
Microsoft Corporation

12

State of Connecticut
PUBLIC DOCUMENT No. 47

State Geological and Natural
History Survey

COMMISSIONERS

FRANK BENTLEY WEEKS, Governor of Connecticut (*Chairman*)
ARTHUR TWINING HADLEY, President of Yale University
WILLIAM ARNOLD SHANKLIN, President of Wesleyan University
FLAVEL SWEETEN LUTHER, President of Trinity College (*Secretary*)
CHARLES LEWIS BEACH, President of Connecticut Agricultural College

SUPERINTENDENT

WILLIAM NORTH RICE

BULLETIN No. 14

HARTFORD

Printed for the State Geological and Natural History Survey

1910

Press of The Case, Lockwood & Brainard Company, Hartford, Conn.

~~Bot~~
~~G~~

CATALOGUE

of the
FLOWERING PLANTS AND FERNS
of
Connecticut

Growing without Cultivation

By

CHARLES BURR GRAVES, A.B., M.D.

EDWIN HUBERT EAMES, M.D.

CHARLES HUMPHREY BISSELL

LUMAN ANDREWS

EDGAR BURTON HARGER, Ph.B., and

CHARLES ALFRED WEATHERBY, A.M.

Committee of the

CONNECTICUT BOTANICAL SOCIETY

366926
19. 5. 39.

HARTFORD

Printed for the State Geological and Natural History Survey

1910

QK
151
C3

Preface

The project of an accurate and authoritative catalogue of all the plants known to grow without cultivation in Connecticut originated among several enthusiastic botanists who understood the value of records founded upon careful study of the flora in the field as well as in the herbarium. To arouse the widest possible interest in the undertaking the Connecticut Botanical Society was organized in January, 1903, for the chief purpose of accumulating and recording this knowledge, and committees were appointed to gather and collate all available data bearing upon this particular line of research.

The labor of this never-ending investigation had barely begun when the State Geological and Natural History Survey was authorized. Upon the organization of this Survey its superintendent, Prof. William North Rice, sought the coöperation of this Society to report upon the flora. It was realized then as now that the very nature of the subject would require many years of careful study to arrive at an approximately exact knowledge of the distribution of our plants, since parts of the state were little known botanically, while even those areas most carefully worked over furnished frequent surprises.

That the present work is incomplete goes without saying. A work of this character must always be incomplete if for no other reasons than the advent or naturalization, from time to time, of unexpected species, or the hybridization or artificial segregation of some already known. But the opportunity to disseminate existing information is very acceptable at this time, inasmuch as the many evident deficiencies may thus be made apparent to those who can add to our knowledge.

The present volume, treating of the ferns, fern-allies and flowering plants, is intended to include only such species, varieties and named forms as have been critically examined by at least one of the compilers, and which are represented by authentic

specimens in some herbarium. Great effort has been made to insure accuracy in the determination of all doubtful specimens. Some localities, however, rest upon the authority of collectors alone, when the species is once definitely admitted and there is no reason to doubt identity. It has been necessary to exclude a number of species found in previous lists, because of the absence of any authentic specimens. Errors of determination and changes in classification account for a large proportion of such excluded names, while there remain a few that probably really belong to our flora but are waiting to be rediscovered. A list of such excluded plants will be found at the end of the work. There also will be found other data bearing upon the flora as a whole.

In the present unsettled and perplexing state of nomenclature, it is believed that necessity exists for strict adherence to a single standard to avoid still greater confusion. In Gray's Manual, 7th edition, will be found a discriminating application of the rules and usage adopted by the International Botanical Congress, at Vienna, in 1905. This usage has been productive of the least change in plant names, thereby proving particularly well adapted to the purpose of this Catalogue. Moreover, by accepting this Manual as our guide we are enabled to eliminate all descriptive matter by referring the reader to that work. To facilitate general reference, however, important synonymy is given so that there need be little difficulty in coördinating names.*

Common or English names have been given considerable attention, yet it is probable that many others are in use, some, no doubt, by children or others of an observing nature. It is desirable to increase our knowledge of such usage. The same may be said of the folk-lore of our plants and of such traditional knowledge of their medicinal and other uses as has come down to us from earlier generations or from the aborigines.

The data relative to times of flowering and fruiting have been compiled from carefully kept records supplemented by herbarium material, and represent the normal habits of the plants in our region; yet the varying conditions of altitude, exposure, moisture, light, season, etc., have great influence in modifying

---

* In a few instances we have used, instead of the names given in the 7th edition of the Manual, the names published by the editors of the Manual in a list of emendations in *Rhodora*, vol. 11, no. 123, March, 1909.

plant activities, so that for special localities or seasons the conditions require special consideration. Unless otherwise stated the dates given in the Catalogue indicate the time when the plant is usually in flower, or, for the ferns, when the spores are mature.

The sign $\times$ preceding the name of a species indicates that it is supposed to be of hybrid origin.

All statements indicating the comparative frequency of occurrence of the species are to be considered in relation to allied species and with direct reference to the habitat cited; in other situations the plant may not occur at all or exceptionally. A plant "common" in its habitat should be sufficiently plentiful to be within the observation of all who could recognize it, yet there is a vast difference in the comparative numbers of most really plentiful woody plants and low herbs of the same rating. "Frequent," too, is relative in the same sense. Although, as a rule, frequent or common in the habitat and area cited, many such plants may be rare in, or even absent from, certain intervals where the conditions appear to be equally favorable. "Occasional" needs no explanation. "Rare" is intended to apply to those plants which appear to occur sparingly, usually in but few localities as named. "Local" refers especially to such plants as occur at one or more isolated or special areas, but are there more or less plentiful, as indicated by the context.

The habitats cited are those observed in Connecticut, and although often variable are expressive of local conditions.

In accordance with the spirit of the Act incorporating the Survey, due attention has been given to the economic features of the various species, when required, in notes appended to each. Although in some respects desirable, it seems, on the whole, inadvisable at this time to enter upon a discussion of the associations of native plants and the probable causes leading to such congregations. It is necessary to collect much more complete data than are now available before such discussion can be profitably taken up. Mere lists of such plant aggregates are apt to be of no value to most readers and of little utility to practical botanists.

It is a pleasure to acknowledge the assistance of all who have contributed items of information toward the completeness of this Catalogue and whose names appear throughout the work. Particular mention should be made of Dr. B. L. Robinson and Prof. M. L. Fernald, of the Gray Herbarium of Harvard Uni-

versity, for their very great assistance in determining or verifying many doubtful or critical forms, and for granting the privilege of utilizing the manuscript of the new edition of Gray's Manual. Prof. A. S. Hitchcock and Mrs. Agnes Chase, of the United States Department of Agriculture, have also given aid in certain groups of grasses.

It is hoped that the publication of this Catalogue will stimulate observers and collectors in all parts of the state to contribute every item of information tending to a full knowledge of our plants, either in relation to additional species, distribution, local names, habitat or economic value. Communications may be sent to any member of the committee, at the address given, preferably the one nearest and most convenient, and should be accompanied by specimens of sufficient diagnostic value to determine the identity of each, together with particulars of occurrence, dates, etc. Such specimens, to be of the greatest value for preservation and future reference, should be carefully selected, and may be sent in the fresh state or, preferably, after proper drying under pressure.

C. B. GRAVES, New London,

E. H. EAMES, Bridgeport,

C. H. BISSELL, Southington,

L. ANDREWS, Southington,

E. B. HARGER, Oxford,

C. A. WEATHERBY, East Hartford,

Committee of the Connecticut Botanical Society.

Contents

	Page
Introduction, ...	11
History, ...	11
Geology and Physiography, ...	14
CATALOGUE OF FLOWERING PLANTS AND FERNS, .	17
PTERIDOPHYTA, ...	17
SPERMATOPHYTA, ...	34
GYMNOSPERMAE, ...	34
ANGIOSPERMAE, ...	39
MONOCOTYLEDONEAE, ...	39
DICOTYLEDONEAE, ...	137
Appendix, ...	416
Additions and Corrections, ...	416
Native Plants not found in recent years, ...	422
Excluded Species, ...	423
Fugitive Species, ...	430
Statistical Summaries, ...	435
Botanical Authors cited, ...	442
Index, ...	465

Introduction.

PART I. HISTORY.

The history of botanical exploration in Connecticut may be said to begin near the end of the second decade of the last century. Previous to this time we have no record of any botanical activity within the state, and if any of the older botanists visited Connecticut it must have been cursorily.

The first resident of Connecticut whose work is of importance seems to have been Dr. Eli Ives, who was born in 1779, and was for many years professor of botany and materia medica in Yale College. He was the author of the species *Gnaphalium decurrens*, which was founded on specimens from New Haven and from "the margin of the Housatonic about 30 miles from Long Island Sound." He also described as a new species *Asclepias lanceolata* from Cedar Hill, New Haven, which is the plant now known as *Acerates viridiflora* (Raf.) Eaton, var. *lanceolata* (Ives) Gray. Beside this he published notes on *Limosella*, then recently discovered in America. These three articles appeared in 1819 in the first volume of Silliman's Journal, now known as The American Journal of Science. Twelve years later he, in collaboration with Dr. William Tully and Dr. Melines C. Leavenworth, published a "Catalogue of the Phaenogamous Plants, and of the Ferns, growing without cultivation within five miles of Yale College." This is the earliest record of the flora of this well-explored part of the state and contains the names of 1156 species. It was not, however, founded on specimens or even on accurate records, and contains a few species which are not otherwise reported from the state. The foregoing works seem to have comprised the bulk of Dr. Ives' botanical publications and no specimens of his have been seen.

About the time of the publication of Dr. Ives' earliest articles John Pierce Brace must have been making the observations

about Litchfield the results of which he published in 1822 in Silliman's Journal as "A List of Plants growing spontaneously in Litchfield and Vicinity." This earliest extant catalogue of the plants of any portion of Connecticut enumerates 453 species, most or all of which are now known from the same region. Mr. Brace's specimens are said to be preserved at Williams College, but they have not been seen by any member of this Committee.

We are told that Amos Eaton "prosecuted the study of botany, chemistry and mineralogy to some extent in New Haven in 1817." Although we know nothing of the extent of his work on our flora, the record is interesting from the fact that he was the grandfather of Prof. D. C. Eaton and one of the first in America to arouse a general interest in botany.

The earliest collectors whose specimens have been preserved in any quantity belong to a period some years later. Dr. H. C. Beardslee, Dr. J. W. Robbins and Charles Wright collected many rare species during the dozen years following 1822, mostly from 1828 to 1832, some of which have only recently been rediscovered. These gentlemen, although natives of this state, made most of their later collections outside of Connecticut, and some specimens lay for a long time undistributed; so that a few species known to these collectors are here first included in a formal flora of the state.

The next collector whose work is of importance is Prof. Daniel C. Eaton of Yale, who will need no eulogy either as a man or as a scientist to those who were fortunate enough to know him. Although primarily a student of the ferns and other cryptogams, his knowledge of the higher plants was extensive and accurate. He collected much in the region about New Haven and always welcomed reports or specimens of species new to or rare in Connecticut. His collecting, as shown by the dates in his herbarium, began about 1856, and his specimens have been of the greatest assistance both in botanical exploration and in the preparation of this work.

After 1831 work on the flora of Connecticut seems to have lapsed entirely until it was taken up about 1877 by a small group of students in the Sheffield Scientific School of Yale College. The results of their work were published as "A Catalogue of the Flowering Plants and Higher Cryptogams growing without

cultivation within thirty miles of Yale College." This was published by the Berzelius Society and is often referred to as the "Berzelius Catalogue." The limits adopted included less than one-half of the state and a portion of the northern part of Long Island. The presence of a considerable number of species credited to Long Island makes it difficult to determine the precise number of species recorded from this state; but the species and varieties of plants higher than the Bryophyta which are credited to Connecticut number about 1230. The work was prepared with considerable care, but at least a few species were admitted without the evidence of specimens, which caused a few obvious errors as well as some conjectural ones. The idea of this work originated with Dr. George W. Hawes and Dr. T. M. Prudden, but several others assisted in its preparation, notably Prof. Eaton, who later published some additions in the Bulletin of the Torrey Botanical Club.

Not long after this Miss Leonard of Meriden prepared a list of plants growing near Meriden which was published after her death by the Meriden Scientific Association. This enumerated 749 species, while 41 were added by others the next year, making a total of 790. Owing perhaps to the posthumous character of the work it seems never to have had proper revision, and a number of species are included which are not otherwise reported from Connecticut, some of them of such southern range that it does not seem likely that they can belong in a Connecticut list. The lack of specimens prevents the inclusion here of any of these species not reported elsewhere.

In 1882 George R. Case and William A. Setchell published a list of the flora of Norwich and vicinity containing 668 species, and the next year published 100 addenda. A manuscript found among Prof. Eaton's papers gives 99 more for the year 1884, with some corrections, making the total 856.

In 1885 James N. Bishop of Plainville published "A Catalogue of all the Phaenogamous Plants at present known to grow without cultivation in the State of Connecticut." In 1895 a revision was issued which included also the ferns and fern-allies. Additions and corrections were published in 1897 and another new edition issued in 1901. This first catalogue to cover the entire state contained in its first edition 1250 species and varieties,

which number was increased to 1743 in the edition of 1901. Mr. Bishop deserves much credit for his efforts to increase the knowledge of our flora, but his catalogue is rather a compilation of all accessible reports than a critical treatment of the flora of the state, and contains many records the validity of which cannot now be ascertained.

Of late years a large mass of data has been accumulated by the various collectors whose names appear in this work. Some of this has been published in Luman Andrews' "Flora of Meriden Mountain," in Bissell & Andrews' "Flora of Southington," and in Mrs. E. E. Rogers' "Flora of Norwich," as well as in scattered notes and articles by various writers dealing with special localities or species. The bulk of this later material, however, has found its first publication in this present Catalogue.

PART II. GEOLOGY AND PHYSIOGRAPHY.*

The State of Connecticut, measuring roughly one hundred miles from east to west and fifty miles from north to south, has an area of 4990 square miles, of which 145 square miles are covered by water. The three principal rivers, the Thames, the Connecticut and the Housatonic, with their tributaries, drain the interior. As in all glaciated countries, numerous ponds or lakes and swamps are scattered over the surface, and constitute an important feature both from an economic and an æsthetic point of view. According to the Atlas of the U. S. Topographical Survey the state contains 1026 lakes or ponds, and 420 swamps.

With respect to elevation there are three well-marked divisions running parallel with one another across the state from north to south, namely an eastern and a western highland separated by a central lowland area. From sea level the land gradually rises toward the north and northwest. The eastern highland reaches its greatest altitude of 1286 ft. at Bald Hill, in Union, while Bear Mt., in Salisbury, with a height of 2355 ft. marks the highest point of the western highland as well as of the state.

The central lowland is in general a plain, gently rising toward the northern boundary of the state where it is from one to two

---

* For a very full and admirable account with map, reference is made to Bulletins No. 6 and No. 7 of this Survey.

hundred feet above the level of the sea. It is, however, interrupted by many sharp ridges running chiefly north and south which rise abruptly much above the general level of the plain. Its upper portion as far south as Middletown is traversed by the Connecticut River. Its rock formation is sandstone belonging to the Triassic age, while the sharp ridges referred to are of trap rock and represent ancient eruptions of lava. The highest of these trap ridges is West Peak of the Hanging Hills, near Meriden, which reaches an altitude of 1007 ft. above the sea.

The eastern and western highlands are rugged and hilly, with only comparatively small level areas, and have a crystalline rock formation, being made up for the most part of various kinds of granites, gneisses, schists and limestone. The limestone formation covers a considerable irregular area in the western and north-western parts of the state but is practically absent from other sections.

It is a well-known fact that our wild plants are not evenly distributed over the surface of the country. Some kinds are seen nearly everywhere, others may be abundant in one region but entirely absent from other sections, while still others are found only rarely, and then but very few together. Inquiry into the causes of this unequal distribution reveals a considerable number of factors entering in. One of the most important of these is the chemical constitution of the soil. Rock formations as the source of soils exercise a marked influence upon plant distribution. Many kinds of plants, it is true, are able to grow and seem to thrive equally well upon a variety of soils, but on the other hand there are many species that flourish only upon certain rock formations and the soils produced from them and are rarely if ever found away from such formations. One of our best examples is seen in the case of those species of plants which grow exclusively upon limestone rocks and in soils rich in lime. In like manner seashore plants which grow only in saline soil form a well-marked group. This relation between plant distribution and the chemical constitution of the soil as applied to our Connecticut plants is understood only in its most general features, and there is here good opportunity for research. The problem is much complicated by the fact that Connecticut soils are practically all formed from transported material. Such material, having been

brought by glacial or water agency from a greater or less distance, may be and often is entirely different in chemical composition from the underlying rock. Hence within a small area a variety of soils may be found, while on the other hand soils essentially similar to each other may overlies very different bed-rock formations.

Other influences have an important bearing in this connection. Topographic features correlated with the amount of moisture in the soil and degrees of light and shade affect plant distribution in a marked degree. Thus, the sand plains, the cedar swamps, the trap rock and other precipices and the larger river valleys have their characteristic plants.

There is another small group of species chiefly confined to the southeastern part of the state which belongs to the flora of the Atlantic Coast Plain of the middle and southern states. In the case of these plants, as in that of certain northern plants found within our borders at isolated stations far outside their usual range, it is probable that they represent the shrunken remnants of far larger colonies which grew there in earlier times and under more favorable climatic conditions.

Another agency profoundly influencing the distribution of plants is the fierce unceasing struggle for existence between the various species.

Only a beginning has been made in working out these problems of ecology in their application to our Connecticut flora. They offer a fresh and inviting field for careful research, and it is to be hoped that many observers may soon be interested to undertake the task of supplying the deficiencies of our knowledge in this direction.

Catalogue of Flowering Plants and Ferns.

PTERIDOPHYTA. FERN PLANTS.

POLYPODIACEAE. FERN FAMILY.

POLYPODIUM L. Polypody.

Polypodium vulgare L. (common).

Polypody.

Shaded ledges. Occasional or frequent in northern districts, becoming common near the coast. June — Aug.

The var. *CAMBRICUM* (L.) Willd. has been collected at Stonington (Miss Stanton) and at Cornwall (L. M. Underwood).

The rootstock is medicinal.

PHEGOPTERIS (Presl) Fée. Beech Fern.

Phegopteris polypodioides Fée (Polypodium-like).

Phegopteris Phegopteris Underw.

Long Beech Fern.

Rich moist woods and on shaded banks. Rare or local near the coast, becoming occasional or frequent northward. July.

Phegopteris hexagonoptera (Michx.) Fée (six-angled fern).

Broad Beech Fern.

Rich woods either moist or dry. Occasional near the coast, becoming frequent or common northward. Aug.

This fern is so closely related to *Phegopteris polypodioides* that it is often difficult to decide to which species a given specimen belongs.

Phegopteris Dryopteris (L.) Fée (oak-fern).

Oak Fern.

Rocky woods in rich moist soil. Rare or local over most

of the state: East Lyme (Miss A. M. Ryon), Colchester (Graves), Mansfield (Mrs. C. S. Phelps), East Haddam (Dr. E. J. Thompson), Durham and Monroe (Harger), Meriden (D. C. Eaton), Southington (Andrews), Granby (I. Holcomb), Bridgeport (I. Holden). Occasional or frequent in Litchfield County. Late June — early July.

ADIANTUM L. Maidenhair.

Adiantum pedatum L. (like a bird's foot; referring to the method of division in the fronds).

Maidenhair.

Rich woods. Rare in the immediate vicinity of the coast; occasional or frequent elsewhere. July.

Thrives well in cultivation if placed in a moist, shaded and sheltered location. The plant is medicinal.

PTERIS L. Brake. Bracken.

Pteris aquilina L. (of an eagle; referring to the wing-shaped fronds).

Pteridium aquilinum Kuhn.

Common Brake. Bracken. Brake.

Common. Usually in open ground and poor soils. Aug.

The young shoots are sometimes gathered and eaten in the manner of Asparagus.

CHEILANTHES Sw.

Cheilanthes lanosa (Michx.) Watt (woolly).

Cheilanthes vestita Sw.

Hairy Lip Fern.

Very rare. New Haven, precipitous face of West Rock about half way up the cliff (G. Van Ingen 1892). July.

This is the only known station for this species in New England, and it is supposed to be the northern limit of its growth.

PELLAEA Link. Cliff Brake.

Pellaea atropurpurea (L.) Link (dark purple).

Purple Cliff Brake.

Dry exposed ledges, preferring limestone but occurring also on trap and rarely on gneiss. Bolton, on gneiss (A. V. Osmon); Guilford, on trap (G. H. Bartlett); becoming rare

or local westward and frequent in the limestone district of northwestern Connecticut. July.

The fronds vary greatly in form even on the same plant. The rootstock is medicinal.

CRYPTOGRAMMA R. BR.   Rock Brake.

Cryptogramma Stelleri (Gmel.) Prantl.

Pellaea gracilis Hook.

Pellaea Stelleri Watt.

Slender Rock Brake.

Very rare. New Haven, on trap ledges at West Rock (G. Van Ingen); Kent, moist shaded ledges of calcareous rock (Eames & E. H. Austin), and Brookfield, in similar situations (Eames); Salisbury, on limestone (Mrs. C. S. Phelps). July.

WOODWARDIA Smith.   Chain Fern.

Woodwardia virginica (L.) Smith.

Virginia Chain Fern.

Wet open swamps, often in Sphagnum. Rare or local in northern districts: South Windsor (A. W. Driggs), Granby (I. Holcomb). Becoming occasional southward and frequent near the coast. July.

Woodwardia areolata (L.) Moore (marked with little areas).

Woodwardia angustifolia Smith.

Net-veined Chain Fern.

Wet or swampy woods. Rare inland: East Hartford (J. F. Smith), Oxford and Middlebury (Harger). Occasional in the vicinity of the coast. Sept.

ASPLENIUM L.   Spleenwort.

Asplenium pinnatifidum Nutt. (feather-cleft).

Pinnatifid Spleenwort.

Very rare. Southington, on ledges of shale (H. C. Bigelow); Sharon, on ledges of limestone (E. I. Huntington). July.

Not known from any other New England state.

× **Asplenium ebenoides** R. R. Scott (like the Ebony Spleenwort).

Scott's Spleenwort.

Two plants of this rare species, or more properly hybrid,

have been found in the state. The first was discovered in Canaan by Mr. J. S. Adam in Sept., 1876. Mr. Adam states that the plant flourished there until 1891, then disappeared. A second plant was found in the same town, but at a different station, by Mr. C. K. Averill, in Aug., 1902. Both plants were growing on shaded limestone ledges and with or near the two supposed parent species, *Asplenium platyneuron* and *Camptosorus rhizophyllus*.

Asplenium Trichomanes L. (ancient name for some fern).

Maidenhair Spleenwort.

Shaded ledges. Rather rare along the coast, becoming occasional or frequent northward. July.

Asplenium platyneuron (L.) Oakes (broad-nerved)

Asplenium ebeneum Ait.

Ebony Spleenwort.

Frequent. Dry rocky ground, more often in half-shade. Aug.

The var. **SERRATUM** (E. S. Miller) BSP. (toothed) has been found at Middletown (Bissell), Milford (Eames & C. C. Godfrey), and Huntington (Eames).

Asplenium montanum Willd. (of mountains).

Mountain Spleenwort.

Rare. Crevices of dry, usually overhanging ledges: Scotland (G. Waldo), North Stonington (Fuller & W. E. Setchell, Graves), Franklin and East Haddam (Graves), Beacon Falls (A. W. Evans), Salisbury (Mrs. C. S. Phelps). July.

The last named station represents the northern limit of its range as now known.

Asplenium Ruta-muraria L. (wall-rue).

Rue Spleenwort.

Shaded ledges. Berlin (T. S. Brandegee), Southington (Andrews), Granby (I. Holcomb), Sherman and New Milford (E. H. Austin); and occasional in the limestone district of northwestern Connecticut. Not known from eastern districts or near the coast. July.

Asplenium angustifolium Michx. (narrow-leaved).

Narrow-leaved Spleenwort.

Rare. Moist rich woods: Guilford (W. W. Denslow),

Meriden (D. C. Eaton), Southington (J. N. Bishop), Berlin (H. W. Cowles), Avon (I. Holcomb), Salisbury (F. Rundle). Aug.

Asplenium acrostichoides Sw. (like *Acrostichum*, a genus of tropical ferns).

Asplenium thelypteroides Michx.

Silvery Spleenwort.

Woods and ravines in moist rich soil. Occasional near the coast, becoming frequent northward. Aug.

Asplenium Filix-femina (L.) Bernh. (female fern).

Lady Fern.

Common. Woods, thickets and fence-rows. Late July — early Aug.

A very variable species with many described forms, some of which seem to be caused by differences in the soil, exposure or habitat. The rootstock is medicinal, and is used as a substitute for that of the Male Fern.

CAMPTOSORUS Link. Walking Leaf.

Camptosorus rhizophyllus (L.) Link (with rooting leaves).

Walking Leaf. Walking Fern.

Shaded ledges, preferring limestone, but growing also on granite, sandstone or trap. Found throughout, but rare or local over most of the state, becoming frequent in the limestone district of northwestern Connecticut. July — Aug.

Plants having the lower auricles of the fronds elongated like the tip have been found at Southington (H. C. Bigelow), Hamden, at Mt. Carmel (D. C. Eaton), and Salisbury (Mrs. C. S. Phelps).

POLYSTICHUM Roth.

Polystichum acrostichoides (Michx.) Schott (like *Acrostichum*, a genus of tropical ferns).

Aspidium acrostichoides Sw.

Dryopteris acrostichoides Kuntze.

Christmas Fern.

Common. Woods and shaded banks or ledges. July.

The var. *INCISUM* Gray (cut or notched), var. *Schweinitzii* Small, *Aspidium acrostichoides* Sw., var. *incisum* Gray,

Dryopteris acrostichoides Kuntze, var. *Schweinitzii* Underw., occurs occasionally. It is found more often late in the season and frequently where the woods have recently been felled. A form with crested fronds occurs at East Haddam (Weatherby).

ASPIDIUM Sw.   Wood Fern.   Shield Fern.

Aspidium Thelypteris (L.) Sw. (female fern).

Dryopteris Thelypteris Gray.

Marsh Fern.

Common. Swamps and wet ground. Aug.

Often very plentiful and sometimes cut and dried as bedding for stock.

Aspidium simulatum Davenp. (imitating; referring to its resemblance to the Marsh Fern).

Dryopteris simulata Davenp.

Massachusetts Fern.

Wet woods and cedar swamps. Rare over most of the state: Salisbury (Mrs. C. S. Phelps), Oxford (Harger), Southington (Bissell), Cromwell (H. C. Bigelow). Local in New London County (Graves). Aug.

Aspidium noveboracense (L.) Sw. (New York).

Dryopteris noveboracensis Gray.

New York Fern.

Frequent. Woods, more often in moist ground. Aug.

Aspidium marginale (L.) Sw. (on the edge; referring to the position of the fruit dots).

Dryopteris marginalis Gray.

Marginal Shield Fern.

Frequent. Dry rocky woods. July.

The rhizome is officinal and with that of the Male Fern furnishes the drug *Aspidium* or *Filix-mas*. All species of the genus possess the same property in some degree.

Aspidium Goldianum Hook.

Dryopteris Goldiana Gray.

Goldie's Fern.

Rare. Rich moist woods: North Branford (O. Harger), Bloomfield (Miss A. Lorenz), Farmington (I. Holcomb),

Southington (Andrews & Bissell), Cheshire (D. C. Eaton),
New Haven (Harger). July.

Aspidium Boottii Tuckerm.

Dryopteris Boottii Underw.

Rare or occasional. Wet woods and shaded swamps, usually growing with *Aspidium cristatum*. July.

Intermediate in form and formerly considered a hybrid between *Aspidium cristatum* and *Aspidium spinulosum*, var. *intermedium*.

Aspidium cristatum (L.) Sw. (crested).

Dryopteris cristata Gray.

Crested Shield Fern.

Occasional or frequent. Wet woods and shaded swamps, more often in sandy soil. July.

A hybrid between this species and *Aspidium marginale* occurs at East Lyme (Miss A. M. Ryon & Graves), Waterford (Graves), Granby (I. Holcomb), and Salisbury (Mrs. C. S. Phelps).

Aspidium cristatum (L.) Sw., var. **Clintonianum** D. C. Eaton.

Dryopteris cristata Gray, var. *Clintoniana* Underw.

Clinton's Shield Fern.

Rare or occasional. Wet woods and shaded swamps. July.

This variety appears to hybridize with *Aspidium marginale* and also with the typical form of the species.

Aspidium spinulosum (O. F. Müller) Sw. (with small spines).

Dryopteris spinulosa Kuntze.

Spinulose Shield Fern.

Moist or wet woods. Usually rare or local but occurring throughout the state. Late June — early July.

This species and its varieties are desirable for cultivation in shaded places and also grow well indoors in the fernery.

Aspidium spinulosum (O. F. Müller) Sw., var. **intermedium** (Muhl.) D. C. Eaton (intermediate).

Dryopteris spinulosa Kuntze, var. *intermedia* Underw.

Occasional or frequent. Moist woods and on shaded rocks. Late June — early July.

Aspidium spinulosum (O. F. Müller) Sw., var. *dilatatum* (Hoffm.) Gray (dilated).

Dryopteris spinulosa Kuntze, var. *dilatata* Underw.

Broad Shield Fern.

This variety is not known in its typical state in Connecticut. The forma **ANADENIUM** Robinson (without glands) apparently occurs at East Hartford (Weatherby), Granby and Barkhamsted (I. Holcomb), and Southington (Andrews, Bissell). It is found growing with the species or with the var. *intermedium* and none of the Connecticut specimens are as characteristic as those from mountainous districts farther north. July.

CYSTOPTERIS Bernh. Bladder Fern.

Cystopteris bulbifera (L.) Bernh. (bulb-bearing).

Filix bulbifera Underw.

Bladder Fern.

Moist rocky woods, wet ledges, meadows and banks of streams. Not reported on the coast or from the eastern and southwestern parts of the state. Rare or local in central districts: Guilford, at North Guilford (G. H. Bartlett), Windsor (H. S. Clark), Simsbury (I. Holcomb), Oxford (Harger). Becoming frequent or common in northwestern Connecticut. July.

Cystopteris fragilis (L.) Bernh. (brittle).

Filix fragilis Underw.

Occasional to frequent. Rich woods, usually in leaf-mold among rocks, sometimes found in old wells. June.

One of the earliest of our ferns to appear in the spring.

WOODSIA R. Br.

Woodsia ilvensis (L.) R. Br. (pertaining to the island Elba).

Rusty or Rock Woodsia.

Dry exposed ledges of various rock formations. Rare or local but found in nearly all parts of the state. July.

Woodsia obtusa (Spreng.) Torr. (blunt).

Blunt Woodsia.

Occasional. Woods or half-shade, usually in rocky, rather dry places. July.

DICKSONIA L'Hér.

Dicksonia punctilobula (Michx.) Gray (with small, dotted lobes).

Dicksonia pilosiuscula Willd.

Dennstaedtia punctilobula Moore.

Hay-scented Fern.

Common. Rich woods, fence-rows and hilly pastures, in both moist and dry ground, often forming large colonies. Aug.

The forma **CRISTATA** (Maxon) Clute (crested), and the forma **SCHIZOPHYLLA** Clute (cut-leaved) are both reported to occur rarely with the species.

Sometimes a pest to farmers in rocky pastures, as stock will not eat it and the plant is difficult to eradicate. It grows well in cultivation. Forking fronds are not unusual.

ONOCLEA L.

Onoclea sensibilis L. (sensitive).

Sensitive Fern.

Common. Low fields, swamps and along streams. Sterile June; fertile Sept.

The var. **OBTUSILOBATA** (Schkuhr) Torr. (with blunt lobes) sometimes occurs. It is apparently an abnormal form caused by cutting or some injury to the earlier growth of the plant.

The sterile fronds are very susceptible to early frost, whence the name.

Onoclea Struthiopteris (L.) Hoffm. (ostrich fern).

Matteuccia Struthiopteris Todaro.

Ostrich Fern.

Rich alluvial soil. Rare in most districts, but frequent along the Connecticut and Housatonic Rivers and their larger tributaries. Sterile June; fertile Aug.—Sept.

Our largest fern, the fronds occasionally reaching six feet in height. It thrives in cultivation if given rich soil, and is often grown for ornament.

SCHIZAEACEAE. CURLY GRASS FAMILY.

LYGODIUM Sw. Climbing Fern.

Lygodium palmatum (Bernh.) Sw. (branching like the outspread fingers of a hand).

Creeping Fern. Hartford Fern. Climbing Fern.

Rich woods and thickets, in moist, usually sandy soil. Not reported from western Connecticut; rare in eastern districts: Griswold (Harger & Graves), Lyme (Dr. E. J. Thompson). Local at many stations in the central part of the state. Aug.—Sept.

The following Act was passed by the Legislature and became a law on July 8, 1869: "Any person who shall wilfully and maliciously sever or take from the land of another any of the species of plant known as *Lygodium palmatum* or Creeping Fern growing and being thereon, shall be punished by a fine not exceeding Seven Dollars or imprisonment in county jail not exceeding thirty days or by such fine and imprisonment both at the discretion of the court." The penalty for this offense was later increased. Prior to 1869 this fern was extensively collected and pressed for decorative purposes.

OSMUNDACEAE. FLOWERING FERN FAMILY.

OSMUNDA L. Flowering Fern.

Osmunda regalis L. (royal).

Royal Fern. Flowering Fern.

Frequent or common. Low thickets, wet meadows and pastures and along streams. June.

The rootstock is medicinal.

Osmunda Claytoniana L.

Interrupted Fern.

Frequent or common. Old pastures, along fence-rows and in open wood-lands. Fertile May; sterile June.

The var. *DUBIA* A. J. Grout (doubtful) occurs occasionally. It is apparently a form caused by some injury to the plant.

All our species of *Osmunda* thrive in cultivation.

Osmunda cinnamomea L. (cinnamon-colored).

Cinnamon Fern.

Common. Wet woods, swamps and boggy ground. Fertile May; sterile June.

Both the var. *FRONDOSA* Gray (leafy) and the var. *INCISA* J. W. Huntington (notched) sometimes occur.

The abundant tomentum found on this species is used in nest building by certain birds.

**OPHIOGLOSSACEAE. ADDER'S TONGUE
FAMILY.**

OPHIOGLOSSUM L. Adder's Tongue.

Ophioglossum vulgatum L. (common).

Adder's Tongue.

Moist meadows, woods and low pastures. Rare or local though perhaps more plentiful than usually supposed as the plant is very inconspicuous. July.

BOTRYCHIUM Sw. Moonwort. Grape Fern.

Botrychium simplex E. Hitchc. (simple).

Botrychium tenebrosum A. A. Eaton.

Rare. Rich woods either dry or moist: Granby (I. Holcomb), Oxford (J. & O. Harger), Goshen (L. M. Underwood), New Milford (J. Pettibone). June.

Botanists disagree as to the proper treatment of this species and our plants need further study.

Botrychium lanceolatum (Gmel.) Ångstr. (lance-shaped), var. **angutisegmentum** Pease & Moore (with narrow segments).

Botrychium lanceolatum of Manuals.

Rare. Moist rich woods, usually in leaf-mold: Norwich (W. A. Setchell), East Lyme (Miss A. M. Ryon), Windsor (Weatherby), Granby (I. Holcomb), New Haven and Oxford (Harger), Orange (O. Harger), Naugatuck and Stratford (Eames), Winchester (Bissell), Goshen (L. M. Underwood), Easton (L. N. Johnson), Salisbury (Mrs. C. S. Phelps). Late June — early July.

This species seems to mature its spores two or three weeks later than *Botrychium ramosum* when the two grow together.

Botrychium ramosum (Roth) Aschers. (having many branches).

Botrychium matricariaefolium Braun.

Botrychium neglectum Wood.

Rich woods. Rare or local, but found throughout the state. June.

Small forms of this are difficult to separate from *Botrychium simplex*.

Botrychium obliquum Muhl. (oblique).

Botrychium ternatum Sw., forma *obliquum* Milde.

Grape Fern.

Occasional or frequent. Meadows, woods and old pastures in either dry or moist ground. Sept.

The var. **ELONGATUM** Gilbert & Haberer (elongated), and the var. **DISSECTUM** (Spreng.) Clute (finely cut), *Botrychium dissectum* Spreng., are occasional, growing with the typical form.

Botrychium ternatum (Thunb.) Sw. (three-parted), var. **intermedium** D. C. Eaton (intermediate).

Botrychium obliquum Muhl., var. *intermedium* Underw.

Botrychium ternatum Sw., var. *australe* D. C. Eaton.

Rare. Rich woods: Union and Southington (Bissell), West Hartford (Harger), Granby (I. Holcomb), Meriden (Andrews), New Milford (C. K. Averill & E. H. Austin), North Canaan (M. B. Tobey). Sept. A small form of this approaching in appearance *Botrychium obliquum*, var. *oneidense* occurs at Granby (I. Holcomb), Plainville (Andrews), and Plymouth (Bissell).

Botrychium virginianum (L.) Sw.

Rattlesnake Fern.

Occasional or frequent. Moist rich woods. June.

The fruiting fronds are occasionally forked, and bear two, three or four fertile panicles.

MARSILEACEAE.

MARSILEA L.

Marsilea quadrifolia L. (four-leaved).

Local. Plentiful in Bantam Lake, Litchfield, its only known native habitat in North America. It has been intro-

duced and thrives in a pond at Cromwell (C. C. Hanmer), and in Lake Whitney, Hamden. Aug.

EQUISETACEAE. HORSETAIL FAMILY.

EQUISETUM L. Horsetail. Scouring Rush.

Equisetum arvense L. (of cultivated ground).

Common Horsetail.

Common. Sandy soil either dry or moist. Varies greatly according to season or habitat and several forms have been described. Fertile May; sterile June.

The plant is medicinal. It is said to be dangerously poisonous to horses when cut with hay.

Equisetum pratense Ehrh. (of meadows).

Rare. Moist sandy alluvium on the banks of the Housatonic River: Oxford (Eames & Harger), Newtown (Harger). Fertile May; sterile June—July.

This resembles the preceding species and may have been overlooked by other collectors.

Equisetum sylvaticum L. (growing in woods).

Occasional or local. Moist places and in wet ground about springs. Fertile May; sterile June—July.

Equisetum palustre L. (of marshes).

Rare. Wet meadows along the Connecticut River or on its banks: Lyme (Graves), East Windsor (Bissell). June.

Equisetum fluviatile L. (of a river).

Equisetum limosum L.

Pipes.

Shallow water and wet meadows along streams. Frequent along our rivers and larger streams but rare or local elsewhere. Fertile May; sterile June—Aug.

Equisetum hyemale L. (lasting over the winter), var. **intermedium** A. A. Eaton (intermediate).

Scouring Rush.

Rare. Growing on railroad embankments: Hartford (H. S. Clark), Norfolk (Bissell & H. S. Clark). May—June.

Equisetum hyemale L., var. **affine** (Engelm.) A. A. Eaton (allied).

Equisetum hyemale of Manuals, mainly.

Scouring Rush. Shave Grass.

Frequent. Sandy soil, usually in moist but sometimes in dry places. May.

The siliceous stems were formerly much used for scouring and polishing. The plant is medicinal.

Equisetum variegatum Schleich. (variegated), var. **Jesupi** A. A. Eaton.

Equisetum variegatum of Manuals in part.

Rare. Alluvial soil along the Housatonic River: Canaan (J. W. Robbins), Salisbury (A. W. Evans, Mrs. C. S. Phelps), Cornwall (H. S. Clark & Bissell). May—June.

Equisetum scirpoides Michx. (like *Scirpus*, the Bulrush).

Rare or local. Rich woods, usually on moist hillsides: Norfolk (J. W. Robbins), Canaan (H. S. Clark & Bissell), Sharon and Cornwall (A. V. Osmun). May—June.

LYCOPODIACEAE. CLUB MOSS FAMILY.

LYCOPODIUM L. Club Moss.

Lycopodium Selago L. (classical name for this species).

Rare. In a cool shaded ravine near New Haven (J. A. Allen, 1879). Sept.

Has been found at Mt. Holyoke, Mass., and should be looked for at intermediate localities among our trap hills.

Lycopodium lucidulum Michx. (slightly shining).

Occasional. Damp mossy woods, usually in deep shade. Sept.

Lycopodium inundatum L. (subject to flooding).

Rare or local. Open bogs, usually in sandy soil. Aug.—Sept.

The var. **BIGELOVII** Tuckerm., *Lycopodium adpressum* Lloyd & Underwood in part, occurs at Voluntown (Harger), Groton (Graves), East Lyme (Miss A. M. Ryon & Graves), New Haven (D. C. Eaton), Milford (Eames).

Lycopodium annotinum L. (of a year).

Rare or local. Base of trap dyke, in moist soil, North Branford (G. H. Bartlett), and in similar situations, Durham (Harger). Wet cold woods: Cromwell (F. K. Hallock), Winchester (Andrews & Bissell), Norfolk (J. H. Barbour), Redding (L. N. Johnson), Salisbury (Mrs. C. S. Phelps). July — Aug.

Lycopodium clavatum L. (club-shaped).

Running Pine. Common Club Moss.

Occasional. Dry woods or sometimes in moist ground. Sept.

The var. *MONOSTACHYON* Grev. & Hook. (single-spiked) is rare or local: East Lyme (Miss A. M. Ryon), Franklin (R. W. Woodward), Stafford (Dr. E. J. Thompson & Weatherby), Simsbury (I. Holcomb, B. B. Bristol & Bissell), Southington (Andrews), Wolcott (Andrews & Bissell), Norfolk (J. H. Barbour), Salisbury (Mrs. C. S. Phelps).

The spores of this and other species are medicinal and are officinal. They also possess peculiar mechanical properties.

Lycopodium obscurum L. (obscure).

Tree Club Moss.

Woods and old pastures, both dry and moist. Frequent near the coast, becoming rare northward. Sept.

Lycopodium obscurum L., var. *dendroideum* (Michx.) D. C. Eaton (tree-like).

Tree Club Moss.

Woods and pastures. Frequent northward, becoming rare near the coast. Sept.

Lycopodium complanatum L. (flattened), var. *flabelliforme* Fernald (fan-form).

Lycopodium complanatum of American authors in part.

Ground Pine. Christmas Green.

Common. Woods and pastures, more often in sandy soil. Sept.

Well known and much used for Christmas decorations.

Lycopodium tristachyum Pursh (three-spiked).

Lycopodium complanatum L., var. *Chamaecyparissus* Milde.

Occasional. Sandy woods, either dry or moist. July — Aug.

SELAGINELLACEAE.

SELAGINELLA Beauv.

Selaginella rupestris (L.) Spring (growing on rocks).

Occasional. Dry exposed ledges, or sometimes on barren soil. Aug.—Sept.

Selaginella apus (L.) Spring (footless; i. e., without a stalk).

Frequent. Moist open or half-shaded ground, usually in meadows and pastures or about springs. July — Aug.

ISOËTACEAE. QUILLWORT FAMILY.

ISOËTES L. Quillwort.

Isoëtes Tuckermani A. Br.

Rare or local. Growing submerged on gravelly shores of ponds: Ledyard, North Stonington and East Lyme (Graves), Lyme (Graves & Bissell). July — Aug.

Isoëtes foveolata A. A. Eaton (minutely pitted).

Rare. Meriden, edge of small pond near West Peak (F. W. Hall, 1873). Aug.

Isoëtes saccharata Engelm. (sugary), var. *Amesii* A. A. Eaton.

Rare. Shallow water of ponds and rivers: Griswold (Harger), North Stonington (Graves & Bissell), Ledyard and Lyme (Graves). July — Aug.

Isoëtes echinospora Dur. (prickly-spored), var. *Braunii* (Dur.) Engelm.

Occasional. Shallow water or muddy borders of ponds and streams. July — Sept.

Isoëtes echinospora Dur., var. *muricata* (Dur.) Engelm. (beset with short, hard points).

Rare. Groton, in Great Brook (Graves). July — Sept.

Forms approaching this have been found at Union (Bissell), and at Lyme (Graves & Bissell).

Isoëtes Gravesii A. A. Eaton.

Local. Muddy border of ponds and streams: Lyme (Graves), Windsor (Bissell), East Haven (W. A. Setchell), Bristol (J. N. Bishop), Plymouth (H. S. Clark & Bissell),

Oxford and Huntington (Harger), Stratford (Eames), Goshen (L. M. Underwood). Aug.—Sept.

Isoëtes Dodgei A. A. Eaton.

Isoëtes canadensis A. A. Eaton.

Isoëtes riparia Engelm., var. *canadensis* Engelm.

Rare or local. Windsor, muddy river bank (Bissell), Fairfield, in Mill River, and Westport, in Saugatuck River (Eames). July — Sept.

Isoëtes Engelmanni A. Br.

Occasional. Muddy border of ponds and streams, growing where it would be submerged during high water. July — Sept.

The var. *GRACILIS* Engelm. (slender) has been found at Groton (Graves), Southington (Bissell), Bridgeport and Westport (Eames).

SPERMATOPHYTA. SEED PLANTS.

GYMNOSPERMAE.

TAXACEAE. YEW FAMILY.

TAXUS L. Yew.

Taxus canadensis Marsh.

Taxus minor Britton.

Ground Hemlock. American Yew.

Rocky woods, often under other evergreens. Rare or wanting along the coast, reaching Norwich (Mrs. E. E. Rogers), Guilford, at North Guilford (G. H. Bartlett), Orange (D. C. Eaton), Danbury (Eames); becoming occasional or frequent northward. April—May; fruit July—Aug.

The pulp of the fruit is edible, but all other parts of the plant are poisonous. Drinking a decoction of the leaves has caused death to man, and birds are said to be sometimes poisoned by eating the seeds.

PINACEAE. PINE FAMILY.

PINUS L. Pine.

Pinus Strobus L. (classical name for some pine tree).

White Pine.

Woodlands, in various soils and exposures. Occasional near the coast, becoming frequent northward and common in northeastern Connecticut. May—June.

A well known and valuable timber tree; often planted for ornament and for wind-breaks. The bark is medicinal.

Pinus rigida Mill. (stiff).

Pitch Pine. Yellow Pine.

Poor, sterile or sandy soils. Rare or local in Litchfield County, frequent elsewhere. May—June.

Usually a small tree, but sometimes growing larger, then yielding a hard resinous lumber.

***Pinus sylvestris* L.** (of woods).

Scotch Pine. Scotch Fir.

Rare or local. Fields, roadsides and woods as an escape from cultivation: New London (Graves), Lyme (Harger & Graves), Southington (Andrews & Bissell), Bridgeport (Eames). May. Native of Europe and Asia.

One of the valuable timber trees of Europe. It thrives in our climate and was formerly often planted. It is of little value as an ornamental tree, but if grown in sufficient quantity might be valuable for timber.

***Pinus resinosa* Ait.** (resinous).

Red Pine.

Rare or local. Rocky woods: Granby (I. Holcomb), Salisbury (Mrs. C. S. Phelps). May—June.

The most beautiful of our native pines and a valuable ornamental tree. One of the timber trees of northern New England.

LARIX Mill. Larch.***Larix laricina* (DuRoi) Koch** (larch-like).

Larix americana Michx.

Tamarack. Hackmatack. American or Black Larch.

Swamps and bogs. Absent near the coast. Rare in the eastern part of the state: Union (Bissell), Tolland (Graves). Becoming occasional westward and frequent in Litchfield County. May.

The wood is hard, strong, durable in contact with the soil, valuable for posts and railroad ties. The bark is medicinal.

***Larix decidua* Mill.** (falling in season).

Larix europaea DC.

European Larch.

Rare. Escaped from cultivation to roadsides, fields and waste ground: Thompson and Union (Bissell), Griswold (Graves), Southington (Andrews & Bissell), Bridgeport (Eames). April—May. Native of northern Europe.

Hardy in almost any location and also producing a valuable timber. A good tree to plant for wind-breaks.

PICEA Link. Spruce.**Picea canadensis** (Mill.) BSP.*Picea alba* Link.

Cat Spruce. Skunk Spruce. White Spruce.

Rare. Waterford, a few trees in a pasture as an escape from cultivation (Graves). May. Native in northern New England and farther north.

A good tree for ornamental planting.

Picea rubra (DuRoi) Dietr. (red).*Picea nigra* Link, var. *rubra* Engelm.

Red Spruce.

Rare. Cool woods and bogs: Litchfield (N. L. Britton), Canaan (J. H. Putnam), Salisbury (Mrs. C. S. Phelps). May.

Picea mariana (Mill.) BSP.*Picea nigra* Link.*Picea brevifolia* Peck.

Black Spruce. Bog Spruce.

Swamps and sphagnum bogs. Rare or local over most of the state but absent near the coast. Usually a small stunted tree 5 to 15 ft. high but growing much larger in the cool swamps of Litchfield County. In open bogs the trees often produce cones when not more than 5 ft. high, and the cones persist on the tree for many years. May.

Northward the lumber is much used in the manufacture of wood pulp. It is the principal source of spruce gum. Medicinal.

Picea Abies (L.) Karst. (like Abies, the Fir).*Picea excelsa* Link.

Norway Spruce.

Rare or local. Roadsides, fields and woods as an escape from cultivation: Norwich (Mrs. E. E. Rogers), Southington (Andrews), Oxford (Harger), Bridgeport (Eames), Norwalk and Wilton (Miss A. E. Carpenter). May. Native of northern Europe.

Extensively planted for ornament and also for wind-breaks.

ABIES Hill. Fir.**Abies balsamea** (L.) Mill. (producing balsam).

Balsam Fir. Balm-of-Gilead Fir.

Rare. Cold swamps and woods: Middlebury (Harger), Goshen (J. H. Putnam & Bissell), Cornwall (E. E. Brewster), Salisbury (Mrs. C. S. Phelps). Also occurs as an escape from cultivation at Woodstock (Weatherby), Andover (Mrs. C. S. Phelps), and Farmington (Miss A. Lorenz). May.

The wood is soft and weak, of little value as timber. Its habit of early losing its lower branches makes it less desirable for ornamental planting than some other species of evergreens. Canada balsam is derived from the resin of its trunk.

TSUGA (Endl.) Carr. Hemlock.**Tsuga canadensis** (L.) Carr.

Hemlock.

Usually frequent but rather local in its distribution. Rocky woods and on hillsides in both dry and wet situations. May.

The timber is coarse-grained and brittle, but is used for rough lumber. The bark is much used in tanning. A valuable tree in cultivation for hedges and wind-breaks, and when standing alone a desirable ornamental tree. Medicinal.

CHAMAECYPARIS Spach. Cypress. White Cedar.**Chamaecyparis thyoides** (L.) BSP. (like *Thya*, classical name for some fragrant tree).*Chamaecyparis sphaeroidea* Spach.

White Cedar.

In swamps. Rare in western and central districts: Danbury and New Fairfield (P. M. Augur et al.), Wolcott (A. M. Johnson). Becoming occasional or frequent eastward. April.

A slender tree with light and durable wood very valuable for fence posts. It usually grows in dense colonies, choking out other vegetation and forming cedar swamps.

THUJA L. Arbor Vitae.**Thuja occidentalis** L. (western).

Arbor Vitae. White Cedar.

Rare. Canaan, on a limestone ridge and in a near-by swamp (C. K. Averill), Salisbury, rocky hillside and at another locality in a deep swamp (Mrs. C. S. Phelps); apparently native at these three localities. Escaped from cultivation to fields and roadsides at Norwich (Mrs. E. E. Rogers), East Hartford (A. W. Driggs), Killingly and Windsor (Bissell). April — May.

Often planted for hedges or as an ornamental tree. A valuable timber tree in northern New England. Medicinal, the fresh tops officinal.

JUNIPERUS L. Juniper.

Juniperus communis L. (growing in colonies).

Common Juniper.

Rare. Norwich, near Spaulding's Pond (Mrs. E. E. Rogers). May.

Juniperus communis L., var. *depressa* Pursh (sunk down, as if flattened from above).

Juniperus nana of Britton's Manual in part.

Juniperus communis L., var. *canadensis* Loud.

Juniperus communis L., var. *alpina* Gray's Manual ed. 6 in part.

Common Juniper.

Frequent. Dry rocky pastures and sterile hills. May.

The fruit often does not ripen until the second summer. The oil of juniper, distilled from the fruit, is officinal. This is medicinal, as are the tops or young branches, and is also an essential constituent of Holland gin.

Juniperus virginiana L.

Red Cedar. Savin.

Common. Dry or sterile soils. April — May.

The wood is light, very durable in contact with the soil, and much used for fencing. It is also used for boat building and cabinet work. The so called "cedar-apples" found on its branches are sometimes used medicinally, and are causative of rust on apple trees.

ANGIOSPERMAE.

MONOCOTYLEDONEAE.

TYPHACEAE. CAT-TAIL FAMILY.

TYPHA L. Cat-tail Flag.

Typha latifolia L. (broad-leaved).

Common Cat-tail.

Frequent. Wet swamps, margins of streams and ponds, often in large colonies. June—July; fruit Oct., persisting through the winter.

The heads are often used for decorative purposes and also make a fluffy stuffing for pillows, etc. The roots are sometimes used medicinally.

Typha angustifolia L. (narrow-leaved).

Cat-tail.

Occasional in fresh-water marshes near the coast, also found inland at Oxford (Harger), and Salisbury (Mrs. C. S. Phelps); common along the coast in salt or brackish marshes. June; fruit Oct., persisting through the winter.

SPARGANIACEAE. BUR-REED FAMILY.

SPARGANIUM L. Bur-reed.

Sparganium eurycarpum Engelm. (broad-fruited).

Borders of ponds and streams. Rare or local over most of the state: Groton and Lyme (Graves), East Hartford (A. W. Driggs), Oxford (Harger), Windsor and Sharon (Bissell). Becoming occasional along the coast in New Haven and Fairfield Counties (Eames). July—Aug.

Sparganium americanum Nutt.

Sparganium simplex Huds., var. *Nuttallii* Engelm.

Rare or occasional. Shallow water and borders of ponds and streams: Voluntown and East Lyme (Graves), Union (Bissell), Hampton (Weatherby). July—Aug.

Sparganium americanum Nutt., var. **androcladum** (Engelm.)
Fernald & A. J. Eames (having the staminate inflores-
cence branched).

Sparganium androcladum Morong.

Sparganium simplex Huds., var. *androcladum* Engelm.

Occasional or frequent. Marshes, about ponds and along
streams. July — Aug.

Sparganium lucidum Fernald & A. J. Eames (shining).

Rare. Shallow water of pool, Hartford (H. S. Clark &
Weatherby). Late Aug.—Sept.

Sparganium diversifolium Graebner (various-leaved).

Sparganium simplex Gray's Manual ed. 6 in great part.

Occasional. Borders of ponds and streams. July — Aug.

Sparganium diversifolium Graebner, var. **acaule** (Beeby)
Fernald & A. J. Eames (stemless).

Rare. Wet places with the typical form. July — Aug.

Sparganium angustifolium Michx. (narrow-leaved).

Sparganium simplex Huds., var. *angustifolium* Engelm.

Rare. Floating in deep water: Canaan (J. W. Robbins,
1828). July — Aug.

Sparganium fluctuans (Morong) Robinson (undulating).

Sparganium androcladum Morong, var. *fluctuans* Morong, at
least in part.

Sparganium simplex Huds., var. *fluitans* Engelm.

Rare. Deep water of cold ponds: Norfolk (J. W. Rob-
bins). July — Aug.

Sparganium minimum Fries (least; smallest).

Rare. Shallow water and mud of Twin Lakes, Salisbury
(Mrs. C. S. Phelps, A. V. Osmun & Bissell). July — Aug.

NAJADACEAE. PONDWEED FAMILY.

POTAMOGETON L. Pondweed.

Potamogeton natans L. (floating).

In ponds and slow streams. Rare or local over most of
the state: Southington (Andrews & Bissell), Oxford (Har-
ger), Salisbury (Mrs. C. S. Phelps, A. V. Osmun & Bissell).
Frequent in New London County (Graves). July — Aug.

Potamogeton Oakesianus Robbins.

Rare. In ponds: Stafford (E. L. Morris), Middlebury (Harger). Aug.

Potamogeton epihydrus Raf. (living on the water).

Potamogeton Nuttallii C. & S.

Potamogeton pennsylvanicus Willd.

Common. Ponds and slow or swift running streams.
June — Aug.

Potamogeton epihydrus Raf., var. *cayugensis* (Wiegand) Benn.

Potamogeton Nuttallii C. & S., var. *cayugensis* Wiegand.

Rare. Lyme, in Selden's Cove (Graves & Bissell), Hamden, in Lake Whitney (Eames). July — Aug.

Potamogeton alpinus Balbis (alpine).

Potamogeton rufescens Schrad.

Rare. Plainville, in cold spring water near Hamlin's Pond (Andrews & Bissell). July — Aug.

Potamogeton americanus C. & S.

Potamogeton lonchites Tuckerm.

Potamogeton fluitans Gray's Manual ed. 6, not Roth.

Local. In the Connecticut River and adjoining coves and creeks at Lyme (Graves); also at New Haven (D. C. Eaton), Hartford (J. W. Robbins, A. W. Driggs), Westport, in the Saugatuck River; also in the Housatonic River near its mouth and at New Milford (Eames), and at Oxford (Harger).
July — Sept.

Potamogeton americanus C. & S., var. *novaeboracensis* (Morong) Benn.

Potamogeton lonchites Tuckerm., var. *novaeboracensis* Morong.

Rare. Lyme, in deep water at Selden's Cove (Graves & Bissell). July — Aug.

Potamogeton pulcher Tuckerm. (beautiful; handsome).

Rare. In ponds: East Lyme, Old Lyme and Lyme (Graves), Bridgeport (Eames). June — July.

Potamogeton amplifolius Tuckerm. (large-leaved).

Occasional. Ponds and sluggish streams. July — Aug.

Potamogeton heterophyllus Schreb. (various-leaved).

Occasional or local. Ponds and either slow or swift flowing streams. July — Aug.

The forma **GRAMINIFOLIUS** (Fries) Morong (grassy-leaved) occurs at Lake Saltonstall (O. D. Allen). The forma **LONGIPEDUNCULATUS** (Mérat) Morong (long-stalked) has been found at Selden's Cove, Lyme (Graves). The forma **MYRIOPHYLLUS** (Robbins) Morong (myriad-leaved) occurs at Lake Saltonstall (O. D. Allen), and Twin Lakes, Salisbury (Bissell). The forma **MAXIMUS** Morong (greatest) has been found in the Connecticut River at East Windsor (Bissell), and in Lake Whitney, Hamden (O. D. Allen). The forma **TERRESTRIS** Schlecht. (terrestrial) is often found along borders of ponds and streams in dry seasons.

Potamogeton angustifolius Berchtold & Presl (narrow-leaved).

Rare. Oxford, in the Housatonic River (Harger). July — Aug.

The var. **CONNECTICUTENSIS** (Robbins) Benn., *Potamogeton lucens* L., var. *connecticutensis* Robbins, occurs rarely in ponds, lakes and rivers: Lake Saltonstall (J. W. Robbins); in the Housatonic River at New Milford (E. H. Austin & Eames) and Kent (C. K. Averill); also in Twin Lakes, Salisbury (Bissell).

Potamogeton lucens L. (shining).

Rare. Ponds and slow streams: Lyme, at Selden's Cove (Graves), Meriden (Harger), Salisbury (Bissell). July — Aug.

Potamogeton praelongus Wulf. (very long).

Local. Deep water of ponds and streams: North Branford and Wallingford (Harger), Lake Saltonstall (J. A. Allen), Westport and Kent (Eames), Litchfield (Dr. T. Morong), Canaan (J. W. Robbins). June — July.

Potamogeton Richardsonii (Benn.) Rydb.

Potamogeton perfoliatus L., var. *lanceolatus* Robbins.

Potamogeton perfoliatus L., var. *Richardsonii* Benn.

Common. Ponds and streams. June — July.

Potamogeton bupleuroides Fernald (like *Bupleurum*, the Thorough-wax).

Potamogeton perfoliatus Gray's Manual ed. 6 in part, not L.

In ponds, streams and brackish waters. Occasional near the coast, extending inland as far as East Windsor (Bissell). July — Aug.

× **Potamogeton nitens** Weber (shining).

Rare. Old Saybrook, small pond near the Connecticut River (Harger). This is apparently a hybrid between *Potamogeton heterophyllus* and some other species, and is not known to produce fruit.

Potamogeton zosterifolius Schum. (having leaves like *Zostera*, the Eel Grass).

Rare or occasional. Ponds and streams. July — Aug.

Potamogeton Hillii Morong.

Rare. Salisbury, in Twin Lakes (Bissell). July — Aug.

Potamogeton obtusifolius Mert. & Koch (blunt-leaved).

Rare. Newtown, in shallow water of a mill pond (Eames). July — Aug.

Potamogeton Friesii Ruprecht.

Potamogeton mucronatus Gray's Manual ed. 6, not Schrad. (?).

Rare. Southington, in pools (Andrews). July — Aug.

Potamogeton pusillus L. (very small).

Frequent. Ponds and slow streams. July — Sept.

Potamogeton pusillus L., var **Sturrockii** Benn.

Rare. In ponds: Waterford (Graves), Lake Saltonstall (O. D. Allen). July — Sept.

Potamogeton lateralis Morong (lateral).

Rare. Collected at Salisbury many years ago by Dr. J. W. Robbins; not reported by any recent collector. July — Aug.

Potamogeton Vaseyi Robbins.

Rare. Ponds and lakes: Lake Saltonstall (O. D. Allen, J. A. Allen, Eames), Milford (Eames), Plymouth (J. K. Goodrich). July — Aug.

Potamogeton gemmiparus Robbins (producing buds).

Rare. Union, shallow water of Mashapaug Pond (Bissell). July — Aug.

Potamogeton foliosus Raf. (leafy).

Potamogeton pauciflorus Pursh.

Rare or local. Ponds and slow streams: Voluntown (Harger), Southington (Andrews & Bissell), Newtown (Eames), New Milford (C. K. Averill), Sharon and Salisbury (Bissell). July — Aug.

Potamogeton hybridus Michx. (mongrel).

Potamogeton diversifolius Raf.

Occasional. In ponds. July — Aug.

The var. MULTI-DENTICULATUS (Morong) Asch. & Graebner (with many fine teeth) has been found at Groton (T. Morong), Griswold (Harger), Milford and Stratford (Eames).

Potamogeton dimorphus Raf. (of two forms).

Potamogeton Spirillus Tuckerm.

Frequent. Ponds and streams. June — Aug.

Floating leaves often wanting.

Potamogeton pectinatus L. (comb-like).

Rare or local. Ponds, streams and ditches: Hartford (D. C. Eaton), East Windsor and Salisbury (Bissell), Oxford (Harger), Stratford, New Milford and Kent (Eames). July — Sept.

Potamogeton Robbinsii Oakes.

Occasional or local. Ponds, ditches and slow streams. July — Aug.

This species very rarely forms fruit.

RUPPIA L. Ditch Grass.

Ruppia maritima L. (of the sea-coast).

Ditch Grass.

Frequent in shallow water of pools, creeks and ditches about salt or brackish marshes along the coast. July — Oct.

ZANNICHELLIA L. Horned Pondweed.

Zannichellia palustris L. (of marshes).

Horned Pondweed.

Occasional in salt or brackish water along the coast, and in the Housatonic River northward as far as New Milford (C. K. Averill). July — Sept.

ZOSTERA L. Grass Wrack. Eel Grass.

Zostera marina L. (of the sea).

Eel Grass.

Common along the coast in bays, salt rivers and creeks, growing on muddy or sandy bottoms. July — Sept.

Extensively used by farmers as a fertilizer.

NAJAS L. Naiad.

Najas flexilis (Willd.) Rostk. & Schmidt (flexible).

Frequent. Ponds and slow streams. July — Sept.

Najas gracillima (A. Br.) Magnus (very slender).

Najas indica Cham., var. *gracillima* A. Br.

Rare or local. In ponds: East Lyme and Lyme (Graves), Stafford (Bissell), Milford, Bridgeport and Newtown (Eames), Danbury (Eames & C. C. Godfrey). July — Sept.

JUNCAGINACEAE. ARROW GRASS FAMILY.

SCHEUCHZERIA L.

Scheuchzeria palustris L. (of marshes).

Rare. Cool sphagnum bogs: South Windsor (Weatherby), Burlington (J. N. Bishop), East Granby (M. Hitchcock), Bethany and Woodbury (Harger), Litchfield (A. L. Train), Salisbury (Mrs. C. S. Phelps & Bissell). June — July.

TRIGLOCHIN L. Arrow Grass.

Triglochin maritima L. (of the sea).

Frequent in salt marshes along the coast. June — Aug.

ALISMACEAE. WATER PLANTAIN FAMILY.

SAGITTARIA L. Arrow-head.

Sagittaria longirostra (M. Micheli) J. G. Smith (long-beaked).

Rare. Groton, swampy border of pond (Harger). July — Sept.

Sagittaria latifolia Willd. (broad-leaved).

Sagittaria variabilis Engelm.

Frequent or common. Marshes and shallow water of ponds and streams. Aug.—Sept.

The forma *OBTUSA* (Muhl.) Robinson (blunt), *Sagittaria obtusa* Muhl., is occasional; the forma *HASTATA* (Pursh) Robinson (halberd-shaped), *Sagittaria hastata* Pursh, and the forma *GRACILIS* (Pursh) Robinson (slender), *Sagittaria gracilis* Pursh, are frequent. The forma *DIVERSIFOLIA* (Engelm.) Robinson (various-leaved), *Sagittaria variabilis* Engelm., var. *diversifolia* Engelm., is rare.

Sagittaria Engelmanniana J. G. Smith.

Sagittaria variabilis Engelm., var. *gracilis* Engelm.

Rare. Bogs and wet meadows: Waterford, Voluntown and East Lyme (Graves), Lyme (Dr. E. J. Thompson). Aug.—Sept.

Sagittaria arifolia Nutt. (arum-leaved).

Sagittaria cuneata Sheldon.

Rare. Wet alluvial soil on the banks of the Connecticut River: Windsor and Hartford (Bissell). June—July.

Sagittaria heterophylla Pursh (various-leaved).

Rare or local. Muddy river shores: Norwich (W. A. Setchell), Lyme (Graves), Wethersfield (C. Wright), East Windsor (Bissell), Windsor (H. S. Clark), Hartford (H. S. Clark & Bissell), Bloomfield (A. W. Driggs), Seymour and Derby (Harger). June—July.

The var *RIGIDA* (Pursh) Engelm. (stiff), *Sagittaria rigida* Pursh, and the var. *ELLIPTICA* Engelm. (oval) sometimes occur with the species.

Sagittaria graminea Michx. (grass-like).

Sagittaria Eatoni J. G. Smith.

Sagittaria cristata Engelm.

Occasional or local. Muddy shores of ponds and streams. June—Aug.

Sagittaria subulata (L.) Buchenau (awl-shaped).

Sagittaria pusilla Nutt.

Sagittaria natans Michx., var. *lorata* Chapm.

Rare or local. Lyme, muddy shore of Selden's Cove (Dr. E. J. Thompson) ; mud of lower Housatonic River and smaller streams along the coast in Fairfield County (Eames). July — Sept.

Sagittaria subulata (L.) Buchenau, var. (?) *gracillima* (Wats.) J. G. Smith (very slender).

Sagittaria natans Michx., var. (?) *gracillima* Wats.

Rare. East Windsor and Windsor, rock ledges in the bed of the Connecticut River, in 3-6 ft. of water (Bissell). July.

LOPHOTOCARPUS Th. Durand.

Lophotocarpus spongiosus (Engelm.) J. G. Smith (spongy).
Sagittaria calycina Engelm., var. *spongiosa* Engelm.

Muddy tidal shores and meadows. Rare at Old Lyme (Graves) and New Haven (D. C. Eaton, Harger) ; occasional, Milford and westward (Eames). June — Sept.

ALISMA L. Water Plantain.

Alisma Plantago-aquatica L. (water-plantain).
Water Plantain.

Common. Muddy places and shallow water. July — Aug.

HYDROCHARITACEAE. FROG'S BIT FAMILY.

ELODEA Michx. Water-weed.

Elodea canadensis Michx.
Philotria canadensis Britton.
Ditch Moss.

Frequent. Ponds and slow streams. July — Sept.

Sometimes so plentiful as to be a nuisance in reservoirs.

VALLISNERIA L. Tape Grass. Eel Grass.

Vallisneria spiralis L. (coiled).
Eel Grass. Wild Celery.

Common in the waters of the Connecticut and Housatonic Rivers and their larger tributaries. It also grows in Hatch Pond, Kent (Eames), and in the Thames River at Norwich (W. A. Setchell, Mrs. E. E. Rogers). July — Sept.

GRAMINEAE. GRASS FAMILY.

ZEA L. Corn.

Zea Mays L. (Indian name for this species).

Corn. Indian Corn. Maize.

Rare. A fugitive in waste grounds and on dumps or banks of streams. July — Aug. Nativity unknown but supposed to be from Mexico.

One of the most important cereals of the United States.

TRIPSACUM L. Gama Grass. Sesame Grass.

Tripsacum dactyloides L. (finger-like).

Gama Grass. Sesame Grass.

Moist or dry open ground bordering salt or brackish marshes and creeks. Groton (Graves) and occasional along the coast westward. July — Aug.

A large corn-like grass, sometimes used for fodder in the South.

ANDROPOGON L. Beard Grass.

Andropogon scoparius Michx. (broom-like).

Broom Beard Grass. Wire Grass. Bunch Grass. Blue-stem.

Common. Open sterile ground, often covering large areas on the sand plains. Aug.—Sept. A glaucous form is frequent.

A dry wiry grass of little agricultural value in Connecticut, but notable for its beautiful color in autumn and winter. In the South and West it is considered of some value for pasturage.

Andropogon scoparius Michx., var. *littoralis* (Nash) Hitchc. (of the sea-shore).

Andropogon littoralis Nash.

Rare. Fairfield, sparingly on Fairfield Beach (Eames). Aug.—Sept.

Andropogon virginicus L.

Dry or moist open ground. Rare or local inland, becoming occasional near the coast. Late Aug.—Sept.

Andropogon furcatus Muhl. (forked).

Forked Beard Grass. Big Blue-stem. Turkey-foot.

Frequent. Open ground, generally in dry soil. Aug.—Sept.

A tall and striking grass, growing in large clumps. It is of value for hay and pasturage in some localities in the United States.

SORGHASTRUM Nash.

Sorghastrum nutans (L.) Nash (nodding).

Sorghastrum avenaceum Nash.

Chrysopogon nutans Benth.

Chrysopogon avenaceus Benth.

Indian Grass. Wood Grass.

Occasional or frequent. Open, usually dry ground. Aug.—Sept.

A tall grass, growing in clumps and with beautiful golden brown flower-panicles.

SORGHUM Pers. Broom Corn. Sorghum.

Sorghum halepense (L.) Pers.

Johnson Grass.

Rare. Waterbury, in waste ground (A. E. Blewitt). Aug.—Sept. Fugitive from the Old World. A cultivated form of this called Kafir Corn has been found in waste ground at Hartford (H. S. Clark).

This species is supposed to be the original of the several forms of Sorghum which are cultivated for sugar-making, for use in the manufacture of brooms, for forage and for their seeds.

DIGITARIA Scop. Finger Grass.

Digitaria filiformis (L.) Koeler (thread-shaped).

Panicum filiforme L.

Syntherisma filiformis Nash.

Frequent. Dry sterile open ground. Aug.—Sept.

Digitaria humifusa Pers. (spread over the ground; prostrate).

Panicum glabrum Gaudin.

Syntherisma linearis Nash.

Small Crab Grass.

Occasional or frequent. Dry or moist fields, roadsides and waste places. Aug.—Sept. Naturalized from Europe.

Digitaria sanguinalis (L.) Scop. (blood-red).*Panicum sanguinale* L.*Syntherisma sanguinalis* Dulac.*Syntherisma fimbriata* Nash.

Crab Grass. Large Crab Grass. Finger Grass. Crowfoot Grass.

Common. Waste places and cultivated ground. July—Oct. Naturalized from Europe.

A troublesome weed in gardens and lawns. It makes good hay if properly dried, and in the South is often harvested. In Bohemia the seeds are used by man as a food.

LEPTOLOMA Chase.**Leptoloma cognatum** (Schultes) Chase (related).*Panicum autumnale* Bosc.

Fall Witch Grass.

Rare. New Haven, in dry ground and in gravelly soil (R. W. Woodward). July.

PASPALUM L.**Paspalum setaceum** Michx. (bristle-like).

Fields and pastures, mostly in dry ground. Rare in the northern part of the state, becoming occasional near the coast. A form with glabrous spikelets sometimes occurs. Aug.—Sept.

Paspalum Muhlenbergii Nash.

Frequent or common. Dry open ground. Aug.—Sept.

Paspalum psammophilum Nash (sand-loving).*Paspalum prostratum* Nash, not Scribn. & Merr.

Rare. Dry sandy or gravelly soil: Sprague (Graves), Franklin (R. W. Woodward), Old Saybrook (Bissell & Graves). Aug.—Sept.

Paspalum plenipilum Nash (having many hairs).

Rare. Orange, in meadows (R. W. Woodward). Sept.

Paspalum circulare Nash (round).

Rare. Groton, moist grassland (Bissell & Graves), Franklin (R. W. Woodward). Sept.

PANICUM L. Panic Grass.

A large genus, made up for the most part of lowly grasses of little or no agricultural value, but of much scientific interest.

Panicum verrucosum Muhl. (wartly).

Rare. New Haven, in damp shaded ground (Harger).
Sept.—Oct.

Panicum capillare L. (hair-like).

Old-witch Grass. Tumble-weed. Tickle Grass.

Common. Cultivated ground and waste places. July—
Sept.

Panicum philadelphicum Bernh.

Panicum minus Nash, according to description.

Panicum minimum Scribn. & Merr.

Dry woods and thickets and on sandy shores of ponds and rivers. Rare in New London County (Graves); occasional in southwestern Connecticut (Eames); extending up the Connecticut River as far as East Windsor (Bissell). Aug.—Sept.

Panicum miliaceum L. (millet).

Common, True, European or Broom Corn Millet.

Rare or occasional. Roadsides and waste places in and about towns and cities. Aug.—Sept. Fugitive or adventive from Europe.

The seeds are highly nutritious and are used in some countries as human food; also in domestic medicine. The grain is excellent for feeding poultry. In the Old World it has been cultivated from prehistoric times.

Panicum dichotomiflorum Michx. (having its flower-stalks forked in pairs).

Panicum proliferum of American authors, not Lam.

Occasional or frequent. Chiefly in moist ground, especially on borders of ponds and rivers. Aug.—Sept.

Panicum amaroides Scribn. & Merr. (like *Panicum amarum*).

Panicum amarum Ell., var. *minor* Vasey & Scribn.

Sea beaches and sand dunes. Rare or local on the coast eastward: Old Lyme (Graves), Guilford (Dr. Barratt). Becoming occasional along the Sound westward. Aug.—Oct.

Panicum virgatum L. (wand-like).

Switch Grass. Tall Panic Grass.

In either moist or dry ground. Common along the coast and the larger rivers, rare or occasional elsewhere. July — Sept.

A handsome grass forming large, dense clumps and with ample flower panicles sometimes 30 inches long. If cut early it makes a fair quality of hay and it is also of some value as a forage plant.

Panicum longifolium Torr. (long-leaved).

Rare or local. Open moist ground near the coast: Groton and Montville (Graves), Fairfield (Eames). Aug:— Sept.

Panicum agrostoides Spreng. (like *Agrostis*, the Red Top).

Common. Low meadows and wet open grounds. July — Sept.

Panicum stipitatum Nash (stalked).

Rare. Lyme, wet meadow at Selden's Cove (Graves & Bissell). Aug.

Panicum depauperatum Muhl. (impoverished).

Frequent. Dry sterile or sandy ground. June — early July.

Panicum linearifolium Scribn. (narrow-leaved).

Panicum Enslinei of Britton's Manual.

Common. Dry fields and in sandy or sterile places. June — early July.

Panicum Wernerii Scribn.

Rare or local. Chiefly in open, dry, sandy or gravelly soil, sometimes in thickets or open sandy woods: Voluntown, Ledyard and Waterford (Graves), Franklin (R. W. Woodward & Graves). June — July.

Panicum Bicknellii Nash.

Panicum nemopanthum Ashe.

Panicum Bushii Nash.

Rare. Rocky woodlands: Norwich (Graves), New Haven (R. W. Woodward). June.

Panicum dichotomum L. (forked in pairs).

Frequent or common. Dry woods and thickets. June — July.

Panicum barbulatum Michx. (having a little beard).

Occasional. Rocky woods and thickets usually in dry soil.

June—July.

Panicum microcarpon Muhl. in Ell. (small-fruited).

Panicum barbulatum of American authors, not Michx.

Frequent. Low moist or wet thickets and open places.

June—July.

Panicum boreale Nash (northern).

Open bogs, wet meadows and moist sandy thickets. Apparently rare in southern Connecticut: Griswold and Waterford (Graves), Franklin (R. W. Woodward & Graves), Southington (Andrews, Bissell), Oxford and Monroe (Harger). Probably occasional in the northern part of the state.

June—July.

Panicum spretum Schult. (despised).

Panicum nitidum of recent American authors, not Lam.

Panicum Eatoni Nash.

Rare. Low meadows and sandy shores of ponds: Groton and East Lyme (Graves), Columbia (Weatherby & Mrs. C. S. Phelps). June—July.

Panicum Lindheimeri Nash.

Panicum nitidum Scribn. & Merr. in part.

Dry sterile open ground. Occasional or frequent in southeastern and southwestern Connecticut, apparently rare elsewhere: East Hartford (Weatherby), Southington (Andrews). June—July.

Panicum huachucae Ashe.

Panicum unciphyllum of recent American authors, not Trin.

Panicum pubescens of Britton's Manual.

Common. Fields, woods and thickets usually in dry or sandy places. June—July.

Panicum huachucae Ashe, var. *silvicola* Hitchc. & Chase (living in woods).

Panicum lanuginosum of recent American authors in part.

Occasional or frequent. Woods and shaded ground in either dry or wet soil. June—July.

Panicum implicatum Scribn. (entangled).

Panicum unciphyllum Trin., var. *implicatum* Scribn. & Merr.

Swamps and in wet sandy places. Rare in most parts of the state, but occasional in southwestern Connecticut. June — July.

Panicum meridionale Ashe (southern).

Panicum filiculme Ashe, not Hack.

Panicum unciphyllum Trin., var. *meridionale* Scribn. & Merr.

Rare or occasional. Dry or sterile soil in woods or in open ground. June — July.

Panicum oricola Hitchc. & Chase (an inhabitant of the shore.)

Rare. Barren sands along the shore of the Sound: Gorton (Bissell). Probably occurring at other points on the coast. June — Aug.

Panicum subvillosum Ashe (somewhat hairy).

Rare. Dry sandy ground: Tolland and Southington (Bissell), East Hartford (Weatherby). June — July.

Panicum tennesseense Ashe.

Occasional or frequent. Woods and shaded ground more often in moist soil. June — July.

Panicum albemarlense Ashe.

Panicum auburne Gray's Manual ed. 7 in part.

Rare. Dry sandy woods: Waterford, at Fog Plain (Graves). June — July.

Panicum scoparioides Ashe (like *Panicum scoparium*).

Rare. Woods or half shade in dry gravelly soil: Southington (Bissell). June — July.

Panicum pseudopubescens Nash (simulating *Panicum pubescens*).

Panicum ovale Gray's Manual ed. 7 in part.

Rare. Southbury, alluvial ground on banks of the Pomperaug River (Harger). June — July.

Panicum villosissimum Nash (very hairy).

Panicum atlanticum Nash.

Panicum xanthospermum Scribn. & Mohr.

Panicum haemacarpon Ashe.

Rare. Dry rocky woods and hillsides or in meadows:

Franklin (Graves, R. W. Woodward), Old Lyme (Graves), East Hartford (Weatherby), Southington (Andrews), Southbury (Harger). June—July.

Panicum Commonsianum Ashe.

Rare. Dry sandy or gravelly soil: East Lyme (Graves), South Windsor (Weatherby). June.

Panicum Addisonii Nash.

Rare. Sandy plains: East Lyme (Graves), East Hartford (Weatherby). June.

Panicum tsugetorum Nash (of hemlocks).

Occasional or frequent. Dry fields and woods. June—July.

Panicum columbianum Scribn.

Panicum psammophilum Nash.

Occasional or frequent. Dry sandy fields and thickets. June—July.

Panicum sphaerocarpon Ell. (round-fruited).

Frequent to common. Fields, pastures and roadsides in dry ground. June—Aug.

Panicum Ashei Pearson.

Panicum commutatum Scribn. & Merr., not R. & S.

Rare or occasional. Dry, often rocky woods. June—July.

Panicum Scribnerianum Nash.

Panicum scoparium Gray's Manual ed. 6, not Lam.

Common. Dry open sterile ground. June—July.

Panicum xanthophysum Gray (having yellow bladders: referring to the yellowish fruit).

Rare. Dry open woods or sandy places: Stafford (Graves), South Windsor (H. J. Koehler & A. W. Driggs). July—Aug.

Panicum clandestinum L. (concealed).

Corn Grass. Deer-tongue Grass.

Common. Moist or dry soil in open or partly shaded places. June—July.

Panicum Boscii Poir.

Panicum Porterianum Nash.

Panicum latifolium of American authors, not L.

Rare or occasional. Dry rocky woodlands. June—July.

Panicum Boscii Poir., var. **molle** (Vasey) Hitchc. & Chase
(soft).

Panicum latifolium L., var. *molle* Vasey.

Panicum pubifolium Nash.

Dry woods and thickets, usually in rocky ground. Occasional or local near the coast, becoming rare inland. June—July.

Panicum latifolium L. (broad-leaved).

Panicum macrocarpon Le Conte.

Occasional or frequent. Woods and thickets, mostly in dry ground. June—Aug.

ECHINOCHLOA Beauv.**Echinochloa crusgalli** (L.) Beauv. (cock-spur).

Panicum crusgalli L.

Barnyard Grass. Corn Grass. Cockspur or Cocksfoot Grass.

Common. Cultivated ground, mostly in manured soil, waste places and banks of streams. July—Sept. Naturalized from Europe.

Sometimes troublesome as a weed in cultivated ground, but useful as a forage plant and for the silo.

Echinochloa frumentacea (Roxb.) Link (producing grain).

Japanese Barnyard Millet or Grass. Billion-Dollar Grass.

Rare. Escaped from cultivation to fields and roadsides: Southington (Andrews), Salisbury (Mrs. C. S. Phelps). July—Sept. Fugitive from the Old World.

In cultivation as a forage plant. In India it is grown under the name of Sowna Millet for its grain which is there used as human food.

Echinochloa Walteri (Pursh) Nash.

Panicum crusgalli L., var. *hispidum* Torr.

Panicum Walteri Pursh.

Ditches, marshes and river banks. Occasional or frequent

along the coast and the larger streams ; rare elsewhere. July — Sept.

SETARIA Beauv. Bristly Foxtail Grass.

Setaria imberbis R. & S. (beardless), var. **perennis** (Hall) Hitchc. (perennial).

Chaetochloa versicolor Bicknell.

Perennial Foxtail Grass.

Occasional or frequent on the coast on borders of salt marshes. Aug.— Sept.

Setaria glauca (L.) Beauv. (glaucous).

Chaetochloa glauca Scribn.

Ixophorus glaucus Nash.

Foxtail. Pigeon Grass. Twitch Grass.

Common. Cultivated ground and waste places. July — Sept. Naturalized from Europe.

Often a troublesome weed in gardens.

Setaria verticillata (L.) Beauv. (whorled).

Chaetochloa verticillata Scribn.

Ixophorus verticillatus Nash.

Rough Foxtail Grass.

Rare or local. Roadsides and waste places in towns and cities. July — Sept. Naturalized from Europe.

Setaria viridis (L.) Beauv. (green).

Chaetochloa viridis Scribn.

Ixophorus viridis Nash.

Green Foxtail. Bottle Grass.

Frequent to common. Cultivated ground and waste places. June — Aug. Naturalized from Europe.

A weed in gardens and cultivated fields.

Setaria italica (L.) Beauv.

Chaetochloa italica Scribn.

Ixophorus italicus Nash.

Common, Italian or German Millet. Hungarian Grass.

Rare or occasional. Escaped from cultivation to roadsides and waste places. Aug.— Sept. Adventive from Europe.

The var. **GERMANICA** (Mill.) Richter, Golden-Wonder Millet, occurs rarely.

Often grown for fodder. In the Old World from ancient times grown for human food.

CENCHRUS L. Sandbur.

Cenchrus carolinianus Walt.

Cenchrus tribuloides of American authors, not L.
Sandbur. Hedgehog or Bur Grass.

Local, frequent or common. Dry sandy or gravelly fields and waste ground. July — Aug.; fruit Aug. — Sept.

Sometimes a troublesome weed.

ZIZANIA L. Water or Indian Rice.

Zizania palustris L. (of marshes).

Zizania aquatica of Manuals, not L.
Wild Rice. Water Oats.

Local or frequent. Shallow water of tidal rivers and large streams, especially near the coast; sometimes in ponds as at Hatch Pond, Kent (Eames). July — Aug.; fruit Sept. — Oct.

A highly ornamental grass. The seeds are very nutritious, and are said to be superior to the Oriental rice. They are greedily eaten by ducks and other birds; also extensively gathered for food by the Indians of the Northwest and sold by them in the markets.

LEERSIA Sw. White Grass. Cut Grass.

Leersia virginica Willd.

Homalocenchrus virginicus Britton.
Cut Grass. Scratch Grass.

Frequent. Wet woods, swamps and moist places. Aug.

Leersia oryzoides (L.) Sw. (like *Oryza*, the Rice).

Homalocenchrus oryzoides Poll.

Rice Cut Grass. Scratch Grass. False Rice.

Frequent. Swamps, along streams and in ditches. Aug. — Sept.

It makes a fair quality of hay.

PHALARIS L. Canary Grass.

Phalaris canariensis L.

Canary Grass.

Rare or occasional. Roadsides and waste places. June — Oct. Fugitive or adventive from Europe.

The seeds are used as food for cage birds, and mixed with wheat or rye are also used in some countries for bread making.

Phalaris arundinacea L. (reed-like).

Reed Canary Grass. Sword Grass. Spires Grass.

In swamps and along streams. Rare or occasional in the western part of the state; becoming frequent eastward. June—July.

The var. **PICTA** L. (painted), Ribbon Grass, is a horticultural form often cultivated for ornament, and it sometimes escapes to roadsides and waste places. The variety is introduced from Europe.

A striking grass adapted for planting in wet ground.

ANTHOXANTHUM L. Sweet Vernal Grass.

Anthoxanthum odoratum L. (fragrant).

Sweet Vernal Grass.

Common. Roadsides, fields, meadows, borders of woods and in waste places. May—June. Native of Europe.

Very fragrant in drying. Used in basket making.

HIEROCHLOË R. Br. Holy Grass.

Hierochloë odorata (L.) Wahlenb. (fragrant).

Hierochloë borealis R. & S.

Savastana odorata Scribn.

Savastana Nashii Bicknell.

Vanilla or Seneca Grass.

Rare or occasional inland: Franklin (R. W. Woodward), Southington (Andrews), Southbury (Eames & Harger), Sherman (Eames & E. H. Austin), Salisbury (Mrs. C. S. Phelps). Becoming frequent about the borders of salt and brackish marshes along the coast. May—June.

A very fragrant grass, used by the Indians in basket making. In northern Europe this and other sweet-scented grasses are strewn before the church doors on Saints' days.

ORYZOPSIS Michx. Mountain Rice.

Oryzopsis pungens (Torr.) Hitchc. (sharp-pointed).

Oryzopsis canadensis of Gray's Manual ed. 6.

Oryzopsis juncea BSP.

Rare. Dry woodlands: Voluntown (R. W. Woodward),

Preston (Graves), Thompson (Harger), Stafford (Weatherby & Bissell). May.

Oryzopsis asperifolia Michx. (rough-leaved).

Rocky woods. Rare near the coast and in the southwestern part of the state; occasional or frequent in central and northern Connecticut. May—June.

Oryzopsis racemosa (Sm.) Ricker (racemose).

Oryzopsis melanocarpa Muhl.

Rocky woods. Rare in the southeastern part of the state, frequent in southwestern Connecticut, occasional elsewhere. July—Aug.

STIPA L. Feather Grass.

Stipa avenacea L. (oat-like).

Black Oat Grass. Needle Grass. Porcupine Grass.

Reported only near the coast, in dry and rocky woods or openings and dry, sandy soils. Occasional in the southeastern part of the state, rare or local near New Haven, becoming more frequent in southwestern Connecticut. June.

The seeds of this grass are injurious to sheep by clinging to the wool and then penetrating the flesh.

ARISTIDA L. Triple-awned Grass.

Aristida dichotoma Michx. (forked).

Poverty Grass.

Common. Open, dry, sterile or sandy soil. Aug.—Sept.

Aristida gracilis Ell. (slender).

Aristida gracilis Ell., var. *depauperata* Gray.

Dry, sandy soil. Occasional or local near the coast, becoming rare northward. Aug.—Sept.

Aristida tuberculosa Nutt. (pimply).

Rare or local. Sea beaches from Orange westward. Aug.—Sept.

Aristida purpurascens Poir. (purplish).

Dry, sterile fields and pastures. Occasional or frequent except in the southwestern part of the state where it is rare or local. Aug.—Sept.

MUHLENBERGIA Schreb. Drop-seed Grass.

Muhlenbergia sobolifera (Muhl.) Trin. (producing offshoots).

Dry rocky woods. Generally rare, but frequent in southwestern Connecticut. Aug.—Sept.

Muhlenbergia tenuiflora (Willd.) BSP. (slender-flowered).

Muhlenbergia Willdenowii Trin.

Occasional or frequent. Rich or rocky woods. Aug.—Sept.

Muhlenbergia sylvatica Torr. (of woods).

Rocky woods, either moist or dry. Rare or occasional over most of the state; becoming frequent in southwestern Connecticut. Aug.—Sept.

Muhlenbergia foliosa Trin. (closely clothed with leaves).

Muhlenbergia ambigua Torr.

Moist woods. Southington (Bissell), and probably elsewhere, as the species has been confused with *Muhlenbergia mexicana*. Aug.—Sept.

Muhlenbergia mexicana (L.) Trin.

Crab Grass. Knot-root Grass.

Frequent or common. Moist or rich soil in cultivated ground, along roadsides and in waste places of towns and cities; also occasional in bogs and swamps and near streams. Aug.—Sept.

Sometimes troublesome as a weed in gardens and lawns. A cultivated form with striped leaves has escaped, and is established in a yard at Southington (Bissell).

Muhlenbergia racemosa (Michx.) BSP. (racemose).

Muhlenbergia glomerata Trin.

Bogs and swamps or sometimes in dry, rocky ground. Frequent in Litchfield County, becoming occasional or rare eastward and southward; reaching Union and Willington (Bissell), Franklin (R. W. Woodward), Meriden (Andrews & Bissell), New Haven (Eaton Herb.), Monroe (Eames). Aug.—Sept.

Muhlenbergia Schreberi J. F. Gmel.*Muhlenbergia diffusa* Schreb.

Drop-seed. Nimble Will.

Frequent along roadsides, in yards and waste places near dwellings; rare elsewhere. Aug.—Sept.

Muhlenbergia capillaris (Lam.) Trin. (hair-like).

Hair Grass.

Rare. Rocky cliffs: Hamden (O. Harger), New Haven (O. Harger, R. W. Woodward & Harger). Sept.

BRACHYELYTRUM Beauv.**Brachyelytrum erectum** (Schreb.) Beauv. (erect).*Brachyelytrum aristatum* Beauv.

Rich moist or rocky woods. Frequent except along the coast eastward where it is rare. July — Aug.

PHLEUM L. Timothy. Herd's Grass.**Phleum pratense** L. (of meadows).

Timothy. Herd's Grass. Cat-tail Grass.

Common. Fields, roadsides and pastures. June — Aug. Naturalized from Europe.

Extensively grown and very valuable for hay. It is said to have been introduced into Maryland in 1720 by Timothy Hanson, hence the name "Timothy."

ALOPECURUS L. Foxtail Grass.**Alopecurus pratensis** L. (of meadows).

Meadow Foxtail.

Rare. Moist fields and roadsides: New London (Graves), Middlebury (Harger), Southington, Litchfield and Cornwall (Bissell). May—June. Adventive from Europe.

A desirable grass for moist pastures.

Alopecurus geniculatus L. (abruptly bent).

Marsh, Water or Floating Foxtail.

Rare or local. Wet meadows and along brooks: Hartford (A. W. Driggs), Wethersfield (C. Wright), Southington (Andrews & Bissell). May—June.

A good grazing grass for wet grounds.

Alopecurus geniculatus L., var. **aristulatus** Torr. (with small awns or bristles).

Rare. Shallow water of ditches: Meriden (Harger & Mrs. C. S. Phelps), Salisbury (Weatherby & Mrs. C. S. Phelps). May—June.

SPOROBOLUS R. Br. Drop-seed. Rush Grass.

Sporobolus clandestinus (Spreng.) Hitchc. (concealed).

Sporobolus asper of Manuals.

Rare. Open, rocky ground: New Haven (R. W. Woodward). Sept.

Sporobolus asper (Michx.) Kunth (rough).

Sporobolus longifolius Wood.

Dry, sandy soils. In northern districts rare or occasional: Salisbury (Mrs. C. S. Phelps), New Milford (Eames), Oxford (Harger), Southington (Andrews & Bissell), Hartford (C. Wright). Becoming frequent near the coast and common about New Haven. Aug.—Sept.

Sporobolus vaginiflorus (Torr.) Wood (having the flowers in sheaths).

Frequent to common. Dry, sterile fields and sandy roadsides. Aug.—Sept.

Sporobolus neglectus Nash (neglected).

Rare. Dry ground: Oxford (Weatherby). Sept.

Sporobolus cryptandrus (Torr.) Gray (with hidden stamens).

Occasional in the southwestern part of the state, in sandy soil along the coast (Eames). July—Aug.

Sporobolus heterolepis Gray (various-scaled).

Rare. Dry, rocky summits: New Haven (Dr. Monson, O. D. Allen, Harger & R. W. Woodward). Sept.

Sporobolus uniflorus (Muhl.) Scribn. & Merr. (one-flowered).

Sporobolus serotinus Gray.

Peat bogs and open swamps. Frequent in the eastern part of the state, becoming rare or local westward: East Haven (A. H. Young & Harger), Southington (Andrews), Wolcott

(Andrews & Bissell), Waterbury (A. E. Blewitt), Middlebury (Harger), Norfolk (Bissell). Aug.—Sept.

A very delicate grass.

AGROSTIS L. Bent Grass.

Agrostis alba L. (white).

Fiorin. White Bent Grass. Red Top. Fine Bent. Dew Grass.

Local or occasional. Open, generally moist ground. July—Aug. In part naturalized from Europe.

The var. *VULGARIS* (With.) Thurb. (common), *Agrostis vulgaris* With., cultivated under the name of Red Top, is common in fields and open ground and is a valuable grass for hay and pasturage. This variety is usually introduced from Europe but is perhaps also native.

Agrostis alba L., var. *aristata* Gray (awned).

Rare. Franklin, moist peaty soil in shade (R. W. Woodward). July.

Agrostis alba L., var. *maritima* (Lam.) G. F. W. Mey. (of the sea-coast).

Agrostis coarctata Ehrh.

Frequent along the coast in salt and brackish marshes; rare inland as at Southington (Bissell), Oxford (Harger). July—Sept.

Agrostis hyemalis (Walt.) BSP. (wintering).

Agrostis scabra Willd.

Agrostis scabra Willd., var. *montana* Gray's Manual ed. 6.

Hair or Rough Hair Grass. Rough Bent. Fly-away or Silk Grass.

Frequent or common. Dry or moist open ground, often in sandy soil. June—Sept.

Agrostis perennans (Walt.) Tuckerm. (perennial).

Agrostis intermedia Scribn.

Thin Grass.

Frequent. Rich woodlands either dry or moist. Aug.—Sept.

Agrostis canina L. (of a dog).

Brown Bent Grass. Rhode Island Bent.

Local. Meadows, East Hartford (Weatherby); dry, ster-

ile field on bank of the Housatonic River, Milford (Eames); field, Westport (Eames & C. C. Godfrey). July. Adventive from Europe.

POLYPOGON Desf. Beard Grass.

Polypogon monspeliensis (L.) Desf.

Beard Grass.

Rare. Waste places: Manchester (A. W. Driggs). July—Sept. Fugitive from Europe.

CALAMAGROSTIS Adans. Reed Bent Grass.

Calamagrostis canadensis (Michx.) Beauv.

Blue-joint Grass. Blue-stem. Reed Bent Grass.

Frequent. Wet meadows and borders of swamps. July.

A valuable grass for wet grounds, making good hay if cut early.

Calamagrostis cinnoides (Muhl.) Barton (like Cinna, the Reed Grass).

Calamagrostis Nuttalliana Steud.

Occasional. Bogs and open swamps. Aug.—Sept.

AMMOPHILA Host.

Ammophila arenaria (L.) Link (of sand).

Ammophila arundinacea Host.

Beach Grass. Sea Sand Reed. Psamma. Marram.

Common along the coast on sand dunes and beaches. Aug.—Sept.

Most valuable as a sand binder, its long underground stems holding the sand together and preventing it from being blown by the wind.

CINNA L. Wood Reed Grass.

Cinna arundinacea L. (reed-like).

Frequent. Wet woods and shaded swamps. Aug.—Sept.

Cinna latifolia (Trev.) Griseb. (broad-leaved).

Cinna pendula Trin.

Rare. Moist shaded rocks: Barkhamsted (A. E. Blewitt), Hartland and Colebrook (Bissell), Salisbury (Mrs. C. S. Phelps). Aug.—Sept.

HOLCUS L.**Holcus lanatus L.** (woolly).

Velvet Grass.

Occasional to frequent. Moist fields and roadsides. June—July. Naturalized from Europe.

SPHENOPHOLIS Scribn.**Sphenopholis obtusata (Michx.) Scribn.** (blunt).

Eatonia obtusata Gray.

Rare or local. Borders of salt marshes: New Haven (R. W. Woodward), Fairfield (Eames). June—early July.

The var. **PUBESCENS** (Scribn. & Merr.) Scribn. (downy) occurs at Stratford and Fairfield (Eames).

Sphenopholis nitida (Spreng.) Scribn. (shining).

Eatonia nitida Nash.

Eatonia Dudleyi Vasey.

Dry, usually rocky woods. Generally frequent, but reported rare in the central part of the state. May—June.

Sphenopholis pallens (Spreng.) Scribn. (pale).

Eatonia pennsylvanica Gray.

Moist or dry woods and in open, wet meadows. Occasional along the coast, becoming frequent northward. June—early July.

The var. **MAJOR** (Torr.) Scribn. (larger), *Eatonia pennsylvanica* Gray, var. *major* Torr., occurs at Southington and Salisbury (Bissell).

Sphenopholis palustris (Michx.) Scribn. (of marshes).

Trisetum palustre Trin.

Trisetum pennsylvanicum Britton & Brown's Ill. Flora.

Rare or occasional. Wet meadows and open swamps. June.

TRISETUM Pers.**Trisetum spicatum (L.) Richter** (spiked).

Trisetum subspicatum Beauv.

Trisetum subspicatum Beauv., var. *molle* Gray.

Rare. Limestone ledges: Salisbury (J. R. Churchill). May—June.

DESCHAMPSIA Beauv.**Deschampsia flexuosa** (L.) Trin. (zigzag).

Common Hair Grass.

Dry woods and rocky hillsides. Frequent to common along the coast and on banks of tidal rivers; occurring rarely inland, as at Salisbury (Bissell). June—July.

Deschampsia caespitosa (L.) Beauv. (tufted).

Tufted Hair Grass.

Frequent on shores of tidal rivers in the southeastern part of the state, rare or local elsewhere: New Haven (A. L. Winton), Southington, introduced and established in one field (Bissell). June—July.

AVENA L. Oat.**Avena sativa** L. (sown).

Common Oat.

Occasional. Roadsides and waste places. June—July. Fugitive from Europe.

It is extensively grown as food for man and beast and is also reputed to have medicinal value.

ARRHENATHERUM Beauv. Oat Grass.**Arrhenatherum elatius** (L.) Beauv. (rather tall).

Arrhenatherum avenaceum Beauv.

Tall Oat Grass.

Fields and roadsides. Occasional in most parts of the state; frequent in the southwestern portion. June. Naturalized from Europe.

DANTHONIA DC. Wild Oat Grass.**Danthonia spicata** (L.) Beauv. (spiked).

Common. Dry, sterile soils. June—July.

Often covering large areas of dry meadow or pasture land, but of little value either for hay or pasturage.

Danthonia compressa Aust. (flattened).

Dry woods or sometimes on exposed, ledgy places. Occasional in southeastern and southwestern Connecticut, apparently rare in other parts of the state: Union and Windham

(Bissell), Southington (Andrews & Bissell), Cheshire (A. E. Blewitt), Naugatuck (Eames). June—July.

SPARTINA Schreb. Cord or Marsh Grass.

Spartina Michauxiana Hitchc.

Spartina cynosuroides of American authors, not Roth.
Slough, Cord, Bull or Thatch Grass. Tall Marsh Grass.

Marshes and shallow water both fresh and salt. Frequent to common along the coast and near tidal rivers; rare inland as at Glastonbury (Andrews), Oxford (Harger). July—Sept.

Spartina cynosuroides (L.) Roth (like *Cynosurus*, the Dog's-tail Grass).

Spartina polystachya Willd.
Salt Reed Grass.

Borders of salt marshes and creeks. Rare in eastern Connecticut: Old Lyme (Graves), Old Saybrook (Bissell). Becoming occasional from New Haven westward. July—Sept.

Spartina glabra Muhl. (smooth).

Spartina stricta Roth, var. *glabra* Gray.
Salt Marsh Grass.

In its typical form not known in Connecticut. The var. *PILOSA* Merr. (hairy) is common on borders of salt marshes and tidal rivers. Aug.—Sept.

Forms an important part of the hay cut on the salt marshes.

Spartina glabra Muhl., var. **alterniflora** (Loisel.) Merr. (alternate-flowered).

Spartina stricta Roth., var. *alterniflora* Gray.
Salt Marsh Grass.

Occasional. Borders of salt marshes and tidal streams.
Aug.—Sept.

Spartina patens (Ait.) Muhl. (spreading) var. **juncea** (Michx.) Hitchc. (rush-like).

Spartina juncea Willd.
Trachynotia juncea Michx.
Salt Meadow Grass.

Common on salt meadows along the coast. July—Sept.
Furnishes much of the hay cut on the salt meadows.

Spartina patens (Ait.) Muhl., var. *caespitosa* (A. A. Eaton) Hitchc. (growing in tufts).

Rare. Salt marshes: Groton (Graves). July — Aug.

CYNODON Richard. Bermuda or Scutch Grass.

Cynodon Dactylon (L.) Pers. (finger).

Capriola Dactylon Kuntze.

Bermuda or Scutch Grass.

Rare. Waste ground: New Haven (O. Harger). July — Aug. Fugitive from Europe where it is native, or from the South where it has been introduced and is often cultivated as a pasture grass.

BOUTELOUA Lag. Mesquite Grass.

Bouteloua curtipendula (Michx.) Torr. (short-hanging).

Bouteloua racemosa Lag.

Atheropogon curtipendulus Fourn.

Mesquite Grass.

Rare. Dry, open sandy soil: Oxford (H. C. Beardslee, Harger), Salisbury (Mrs. C. S. Phelps). Aug.—Sept.

ELEUSINE Gaertn. Goose Grass. Yard Grass.

Eleusine indica Gaertn.

Crab, Yard, or Wire Grass.

Occasional to common, chiefly near dwellings and in waste places of towns and cities, but sometimes in country districts, especially those in the valley of the Connecticut River. Aug. — Sept. Naturalized from India.

LEPTOCHLOA Beauv.

Leptochloa fascicularis (Lam.) Gray (clustered).

Diplachne fascicularis Beauv.

Rare. Borders of salt or brackish marshes: Stonington (Graves), Groton (Bissell & Graves), New Haven (W. A. Setchell, Harger), Stratford (Eames & Harger). Aug.—Sept.

PHRAGMITES Trin. Reed.

Phragmites communis Trin. (growing in colonies).

Phragmites vulgaris BSP.

Phragmites Phragmites Karst.

Wild Broom Corn.

Borders of marshes, either salt or fresh. Apparently rare inland: Salisbury (Mrs. C. S. Phelps). Occasional along the coast, becoming more frequent in the southwestern corner of the state. Late Aug.—Sept.

A tall, striking grass with broad leaves, the largest of our native grasses.

TRIDENS R. & S.

Tridens flavus (L.) Hitchc. (yellow).

Triodia cuprea Jacq.

Sieglingia seslerioides Scribn.

Tricuspis seslerioides Torr.

Tall Red Top.

Dry fields and roadsides, generally in sandy or sterile soil. Rare in the eastern part of the state: East Lyme and the valley of the Thames River (Graves). Becoming occasional westward along the coast and in the river valleys and frequent in southwestern Connecticut. In the Housatonic Valley it is found as far north as Kent (Eames). Aug.

TRIPLASIS Beauv.

Triplasis purpurea (Walt.) Chapm. (purple).

Triodia purpurea Hack.

Sieglingia purpurea Kuntze.

Sand Grass.

Dry, open sandy places. Occasional to frequent along the shore; rare inland as at Lisbon (Harger). July—Sept.

MOLINIA Schrank.

Molinia coerulea (L.) Moench (sky-blue).

Rare. Well established along roadsides: New Haven (R. W. Woodward). July—Aug. Adventive from Europe.

ERAGROSTIS Beauv.

Eragrostis hypnoides (Lam.) BSP. (like Hypnum, a kind of creeping Moss).

Eragrostis reptans Nees.

Sandy shores of rivers and sometimes ponds. Frequent in the valleys of the Connecticut and Housatonic Rivers; rare elsewhere. Aug.—Sept.

Eragrostis capillaris (L.) Nees (hair-like).

Hair Grass.

Dry fields or thin woods in sandy ground. Occasional, becoming frequent or locally common in some parts of southwestern and central Connecticut. Aug.—Sept.

Eragrostis Frankii (Fisch., Mey. & Lall.) Steud.

Rare or local. River shores and roadsides in sandy soil: Lyme (Graves & Bissell), Middletown (A. W. Driggs), East Windsor, Windsor and Hartford (Bissell), Oxford (Harger), Salisbury (Mrs. C. S. Phelps). Aug.—Sept.

Eragrostis pilosa (L.) Beauv. (hairy).

Eragrostis Purshii Schrad.

Frequent. Dry soils, along roadsides and railways, on river shores and in waste places. July — Sept.

Eragrostis megastachya (Koeler) Link (large-spiked).

Eragrostis major Host.

Stink Grass. Snake Grass.

Occasional or frequent. Waste places, roadsides, and as a weed in cultivated ground. July — Sept. Naturalized from Europe.

The fresh plant emits a strong, unpleasant odor.

Eragrostis minor Host (smaller).

Rare. Waste ground: Bridgeport (Eames). Aug. Adventive from Europe.

Eragrostis pectinacea (Michx.) Steud. (comb-like).

Purple Eragrostis.

Frequent or common. Dry, open ground. Aug.—Sept.

A beautiful native grass, one of the "purple grasses" distinguished by Thoreau in his essay "Autumnal Tints."

MELICA L. Melic Grass.**Melica striata** (Michx.) Hitchc. (streaked).*Avena striata* Michx.

Purple Oat.

Local. Rocky woods: Oxford (Harger). Limestone ledges: Salisbury and Sharon (Bissell). May—June.

DISTICHLIS Raf. Spike Grass. Alkali Grass.**Distichlis spicata** (L.) Greene (spiked).*Distichlis maritima* Raf.

Alkali Grass.

Frequent or common in salt meadows along the coast.
Aug.—Sept.

It is of considerable value as a sand binder.

BRIZA L. Quaking Grass.**Briza media** L. (intermediate).

Rare. Fields and waste places: Mansfield (R. W. Woodward), Salisbury (Mrs. C. S. Phelps). June—July. Adventive from Europe.

Sometimes cultivated for ornament.

DACTYLIS L. Orchard Grass.**Dactylis glomerata** L. (densely clustered).

Orchard Grass.

Common. Fields, roadsides and waste places. June—July. Naturalized from Europe.

In cultivation a valuable grass for shaded ground.

CYNOSURUS L.**Cynosurus cristatus** L. (crested).

Dog's-tail Grass.

Rare. New London, well established in one lawn (Graves). June. Adventive from Europe.

POA L. Meadow Grass. Spear Grass.**Poa annua** L. (annual).

Low Spear Grass. Goose Grass.

Common. Cultivated ground and waste places. Apr.—Nov. Naturalized from Europe.

Poa compressa L. (flattened).

Creeping Spear Grass. Wire Grass. Flat-stemmed or Canada Blue Grass.

Common. Fields, waste places and woods, mostly in dry ground. May — Aug. Naturalized from Europe.

Said to be a valuable grass for dry and poor soils.

Poa triflora Gilib. (three-flowered).

Poa serotina Ehrh.

Poa flava of American authors, not L.

False Red Top. Fowl Meadow Grass. Swamp Wire Grass. Duck Grass.

Frequent or occasional. Moist meadows. July — Aug.

A desirable grass for hay in wet ground.

Poa pratensis L. (of meadows).

June Grass. Kentucky Blue Grass. Spear Grass. Smooth Meadow Grass.

Common. Meadows, fields and pastures. May — June. In Connecticut naturalized from Europe.

A valuable grass for pastures and lawns, and in some parts of the country much cultivated. The stems of this grass are used in the manufacture of the finer grades of Leghorn hats.

Poa trivialis L. (common).

Rough-stalked Meadow Grass.

Occasional. Moist meadows, borders of streams and about springs. June — July. Naturalized from Europe.

Poa debilis Torr. (weak).

Rare or local. Rocky woods or fields, either dry or moist: Union, Ashford and Stafford (Weatherby & Bissell), Oxford (Harger), New Haven (R. W. Woodward), Salisbury (C. S. Phelps & Bissell). May — July.

Poa alsodes Gray (of groves).

Rocky woods or along woodland brooks. Rare or local in the eastern part of the state and along the coast westward, becoming occasional in northwestern Connecticut. May — June.

GLYCERIA R. Br.   Manna Grass.**Glyceria Torreyana** (Spreng.) Hitchc.

Glyceria elongata Trin.

Panicularia elongata Kuntze.

Wet woods and along wooded brooks and borders of swamps. Rare in southeastern Connecticut and along the coast, becoming occasional or frequent northward. June—July.

Glyceria obtusa (Muhl.) Trin. (blunt).

Panicularia obtusa Kuntze.

Swamps and boggy meadows. Frequent or occasional in the southeastern part of the state and westward along the coast; rare inland. Mid July—Sept.

Glyceria canadensis (Michx.) Trin.

Panicularia canadensis Kuntze.

Pearl Grass. Rattlesnake Grass. Tail Quaking Grass. Tuscarora Rice.

Frequent. Bogs, open swamps and ditches. June—July.

Glyceria nervata (Willd.) Trin. (nerved).

Panicularia nervata Kuntze.

Fowl Meadow Grass. Manna Grass. Meadow Spear Grass.

Common. Open swamps, boggy meadows, along streams and about ponds. June—July.

A good forage grass for wet grounds. The seeds furnish much food for water-fowl.

Glyceria grandis Wats. (large).

Panicularia americana MacMill.

Tall Manna Grass. Reed Meadow Grass.

Moist or wet open ground. Rare in the eastern part of the state and on the coast: Lyme (Graves), New Haven (Harger), Norwalk (Bissell). Elsewhere occasional. June—July.

Glyceria pallida (Torr.) Trin. (pale).

Panicularia pallida Kuntze.

Pale Manna Grass.

Occasional. Shallow water, wet bogs and swamps. June—July.

Glyceria septentrionalis Hitchc. (northern).

Glyceria fluitans of American authors, not R. Br.

Panicularia fluitans of Britton's Manual.

Floating Manna Grass.

Rare. Wet meadows: Stonington (Graves), Thompson and Woodstock (Harger), Cheshire (D. C. Eaton), Bridgeport and Westport (Eames), Salisbury (Bissell). June — July.

Glyceria borealis (Nash) Batchelder (northern).

Panicularia borealis Nash.

Rare. Swampy ground along brooks and in ditches: Woodstock (Weatherby), Farmington (Andrews & Bissell), Norfolk (Bissell). June — July.

Glyceria acutiflora Torr. (with pointed flowers).

Panicularia acutiflora Kuntze.

Open swamps and wet meadows. Occasional in the southeastern part of the state, becoming frequent or common elsewhere. June.

PUCCINELLIA Parl.**Puccinellia angustata** (R. Br.) Rand & Redfield (narrow).

Puccinellia maritima Parl., var. (?) *minor* Gray's Manual ed. 6.

Goose Grass. Sea Spear Grass.

Rare. Old Lyme, shore of Blackhall River (Graves). June.

Puccinellia distans (L.) Parl. (standing apart).

Goose Grass.

Wet tidal sands and borders of salt marshes. Rare in southeastern Connecticut, becoming occasional or frequent westward. June — July.

Puccinellia Borreri (Bab.) Hitchc.

Rare. Bridgeport, sandy shore of Cedar Creek (Eames). June — July.

Introduced from Europe.

FESTUCA L. Fescue Grass.**Festuca octoflora** Walt. (eight-flowered).*Festuca tenella* Willd.

Slender Fescue.

Dry sandy soil or thin soil on ledges. Occasional over the greater part of the state, becoming frequent in the southwestern portion. June—July.

Festuca rubra L. (red).

Swamps and marshes or sometimes in fields or on ledges. Frequent or common along and near the coast; occasional inland. June—July.

Festuca ovina L. (of sheep).

Sheep's Fescue.

Rare or occasional. Dry fields or in sterile soils. June—July.

The var. *CAPILLATA* (Lam.) Hack. (hair-like), *Festuca capillata* Lam., is occasional in similar situations. The species is native northward, but in Connecticut both that and the variety are naturalized from Europe.

Valuable as a forage grass, especially for sheep; also a good grass for lawns.

Festuca elatior L. (taller).*Festuca elatior* L., var. *pratensis* Gray.

Taller or Meadow Fescue.

Common. Meadows, fields and waste places. June—July. Naturalized from Europe.

A grass of much value both for pasturage and hay.

Festuca nutans Spreng. (nodding).

Occasional or frequent. Rocky woodlands. June—July.

BROMUS L. Brome Grass.**Bromus secalinus** L. (rye-like).

Cheat. Chess.

Occasional or frequent. Grassland, roadsides and often in grain fields. June—Aug. Adventive from Europe.

A pernicious weed in grain fields. In some countries the seeds are mixed with rye or wheat for use as food.

Bromus hordeaceus L. (like *Hordeum*, the Barley).

Bromus mollis L.

Soft Chess.

Rare. Waste places: New London (Graves), Hartford (Bissell), Southington (Andrews). June. Adventive from Europe.

Bromus squarrosus L. (with spreading scales).

Rare. Naugatuck, in waste ground (A. E. Blewitt). June. Fugitive from Europe.

Bromus racemosus L. (racemed).

Waste places and roadsides. Occasional in southwestern Connecticut (Eames). Rare elsewhere: New London (Graves), Norwich (Miss Hakes), New Haven (O. D. Allen). June. Adventive from Europe.

Bromus commutatus Schrad. (variable).

Rare. Roadsides and waste ground: Cromwell (Andrews & Bissell), Middletown and Southington (Bissell). June—July. Adventive from Europe.

Bromus brizaeformis Fisch. & Mey. (like *Briza*, the Quaking Grass).

Rare. Waste ground: New Haven (R. W. Woodward). July—Aug. Adventive, probably from Europe.

Bromus tectorum L. (of dwellings).

Sandy or sterile waste places. Frequent or common in or near cities and along railroads, rare elsewhere. May—July. Naturalized from Europe.

Bromus ciliatus L. (fringed).

Wood Chess. Hairy Brome Grass.

Dry soil of rocky woods or railroad banks. Rare near the coast, becoming occasional northward. July—Aug.

Bromus purgans L. (purging).

Bromus ciliatus L., var. *purgans* Gray.

Frequent. Rocky woods and copses. July—Aug.

Bromus altissimus Pursh (tallest).

Rocky woods and shaded alluvial ground. Occasional or local throughout the northern part of the state, extending

southward to Lyme (Bissell), and Derby (Harger), its exact distribution unknown. July — Aug.

Bromus Kalmii Gray.

Wild Chess.

Dry hillsides and rocky woods, or sometimes in moist meadows. Absent or rare near the coast, becoming occasional or frequent northward. June — July.

Bromus erectus Huds. (erect).

Rare. Introduced in one field, Southington (Bissell). May — June. Adventive from Europe.

Bromus inermis Leyss. (unarmed; referring to the absence of awns).

Hungarian Brome Grass.

Rare. Fields and roadsides: East Windsor (G. S. Phelps), Naugatuck (A. E. Blewitt), Salisbury (Mrs. C. S. Phelps). July. Adventive from Europe.

In Europe considered one of the best forage plants for dry soils. Introduced and cultivated for hay in many parts of the United States.

LOLIUM L. Darnel.

Lolium perenne L. (perennial).

Perennial Ray Grass or Rye Grass. Nonesuch. Common Darnel.

Rare or occasional. Fields, waste places or cultivated ground. July — Aug. Adventive from Europe.

Lolium multiflorum Lam. (many-flowered).

Lolium italicum R. Br.

Italian Rye or Ray Grass.

Rare. Waste grounds and roadsides: Bridgeport (Eames). July — Sept.

Adventive from Europe, where it is regarded as one of the best grasses for hay.

Lolium temulentum L. (drunken; referring to the narcotic properties of the seeds).

Bearded Darnel.

Rare or local. Waste grounds: Bridgeport, in several places and usually associated with *Phalaris canariensis*, with

which it appears to have been introduced (Eames). July.
Adventive from Europe.

AGROPYRON Gaertn.

Agropyron repens (L.) Beauv. (creeping).

Couch, Quack, Quitch, Durfee, Scutch, Shear, Dog, or Knot Grass.

Common. Fields, cultivated ground and waste places.
June—Aug. Naturalized from Europe.

A bad weed, very troublesome in cultivated ground. The rootstocks are of medicinal value and are officinal.

Agropyron tenerum Vasey (delicate).

Rare. Naugatuck, in waste ground (A. E. Blewitt). July
—Aug. Fugitive from the western United States.

Agropyron caninum (L.) Beauv. (of a dog).

Awned Wheat Grass. Dog's Wheat or Couch Grass.

Occasional or local. Dry or moist thickets, fields and woods: Killingly (Weatherby & Bissell), Union, East Had-dam, Southington, Norfolk and Salisbury (Bissell), Oxford (Harger). July—Aug. In part naturalized from Europe.

SECALE L. Rye.

Secale cereale L. (cereal).

Rye.

Occasional. Roadsides and waste places as an escape from cultivation. June. Fugitive from Europe.

The grain furnishes a valuable cereal and is largely used in the manufacture of distilled liquors.

TRITICUM L. Wheat.

Triticum sativum Lam. (sown).

Triticum vulgare Vill.

Wheat.

Local. Old fields and waste places as an escape from cultivation. June. Fugitive from Europe.

Easily leads all other food plants in value and importance.

HORDEUM L. Barley.***Hordeum jubatum* L.** (maned).

Squirrel-tail Grass.

Rare or local. Salt marshes where it is apparently native: Branford (Andrews & Bissell), New Haven and Milford (Harger), Fairfield (Eames). Introduced in waste grounds: Norwich (Mrs. E. E. Rogers), Berlin (J. N. Bishop), Hartford (Bissell), Bridgeport (Eames). Waterbury and Naugatuck (A. E. Blewitt), Salisbury (Mrs. C. S. Phelps). June—Sept.

This grass is very injurious in hay, the beards of the heads sticking in the nose and mouth of stock, even penetrating the flesh and causing death.

***Hordeum vulgare* L.** (common).

Common Barley.

Frequent as a weed in oat fields, rarely escaping to roadsides and waste places, as at Southington (Andrews), Oxford (Harger). July. Fugitive from Europe.

The grain is one of the important cereals, especially in northern countries. Malt is made very largely from barley.

ELYMUS L. Lyme Grass. Wild Rye.***Elymus virginicus* L.**

Wild Rye. Terrell Grass.

Frequent along the coast, and in low grounds, mostly near streams, inland; rare elsewhere. July—Aug.

The var. *HIRSUTIGLUMIS* (Scribn.) Hitchc. (with hairy scales), *Elymus hirsutiglumis* Scribn., occurs at East Haven (Harger), New Haven (Bissell), Stratford (Eames), Bridgeport (C. K. Averill), and is occasional in the valleys of the larger rivers.

***Elymus australis* Scribn. & Ball** (southern).

Rare. Dry rocky hills near New Haven (O. D. Allen). Aug.

***Elymus canadensis* L.**

Lyme Grass. Wild Rye. Nodding Wild Rye.

Occasional, local or frequent. Moist thickets and banks of streams. July—Sept.

The var. *GLAUCIFOLIUS* (Muhl.) Gray (glaucous-leaved) is rare or occasional, mostly near streams and rivers: Sprague (Graves), East Windsor and New Hartford (Bissell), Waterbury (A. E. Blewitt), Oxford (Harger), Sherman and New Milford (Eames), Salisbury (Mrs. C. S. Phelps).

Elymus striatus Willd. (grooved).

Slender Wild Rye.

Rare or occasional. Woods, thickets and near streams, mostly in dry ground. July — Aug.

HYSTRIX Moench. Bottle-brush Grass.

Hystrix patula Moench (spreading).

Hystrix Hystrix Millsp.

Asprella Hystrix Willd.

Bottle-brush Grass.

Occasional to frequent. Dry, rocky woods. June — July.

CYPERACEAE. SEDGE FAMILY.

A large family, composed mostly of grass-like plants that are found in various situations, but are specially abundant in low grounds and often form nearly the entire vegetation in wet meadows and open bogs. While they are often cut for coarse hay and bedding for stock, they are of little economic value, and should be rooted out and replaced where possible by species of true grasses that will thrive in such locations. The dates given in this family are for the time of fruiting, not of flowering, as specimens should be collected when in fruit, it being impossible otherwise in some groups to determine the exact species.

CYPERUS L. Galingale.

Cyperus diandrus Torr. (two-stamened).

Frequent. Moist, grassy places and about swamps. Aug. — Sept.

Cyperus rivularis Kunth (of streams).

Cyperus diandrus Torr., var. *castaneus* Torr.

Frequent. Wet, sandy shores, along streams and about ponds. Aug. — Sept.

Cyperus Nuttallii Eddy.

Frequent along the coast on wet, sandy shores and edges of salt marshes. Aug.—Sept.

Cyperus aristatus Rottb. (awned).

Cyperus inflexus Muhl.

Occasional. Moist, sandy soil on river banks, beside ponds and along roadsides. Aug.—Oct.

The dried plants are pleasantly sweet-scented.

Cyperus fuscus L. (dusky).

Rare. Sandy shore of the Connecticut River near Hadlyme Ferry, Lyme (Graves). Aug.—Sept. Fugitive from Europe.

Cyperus dentatus Torr. (toothed).

Occasional or local. Sandy shores of ponds and streams. Aug.—Oct.

Cyperus esculentus L. (eatable).

Frequent. Moist fields, waste ground and along rivers. Aug.—Sept.

The var. *LEPTOSTACHYUS* Boeckl. (thin-spiked), var. *angustispicatus* Britton, is sometimes seen.

A weed, often a pest in cultivated ground and difficult to exterminate.

Cyperus erythrorhizos Muhl. (red-rooted).

Local. Plentiful along the banks of the Connecticut River at East Windsor and Glastonbury (Bissell), Hartford (C. Wright), Lyme (Graves). Also found along the Pequonnock River, Bridgeport (Eames). Aug.—Sept.

The var. *PUMILUS* Engelm. (low) occurs with the species at Hartford (H. S. Clark & Weatherby).

Cyperus ferax Richard (fruitful).

Cyperus speciosus Vahl.

Sandy beaches and about brackish marshes near the coast. Rare at Old Lyme (Graves) ; becoming occasional or frequent westward. Sept.—Oct.

Cyperus strigosus L. (bristly).

Common. Meadows, fields and along streams, usually in moist, but sometimes in dry soil.

The var. *CAPITATUS* Boeckl. (densely clustered) is reported to occur. Aug.—Sept.

Often a troublesome weed in cultivated ground.

Cyperus strigosus L., var. *robustior* Kunth (stouter).

Rare or occasional. Fields and meadows, growing with the typical form. Aug.—Sept.

Cyperus Grayii Torr.

Occasional along the coast on the higher portions of the beaches and among sand dunes. Aug.—Oct.

Cyperus filiculmis Vahl (thread-stemmed).

Rare or occasional. Dry or sandy fields. July — Aug.

Cyperus filiculmis Vahl, var. *macilentus* Fernald (lean).

Common. Dry, sandy or sterile soil. July — Aug.

DULICHIMUM Pers.**Dulichium arundinaceum** (L.) Britton (reed-like).

Dulichium spathaceum Pers.

Common. Wet places about ponds and in shallow water. July — Sept.

ELEOCHARIS R. Br. Spike Rush.**Eleocharis quadrangulata** (Michx.) R. & S. (four-cornered).

Eleocharis mutata Britton, not R. & S.

Rare. Shallow water of pond: Guilford (G. H. Bartlett). Aug.—Sept.

Eleocharis Robbinsii Oakes.

Rare. In ponds: Voluntown, Groton, Ledyard and East Lyme (Graves), Griswold (Harger), Monroe (Eames), Salisbury (Bissell). Sept.

Eleocharis olivacea Torr. (olive-colored).

Open bogs and muddy borders of ponds. Rare inland: Salisbury (Mrs. C. S. Phelps), Windsor (Bissell). Occasional southwestward and along the coast. Aug.—Sept.

Eleocharis diandra C. Wright (two-stamened).

Rare. Banks and high sand bars of the Connecticut River: Lyme (Graves), Wethersfield (C. Wright), East Windsor (Bissell). Sept.—Oct.

Eleocharis ovata (Roth) R. & S. (egg-shaped).

Rare. Sand flats, bed of the Connecticut River, East Windsor (Bissell). Sept.—Oct.

Eleocharis obtusa (Willd.) Schultes (blunt).

• *Eleocharis ovata* of recent Manuals.

Common. Banks of streams, about ponds and in muddy places. Aug.—Sept.

Eleocharis Engelmanni Steud.

Rare. Gravelly or sandy border of ponds or streams: Wethersfield (C. Wright), West Hartford (Bissell). Aug.—Sept.

Many reports of this species should be referred to *Eleocharis obtusa*.

Eleocharis palustris (L.) R. & S. (of marshes).

Sphagnum bogs, marshy ground or shallow water on borders of ponds. The typical form is rare over most of the state: East Lyme (Graves), East Hartford (A. W. Driggs), Kent (Eames). Frequent in Fairfield County (Eames).

The var. *GLAUCESCENS* (Willd.) Gray (somewhat glaucous) is frequent throughout.

The var. *MAJOR* Sonder (greater), var. *vigens* Bailey, is rare: East Lyme (Graves). July — Aug.

Eleocharis acicularis (L.) R. & S. (needle-shaped).

Common. Borders of ponds and in shallow water. July — Sept.

Eleocharis tuberculosa (Michx.) R. & S. (pimply).

Swamps, boggy meadows and wet margins of ponds and streams. Frequent near the coast in New London County, becoming rare or local northward and westward, reaching Franklin (R. W. Woodward), Thompson (Weatherby & Bissell), New Haven and East Haven (Harger), Orange (Andrews), Milford (Eames). July — Sept.

Eleocharis Torreyana Boeckl.

Eleocharis microcarpa of authors, not Torr.

Rare. Moist sandy soil: Voluntown, at Beach Pond (R. W. Woodward & Graves). Aug.

Eleocharis tenuis (Willd.) Schultes (slender).

Common. Swamps and wet places. June—Aug.

Eleocharis intermedia (Muhl.) Schultes (intermediate).

Rare. Muddy borders of ponds and on river banks: East Windsor and Salisbury (Bissell). Sept.—Oct.

Eleocharis rostellata Torr. (small-beaked).

Marshes and wet meadows along the coast. Rare or local in New Haven County: Milford (Eames), Orange (Andrews), New Haven (Harger). Becoming occasional eastward. Aug.

STENOPHYLLUS Raf.**Stenophyllus capillaris** (L.) Britton (hair-like).

Fimbristylis capillaris Gray.

Common. Dry or moist sterile soil. Aug.—Sept.

FIMBRISTYLIS Vahl.**Fimbristylis Frankii** Steud.

Fimbristylis autumnalis of American authors in part, not R. & S.

Frequent. Wet places on banks of ponds and streams, or in low meadows. Aug.—Sept.

SCIRPUS L.   Bulrush. Club Rush.**Scirpus nanus** Spreng. (dwarf).

Eleocharis pygmaea Torr.

Salt marshes and tidal banks along the coast. Rare eastward: Groton and Montville (Graves). Becoming frequent west of New Haven (Eames). July—Sept.

Scirpus planifolius Muhl. (flat-leaved).

Dry woodlands. Rare in New London County: Montville, Ledyard and East Lyme (Graves). Occasional or frequent elsewhere. June.

Scirpus hudsonianus (Michx.) Fernald.

Eriophorum alpinum L., not *Scirpus alpinus* Schleich.

Rare or local. Open bogs and wet meadows: Union, Ashford and Stafford (Weatherby & Bissell), Willington (H. C. Beardslee), Mansfield (A. F. Blakeslee), Goshen (Mr. Hopkin). May — early June.

Scirpus subterminalis Torr. (a little below the end).

Rare or local. Shallow water of ponds: Ledyard (W. A. Setchell), Voluntown, Groton, East Lyme and Lyme (Graves), Guilford (G. H. Bartlett), Salisbury (Bissell). Aug.

Scirpus debilis Pursh (weak).

Frequent. Muddy borders of ponds and streams. Aug.—Sept.

Scirpus Smithii Gray.

Rare or local. Muddy shores: Lyme (Graves), Monroe (H. C. Beardslee), Newtown (Eames). Aug.—Sept.

Scirpus americanus Pers.

Scirpus pungens Vahl.

Three-square or Chair-maker's Rush.

Marshes and wet places. Occasional or local over most of the state, but common along and near the coast. July — Aug.

Scirpus Torreyi Olney.

Local. Lyme, marshy banks and shallow water of the Connecticut River (Graves). Aug.

Scirpus Olneyi Gray.

Salt or brackish marshes. Occasional or local along the coast, also extending up the rivers as far as salt water influences. July — Aug.

The var. *CONTORTUS* Eames (twisted or bent) is plentiful in a brackish marsh at Milford (Eames).

Scirpus validus Vahl (stout).

Scirpus lacustris mostly of American authors, not L.
Great Bulrush.

Frequent. Shallow water and in swamps. July — Aug.

***Scirpus fluviatilis* Torr. & Gray (of a river).**

River Bulrush.

Rare or local. Lyme and Old Lyme, in fresh and salt creeks and marshes (Graves); East Windsor and Glastonbury, banks of the Connecticut River (Bissell). July — Sept.

***Scirpus robustus* Pursh (stout).**

Scirpus maritimus of American authors in part.

Occasional in salt or brackish marshes on or near the coast. July — Aug.

***Scirpus campestris* Britton (of fields).**

Scirpus maritimus in part, of authors.

In its typical form not known in Connecticut.

The var. *PALUDOSUS* (A. Nelson) Fernald (of marshes), *Scirpus paludosus* A. Nelson, is frequent in marshes along the coast.

The var. *NOVAE-ANGLIAE* (Britton) Fernald, *Scirpus novae-angliae* Britton, is rare or local in fresh and brackish marshes on the coast from Milford westward (Eames). July — Aug.

***Scirpus rubrotinctus* Fernald (red-dyed).**

Scirpus sylvaticus L., var. *digynus* Gray's Manual ed. 6, not Boeckl.

Rare or local. Swamps and marshy meadows: Lyme (Graves), Southington (Andrews & Bissell), Waterbury (Harger), Union, Glastonbury, East Windsor, Somers, Litchfield and Norfolk (Bissell). Late June — early July.

***Scirpus sylvaticus* L. (of woods).**

Occasional or frequent. Swamps, along streams and about ponds. Late July — Aug.

***Scirpus sylvaticus* L., var. *Bissellii* Fernald.**

Rare. Open swamps: Southington (Andrews, Bissell), Ansonia (Harger). July.

***Scirpus atrovirens* Muhl. (dark green).**

Rare. Moist ground: Orange, Huntington and Southbury (Harger), Milford (Eames). Aug.

Scirpus georgianus Harper.

Scirpus atrovirens of Manuals in part.

Frequent. Moist meadows and wet open ground. July — early Aug.

Scirpus polyphyllus Vahl (many-leaved).

Wet meadows and shaded swamps. Rare through most of the state: Lyme (Graves), Southington and Berlin (Andrews & Bissell), Cheshire, Derby and Oxford (Harger), New Haven and Milford (Eames), Colebrook (Bissell). Becoming frequent in Fairfield County (Eames). July.

The var. *MACROSTACHYS* Boeckl. (long-spiked) has been found at Berlin (Andrews & Bissell).

Scirpus lineatus Michx. (marked with lines).

Eriophorum lineatum Benth. & Hook.

Rare or local. Wet meadows: New Haven (D. C. Eaton), New Milford and Sharon (Bissell), Salisbury (Mrs. C. S. Phelps). July.

Scirpus cyperinus (L.) Kunth (rush-like).

Eriophorum cyperinum L.

Wool Grass.

Common. Swamps and wet places. Aug.—Sept.

The var. *ANDREWSII* Fernald has been found at Killingly (Weatherby & Bissell), East Hartford (Bissell), Southington (Andrews).

Scirpus cyperinus (L.) Kunth, var. *pelius* Fernald (black or livid).

Rare. Swamps: Lyme (Graves & Bissell), Hartford and Granby (Bissell), Oxford (Harger). Aug.

The var. *CONDENSATUS* Fernald (pressed together) occurs occasionally.

Scirpus Eriophorum Michx. (wool-bearing).

Scirpus cyperinus Kunth, var. *Eriophorum* Britton.

Rare. Swamps: Southington (Andrews), Trumbull (Eames). Aug.—Sept.

Scirpus pedicellatus Fernald (borne on stalks).

Swamps and wet meadows. Occasional to common along the Connecticut River from the northern boundary of the

state to the coast; occasional westward in southern districts.
July — Aug.

The var. *PULLUS* Fernald (dusky) is rare: Southington and Winchester (Bissell).

Scirpus atrocinctus Fernald (dark-girded).

Eriophorum cyperinum L., var. *laxum* Gray.

Low meadows and bogs. Rare or absent near the coast: New London and Lyme (Graves). Becoming occasional or frequent in the northern part of the state. Late June—July.

The var. *BRACHYPODUS* Fernald (short-stalked) occurs at Union, Somers, East Windsor and Norfolk (Bissell).

ERIOPHORUM L.   Cotton Grass.

Eriophorum callitrix Cham. (having beautiful hair).

Eriophorum vaginatum of American authors, not L.
Hare's Tail.

Rare or local. Sphagnum bogs: Willington (Weatherby & Bissell), Southington (Andrews), Burlington (J. N. Bishop), Litchfield (J. P. Brace), Middlebury (Harger), Norfolk and Salisbury (Bissell). May — early June.

Eriophorum gracile Roth (slender).

Rare or local. Boggy meadows or in sphagnum: Griswold (Graves), Union (Weatherby & Bissell), Franklin (R. W. Woodward & Graves), Coventry, Cheshire, Southington and Burlington (Bissell), Meriden and Bethany (Harger), Easton (Eames), New Milford (E. H. Austin), Salisbury (Bissell). Late May—early June.

Eriophorum tenellum Nutt. (small; delicate).

Eriophorum paucinervium A. A. Eaton.

Bogs and wet meadows. Rare or local through most of the state: South Windsor (Weatherby), Monroe and Stratford (Eames), Oxford and Meriden (Harger), Orange (R. W. Woodward), Salisbury, Southington, East Haddam and Union (Bissell). Becoming occasional in New London County (Graves). July — Aug.

Eriophorum viridi-carinatum (Engelm.) Fernald (green-keeled).

Eriophorum polystachion of most American authors in part, not L.

Eriophorum polystachion L., var. *latifolium* Gray.

Bogs and wet meadows. Rare in New London County: Groton and Griswold (Graves). Occasional elsewhere. June.

Eriophorum virginicum L.

Frequent. Wet meadows, bogs and sphagnum swamps. Aug.—Sept.

The var. **ALBUM** Gray (white) is occasionally seen.

HEMICARPHA Nees & Arn.

Hemicarpha micrantha (Vahl) Pax (small-flowered).

Hemicarpha subsquarrosa Nees.

Rare. Wet alluvium along the banks of streams: Enfield (Andrews & Bissell), East Windsor, Hartford and Southington (Bissell), Bloomfield (N. Coleman), Oxford (H. C. Beardslee). Aug.—Sept.

RYNCHOSPORA Vahl. Beak Rush.

Rynchospora macrostachya Torr. (long-spiked).

Rynchospora corniculata Gray, var. *macrostachya* Britton. Horned Rush.

Rare or local. Sphagnum bogs and shallow water of ponds: Groton and East Lyme (Graves), Guilford (G. H. Bartlett), Monroe (Eames), Woodbury (Harger). Aug.—Sept.

Rynchospora fusca (L.) Ait. f. (dusky).

Rare. Sphagnum bogs or swampy meadows: Thompson (Weatherby), Groton, Waterford and East Lyme (Graves), Griswold and Woodbury (Harger), Monroe (Eames). July — Sept.

Rynchospora alba (L.) Vahl (white).

Occasional or frequent. Peat swamps and open springy bogs. Aug.—Sept.

Rynchospora glomerata (L.) Vahl (densely clustered).

Common. Moist fields, meadows and in wet open places.

July — Sept.

CLADIUM P. Br.   Twig Rush.

Cladium mariscoides (Muhl.) Torr. (like Mariscus).

Borders of ponds and marshes, either salt or fresh. Rare or local inland: Stafford (Dr. E. J. Thompson & Weatherby), Woodbury (Harger), Monroe (Eames), Salisbury (Mrs. C. S. Phelps). Becoming occasional or frequent on the coast or in its vicinity. Aug.—Sept.

SCLERIA Bergius.   Nut Rush.

Scleria triglomerata Michx. (three-headed).

Sandy soil either dry or moist. Rare or local in most districts: Griswold, Stonington and Waterford (Graves), South Windsor (J. F. Smith), Hartford (A. W. Driggs), Southington (Andrews & Bissell), Cheshire (Bissell). Becoming occasional along the coast in Fairfield County (Eames). July — Aug.

Scleria pauciflora Muhl. (few-flowered). var. *caroliniana* (Willd.) Wood.

Scleria pauciflora of recent Manuals in part.

Rare or local. Low meadows: Columbia (Mrs. C. S. Phelps), Hartford (H. J. Koehler). July — Sept.

Scleria verticillata Muhl. (whorled).

Local. Salisbury, plentiful in an open grassy swamp in sandy soil (H. S. Clark & Bissell). Aug.—Sept.

CAREX L.   Sedge.

Carex scoparia Schk. (broom-like).

Common. Wet open ground, or sometimes in drier places. June — July.

The var. *MONILIFORMIS* Tuckerm. (necklace-shaped), and the var. *CONDENSA* Fernald (compact), both occur occasionally with the species.

Carex tribuloides Wahlenb. (like Tribulus, the Caltrop).

Frequent. Low meadows and swampy places. July — Aug.

The var. **TURBATA** Bailey (confused) is occasional.

Carex tribuloides Wahlenb., var. **reducta** Bailey (reduced).

Carex tribuloides Wahlenb., var. *moniliformis* Britton.

Rare. Cool swales: Woodstock (Weatherby), Franklin (R. W. Woodward), Winchester and Litchfield (Weatherby & Bissell), Salisbury (Weatherby). July.

Carex siccata Dewey (dry).

Occasional or local. Dry sandy or barren ground, usually growing in colonies. Late May — June.

Carex Crawfordii Fernald.

Local. Salisbury, in dry fields (M. L. Fernald). June.

Carex cristata Schwein. (crested).

Carex tribuloides Wahlenb., var. *cristata* Bailey.

Carex cristatella Britton.

Rare or local. Low meadows and thickets and along river banks: Ledyard (Graves), Southington (Andrews & Bissell), Oxford (Harger), Huntington and Kent (Eames), Salisbury (Bissell). June — July.

Carex albolutescens Schwein. (yellowish-white).

Carex straminea Willd., var. *foenea* Torr.

Carex straminea Willd., var. *cumulata* Bailey.

Locally plentiful near the coast in bogs and moist sandy ground in New London County; has been found also on the top of Bald Hill at 1200 ft. elevation, Union (Graves). July.

Carex mirabilis Dewey (wonderful).

Carex straminea Willd., var. *mirabilis* Tuckerm.

Occasional or frequent. Fields and copses, in either dry or moist ground. June.

The var. **PERLONGA** Fernald (very long) is occasional, usually in dry ground.

Carex mirabilis Dewey, var. **tincta** Fernald (dyed).

Rare. Dry open woods: East Hartford (Weatherby). June.

Carex straminea Willd. (straw-colored).

Carex tenera Dewey.

Rare. Woods and fields in wet sandy soil: Griswold (Graves), Thompson, West Hartford and Salisbury (Bissell), Ellington and East Hartford (Weatherby), Norfolk (Weatherby & Bissell). June.

Carex hormathodes Fernald (necklace-like).

Carex tenera of Britton's Manual, not Dewey.

Carex straminea Willd., var. *aperta* W. Boott.

In and about marshes. Rare inland: Killingly (Bissell). Frequent along the coast. June.

The var. *INVISa* (W. Boott) Fernald (unseen), *Carex straminea* Willd., var. *invisa* W. Boott, occurs on the coast and is frequent in Fairfield County (Eames).

Carex hormathodes Fernald, var. **Richii** Fernald.

Rare or occasional. Wet ground throughout. June.

Carex Bicknellii Britton.

Rare or local. In meadows or on shaded ledges, in either dry or moist ground: Sprague and Colchester (Graves), Thompson and Franklin (R. W. Woodward), East Hartford (Weatherby), Glastonbury and Southington (Bissell), Orange (Harger). June—July.

Carex silicea Olney (flinty).

Frequent on dunes and sandy beaches along the coast. July.

Carex alata Torr. (winged).

Carex straminea Willd., var. *alata* Bailey.

Rare. In wet ground: Hartford (A. W. Driggs), Southington (Bissell). June.

Carex festucacea Schk. (fescue-like), var. **brevior** (Dewey) Fernald (shorter).

Carex festucacea Britton in part.

Carex straminea Willd., var. *brevior* Dewey.

Frequent or common. Dry sandy fields. June.

Carex Bebbii Olney.

Rare. Salisbury, marshy border of ponds and sloughs (Mrs. C. S. Phelps & A. E. Blewitt). June.

Carex foenea Willd. (hay-like).

Occasional. Dry rocky woods. June—July.

The var. *PERPLEXA* Bailey (confused) occurs at East Lyme (Graves), and at Southington (Andrews).

Carex aenea Fernald (brassy).

Rare. Salisbury, dry exposed ledges on Mt. Riga (Weatherby & Bissell). June.

Carex stellulata Good. (star-shaped).

Carex echinata Murr., var. *microstachys* Boeckl.

Carex sterilis of American authors, not Willd.

Frequent. Wet meadows and swamps. Late May—June.

Carex stellulata Good., var. *ormantha* Fernald (having a necklace-shaped inflorescence).

Rare. Wet places, growing with the typical form. June.

Carex stellulata Good., var. *excelsior* (Bailey) Fernald (taller).

Carex sterilis Willd., var. *excelsior* Bailey.

Occasional. Bogs and wet meadows. June.

Carex stellulata Good., var. *cephalantha* (Bailey) Fernald (having its flowers in a head).

Carex sterilis Willd., var. *cephalantha* Bailey.

Carex echinata Murr., var. *cephalantha* Bailey.

Occasional. Borders of swamps. June.

Carex stellulata Good., var. *angustata* Carey (narrow).

Carex echinata Murr., var. *angustata* Bailey.

Rare or local. Bogs and swamps: Ledyard and Waterford (Graves), East Hartford (A. W. Driggs & Bissell), Oxford (Harger), Huntington (Eames). June.

Carex sterilis Willd. (sterile).

Carex echinata Murr., var. *conferta* Bailey.

Carex atlantica Bailey.

Swampy places. Rare over most of the state: New London (Graves), Woodstock (R. W. Woodward & Weatherby), East Windsor and Southington (Bissell). Frequent near the coast in the vicinity of Bridgeport (Eames). June.

Carex scirpoides Schk. (like Scirpus, the Bulrush).

Carex interior Bailey.

Open swamps and peat bogs. Rare in eastern and central districts: Thompson (R. W. Woodward & Weatherby),

Waterford (Graves), Lyme (Dr. E. J. Thompson), Bolton (Weatherby), South Windsor (A. W. Driggs & Bissell), Southington (Andrews & Bissell), New Haven (Harger). Becoming occasional in the western part of the state. Late May — June.

Carex scirpoides Schk., var. *capillacea* (Bailey) Fernald (hair-like).

Carex interior Bailey, var. *capillacea* Bailey.

Shaded bogs. Rare in most parts of the state: Huntington (Eames), Thompson, Southington and East Haven (Bissell). Occasional in New London County (Graves). June.

Carex seorsa E. C. Howe (separate).

Wet shaded ground. Rare or local in most parts of the state: Bolton (A. W. Driggs), East Hartford (Weatherby), New Haven (R. W. Woodward), Southington (Andrews), Stratford (Eames), Oxford (Harger), Litchfield (Bissell). Occasional in New London County (Graves). June.

Carex canescens L. (somewhat hoary).

Rare. Wet woods and sphagnum bogs: Thompson, Southington and Norfolk (Bissell). June.

Carex canescens L., var. *subloliacea* Laestad. (somewhat like *Lolium*, the Tare).

Rare. Wet woods: Southington (Bissell). June.

Carex canescens L., var. *disjuncta* Fernald (disjoined).

Carex canescens in part and of most authors.

Frequent. Shaded swamps, wet bogs and beside brooks, often in shallow water. June.

Carex brunnescens Poir. (brownish).

Carex canescens L., var. *vulgaris* Bailey.

Carex canescens L., var. *alpicola* Wahlenb.

Rare. Cool mossy woods and shaded peat bogs: Wallingford (Harger), Winchester and Salisbury (Bissell). June.

Carex bromoides Schk. (like the Brome Grass).

Wet woods, shaded swamps and in springy places. Rare in eastern districts: Union (Bissell), East Haddam (Graves). Becoming occasional or frequent westward. June.

Carex Deweyana Schwein.

Rare. Woodland hillsides in rich, rather dry soil: Watertown (Harger), Colebrook (J. W. Robbins), Winchester (Weatherby & Bissell), Southington, Torrington, Canaan and Salisbury (Bissell), Danbury and Ridgefield (Eames), Cornwall (E. E. Brewster). June.

Carex trisperma Dewey (three-seeded).

Occasional. Cool bogs and sphagnum swamps. June — July.

Carex tenella Schk. (delicate).

Rare. Cool mossy woods: Waterford (Graves), Stafford (Weatherby & Bissell), Manchester (Weatherby), Norfolk (J. W. Robbins, 1828; Bissell), Barkhamsted and Cornwall (Bissell). June — July.

Carex rosea Schk. (rose-like).

Frequent. Rich woods and thickets or sometimes in open ground. June.

Carex rosea Schk., var. **radiata** Dewey (radiate).

Frequent. Woods, copses and meadows in either dry or moist ground. June.

Carex rosea Schk., var. **minor** Boott (smaller).

Rare. Woods or in open ground, more often in dry soil: Norwich (W. A. Setchell), East Hartford (A. W. Driggs), Farmington (Andrews), Southington (Andrews, Bissell), Plainville and Wolcott (Bissell). June.

Carex retroflexa Muhl. (bent backward).

Carex rosea Schk., var. *retroflexa* Torr.

Woods, copses and open ground, mostly in dry soil. Rare in northern and eastern districts: Ledyard (Graves), Norwich (W. A. Setchell), Scotland and Middlefield (Weatherby), Windsor (Bissell, A. W. Driggs), Southington (Andrews & Bissell), Oxford (Harger). Becoming frequent in the southwestern part of the state (Eames). June.

Carex Muhlenbergii Schk.

Frequent. Dry sterile soil. June — July.

The var. **ENERVIS** Boott (nerveless), var. *xalapensis* Britton, is rare inland: Franklin (R. W. Woodward), Killingly and Plainville (Bissell), Southington (Andrews), Oxford (Harger). Becoming occasional or frequent near the coast.

Carex cephalophora Muhl. (head-bearing).

Frequent. Dry soils, often in woods. July.

Carex sparganioides Muhl. (like *Sparganium*, the Bur-reed).

Rich woods, more often in rocky places. Rare in eastern districts: Norwich and Franklin (Graves), Bolton (A. W. Driggs). Becoming occasional or local westward. June.

Carex cephaloidea Dewey (head-like).

Rare or occasional. Rich shaded ground, more often in moist alluvium. June.

Carex vulpinoidea Michx. (like *Carex vulpina*, the Fox Sedge).

Common. Open ground, usually in moist but sometimes in dry places. June—July.

Carex setacea Dewey (bristle-like), var. *ambigua* (Barratt) Fernald (doubtful).

Carex xanthocarpa Bicknell.

Carex xanthocarpa Bicknell, var. *annectens* Bicknell.

Occasional or frequent. Fields and meadows, either dry or moist. June—July.

Carex diandra Schrank (two-stamened).

Carex teretiuscula Good.

Local. In bogs: New Haven (O. D. Allen), Salisbury (Bissell). June.

Carex diandra Schrank, var. *ramosa* (Boott) Fernald (branching).

Carex teretiuscula Good., var. *ramosa* Boott.

Carex teretiuscula Good., var. *prairiea* Britton.

Rare. Bogs and swamps: Salisbury (M. L. Fernald). June.

Carex stipata Muhl. (crowded).

Common. Swamps and wet meadows. June.

Carex crinita Lam. (long-haired).

Swamps and wet places. Rare in New London County: Stonington and East Lyme (Graves). Frequent or common elsewhere. June.

Carex crinita Lam., var. *gynandra* (Schwein.) Schwein. & Torr. (gynandrous).

Carex gynandra Schwein.

Occasional or frequent. Swamps and wet places. June.

Carex aquatilis Wahlenb. (aquatic).

Rare. Wet meadows or cold bogs: Lyme and Oxford (Harger), Salisbury (M. L. Fernald). June.

Carex torta Boott (twisted).

Banks of rivers and swift flowing streams. Rare near the coast: Lyme (Graves), Darien (Harger & Eames). Becoming frequent northward and common in the northwestern part of the state. May.

Roots very long and tough, the plant forming dense tufts or beds. The fruit ripens early and falls very quickly.

Carex stricta Lam. (straight).

Sword Grass. Nigger-heads.

Very common. Swales, wet meadows and about ponds, often forming large tussocks. June.

One of the best known and most plentiful of our sedges. Largely cut as bedding for stock.

Carex stricta Lam., var. *curtissima* Peck (very short).

Rare. In swamps: Waterford (Graves), Lyme (Weatherby). June.

Carex stricta Lam., var. *angustata* (Boott) Bailey (narrow).

Carex stricta Lam., var. *xerocarpha* Britton.

Wet meadows and in marshes. Rare in most districts: Voluntown (Graves), Southington (Andrews), Windsor and Salisbury (Bissell). Locally plentiful in marshes along the lower Housatonic River (Eames). June.

Carex stricta Lam., var. *decora* Bailey (elegant).

Carex Haydeni Dewey.

Rare. Low meadows: Franklin and Waterford (Graves), East Hartford (Weatherby), Glastonbury and Southington (Bissell). June.

Carex aurea Nutt. (golden).

Rare or local. Bloomfield, low field on outcrops of sandstone (Weatherby), Kent, moist calcareous rocks on the banks of the Housatonic River (Eames & J. Pettibone), Kent, wet upland pasture (Eames), Salisbury, moist meadows (Miss E. L. Shaw). June—July.

Carex pauciflora Lightf. (few-flowered).

Rare. Norfolk, sphagnum swamp (J. W. Robbins, 1827; Bissell). June.

Carex leptalea Wahlenb. (delicate).

Carex polytrichoides Muhl.

Frequent. Wet mossy woods and grassy swamps. May—June.

Carex polygama Schk. (polygamous).

Carex fusca Gray's Manual ed. 6, not All.

Local. Wet meadows and open swamps: New London and Franklin (Graves), Bolton, East Hartford and Bloomfield (Weatherby), East Windsor and Southington (Bissell), Plainville (J. N. Bishop), Hamden (A. L. Winton), Milford (Eames). May.

Carex triceps Michx. (three-headed), var. **hirsuta** (Willd.) Bailey (hairy).

Carex triceps Britton in part, not Michx.

Fields and roadsides in sandy soil, either dry or moist: Old Lyme (Graves), Salisbury (Bissell). Frequent in central and southwestern Connecticut. June.

Carex virescens Muhl. (greenish).

Carex virescens Muhl., var. *costata* Dewey.

Carex costellata Britton.

Frequent. Dry woods and clearings, often in leaf-mold. July.

Carex virescens Muhl., var. **Swanii** Fernald.

Carex virescens of American authors.

Common. Dry woods and open grassy places. July.

Carex formosa Dewey (handsome).

Rare. Meadows and wooded hillsides in rich moist soil: Salisbury (J. R. Churchill). Late May—June.

Carex Davisii Schwein. & Torr.

Rare. Alluvial soil, along river banks or borders of low thickets: Windsor (A. W. Driggs), East Hartford (Weatherby), Lyme and Chester (R. W. Woodward & Graves). June.

Carex gracillima Schwein. (very delicate).

Frequent. Moist woods, thickets and meadows. June.

Carex aestivalis M. A. Curtis (of summer).

Rare. Salisbury, rocky woodland hillside (A. E. Blewitt).
June—July.

Carex Willdenowii Schk.

Rare. Dry woods: East Haven (Harger), Hamden (J. A. Allen). Late May—early June.

Carex umbellata Schk. (bearing umbels).

Open ground, in dry sandy or rocky places. Occasional or frequent near the coast, becoming rare or local northward, reaching Woodstock (R. W. Woodward & Harger), Bolton (A. W. Driggs) and Barkhamsted (Harger). May.

The var. *TONSA* Fernald (clipped) occurs at North Stonington, rocky slope of Lantern Hill (Graves).

Carex nigro-marginata Schwein. (black-margined).

Rare. North Stonington, dry rocky slope of Lantern Hill (Graves). May.

Carex communis Bailey (growing in colonies).

Carex pedicellata Britton.

Carex pedicellata Britton, var. *Wheeleri* Britton.

Carex communis Bailey, var. *Wheeleri* Bailey.

Occasional or frequent. Rocky woods and on shaded banks. May—June.

Carex varia Muhl. (variable).

Occasional or frequent. Rocky or sandy woods and clearings. May—June.

The var. *COLORATA* Bailey (colored) occurs with the typical form.

Carex pennsylvanica Lam.

Common. Dry sandy or sterile soil, in woods and in open ground. May.

One of the most abundant species of the genus.

Carex pennsylvanica Lam., var. *lucorum* (Willd.) Fernald (of groves).

Rare or local. Dry or moist woods: West Hartford (Dr. E. J. Thompson), Meriden (Andrews), Southington (Bissell, Andrews), Fairfield (Eames). Late May—June.

Carex pubescens Muhl. (downy).

Woods, thickets and half-shade, usually in moist rich soil. Rare in New London County: North Stonington (Graves). Becoming occasional along the coast westward and frequent in northern districts. Late May—June.

Carex livida (Wahlenb.) Willd. (pale lead-color).

Rare. In bogs: New Haven (C. N. Shepard, 1830; O. D. Allen). May—June.

Carex panicea L. (like the Panic Grass).

Rare or local. Fields and meadows: New Haven (O. D. Allen), Orange (Eames & C. C. Godfrey). May—June. Native or possibly naturalized from Europe.

Carex tetanica Schk. (rigid).

Rare or local. Meadows and rocky woods: Waterford (Graves), Sherman (E. H. Austin & Eames), Salisbury (M. L. Fernald). Late May—June.

The var. **WOODII** (Dewey) Bailey occurs at Salisbury, in a cool shaded bog (M. L. Fernald).

Carex polymorpha Muhl. (of many forms).

Rare. East Lyme, low woods (Graves), New Haven, marshes (J. A. Allen, Andrews). June.

Carex pallescens L. (rather pale).

Common. Woods, fields and meadows, either wet or dry. May—June.

Carex paupercula Michx. (stunted), var. **pallens** Fernald (pale).

Carex Magellanica of Gray's Manual ed. 6 in part, not Lam.

Local. Norfolk, plentiful in a sphagnum bog (Bissell). June.

Carex limosa L. (growing in mud).

Rare. Sphagnum bogs: Burlington and Salisbury (Bissell), Norfolk (J. W. Robbins, 1828; Weatherby). June.

Carex littoralis Schwein. (of the sea-shore).

Rare or local. Swampy woods in sandy soil: East Windsor and South Windsor (Bissell), East Hartford (Weatherby), Windsor (A. W. Driggs), Stratford (Harger). Late May—early June.

Carex prasina Wahlenb. (leek-green).

Occasional. Along woodland brooks and in shaded swampy places. June.

Carex eburnea Boott (ivory-like).

Carex setifolia Britton.

Dry shaded ledges. Frequent in the limestone district of northwestern Connecticut, extending southward as far as New Milford (Eames). Rare or local among the trap hills of the Connecticut Valley: Plainville (Bissell), Southington (Andrews & Bissell), Durham (Harger). May—June.

Carex pedunculata Muhl. (stalked).

Rare, local or occasional. Wooded banks, in rich soil either moist or dry: Franklin (Graves), Stafford (Weatherby & Bissell), Manchester (A. W. Driggs), Windsor, Barkhamsted and Salisbury (Bissell), Meriden (D. C. Eaton), Oxford and Southbury (Harger), Monroe (H. C. Beardslee), Weston (Eames & C. C. Godfrey), Cornwall (E. E. Brewster). Late April—early May.

The fruit falls very quickly on ripening.

Carex plantaginea Lam. (like *Plantago*, the Plantain).

Rare or local. Moist rich woods: North Branford (O. Harger), Colebrook (J. W. Robbins, 1828), Norfolk (Weatherby & Bissell), Torrington and Salisbury (Bissell), Sherman (C. K. Averill). May.

Carex platyphylla Carey (broad-leaved).

Rocky hillsides in rich woods, usually in dry soil. Rare or absent near the coast: Wilton (Miss A. E. Carpenter), Huntington (Eames). Becoming occasional or frequent northward and common in the limestone district of northwestern Connecticut. May.

Carex laxiculmis Schwein. (loose-stalked).

Frequent. Woods and half-shade, usually in rich soil. June.

Carex digitalis Willd. (of a finger).

Common. Rich woods and glades, more often in rather dry soil. June.

Carex *ptychocarpa* Steud. (having folds on the fruit).

Rare. Waterford, in rocky woods (Graves). June.

Carex *laxiflora* Lam. (loose-flowered).

Rich woods. Rare in northern and eastern Connecticut, becoming occasional or frequent in Fairfield County. Late May — June.

Carex *laxiflora* Lam., var. *gracillima* Boott (very slender).

Rare. Borders of moist thickets: Oxford (Harger), Litchfield (Bissell). Late May.

Carex *laxiflora* Lam., var. *patulifolia* (Dewey) Carey (with spreading leaves).

Occasional or frequent. Rich woods or thickets. Late May — early June.

Carex *laxiflora* Lam., var. *styloflexa* (Buckley) Boott (having bent styles).

Carex styloflexa Buckley.

Rare. Rocky or moist woods or in sphagnum swamps: Lyme (Graves), East Haddam (Weatherby), New Haven (J. A. Allen), Southington (Bissell), Oxford (Harger), Fairfield (Eames). June.

Carex *laxiflora* Lam., var. *varians* Bailey (varying).

Occasional. Rich woods and thickets. Late May — June.

Carex *laxiflora* Lam., var. *blanda* (Dewey) Boott (agreeable).

Carex laxiflora Lam., var. *striatula* Carey.

Frequent or common. Rich open woods or in half-shade, in either dry or moist ground. Late May — June.

Carex *laxiflora* Lam., var. *latifolia* Boott (broad-leaved).

Carex albursina Sheldon.

Rare or local. Moist rich woods: Groton and Waterford (Graves), East Haven and Salisbury (Bissell), Southington (Andrews & Bissell), Seymour (Harger), Oxford (R. W. Woodward & Eames), Winchester (Weatherby & Bissell). May — early June.

Carex *laxiflora* Lam., var. *leptonervia* Fernald (delicately nerved).

Rare. Wet woods or sphagnum bogs: Franklin (R. W. Woodward), West Hartford and Winchester (Bissell). May — June.

Carex Hitchcockiana Dewey.

Rare or local. Rocky hillsides in rich woods: Middlefield (R. W. Woodward), Southington (Andrews & Bissell), Plainville and Farmington (Bissell). June.

Carex oligocarpa Schk. (few-fruited).

Rare. Shaded ledges in rich woods: Colebrook (J. W. Robbins, 1828), Salisbury (M. L. Fernald). June.

Carex conoidea Schk. (cone-shaped).

Common. Moist meadows and wet places. June.

Carex grisea Wahlenb. (gray).

Occasional. Woods and meadows in rich soil. June.

The var. *RIGIDA* Bailey (rigid), var. *angustifolia* Gray's Manual ed. 6, not Boott, is rare over most of the state: Southington, Torrington and North Canaan (Bissell). Occasional in Fairfield County (Eames).

Carex glaucoidea Tuckerm. (gray-green).

Rare. Rich or rocky woods and fields or in moist meadows: Ledyard and Groton (Graves), Franklin (R. W. Woodward), Hartford and West Hartford (A. W. Driggs), Meriden (Andrews), Woodbridge (O. D. Allen). June.

Carex granularis Muhl. (granular).

Rare or local. Moist meadows: East Haven, Meriden and Oxford (Harger), New Haven (D. C. Eaton), Southington (Andrews & Bissell), Bloomfield and North Canaan (Bissell), Ridgefield and Kent (Eames & C. C. Godfrey). June.

Carex granularis Muhl., var. **Haleana** (Olney) Porter.

Carex granularis Muhl., var. *Shriveri* Britton.

Carex Shriveri Britton.

Rare. Wet meadows and pastures: Ridgefield (Eames & C. C. Godfrey), Salisbury (M. L. Fernald & Bissell). June.

Carex Crawei Dewey.

Rare. Moist fields and meadows: Salisbury (Mrs. C. S. Phelps & Weatherby). June—July.

Carex flava L. (yellow).

Low fields and meadows. Rare or absent in most districts: Berlin (N. Coleman), Ridgefield (Eames & C. C. Godfrey). Frequent or common in Litchfield County. June.

Carex flava L., var. **rectirostra** Gaudin (straight-beaked).

Carex flava L., var. *graminis* Bailey.

Local. Swamps and wet meadows: Woodstock (Harger), Ashford and Stafford (Weatherby & Bissell), Union and Colchester (Graves). June — July.

Carex flava L., var. **elatio**r Schlecht. (taller).

Rare. Low ground: Ridgefield and Kent (Eames & C. C. Godfrey). June.

Carex Oederi Retz., var. **pumila** (Cosson & Germain) Fernald (dwarf).

Carex flava L., var. *viridula* Bailey.

Carex viridula Michx.

Rare. East Haven, in moist meadows (Harger); New Haven, in salt marsh (D. C. Eaton); Kent, in sand on shore of pond (Eames); Salisbury, in wet ground (Mrs. C. S. Phelps). June — July.

Carex longirostris Torr. (long-beaked).

Rich rocky woods in either moist or dry places, or on river banks. Local from the Connecticut River westward except near the coast in the southwestern part of the state where it is not reported. Late May — June.

Carex castanea Wahlenb. (chestnut-colored).

Rare. Alluvial soil: Salisbury (J. Young, 1828). Apparently has not been collected since that date. June.

Carex arctata Boott (contracted).

Rare. Hillsides in rich woods: Bridgeport (Eames), Barkhamsted, Norfolk and Canaan (Bissell), Cornwall (Harger). May.

Carex debilis Michx. (weak), var. **Rudgei** Bailey.

Carex tenuis Rudge.

Frequent. Dry or moist woods and in meadows. June — July.

Carex debilis Michx., var. **interjecta** Bailey (thrown between).

Rare. Rocky woods: Southington (Andrews & Bissell). June — July.

Carex scabrata Schwein. (rough).

Local or occasional. Wet woods, about springs and along streams. July.

Carex filiformis L. (thread-like).

Open swamps and bogs. Local in the northern part of the state: Woodstock (Weatherby), Union and East Granby (Weatherby & Bissell), Burlington and Salisbury (Bissell). Becoming frequent southward. June.

Carex lanuginosa Michx. (woolly).

Carex filiformis L., var. *latifolia* Boeckl.

Wet meadows, bogs and about ponds. Rare in New London County: Norwich (W. A. Setchell), Waterford and Franklin (Graves). Frequent elsewhere. June.

Carex vestita Willd. (clothed).

Frequent or common. Sandy soils, either dry or moist. June.

Carex oligosperma Michx. (few-seeded).

Rare. Groton, in peat bogs (Graves), South Windsor (A. E. Blewitt). June—July.

Carex trichocarpa Muhl. (with hairy fruit).

Local. Thomaston, in wet ground (A. E. Blewitt). June—July.

Carex riparia W. Curtis (of river banks).

Occasional or local. Wet meadows and swamps. June.

Carex squarrosa L. (with spreading scales).

Rare or local. Wet meadows and pastures: Guilford (G. H. Bartlett), Chester (R. W. Woodward & Harger), North Branford and East Haven (Harger), New Haven (G. G. Merrell), Middletown (J. Barratt), Southington (Andrews & Bissell). June—July.

Carex typhina Michx. (like Typha, the Cat-tail).

Carex typhinoides Schwein.

Rare. Wet alluvium and in meadows: Guilford (G. H. Bartlett), East Haven (Eames), East Hartford (A. W. Driggs), Hartford (Harger, H. S. Clark & Bissell). June—July.

Carex Pseudo-Cyperus L. (false Cyperus).

Rare. Salisbury, muddy border of Twin Lakes (Mrs. C. S. Phelps & Bissell). June—July.

Carex comosa Boott (having tufts of hair).

Carex Pseudo-Cyperus L., var. *americana* Hochst.

Occasional. Swamps and wet places along streams. June—July.

Carex hystericina Muhl. (porcupine-like).

Rare or local. Wet springy pastures and meadows and in swales: Lyme (H. S. Clark), Manchester (Weatherby), Southington (Andrews & Bissell), Prospect, Oxford and Southbury (Harger), Stafford, Sharon and Salisbury (Bissell). June—July.

The var. *COOLEYI* Dewey, var. *Dudleyi* Bailey, occurs at Wethersfield (C. Wright), Southington and Sharon (Bissell).

Many reports of this species should be referred to *Carex lurida*.

Carex lurida Wahlenb. (dingy brown or yellow).

Carex lurida Wahlenb., var. *flaccida* Bailey.

Carex lurida Wahlenb., var. *parvula* Bailey.

Carex lurida Wahlenb., var. *exundans* Bailey.

Common. Swamps and wet places. July—Aug. A hybrid of this with *Carex lupulina* has been found at Groton and Lyme (Graves).

Very variable with several intergrading forms.

Carex lurida Wahlenb., var. *gracilis* (Boott) Bailey (slender).

Carex Baileyi Britton.

Rare. East Lyme, in bogs (Graves). July—Aug.

Carex Schweinitzii Dewey.

Rare. Salisbury, in open swamps and wet meadows: (M. L. Fernald). June.

Carex retrorsa Schwein. (turned backward).

Rare or local. Wet meadows or in moist alluvial soil: Lyme (Graves), Huntington (Harger), Salisbury (Bissell). June—July. A supposed hybrid of this with *Carex rostrata* was found in Connecticut many years ago by Charles Wright.

Carex lupuliformis Sartwell (hop-shaped; referring to the head of fruit).

Carex lupulina Muhl., var. *polystachya* Schwein. & Torr.

Rare. Bogs or shaded swamps: Southington (Andrews & Bissell), Huntington and Monroe (Eames). Aug.—Sept.

Carex lupulina Muhl. (like *Lupulus*, the Hop).

Frequent or common. Swamps and wet ground. July—Aug.

Carex lupulina Muhl., var. *pedunculata* Dewey (stalked).

Local or occasional. Swamps, growing with the typical form. July—Aug.

Carex Grayii Carey.

Carex Asa-Grayi Bailey.

Alluvial soil along streams or in moist rich ground. Local along the Connecticut River: Lyme (Graves), Haddam (H. S. Clark & Bissell), East Hartford (Weatherby). Rare elsewhere: Middletown, at Westfield, and Southington (Andrews & Bissell), Salisbury (G. H. Bartlett). June.

Carex Grayii Carey, var. *hispidula* Bailey (minutely hispid).

Local. Hartford, alluvial soil on bank of the Connecticut River (H. S. Clark & Bissell). June.

Carex intumescens Rudge (swollen).

Frequent. Swamps and wet places. June—July.

Carex intumescens Rudge, var. **Fernaldii** Bailey.

Rare. Salisbury, in rocky woods (A. E. Blewitt).

Carex folliculata L. (like a small bag).

Frequent. Wet boggy meadows and swampy woods. June—Aug.

Carex vesicaria L. (bladdery).

Carex monile of Gray's Manual ed. 6, not Tuckerm.

Occasional. Low meadows, borders of ponds and near river banks. June.

The var. *MONILE* (Tuckerm.) Fernald (necklace), *Carex monile* Tuckerm., is occasional. The var. *JEJUNA* Fernald (insignificant) occurs rarely with the species. The var. *DISTENTA* Fries (swollen) is rare: East Hartford (Weatherby), Windsor (H. S. Clark & Bissell).

Carex rostrata Stokes (beaked).*Carex utriculata* Boott, var. *minor* Boott.

Swamps and wet meadows or in shallow water. Rare over most of the state: Waterford (Graves), Plainville, Woodbridge and Oxford (Harger), Monroe (Eames). Occasional in Litchfield County (Bissell). June—July.

Carex rostrata Stokes, var. **utriculata** (Boott) Bailey (bottle-like).*Carex utriculata* Boott.

Peat bogs and wet meadows. Rare in most districts: Stratford (Eames), New Haven and Monroe (Harger), East Granby and Putnam (Weatherby), Glastonbury and Thompson (Bissell). Occasional in New London County (Graves). June—July.

Carex bullata Schk. (having bubbles or blisters).*Carex bullata* Schk., var. *Olneyi* Bailey.

Rare. Voluntown, in Great Cedar Swamp (Graves). June—July.

Carex bullata Schk., var. **Greenii** (Boeckl.) Fernald.*Carex bullata* of Manuals.

Local. In swamps: Voluntown, Stonington and Colchester (Graves). Columbia (Weatherby), Ellington (F. N. Pease). June—July.

Carex Tuckermani Dewey.

Rare or local. Moist alluvial soil on banks of rivers and coves: Windsor (A. W. Driggs), Hartford (C. Wright), Southington (Andrews, Bissell), Southbury (Harger), Torrington and Salisbury (Bissell), Canaan (J. W. Robbins, 1828). June—July.

ARACEAE. ARUM FAMILY.

ARISAEMA Martius. Dragon Arum. Indian Turnip.**Arisaema triphyllum** (L.) Schott (three-leaved).*Arisaema triphyllum* Schott, var. *pusillum* Peck.*Arisaema pusillum* Nash.

Jack-in-the-Pulpit. Indian or Wild Turnip.

Common. Rich or moist woods. Late April—May; fruit late Aug.—Nov.

The corm or tuber is intensely acrid, but this property is lost upon being heated, leaving 10 to 18% of starch. The corm is medicinal.

Arisaema Dracontium (L.) Schott (classical name for some species of *Arum*).

Green Dragon. Dragon Root.

Low grounds near streams and rivers. Rare in the eastern part of the state, becoming occasional westward. May—June; fruit Aug.—Sept.

PELTANDRA Raf. Arrow Arum.

Peltandra virginica (L.) Kunth.

Peltandra undulata Raf.

Arrow Arum.

Occasional or frequent. Shallow water of ponds and streams and sometimes in bogs. June—July; fruit Sept.—Oct.

CALLA L. Water Arum.

Calla palustris L. (of marshes).

Wild or Marsh Calla.

Occasional or local. Cold bogs and shaded swamps, sometimes forming extensive colonies. May—June; fruit July—Sept.

The rootstocks are edible after an acrid principle they contain has been dissipated by cooking, and they are said to be sometimes used for food in parts of Europe. The Calla Lily of cultivation is not a true *Calla*, but is a species of the genus *Richardia*.

SYMPLOCARPUS Salisb. Skunk Cabbage.

Symplocarpus foetidus (L.) Nutt. (ill-smelling).

Spathyema foetida Raf.

Skunk Cabbage.

Common. Wet ground. March—April; fruit July—Sept., persisting into the winter.

The rootstocks are reputed to have medicinal value.

ORONTIUM L.   Golden Club.**Orontium aquaticum** L. (aquatic).

Golden Club.

Occasional or local. Mostly in shallow waters of the larger rivers and their tributaries where extensive colonies are often formed; sometimes in swamps and along small streams. May — early June; fruit June — July.

The seeds and rootstocks are said to have been used for food by the Indians after destroying, by cooking, the acrid principle which they contain.

ACORUS L.   Sweet Flag. Calamus.**Acorus Calamus** L. (classical name for some Reed).

Sweet Flag. Calamus.

Frequent. Wet meadows, swamps and borders of ponds and streams, often forming large colonies. May — June.

The aromatic rootstock is often candied, is of some medicinal value and is officinal.

LEMNACEAE.   DUCKWEED FAMILY.**SPIRODELA** Schleid.**Spirodela polyrhiza** (L.) Schleid. (many-rooted).

Greater Duckweed.

On still water of ponds and pools. Occasional in the southeastern part of the state; frequent or locally common elsewhere. July — Aug.

Rarely seen in flower.

LEMNA L.   Duckweed. Duck's-meat.**Lemna trisulca** L. (three-furrowed).

Duck's-meat.

Still or running water. Rare in the south central, occasional in the southwestern, frequent to common in the northern and western parts of the state; not reported from the eastern portion. July.

Lemna valdiviana Philippi.

Lemna cyclostasa of authors.

Shallow water of ponds and rapid waters of brooks and rivers. Occasional in the southeastern, locally common in the

southwestern part of the state; apparently rare elsewhere. June—July, but neither flowers or fruit seen here.

Often occurs in large tangled strings, balls and irregular masses, either floating free or clinging to twigs and stones.

Lemna minor L. (smaller).

Lesser Duckweed.

Ponds and stagnant water of pools and ditches. Rare in southeastern Connecticut; frequent in Hartford and Litchfield Counties; common in the southwestern part of the state. June—July.

WOLFFIA Horkel.

Wolffia columbiana Karst.

Wolffia.

Local. Surface of ponds, plentiful where it occurs: Woodbury and Ridgefield (Eames & C. C. Godfrey), Kent (Eames), New Milford (J. W. Robbins, 1829), Salisbury (J. W. Robbins, Mrs. C. S. Phelps). June—July.

The plants of this species are the smallest of our flowering plants, being little globules about 1-25th of an inch in diameter.

ERIOCAULACEAE. PIPEWORT FAMILY.

ERIOCAULON L. Pipewort.

Eriocaulon septangulare Withering (seven-angled).

Pipewort.

Borders of ponds and rivers, in either shallow or deep water. Frequent in the southeastern part of the state; occasional elsewhere. July—Sept.

XYRIDACEAE. YELLOW-EYED GRASS FAMILY.

XYRIS L. Yellow-eyed Grass.

Xyris caroliniana Walt.

Occasional or local. Bogs or sphagnum swamps. July—Sept.

Xyris flexuosa Muhl. (flexuous).

Yellow-eyed Grass.

Sandy bogs. Occasional to frequent in most sections but not reported from the southwestern part of the state. July—Sept.

Xyris Smalliana Nash.*Xyris Congdoni* Small.

Rare or local. Borders of ponds or in sandy bogs: Salem (Graves), East Lyme (Miss A. M. Ryon & Graves), Guilford (G. H. Bartlett). Aug.—Sept.

COMMELINACEAE. SPIDERWORT FAMILY.

TRADESCANTIA L. Spiderwort.**Tradescantia virginiana** L.

Trinity. Spiderwort. Spider Lily. Job's Tears.

Rare or occasional. Roadsides and waste places, or sometimes in river meadows. In most cases adventive or naturalized from the southeastern United States as an escape from gardens; possibly native at Southbury (Harger) and Fairfield (L. N. Johnson). May—July.

COMMELINA L. Day-flower.**Commelina communis** L. (growing in colonies).*Commelina nudiflora* of authors, not L.

Day-flower.

Occasional to frequent. Waste places and cultivated ground as an escape from cultivation; usually in or near cities. July—Nov. Naturalized from the South or from Asia.

PONTEDERIACEAE. PICKEREL-WEED FAMILY.

PONTEDERIA L. Pickerel-weed.**Pontederia cordata** L. (heart-shaped).

Pickerel-weed.

Common. Shallow water of ponds and streams. July—Aug.

The var. *ANGUSTIFOLIA* Torr. (narrow-leaved) occurs at Old Lyme (H. S. Clark).

HETERANTHERA R. & P. Mud Plantain.**Heteranthera reniformis** R. & P. (kidney-shaped).

Rare. Muddy shores of the Housatonic River at Derby (G. W. Hawes & Harger), and along the river southward to salt water (Eames). Late Aug.—Sept.; fruit Sept.—Oct.

Heteranthera dubia (Jacq.) MacM. (doubtful).*Heteranthera graminea* Vahl.

Water Star Grass.

Rare or local. Shallow water of larger rivers, such as the Connecticut and Housatonic, or sometimes in ponds. July — Sept.

EICHHORNIA Kunth.**Eichhornia crassipes** (Martius) Solms (thick-stemmed).

Water Hyacinth.

Rare. A few plants were found in the Pequonnock River, Bridgeport (C. K. Averill, 1893). June — Aug. Fugitive from Brazil.

The plant is not hardy in this climate, but in Florida it has multiplied in the St. John's river system to such an extent as seriously to obstruct navigation.

JUNCACEAE. RUSH FAMILY.**JUNCUS** L. Rush. Bog Rush.**Juncus bufonius** L. (of toads).

Toad Rush. Toad Grass. Frog Grass.

Frequent to common. Open, moist, sandy places. Fruit mid-June — Aug.

Juncus Gerardi Loisel.

Black Grass.

Common on salt marshes and meadows along the coast. Fruit June — Aug.

Is valued for fodder and constitutes much of the salt hay cut by farmers.

Juncus tenuis Willd. (slender).

Yard Rush. Slender Rush.

Common. Fields, pastures, open woods, roadsides and paths, in either dry or moist ground. Fruit mid-June — Sept.

This species is said to be readily eaten by stock, and when made into hay to contain 7% crude protein.

Juncus tenuis Willd., var. *anthelatus* Wiegand (having a cyme with lateral branches overtopping the central ones).

Rare. Low sandy or grassy places: Southington (Andrews

& Bissell), Lyme (Graves & Bissell), Granby (Weatherby).
Fruit July — Sept.

Juncus tenuis Willd., var. **Williamsii** Fernald.

Rare. Open moist or dry ground: Groton (Graves), Putnam (Weatherby & Bissell), Salisbury (Bissell). Fruit July — Aug.

Juncus secundus Beauv. (one-sided).

Juncus tenuis Willd., var. *secundus* Engelm.

Sandy places and ledgy hillsides, mostly in dry ground. Occasional in most districts but apparently rare in the southwestern part of the state. Fruit July — Sept.

Juncus Dudleyi Wiegand.

Rare. Sandy or sterile ground: Windsor (A. W. Driggs), Meriden (Andrews), South Windsor, Sharon and Salisbury (Bissell). Fruit June — July.

Juncus dichotomus Ell. (forking by pairs).

Rare on borders of salt marshes and in dry open fields near the coast: Groton (Graves), Milford (Harger). Fruit July — Aug.

Juncus dichotomus Ell., var. **platyphyllus** Wiegand (broad-leaved).

Rare. Fields: Groton (Graves). Fruit July — Aug.

Juncus Greenei Oakes & Tuckerm.

Dry, open, generally sandy but sometimes ledgy places. Frequent along the coast; becoming occasional or rare inland, reaching Waterbury (A. E. Blewitt), Southington, on Wolcott Mt. at 900 ft. elevation (Andrews), and Union, on Bald Hill at 1250 ft. elevation (Bissell). Fruit July — Sept.

Juncus effusus L. (loosely spreading).

Bulrush. Common, Soft, Bog, or Candle Rush.

Common. Marshes, low fields and open swamps. Fruit July — Aug.

The var. **COMPACTUS** Lejeune & Courtois (pressed together) has been collected at Franklin (R. W. Woodward).

Sometimes used for weaving into mats.

Juncus brachycephalus (Engelm.) Buchenau (short-headed).

Juncus canadensis J. Gay, var. *brachycephalus* Engelm.

Rare. Swamps and bogs: Salisbury and Sharon (Bissell).
Fruit Aug.—Sept.

Juncus brevicaudatus (Engelm.) Fernald (short-tailed).

Juncus canadensis J. Gay, var. *brevicaudatus* Engelm.

Juncus canadensis J. Gay, var. *coarctatus* Engelm.

Occasional. Bogs and moist sandy places. Fruit Aug.—Sept.

Juncus canadensis J. Gay.

Juncus canadensis J. Gay, var. *longicaudatus* Engelm.

Frequent. Open swamps and wet meadows. Fruit Aug.—Sept.

Juncus canadensis J. Gay, var. *subcaudatus* Engelm. (somewhat tailed).

Rare or occasional. Low moist ground, often in shade: Sprague and Stafford (Graves), Lyme, East Windsor, Farmington and Southington (Bissell). Fruit Aug.—Sept.

Juncus pelocarpus Mey. (dark-fruited).

Sandy or muddy shores of ponds and streams. Occasional in the southeastern part of the state; apparently rare or local elsewhere. Fruit Aug.—Sept.

Often proliferous.

Juncus militaris Bigel. (soldierly).

Rare or local. Shallow water of ponds: Groton and East Lyme (Graves), Guilford (G. H. Bartlett & Bissell). Fruit July — Sept.

Juncus nodosus L. (knotty).

Knotted Rush.

River banks and moist sandy soil bordering swamps, ponds or small streams. Rare in most districts: Oxford (Harger), Cornwall (R. W. Woodward), Norfolk, Litchfield and Salisbury (Bissell). Occasional along the Connecticut River from East Windsor (Bissell) to Lyme (Graves). Fruit July — Aug.

Juncus brachycarpus Engelm. (short-fruited).

Rare. New London, low ground near Ocean Beach (Graves). Fruit July. A fugitive, probably from the West or South.

Juncus acuminatus Michx. (taper-pointed).

Frequent. Open swamps and wet meadows. Fruit July — Sept.

Often proliferous.

Juncus debilis Gray (weak).

Juncus acuminatus Michx., var. *debilis* Engelm.

Rare. Pond shores and borders of swamps: Waterford and Ledyard (Graves). Fruit Aug.

Juncus articulatus L. (jointed).

Low and moist, mostly sandy places. Occasional to frequent in New London County; rare or occasional in Middlesex, Hartford and Litchfield Counties; not reported elsewhere. Fruit July — Sept.

Juncus articulatus L., var. *obtusatus* Engelm. (blunt).

Rare. Low moist ground: Stafford and Glastonbury (Bissell). Fruit July — Sept.

Juncus marginatus Rostk. (with a distinct border).

Frequent. Grassy places, mostly in moist ground. Fruit July — Sept.

LUZULA DC. Wood Rush.**Luzula saltuensis** Fernald (of forests).

Luzula vernalis Gray's Manual ed. 6, not DC.

Juncoides pilosum Coville, not Kuntze.

Hairy Wood Rush.

Rocky or moist open woods. Occasional in the north-western part of the state (Bissell). Rare elsewhere: Guilford (G. H. Bartlett), North Branford and Watertown (Harger). April — May; fruit May.

Luzula campestris (L.) DC. (of fields), var. *multiflora* (Ehrh.)

Celak. (many-flowered).

Luzula campestris of American authors, not DC.

Juncoides campestre of American authors, not Kuntze.

Common. Woods and fields, in either dry or moist ground. April — May; fruit June — July.

LILIACEAE. LILY FAMILY.

CHAMAELIRIUM Willd. Devil's Bit.

Chamaelirium luteum (L.) Gray (yellow).

Chamaelirium carolinianum Willd.

Blazing Star. True Unicorn-root.

Meadows and low woods. Occasional in the southwestern part of the state, becoming rare or local northward and eastward, reaching Salisbury (Bissell), East Haddam (W. E. Selden, Dr. E. J. Thompson). May—June.

The rootstock is medicinal.

MELANTHIUM L.

Melanthium latifolium Desr. (broad-leaved).

Melanthium racemosum Michx.

Crisped Bunch-flower.

Rare. Dry woods: Greenwich, at North Greenwich (P. Alcott, 1869). July—Aug.

VERATRUM L. False Hellebore.

Veratrum viride Ait. (green).

American White Hellebore. Indian Poke. Green Hellebore. Poor Annie.

Frequent to common. Wet woods, open swamps and wet meadows. May—June.

The rootstock is medicinal, is an active poison and is official. The early colonists used the plant as an insecticide.

UVULARIA L. Bellwort.

Uvularia perfoliata L. (through a leaf; i. e., with leaves clasping the stem).

Bellwort.

Frequent. Dry or moist ground, usually in woods but sometimes occurring in fence-rows or even in fields. May—June.

The root is medicinal and has acquired some local reputation as a remedy against snake bites.

OAKESIA Wats.

Oakesia sessilifolia (L.) Wats. (having leaves without leaf-stalks).

Uvularia sessilifolia L.

Bellwort.

Frequent to common. Woods, thickets and meadows, in either dry or moist ground. May—June.

ALLIUM L. Onion. Garlic.

Allium tricoccum Ait. (having three grains: referring to the three-lobed fruit).

Wild Leek.

Occasional or frequent. Woods, usually in rich but sometimes in sandy soil. Late June—July.

If eaten by cows in the spring, the milk and butter are tainted.

Allium canadense L.

Wild or Meadow Garlic.

Frequent. Meadows bordering streams and rivers, sometimes also in sandy ground and on dry hillsides. June.

Rarely used as a substitute for common garlic.

Allium vineale L. (of vineyards).

Field or Wild Garlic. Wild Onion.

Waste places, grain fields and meadows. Rare in southeastern Connecticut, occasional to frequent elsewhere. Mid-June—July. Naturalized from Europe.

A bad weed, both in pastures, where it taints the milk of animals feeding upon it, and in grain fields, where the bulblets mixing with grain injure it for milling.

HOSTA Tratt. Day Lily. Plantain Lily.

Hosta caerulea (Andr.) Tratt. (sky-blue).

Funkia ovata Spreng.

Blue Day Lily.

Rare. Roadsides near dwellings as an escape from gardens: Montville (Graves), Bridgeport and Fairfield (Eames). July. Native of Japan.

Hosta japonica (Thunb.) Aschers.*Funkia lancifolia* Spreng.

Rare. Escaped from gardens to roadsides: Montville (Graves), Stafford (Bissell). July — Aug. Native of Japan.

HEMEROCALLIS L. Day Lily.**Hemerocallis flava** L. (yellow).

Yellow Day Lily. Lemon Lily.

Rare. Escaped from cultivation to fields and roadsides: Groton, near Poquonnock Lake (Graves, Harger, Bissell et al.), Meriden (Bissell), Westport (Eames), Wilton (Miss A. E. Carpenter). June. Adventive from Europe.

Hemerocallis fulva L. (reddish-yellow).

Common Day Lily.

Frequent. Escaped from cultivation to fields, roadsides and waste places. Mid-June — Aug. Naturalized from Europe.

Troublesome and difficult to eradicate in moist rich ground.

LILIUM L. Lily.**Lilium philadelphicum** L.

Wild Orange-red Lily. Red or Wood Lily.

Frequent. Dry or moist thickets, pastures and open woods. Late June — July.

Lilium superbum L. (superb).

Turk's-cap Lily. Wild Tiger Lily.

Marshes and low fields. Frequent near the coast in the southeastern part of the state, becoming occasional or local westward, reaching Stamford (W. H. Hoyt); not reported far inland. July — Aug.

Lilium canadense L.

Wild Yellow Lily. Canada Lily.

Frequent. Moist meadows, bogs and open swamps. July.

Lilium tigrinum Ker (of tigers).

Tiger Lily.

Rare or occasional. Escaped from gardens to fence-rows, roadsides and waste places. Aug. Adventive from Asia.

In Japan and China the bulbs are eaten.

ERYTHRONIUM L. Dog's-tooth Violet.**Erythronium americanum Ker.**

Yellow Adder's Tongue. Yellow Dog's-tooth Lily or Violet.
Snake-leaf. Trout Lily.

Meadows and rich woods. Local in southeastern Connecticut, common elsewhere. April — May.

Sometimes used as a pot-herb. The dried bulbs, if not kept too long, are said to be nutritious. The leaves and root are medicinal.

ORNITHOGALUM L. Star of Bethlehem.**Ornithogalum umbellatum L.** (umbellate).

Star of Bethlehem. Go-to-Bed-Noon.

Rare or occasional. Escaped from gardens to fields and waste places, mostly near dwellings and in shaded moist ground. May — June. Naturalized from Europe.

MUSCARI Mill. Grape Hyacinth.**Muscari botryoides (L.) Mill.** (like a cluster of grapes).

Grape Hyacinth. Babies' Breath.

Rare. Roadsides and grassland near dwellings, as an escape from cultivation: Norwich (Mrs. E. E. Rogers), East Lyme (Graves), Seymour and Southbury (Harger), New Haven (Eaton Herb.), Milford (Eames & C. C. Godfrey). May. Adventive from Europe.

Muscari racemosum (L.) Mill. (racemose).

Starch Grape Hyacinth. Feather Hyacinth.

Rare or local. Grassland near dwellings: New London and Lyme (Graves), Guilford (G. H. Bartlett), Fairfield (Eames), Stamford (W. H. Hoyt). May. Naturalized from Europe.

Reproduces quite rapidly by forming new bulbs, is very persistent and may give much trouble in lawns.

YUCCA L. Bear Grass. Spanish Bayonet.**Yucca filamentosa L.** (bearing slender threads).

Adam's Needle. Thread-and-Needle.

Rare. Escaped from cultivation to waste ground: Groton

(Harger, Bissell, Graves et al.), Bridgeport and Fairfield (Eames). May—July. Adventive from the South.

The plant yields a strong fiber. The roots form a lather with water and were formerly used in the region where it is plentiful in place of soap.

ASPARAGUS L.   *Asparagus*.

Asparagus officinalis L. (of the shops).

Garden *Asparagus*.

Frequent along the coast on shores and borders of salt marshes; occasional in fields, waste places and along roadsides inland. June; fruit Aug.—Sept. Naturalized from Europe.

Widely cultivated for its young shoots.

CLINTONIA Raf.

Clintonia borealis (Ait.) Raf. (northern).

Clintonia. Yellow *Clintonia*.

Rich often swampy woods. Frequent or common in the extreme northwestern part of the state; becoming occasional or rare southward and eastward, reaching Kent (C. K. Averill, E. H. Austin, Eames), Bristol (W. A. Terry), East Hartford and Manchester (A. W. Driggs), Cromwell (F. K. Hallock), Mansfield (Mrs. C. S. Phelps), Hampton (Weatherby), Union (Bissell), Voluntown (Graves). May—early June.

SMILACINA Desf.   False Solomon's Seal.

Smilacina racemosa (L.) Desf. (racemose).

Vagnera racemosa Morong.

Wild Spikenard. False Spikenard.

Frequent to common. Rich usually rocky woods, thickets and borders of fields. Mid-May—June; fruit Sept.—Oct.

The root is medicinal.

Smilacina stellata (L.) Desf. (star-shaped).

Vagnera stellata Morong.

Star-flowered Solomon's Seal.

Occasional near the coast in dry or moist, usually sandy ground; rare or local inland on river banks, in swamps or even in dry rocky ground. Mid-May—June.

Smilacina trifolia (L.) Desf. (three-leaved).

Vagnera trifolia Morong.

Three-leaved Solomon's Seal.

Rare or local. Cool sphagnum bogs: Cromwell (Andrews & Bissell), East Hartford (H. S. Clark), Bristol (J. N. Bishop), Colebrook (J. W. Robbins), Norfolk (Miss M. C. Seymour), Salisbury (Bissell). May—June.

MAIANTHEMUM Wiggers.

Maianthemum canadense Desf.

Unifolium canadense Greene.

Wild Lily of the Valley. Two-leaved Solomon's Seal.

Common. Moist or dry woods and thickets. Mid-May—June.

STREPTOPUS Michx. Twisted-stalk.

Streptopus amplexifolius (L.) DC. (having leaves which clasp the stem).

Liver Berry.

Rare or local. Rich moist woods: Salisbury (Bissell, Mrs. C. S. Phelps). May.

Streptopus roseus Michx. (rose-colored).

Liver Berry.

Rich woods, often among rocks. Occasional in the north-western part of the state, becoming local or rare eastward and southward, reaching Somers (Bissell), East Haddam (Dr. E. J. Thompson, Graves), Hamden (D. C. Eaton, Harger), Monroe (Harger). May.

POLYGONATUM Hill. Solomon's Seal.

Polygonatum biflorum (Walt.) Ell. (two-flowered).

Salomonias biflora Farwell.

Small or Hairy Solomon's Seal.

Frequent. Woods and thickets. May—June.

The rootstock is medicinal.

Polygonatum commutatum (R. & S.) Dietrich (variable).

Polygonatum giganteum Dietrich (?).

Salomonias commutata Farwell.

Great, Giant or Smooth Solomon's Seal.

Occasional to frequent. Usually in meadows and alluvial soil near the larger streams; sometimes in rich or dry woods and thickets or on sandy banks. May—June.

The rootstock is medicinal.

CONVALLARIA L. Lily of the Valley.

Convallaria majalis L. (blooming in May).

Lily of the Valley.

Rare. Escaped from cultivation to roadsides, thickets and waste places: New Haven, at East Rock (H. M. Denslow et al.), Southington (Andrews), Oxford (Harger), Stratford (Eames). May. In Connecticut adventive from Europe.

The rootstock and roots are medicinal and are official.

MEDEOLA L. Indian Cucumber-root.

Medeola virginiana L.

Indian Cucumber-root.

Rich woods. Occasional in most parts of the state, becoming common in southwestern Connecticut. May—June.

The rootstock is edible, somewhat resembling cucumber in flavor.

TRILLIUM L. Wake Robin. Birthroot.

Trillium erectum L. (erect).

Purple or Red Trillium. Birthroot. Red Benjamin.

Rich and often rocky woods. Rare or occasional in southeastern Connecticut, becoming frequent northward and westward, and common in the southwestern part of the state. Mid-April—May.

Both white-flowered and yellow-flowered forms are occasionally found. The flowers exhale a very disagreeable odor.

Trillium grandiflorum (Michx.) Salisb. (large-flowered).

Large-flowered White Trillium.

Rare. Weston, in rocky rich woods (Mrs. Mabel Osgood Wright). May.

Trillium cernuum L. (nodding).

Nodding Trillium. White Trillium.

Rich moist woods. Occasional in southeastern and southwestern Connecticut, apparently rare elsewhere. May.

Trillium undulatum Willd. (wavy).*Trillium erythrocarpum* Michx.

Painted Trillium.

Rich woods and shaded swamps. Occasional in the north-western part of the state, becoming local or rare eastward and southward, extending to Union (Bissell, Graves), Middletown (M. Hitchcock), New Haven (E. P. Prudden), Oxford (Harger). May.

ALETRIS L. Colic-root. Star Grass.**Aletris farinosa** L. (mealy).

Colic-root. Star Grass. False Unicorn-root.

Occasional or local. Fields and meadows, or moist sandy places. Late June—July.

The rootstock is medicinal.

SMILAX L. Green Brier. Cat Brier.**Smilax herbacea** L. (herbaceous).

Carrion-flower. Jacob's Ladder.

Frequent. Low thickets, borders of meadows and sometimes in drier fields. Late May—June.

The flowers exhale a most offensive odor. The herb is somewhat medicinal. The young shoots are sometimes used as a pot-herb and are called Wild Asparagus.

Smilax rotundifolia L. (round-leaved).

Common Green Brier. Horse, Cat, Bull or Squirrel Brier.

Common. Moist or dry woods, thickets and pastures. Late May—June; fruit Sept., persisting over the winter.

Smilax glauca Walt. (glaucous).

Saw, Cat or Squirrel Brier.

Common. Dry or moist open woods and thickets, often in sandy ground. June; fruit Sept., persisting over the winter.

The roots have been substituted for those of the Brazilian Sarsaparilla.

Smilax hispida Muhl. (rough-hairy).

Rare. Fairfield, in moist thickets (Eames). June.

HAEMODORACEAE. BLOODWORT FAMILY.

LACHNANTHES Ell. Red-root.

Lachnanthes tinctoria (Walt.) Ell. (used for dyeing).

Gyrotheca capitata Morong.

Gyrotheca tinctoria Salisb.

Red-root.

Rare. Open boggy meadows and sandy shores of ponds: East Lyme, several localities (Miss A. M. Ryon & Graves), Madison (W. R. Dudley). Aug.—Sept.

DIOSCOREACEAE. YAM FAMILY.

DIOSCOREA L. Yam.

Dioscorea villosa L. (hairy).

Wild Yam or Yam-root. Colic-root. Rheumatism-root.

Moist thickets. Frequent along and near the coast and in the valley of the Connecticut River; occasional or rare elsewhere. June—July; fruit Sept.—Oct.

The rootstock is medicinal.

AMARYLLIDACEAE. AMARYLLIS FAMILY.

NARCISSUS L.

Narcissus Pseudo-Narcissus L. (false Narcissus).

Daffodil.

Rare. Escaped from cultivation to fields and roadsides at East Windsor (Bissell), and at several localities in the southwestern part of the state (Eames). May. Native of Europe.

Narcissus poeticus L. (of poets).

Poet's Narcissus.

Rare. Waste grounds and near old dwellings as an escape from gardens, persistent but not inclined to spread: Oxford (Harger), Fairfield (Eames). May. Native of Europe.

Sometimes occurs in the double-flowered form.

LEUCOJUM L.

Leucojum aestivum L. (of summer).

Summer Snowflake.

Rare. Fairfield, escaped from cultivation to waste grounds in rich moist soil (Eames). Mid-May—mid-June. Adventive from Europe.

HYPOXIS L. Star Grass.**Hypoxis hirsuta** (L.) Coville (hairy).*Hypoxis erecta* L.

Yellow-eyed Grass. Star Grass.

Common. Dry or moist, open or shaded ground. May — Oct.

IRIDACEAE. IRIS FAMILY.**IRIS L.** Fleur-de-lis.**Iris versicolor** L. (of various colors).

Larger Blue or Poison Flag. Fleur-de-lis. Iris. Vegetable Mercury.

Common. Swamps and wet meadows. Mid-May — July.

The rhizome and roots are poisonous and medicinal and are officinal. There have been cases of serious poisoning due to mistaking the roots for those of Sweet Flag.

Iris prismatica Pursh (prism-shaped).

Slender Blue Flag.

Frequent on and near the coast in swamps, meadows and borders of salt marshes; rarely seen farther inland. June — mid-July.

Iris pseudacorus L. (false Acorus).

Yellow Iris.

Rare. Escaped from gardens to marshes and low grounds: Norwich (Mrs. E. E. Rogers), Madison (Miss Roberts), East Haddam (Dr. E. J. Thompson), Stratford (Mrs. R. H. Russell), Fairfield (Eames). Mid-May — June. Adventive from Europe.

Iris orientalis Mill. (of the Orient).Rare. Escaped from cultivation to marshes: Stratford, many plants growing with *Iris pseudacorus* (Mrs. R. H. Russell). Late May — June. Adventive from Asia.**Iris germanica** L.

Fleur-de-lis.

Rare. Escaped from gardens to roadsides and fence-rows: Oxford (Harger), Fairfield (Eames). May — June. Adventive from Europe.

BELAMCANDA Adans.   Blackberry Lily.**Belamcanda chinensis** (L.) DC.*Gemmingia chinensis* Kuntze.

Blackberry Lily. Leopard Flower.

Escaped from cultivation to roadsides and waste places, more often in rocky ground. Frequent in the southwestern part of the state, becoming occasional or rare northward and eastward, reaching Danbury (Miss G. L. Northrop), Sharon and Portland (Dr. E. J. Thompson), Berlin (Andrews & Bissell), East Lyme (F. H. Dart), Norwich (Mrs. E. E. Rogers). July — Aug.; fruit Sept. — Nov. Adventive from Asia.

SISYRINCHIUM L.   Blue-eyed Grass.**Sisyrinchium albidum** Raf. (whitish).

Rare. New London, one plant in a dry field (Miss E. Coit, 1889). May. Fugitive from the western United States.

Sisyrinchium mucronatum Michx. (having an abrupt, short point).

Meadows and woods, usually in rather dry ground. Occasional in the northwestern part of the state, becoming rare southward and eastward, reaching Newtown (Eames), Oxford (Harger), Plainville and Glastonbury (Bissell). Mid-May — June.

Sisyrinchium angustifolium Mill. (narrow-leaved).

Dry or moist fields. Occasional in the southwestern part of the state; frequent or common elsewhere. Mid-May — June.

Forms intermediate between *Sisyrinchium angustifolium* and *Sisyrinchium gramineum* occur at New London, Groton and Ledyard (Graves), and have been called *Sisyrinchium intermedium* Bicknell.

Sisyrinchium gramineum Curtis (grass-like).*Sisyrinchium anceps* of Gray's Manual ed. 6.*Sisyrinchium graminoides* Bicknell.

Frequent or common. Fields, meadows, thickets and woods, generally in moist ground. June.

Sisyrinchium atlanticum Bicknell.

Fields, meadows and borders of salt marshes. Common on and near the coast; occasional or local inland. June.

Rarely occurs with white flowers.

ORCHIDACEAE.   ORCHIS FAMILY.

CYPRIPEDIUM L.   Lady's Slipper. Moccasin Flower.**Cypripedium parviflorum** Salisb. (small-flowered).

Smaller Yellow Lady's Slipper.

Rare or occasional. Dry sandy or rocky woods. May — June.

The rootstock and roots are medicinal and are official. As in the following variety, contact with this plant poisons the skin of some people, the glandular hairs containing an irritant oil.

Cypripedium parviflorum Salisb., var. **pubescens** (Willd.)

Knight (downy).

Cypripedium pubescens Willd.

Cypripedium hirsutum of authors, not Mill.

Large Yellow Lady's Slipper. Yellow Moccasin Flower. American Valerian.

Rocky woods and cold swamps. Rare in the eastern part of the state and near the coast, becoming occasional or frequent northward and westward. May — June.

The rootstock and roots are medicinal and are official.

Cypripedium hirsutum Mill. (hairy).

Cypripedium spectabile Salisb.

Cypripedium reginae Walt.

Showy Lady's Slipper.

Rare or local. Swamps or wet meadows: Willington (Mrs. C. S. Phelps), Milford (Eames), Norfolk (Miss M. C. Seymour), Danbury (H. C. Ryder), Cornwall (E. E. Brewster), Salisbury (Mrs. C. S. Phelps). June.

Cypripedium acaule Ait. (stemless).

Stemless, Pink or Wild Lady's Slipper. Whip-poor-will's Shoe. Wild Valerian.

Frequent. Dry open sandy or rocky woods, often under evergreen trees. May — June.

ORCHIS L.

Orchis spectabilis L. (showy).*Galeorchis spectabilis* Rydb.

Showy Orchis.

Rich woods, generally in leaf-mold. Rare near the coast; occasional or local inland. May — early June.

HABENARIA Willd. Rein Orchis. Fringed Orchis.**Habenaria bracteata** (Willd.) R. Br. (having bracts).*Coeloglossum bracteatum* Parl.

Long-bracted Orchis.

Rare or local. Dry or rocky woods: Killingly (C. H. Knowlton), Somers (Bissell), Middletown (M. Hitchcock), Berlin (Andrews), Meriden (Harger, Andrews), Southington (Andrews, Bissell), New Haven and Hamden (Eaton Herb.), Granby and Simsbury (I. Holcomb), New Milford (E. H. Austin), Kent (C. K. Averill), Salisbury (Mrs. C. S. Phelps). Late May — June.

Habenaria flava (L.) Gray (yellow).*Habenaria virescens* Spreng.*Perularia flava* Farwell.

Small Pale Green Orchis.

Occasional or frequent. Low meadows and open swamps. June — July.

Habenaria hyperborea (L.) R. Br. (northern).*Limnorchis hyperborea* Rydb.*Limnorchis huronensis* Rydb.

Tall Leafy Green Orchis.

Rich woods and wooded swamps. Rare in most districts: Bolton (Weatherby), New Britain (Bissell), Plainville (J. N. Bishop), Southington (Bissell, Andrews). Becoming occasional or local in Litchfield County. Late June — early Aug.

Habenaria dilatata (Pursh) Gray (expanded).*Limnorchis dilatata* Rydb.

Tall White Bog Orchis.

Rare. Wet meadows or sphagnum bogs: Plainville (Andrews), Norfolk (J. H. Barbour, Miss M. C. Seymour). June — July.

Habenaria clavellata (Michx.) Spreng. (shaped like a little club).

Habenaria tridentata Hook.

Gymnadeniopsis clavellata Rydb.

Small Green Wood Orchis.

Occasional or frequent. Bogs and wet woods. July — Aug.

Habenaria Hookeri Torr.

Habenaria Hookeri Torr., var. *oblongifolia* Paine.

Lysias Hookeriana Rydb.

Rich woods. Rare near the coast, becoming occasional or local northward. June.

Habenaria orbiculata (Pursh) Torr. (disk-shaped).

Lysias orbiculata Rydb.

Large Round-leaved Orchis.

Rare. In woods: South Windsor (S. P. Elmore), Windsor (H. S. Clark), Norfolk (Miss M. C. Seymour), Salisbury (Mrs. C. S. Phelps & Weatherby). June.

Habenaria macrophylla Goldie (large-leaved).

Rare. Norfolk, in pine woods (J. H. Barbour). June — July.

Habenaria ciliaris (L.) R. Br. (fringed).

Blephariglottis ciliaris Rydb.

Yellow Fringed Orchis.

Meadows, swamps, dry fields, thickets and open woods along the coast. Occasional or frequent eastward, becoming rare or local westward. Not certainly known farther inland than Monroe (H. C. Beardslee). Mid-July — Aug.

Habenaria blephariglottis (Willd.) Torr. (eyelid-tongued: i. e., having a fringed lip).

Blephariglottis blephariglottis Rydb.

White Fringed Orchis.

Rare. Sphagnum bogs: Cromwell (Dr. E. J. Thompson), Bethany and Middlebury (Harger), Colebrook (J. W. Robbins), Norfolk (Miss M. C. Seymour). Aug.

Habenaria lacera (Michx.) R. Br. (torn).*Blephariglottis lacera* Rydb.

Ragged or Ragged Fringed Orchis.

Occasional. Fields, meadows and open or wooded swamps.
July — mid-Aug.**Habenaria psycodes** (L.) Sw. (butterfly-like).*Blephariglottis psycodes* Rydb.

Smaller Purple Fringed Orchis.

Occasional. Bogs, wet meadows and open swamps. Late
June — Aug.**Habenaria fimbriata** (Ait.) R. Br. (fringed).*Habenaria grandiflora* Torr.*Blephariglottis grandiflora* Rydb.

Large Purple Fringed Orchis.

Rare or occasional. Swamps and wet woods. Mid-June —
July.This species usually blooms several weeks earlier than
Habenaria psycodes.**POGONIA** Juss.**Pogonia ophioglossoides** (L.) Ker (like *Ophioglossum*, the
Adder's Tongue).

Rose Pogonia. Snake or Adder's Mouth.

Occasional or frequent. Bogs and wet meadows. June —
July.Rarely occurs with white flowers. The flowers are fra-
grant.**Pogonia trianthophora** (Sw.) BSP. (bearing three flowers).*Pogonia pendula* Lindl.*Triphora trianthophora* Rydb.

Nodding Pogonia.

Rare or local. Rich woods, usually in leaf-mold: Norwich
(Miss M. P. Gilman, W. A. Setchell), Franklin (W. A. Set-
chell), Granby (I. Holcomb), Southington (Miss F. S. Walk-
ley), Salisbury (Mrs. C. G. Beardslee & Mrs. C. S. Phelps).
Aug.

Pogonia verticillata (Willd.) Nutt. (whorled).

Isotria verticillata Raf.

Whorled Pogonia.

Rare or occasional. Rich woods. Mid-May — early June.

Pogonia affinis Austin (allied).

Isotria affinis Rydb.

Smaller Whorled Pogonia.

Rare. Rich woods: New Haven (E. S. Dana), Stratford (C. K. Averill, Eames). Mid-May — mid-June.

CALOPOGON R. Br.

Calopogon pulchellus (Sw.) R. Br. (pretty).

Limodorum tuberosum of American authors, not L.

Grass Pink. Calopogon.

Occasional or frequent. Bogs and low meadows. June — July.

The flowers are rarely pure white.

ARETHUSA L.

Arethusa bulbosa L. (bulbous).

Arethusa.

Rare or local. Sphagnum bogs and wet meadows. Late May — June.

SPIRANTHES Richard. Ladies' Tresses.

Spiranthes Beckii Lindl.

Spiranthes simplex Gray.

Gyrostachys simplex Kuntze.

Rare or local. Dry, sandy fields and sterile pastures. Aug. — Sept.

Spiranthes gracilis (Bigel.) Beck (slender).

Gyrostachys gracilis Kuntze.

Frequent. Fields, meadows and open woods, in both moist and dry ground. Aug. — Sept.

Spiranthes vernalis Engelm. & Gray (vernal).

Spiranthes praecox Gray's Manual ed. 6 in part.

Gyrostachys praecox Kuntze.

Gyrostachys linearis Rydb.

Fields and meadows, usually in dry soil. Occasional to frequent near the coast, becoming rare inland. Aug.—Sept.

Spiranthes lucida (H. H. Eaton) Ames (shining).

Spiranthes latifolia Torr.

Gyrostachys plantaginea Britton.

Rare or local. Moist river banks: Lyme (Mrs. E. E. Rogers), Cromwell (F. K. Hallock), Windsor (H. S. Clark), and along the Housatonic River from Oxford (Harger), northward to the state line. Late May—June.

Spiranthes cernua (L.) Richard (nodding).

Gyrostachys cernua Kuntze.

Frequent. Bogs, meadows and open swamps, or sometimes in drier places. Sept.—Oct.

The var. *OCHROLEUCA* (Rydb.) Ames (buff-colored), *Gyrostachys ochroleuca* Rydb., occurs at Norfolk (Bissell), Salisbury (Mrs. C. S. Phelps).

Sometimes very fragrant.

Spiranthes Romanzoffiana Cham.

Gyrostachys stricta Rydb.

Rare. Sphagnum bog: Norfolk (J. H. Barbour). July.

EPIPACTIS Boehm. Rattlesnake Plantain.

Epipactis repens (L.) Crantz (creeping), var. *ophioides* (Fernald) A. A. Eaton (snake-like).

Peramium ophioides Rydb.

Goodyera repens Gray's Manual ed. 6 in part.

Peramium repens Britton & Brown's Ill. Flora in part.

Lesser Rattlesnake Plantain. Squirrel-ear.

Rare. Rocky woods under evergreens: Southington (J. Shepard), Norfolk (Miss M. C. Seymour). Aug.

Epipactis tessellata (Lodd.) A. A. Eaton (checkered).

Goodyera tessellata Lodd.

Peramium tessellatum Rydb.

Rattlesnake Plantain.

Rare or local. Rich woods in the northern part of the state, mostly under evergreens: Union and Granby (Bissell), Enfield (Andrews & Bissell), Manchester and South Windsor

(A. W. Driggs), East Hartford (Weatherby), Bristol (J. N. Bishop), Norfolk (Miss M. C. Seymour), Salisbury (Mrs. C. S. Phelps). Aug.—Sept.

Epipactis pubescens (Willd.) A. A. Eaton (downy).

Goodyera pubescens R. Br.

Peramium pubescens MacMill.

Net-leaf or Downy Rattlesnake Plantain. Scrofula-weed.

Frequent. Rich woods in either dry or moist ground. Aug.

All our species of this genus are considered medicinal, the whole plant being used.

CORALLORRHIZA Chatelain. Coral Root.

Corallorrhiza trifida Chatelain (three-cleft).

Corallorrhiza innata R. Br.

Corallorrhiza Corallorrhiza Karst.

Early Coral Root.

Rare. Cold swamps or wet pine woods: Waterford (Graves), Norwich (Mrs. E. E. Rogers), Manchester (A. W. Driggs), Cromwell (F. K. Hallock), Windsor (Weatherby), Plainville (J. N. Bishop), Oxford (Harger), Winchester (Andrews & Harger), Barkhamsted (C. S. Phelps), Cornwall (E. E. Brewster), Salisbury (Mrs. C. S. Phelps). May—June.

All the species of this genus are parasitic upon other plants and are destitute of green parts.

Corallorrhiza maculata Raf. (spotted).

Corallorrhiza multiflora Nutt.

Corallorrhiza multiflora Nutt., var. *flavida* Peck.

Large Coral Root.

Occasional to frequent. Rich woods, usually in leaf-mold. July—Sept. The form with yellow flowers occurs at Plainville (H. S. Clark), and Salisbury (Mrs. C. S. Phelps).

Corallorrhiza odontorhiza Nutt. (having a toothed root).

Coral Root. Crawley Root. Dragon's Claw. Chicken-toes.

Rich woods either moist or dry. Occasional in southern Connecticut, becoming rare in northern districts. Mid-Aug.—Oct.

The rootstock is medicinal.

MICROSTYLIS Eaton. Adder's Mouth.

Microstylis monophyllos (L.) Lindl. (single-leaved).

Achroanthos monophylla Greene.

White Adder's Mouth.

Rare. Wet mossy woods: Salisbury (Mrs. C. S. Phelps, H. S. Clark & Bissell). June.

Microstylis unifolia (Michx.) BSP. (single-leaved).

Microstylis ophioglossoides Eaton.

Achroanthos unifolia Raf.

Green Adder's Mouth.

Rare. Rich woods either moist or dry: Norwich (W. A. Setchell, Mrs. E. E. Rogers), Franklin (Graves), East Lyme (Miss A. M. Ryon), Union and Salisbury (Bissell), Bolton (A. W. Driggs & Weatherby), Enfield and Meriden (Andrews & Bissell), Berlin (T. S. Brandegee), Granby (I. Holcomb), New Haven (O. Harger), Oxford (Harger), Easton (Eames). July — Aug.

LIPARIS Richard. Twayblade.

Liparis liliifolia (L.) Richard (lily-leaved).

Leptorchis liliifolia Kuntze.

Large Twayblade.

Rare or occasional. Rich and moist or sometimes dry and rocky woods. June.

Liparis Loeselii (L.) Richard.

Leptorchis Loeselii MacM.

Fen Orchis.

Rare or occasional. Bogs, moist woods and wet shaded banks. June — July.

APLECTRUM (Nutt.) Torr. Putty-root. Adam-and-Eve.

Aplectrum hyemale (Muhl.) Torr. (lasting over the winter).

Aplectrum spicatum BSP.

Putty-root. Adam-and-Eve.

Rare. Rich woods: Norwich (J. Trumbull), West Hartford (H. S. Clark, Miss A. Lorenz), Farmington (C. H. Pember), Granby (I. Holcomb), New Haven and Hamden

(Harger), Danbury (H. C. Ryder), Salisbury (Mrs. C. S. Phelps). June.

The root is medicinal.

DICOTYLEDONEAE.

PIPERACEAE. PEPPER FAMILY.

SAURURUS L. Lizard's Tail.

Saururus cernuus L. (nodding).

Lizard's Tail.

Shallow water of rivers, ponds and marshes. Preston, in the Shetucket River (W. A. Setchell, Graves), Franklin and Sprague (Graves), along the Housatonic River from the Sound northward as far as Oxford and Newtown (Harger, Eames), and occasional in the southwestern part of the state (Eames). July — Aug.

SALICACEAE. WILLOW FAMILY.

SALIX L. Willow. Osier.

Shrubs and trees with light soft wood used to some extent for cabinet work and for fuel. Willow charcoal is considered one of the best for medicinal and pharmaceutical use and for making crayons and gunpowder.

Willows are propagated with the greatest ease from cuttings, and are extensively planted as ornamental and shade trees. They often serve also to drain wet grounds, which they do by transpiring great quantities of water.

In some parts of the country certain species are extensively grown for osiers to be used in basket making and wickerwork. The bark of most species of willow contains more or less of a very bitter principle called salicin, used in medicine.

Salix nigra Marsh. (black).

Black Willow.

Rare or occasional. Low grounds and borders of ponds and streams. May.

The var. *FALCATA* (Pursh) Torr. (scythe-shaped) is occasional to frequent in similar situations, being more plentiful than the typical form.

This species spreads rapidly along rivers by the rooting of broken twigs and branches. The bark and aments are medicinal.

Salix pentandra L. (having five stamens).

Bay-leaved or Laurel-leaved Willow.

Rare. Escaped from cultivation to roadsides: Lyme, near Hadlyme Ferry (Graves), Norfolk (Bissell). May. Adventive from Europe.

Salix lucida Muhl. (shining).

Shining Willow. Glossy Willow.

Occasional. Swamps and borders of ponds and streams. May.

Salix serissima (Bailey) Fernald (very late; referring to the time of flowering and fruiting).

Autumn Willow.

Open swamps and wet pastures. Rare or local and apparently confined to the northwestern part of the state: Norfolk (Bissell), Salisbury (M. L. Fernald, Bissell). May — early June; fruit Aug.— Sept.

Salix fragilis L. (brittle).

Crack Willow. Brittle Willow.

Rare or local. Waste grounds, moist roadsides and banks of streams as an escape from cultivation: East Windsor and West Hartford (Bissell), New Haven (W. H. Patton, Harger), Bridgeport (Eames). May. Naturalized from Europe.

Introduced into this country about 1850, when a company of promoters induced many farmers to plant this willow for hedges. Many of these old hedges now occur throughout the state.

Salix alba L. (white).

White Willow.

The typical form of this species has not been reported from Connecticut.

The var. *VITELLINA* (L.) Koch (egg-yellow) is occasional in moist ground, especially near ponds and streams. May. Naturalized from Europe.

A hybrid of this variety with *Salix fragilis* occurs rarely in the valley of the Connecticut River (Bissell).

Often planted for ornament.

Salix babylonica L.

Weeping Willow. Ring Willow.

Rare. River banks and roadsides, as an escape from cultivation: Lyme (Graves & Bissell), Southington (Andrews & Bissell), New Haven (Bissell), Stratford, Bridgeport and Fairfield (Eames). May. Adventive from Europe.

Formerly much planted for ornament, especially in cemeteries.

Salix longifolia Muhl. (long-leaved).

Salix fluviatilis of authors, not Nutt.

Sand Bar or River Bank Willow.

Local. Banks of the Connecticut River from Hartford southward: Hartford and Glastonbury (Bissell), Middletown (Dr. Barratt, Harger, Bissell), Lyme (Graves, Bissell & Andrews), Old Saybrook (Harger). May.

Salix cordata Muhl. (heart-shaped).

Salix cordata Muhl., var. *angustata* Anders.

Heart-leaved Willow.

Frequent or common. Wet ground. Late April — May; fruit Aug.

The var. MYRICOIDES (Muhl.) Carey (like *Myrica*, the Sweet Gale), *Salix acutidens* Rydb., occurs at Stratford (Eames).

Salix pedicellaris Pursh (borne on a stalk).

Salix myrtilloides of Gray's Manual ed. 6, not L.

Bog Willow.

Rare. In bogs: Stafford (Graves), East Granby (Weatherby), New Haven (D. C. Eaton, Harger), Norfolk (Bissell), Cornwall (E. E. Brewster). May.

Salix discolor Muhl. (parti-colored; referring to the leaves).

Glaucous Willow. Pussy Willow.

Common. Swamps and low places, or sometimes in rather dry ground. April.

The var. *ERIOCEPHALA* (Michx.) Anders. (woolly-headed), *Salix eriocephala* Michx., is occasional in the southwestern part of the state (Eames).

The var. *PRINOIDES* (Pursh) Anders. (like the Black Alder), *Salix prinoides* Pursh, is rare: Stratford, Trumbull and Bridgeport (Eames).

Hybrids of this species with *Salix rostrata* occur at Stafford (Graves & Bissell). Hybrids with *Salix humilis* are apparently occasional throughout.

Salix humilis Marsh. (low).

Prairie Willow.

Occasional to frequent. Sandy thickets either dry or moist. April — early May; fruit May.

A hybrid of this with *Salix sericea* occurs at Stafford (Graves & Bissell).

Salix tristis Ait. (dull-colored).

Dwarf Gray Willow.

Sand plains and dry open ground. Occasional to frequent in the eastern and north central parts of the state; rare elsewhere, as at New Haven (D. C. Eaton), Bridgeport (Eames), Oxford and Southbury (Harger). Mid-April — mid-May; fruit May.

Salix sericea Marsh. (silky).

Silky Willow.

Frequent. Near streams and ponds and in swamps. Mid-April — mid-May; fruit May — June.

Salix rostrata Richards. (beaked).

Salix Bebbiana Sarg.

Beaked Willow.

Frequent. Woods and thickets, in either moist or dry ground. Late April — May; fruit May — June.

Salix candida Flügge (shining white).

Hoary Willow. Sage Willow.

Local. Swamps in the northwestern part of the state: Norfolk and Cornwall (Bissell), Salisbury (M. L. Fernald). April; fruit May.

The var. *DENUDATA* Anders. (bared) occurs at Salisbury, near Twin Lakes (J. R. Churchill & Bissell).

***Salix purpurea* L. (purple).**

Purple, Bitter, Rose or Whip-cord Willow.

Rare or local. Dry or wet open ground: Voluntown (Harger & Graves), New London (Graves), Hartford, many plants over a wide area (H. S. Clark & Bissell), Southington and Berlin (Andrews & Bissell), New Haven (Eaton Herb.), Seymour (Harger), Stafford and Winchester (Bissell), Salisbury (Mrs. C. S. Phelps & Bissell), Waterbury (A. E. Blewitt). April — May. Adventive from Europe.

Grown for basket rods.

***Salix incana* Schrank (hoary).**

Gray or Lavender Willow.

Rare. Escaped from cultivation to a river bank at Hartford, a few plants only (H. S. Clark). April — May. Fugitive from Europe.

POPULUS L. Poplar. Aspen.

Rapidly growing trees with soft, light wood, of little value for timber, but an important source of wood-pulp and useful for fuel in parts of the country where other wood is scarce. The poplar of the lumberman is *Liriodendron Tulipifera*, the Tulip Tree.

***Populus alba* L. (white).**

White or Silver-leaved Poplar. Abele. White-bark.

Occasional. Escaped from cultivation to roadsides and waste places. April — May. Naturalized from Europe.

Often planted as an ornamental or shade tree, and sometimes to stop sand-blows. The bark is medicinal.

***Populus tremuloides* Michx. (like *Populus tremula*, the European Aspen).**

American or Quaking Aspen. Poplar. Popple. Quiver-leaf. Trembling or White Poplar. Aspen.

Frequent. Woods, thickets and roadsides, more often in dry ground. April — May.

One of the first trees to take possession of clearings. The bark is medicinal.

Populus grandidentata Michx. (large-toothed).

Large-toothed Aspen. Poplar. Popple.

Frequent. Moist or dry woods and clearings, more often in rocky ground. April — May.

Populus heterophylla L. (various-leaved).

Swamp or Downy Poplar.

Rare or local. Wooded swamps and borders of ponds: Salem and Montville (W. A. Setchell, H. C. Beardslee, Graves), Middletown (Graves, Bissell, Andrews), Branford and Southington (Bissell & Andrews), Guilford (G. H. Bartlett), East Haven and Southbury (Harger). May.

Populus balsamifera L. (balsam-bearing).

Balsam Poplar. Tacamahac.

Local. River banks, wet woods and roadsides, usually as an escape from cultivation: Southington (H. Whitney), Milford (Eames & C. C. Godfrey), Wilton (Eames & G. P. Ells), Sherman, New Milford and Kent (E. H. Austin, C. K. Averill). Apparently native at Norfolk (H. S. Clark & Bissell). April — May.

Populus candicans Ait. (white and shining).

Populus balsamifera L., var. *candicans* Gray.

Balm of Gilead.

Rare or occasional. Roadside thickets and fence-rows as an escape from cultivation. April — May. In Connecticut naturalized, probably from Asia.

Occasionally planted as a shade tree. The leaf-buds and bark are medicinal, the first named having been much used in former times as a household remedy.

Populus deltoides Marsh. (triangular; referring to the shape of the leaves).

Populus monilifera Ait.

Cottonwood. Necklace Poplar.

Borders of streams and in wet ground. Frequent in the valleys of the Connecticut, Farmington and Housatonic Rivers; rare or occasional elsewhere. April — May.

A strong, rapidly growing tree, often planted as a shade tree, and on the western prairies for wind-breaks.

Populus nigra L. (black).

Black Poplar.

Rare. Roadsides and river banks as an escape from cultivation: Preston and East Lyme (Graves). April—May. Adventive from Europe.

Has been more or less planted in this country as an ornamental tree for more than a hundred years. It grows more slowly than the Cottonwood.

The var. *ITALICA* Du Roi, *Populus dilatata* L., Lombardy Poplar, was formerly much planted for ornament and has rarely escaped to roadsides and river banks: Lyme (Graves & Bissell), East Windsor (Bissell), Southington (Andrews & Bissell), Berlin and Cheshire (Andrews), Newtown (Harger), Sherman (Eames).

The variety is a quick-growing tree of striking habit, but in this climate it is short-lived.

MYRICACEAE. SWEET GALE FAMILY.**MYRICA** L.**Myrica Gale** L. (classical name).

Sweet Gale. Dutch or Bog Myrtle. Golden Osier.

Swamps and borders of ponds and streams. Occasional or local in the northern part of the state, becoming rare southward; not reported from the vicinity of the coast. April.

The leaves and buds are aromatic and medicinal.

Myrica carolinensis Mill.

Myrica cerifera of Gray's Manual ed. 6, in great part.

Bayberry. Candlewood. Waxberry. Wax Myrtle.

Frequent or common. Dry fields and pastures, sand plains and sea shores. Late May—June; fruit Sept., persisting through the winter.

The berries yield a wax or tallow, somewhat used for making candles which burn with a faintly aromatic odor. One bushel of berries is said to yield four lbs. of wax. The leaves and the bark of the roots are somewhat medicinal.

Myrica asplenifolia L. (having leaves like *Asplenium*, the Spleenwort).

Comptonia peregrina Coulter.

Sweet Fern.

Common. Dry or sterile ground. May ; fruit July — Aug.

The leaves and the tops have some reputation for medicinal properties.

JUGLANDACEAE. WALNUT FAMILY.

JUGLANS L. Walnut.

Juglans cinerea L. (ashy).

Butternut. White Walnut. Oil Nut.

Frequent. Roadsides and rocky woods, generally in dry ground. May ; fruit Oct.

The nuts are edible and are much gathered. The husks were formerly used in dyeing cloth yellow. The bark is sometimes used in tanning, and sugar can be obtained from the sap. The wood is employed in the interior finish of houses and for furniture. The bark of the root is medicinal and is official.

Juglans nigra L. (black).

Black Walnut.

Rare. Roadsides and rocky hillsides, in most localities derived from planted trees: Norwich (Mrs. E. E. Rogers), East Hartford (H. S. Clark), Newington (Bissell), Southington (Andrews & Bissell), Seymour and Southbury (Harger), Trumbull and Easton (Eames). Probably native at North Canaan (Bissell). May ; fruit Oct. For the most part adventive from the West.

The nuts are edible. The wood is valued for cabinet work, for the interior finish of houses, for gunstocks and in ship-building.

CARYA Nutt. Hickory.

A very important group of trees on account of the value of their timber and nuts. Hickory wood has great strength combined with elasticity and is extensively used in the manufacture of carriages, wagons and farming implements: also for axe, pick and other tool handles. When exposed to the weather, however, it should be painted, as otherwise it is liable to quick decay.

Carya ovata (Mill.) K. Koch (egg-shaped).

Carya alba Nutt.

Hicoria ovata Britton.

Shag-bark or Shell-bark Hickory. Walnut.

Frequent or common. Woods and fields, in either moist or dry ground. Late May — early June; fruit Oct.

The most valuable of our native nut trees both for its timber and its fruit. The nut is the common Hickory Nut of the markets.

Carya alba (L.) K. Koch (white).

Carya tomentosa Nutt.

Hicoria alba Britton.

Mocker Nut. White-heart Hickory.

Occasional or frequent. Rocky woods and pastures, mostly in dry ground. Early June; fruit Oct.

The timber is nearly equal to that of the Shag-bark Hickory, the nuts not as good.

Carya microcarpa Nutt. (small-fruited).

Hicoria microcarpa Britton.

Small-fruited Hickory. Little Pignut Hickory.

Rocky woods and hillsides in either dry or moist ground. Occasional or frequent along or near the coast, apparently not extending far inland. Late May — early June; fruit Oct.

The nuts are usually bitter. The open or half-open husks often hang on the tree through the following summer.

Carya glabra (Mill.) Spach (smooth).

Carya porcina Nutt.

Hicoria glabra Britton.

Pignut or Broom Hickory. Pignut.

Occasional or frequent. Rocky woods and hillside pastures. Late May — early June; fruit Oct.

The nuts, usually bitter though sometimes sweet, are of little value. The timber is equal in value to that of the Shag-bark Hickory.

Carya cordiformis (Wang.) K. Koch (heart-shaped).

Carya amara Nutt.

Hicoria minima Britton.

Bitter Nut or Swamp Hickory.

Occasional. Wet woods and banks of streams. Late May — June; fruit Oct.

Nuts very bitter, inedible.

BETULACEAE. BIRCH FAMILY.

CORYLUS L. Hazelnut. Filbert.

Corylus americana Walt.

Hazelnut or Wild Hazelnut. Hazel.

Frequent or common. Woods, thickets, pastures and roadsides, mostly in dry ground. March — April; fruit Sept.

The nuts of this and the following species are well flavored and edible and are gathered to some extent.

Corylus rostrata Ait. (beaked).

Beaked Hazelnut. Filbert.

Woods, thickets and hillside pastures in dry ground. Rare on or near the coast, occasional elsewhere. April; fruit Sept.

OSTRYA Scop. Hop Hornbeam. Ironwood.

Ostrya virginiana (Mill.) K. Koch.

Ostrya virginica Willd.

American Hop Hornbeam. Leverwood. Ironwood. Deerwood.

Frequent. Rocky woods and thickets. May; fruit July — Aug.

The wood is hard and exceedingly tough, used for handles of tools, mallets and other small articles. The bark is medicinal.

CARPINUS L. Hornbeam. Ironwood.

Carpinus caroliniana Walt.

American Hornbeam. Blue or Water Beech.

Frequent or common. Woods, thickets and banks of streams. May; fruit July — Aug.

The wood is close-grained and hard, of value for tool handles, etc.

BETULA L. Birch.

The birches, while not as a rule good timber trees, are yet of great use to man. The wood is generally light in color and weight, but tough and well suited for the making of many small articles. It is also good fuel and makes excellent charcoal.

Betula lenta L. (tough).

Cherry, Sweet or Black Birch.

Frequent or common. Woods, in either dry rocky or rich moist ground. May; fruit Oct.

The wood is extensively used in cabinet work. It also yields an oil which is practically identical with the oil of wintergreen, is of much medicinal value and is officinal. A beer is made from the fermented sap.

Betula lutea Michx. f. (yellow).

Yellow or Gray Birch.

Occasional or frequent. Rich or rocky woods and in swamps. May; fruit Oct.

A handsome tree furnishing timber of considerable value, used in cabinet work, for boxes, etc.

Betula populifolia Marsh. (poplar-leaved).

White, Gray or Old Field Birch.

Common. Woods, clearings, pastures and roadsides, mostly in dry sterile ground. May; fruit Sept.—Oct.

Usually the first tree to take possession of abandoned fields. The wood is largely used in making spools.

Betula alba L. (white). var. **papyrifera** (Marsh.) Spach (paper-bearing).

Betula papyrifera Marsh.

Paper, Canoe or White Birch.

Rich woods and rocky hillsides. Rare near the coast: Lyme (Graves), Huntington (Eames). Becoming occasional northward and frequent in Litchfield County. May; fruit Sept.

In northern countries the wood and bark of this species are put to the greatest variety of uses. The wood is made into furniture, dishes, spoons, bowls and other wooden ware, ox yokes, shoes, casks and hoops; the brushwood makes wicker fences, thatch and brooms; the bark is used for tanning; the North American Indians manufactured their canoes of it and employed it in many other ways; the sap of this and other species is sometimes made into a kind of wine; the leaves afford a yellow dye.

Betula alba L., var. *cordifolia* (Regel) Fernald (having heart-shaped leaves).

Paper, Canoe or White Birch.

Rare. Rocky hillsides: Union, at Bald Hill (Bissell, Graves), Goshen (Bissell). May; fruit Sept.

Betula pumila L. (dwarf).

Low or Swamp Birch.

Swamps and wet ground. Local and apparently confined to the northwestern part of the state: Cornwall (E. E. Brewster), Salisbury (Bissell). May; fruit Sept.

ALNUS Hill. Alder.

Alnus incana (L.) Moench (hoary).

Alder. Speckled or Hoary Alder.

Swamps and borders of streams. Local or occasional except in the southeastern part of the state where it is rare. April; fruit Sept.

The wood of this and the following species is a source of gunpowder charcoal, and is said to be valuable also because of its durability in water. The bark has medicinal properties.

Alnus rugosa (Du Roi) Spreng. (wrinkled).

Alnus serrulata Willd.

Alder. Smooth or Tag Alder.

Frequent or common. Swamps and borders of ponds and streams. March — April; fruit Sept.—Oct.

Intermediate forms occur that are apparently hybrids between this and the preceding species.

FAGACEAE. BEECH FAMILY.

FAGUS L. Beech.

Fagus grandifolia Ehrh. (large-leaved).

Fagus ferruginea Ait.

Fagus americana Sweet.

Beech. American Beech.

Occasional or frequent. Woods and banks in either dry or moist ground. May; fruit Sept.—Oct.

Rarely matures perfect fruit here. The timber, hard and close-grained but rather brittle, is used sparingly for tool

handles. The wood is not durable in contact with the soil, but is remarkably lasting when immersed in water, hence is largely used in making dams, sluices, etc. The purest creosote for medicinal use is obtained from beech wood. A beautiful tree at all seasons of the year.

CASTANEA Hill. Chestnut.

Castanea dentata (Marsh.) Borkh. (toothed).

Castanea sativa Mill., var. *americana* Sarg.

Chestnut.

Common. Rich woods or often in drier ground. Late June — mid-July; fruit late Sept.— Oct.

The nuts are sweet and edible and are extensively gathered for market. The timber is of much value, very durable in contact with the soil, and used especially for poles, piling and railroad ties. One of our most abundant and valuable forest trees. The burs furnish a lampblack used in painting, and contain a dark brown dye. The bark and leaves are somewhat medicinal.

QUERCUS L. Oak.

A large genus of very valuable trees, whose timber and bark are among the most important products of the forest. Oak wood possesses in a high degree strength, solidity, durability and resistance to water, and is largely used in ship building and mill and bridge construction. In the making of furniture also and the interior finish of houses it is very extensively employed. The bark of many species is much used in tanning. Oak trees are famous for their picturesque beauty and dignity, and it is a pity that so few large old specimens are preserved. They are among the most valued trees on estates and country places; in fact any farm is enhanced in value by the possession of a few old oaks.

Quercus alba L. (white).

White Oak.

Common. Moist or dry ground and in various soils. Mid-May — June; fruit Sept.— Oct.

The most valuable of the oaks both for timber and for

tanning. The bark is rich in tannin, is of medicinal value and is officinal. The acorns are sometimes roasted and used as a substitute for coffee.

Quercus stellata Wang. (star-shaped).

Quercus minor Sarg.

Post Oak. Iron Oak.

Local. Usually in rocky ground on and near the coast: East Lyme and Old Lyme (Graves), Branford (Andrews), New Haven (C. K. Averill, Eames, Harger), Orange and Milford (C. K. Averill, Andrews, Bissell), and westward (Eames). Extending inland as far as Hamden, on Mt. Carmel (A. E. Blewitt), and Huntington, at 350 ft. elevation (Eames). May; fruit Oct.

The wood is very hard, heavy and strong. In Connecticut only a small tree.

Quercus macrocarpa Michx. (large-fruited).

Bur Oak. Over-cup or Mossy-cup Oak.

Rich soil in bottom lands or swampy places. Rare or local and confined to the northwestern part of the state: Canaan (J. H. Putnam & Bissell), Salisbury (Mrs. C. S. Phelps). May; fruit Sept.—Oct.

The wood is heavy and hard, similar to and often sold as that of the White Oak.

Quercus bicolor Willd. (two-colored).

Quercus platanoides Sudworth.

Swamp White Oak.

Frequent. Swamps and wet woods. May; fruit Sept.—Oct.

The wood is heavy and strong, furnishing a good quality of timber.

Quercus Muhlenbergii Engelm.

Quercus acuminata Houba.

Yellow Oak. Chestnut Oak.

Rare. Calcareous ridges in the northwestern part of the state: Canaan (C. K. Averill), Salisbury (Mrs. C. S. Phelps). Also along the Housatonic River in Kent (E. H. Austin & Eames), New Milford (C. K. Averill & E. H. Austin), and

bordering tide water in Milford (Eames). May; fruit Sept.—Oct.

The wood is very heavy, hard and durable.

Quercus prinoides Willd. (like *Quercus Prinus*, the Chestnut Oak).

Scrub Chestnut Oak. Chinquapin Oak.

Occasional or frequent. Dry woods, thickets and hillside pastures, and sometimes in open sandy ground. May; fruit Sept.—Oct.

Quercus Prinus L. (classical name for an evergreen oak).

Chestnut or Rock Chestnut Oak.

Rocky ridges and hillsides. Occasional near the coast; frequent or common elsewhere. May; fruit Sept.—Oct.

The wood is durable in contact with the soil, ranking among the oaks next to that of the White Oak for railroad ties. The bark is rich in tannin and is much used in tanning leather.

Quercus rubra L. (red).

Red or Champion Oak.

Frequent. Woods in all soils and various situations. May; fruit Sept.—Oct.

The timber of this species as well as that of *Quercus coccinea* and *Quercus velutina* is relatively poor, but is more used than formerly on account of the scarcity of better. The bark of all three species is used in tanning and also contains a dye.

Quercus palustris Muench. (of swamps).

Pin Oak. Swamp Spanish Oak.

Swamps and borders of ponds and streams. Common in the Connecticut River valley and near the coast in southwestern Connecticut; occasional or local elsewhere. May; fruit Sept.—Oct.

The timber is relatively of a poor quality. Grows more rapidly than most other species of oak and is often planted as a shade or ornamental tree.

Quercus coccinea Muench. (scarlet).

Scarlet Oak.

Frequent. Moist or dry woodlands. May; fruit Sept.—Oct.

The foliage takes a very brilliant color in autumn.

Quercus velutina Lam. (velvety).

Quercus coccinea Muench., var. *tinctoria* A. DC.

Quercitron, Yellow-barked or Black Oak.

Occasional or frequent. Dry or gravelly uplands. May; fruit Sept.—Oct.

Quercus ilicifolia Wang. (holly-leaved).

Quercus nana Sarg.

Bear or Black Scrub Oak.

Dry sandy or rocky sterile ground. Rare in the north-western part of the state; local, frequent or common elsewhere. May; fruit Sept.—Oct.

URTICACEAE.   NETTLE FAMILY.

ULMUS L.   Elm.

Ulmus fulva Michx. (tawny).

Slippery, Red, Rock, Sweet, Moose, Indian or Tawny Elm.

Rare to frequent. Dry or moist rocky woods and near streams. April, rarely earlier.

The wood is hard, strong, durable in contact with the soil; of value for wheel-stock, fence posts, etc., and sometimes preferred for ox-yokes. The inner bark is extensively used in medicine.

Ulmus campestris L. (of fields).

English or European Elm.

Rare. Escaped from cultivation to roadsides in Hamden, at Mt. Carmel (A. H. Graves), Oxford (Harger), and Salisbury (Mrs. C. S. Phelps), in horticultural forms. April—May. Adventive from Europe.

Sometimes planted as an ornamental tree.

Ulmus americana L.

American, White, Common, Water, Swamp, Shade, Weeping or Feathered Elm.

Common. Woods, fields, roadsides and along streams. April, rarely earlier.

The wood is hard, strong and tough; valued for wheel-stock, boats and ship building. One of our most beautiful trees and extensively planted for shade or ornament.

Ulmus alata Michx. (winged).

Wahoo, Winged or Witch Elm.

Rare. Spread from cultivation to roadsides and fence-rows: Old Lyme (H. S. Clark), Plainville (J. N. Bishop). May. Adventive from the South.

Often planted as a shade tree in the South.

CELTIS L. Hackberry. Nettle Tree.**Celtis occidentalis** L. (western).

Hackberry. Sugarberry. American Nettle Tree. False Elm. Hoop Ash.

Occasional to frequent. Dry or poor soils, especially in river valleys and along the coast. May; fruit Sept., and often persisting through the winter.

The var. *PUMILA* Muhl. (dwarf) is rare or occasional in the Housatonic River Valley in Kent, New Milford and Newtown (Eames), and Oxford (Harger, Eames).

A small tree of natural beauty, but the leaves and small branches are usually much galled by insects. The wood is soft, weak, elastic, and easily splits, and is of little value. The bark is medicinal. The fruit is edible.

CANNABIS L. Hemp.**Cannabis sativa** L. (sown).

Common Hemp.

Rare or occasional. Waste places throughout. July — Sept. Adventive or naturalized from Asia.

Grown in India, it is officinal as *Cannabis indica*, has very marked medicinal properties, and is the source of the intoxicant "hashish." Its fibre is one of the important textile products, valuable for coarse cloth, cordage, etc., and its seeds yield an oil used in paints, soap and culinary preparations.

HUMULUS L. Hop.**Humulus Lupulus** L. (from *Lupus*, its classical name).

Common Hop.

Occasional. River banks, woods and waste places, often as an escape from cultivation. July — Aug.; fruit Sept.

The strobiles are used in the manufacture of beer, ale and yeast; also in medicine and are officinal. A good arbor-plant.

Humulus japonicus Sieb. & Zucc.

Japanese Hop.

Rare. Escaped from cultivation into waste ground: New London (Graves), Hartford (H. S. Clark & Bissell), Bridgeport and Fairfield (Eames). Aug.—Sept. Adventive from Japan.

Recently introduced into cultivation and becoming popular as an arbor-plant.

MACLURA Nutt. Osage Orange. Bois d'Arc.

Maclura pomifera (Raf.) Schneider (pome-bearing).

Maclura aurantiaca Nutt.

Toxylon pomiferum Sarg.

Osage or Mock Orange or Apple. Bow-wood.

Rare. Escaped from cultivation into roadsides and neglected places: Waterford (Graves), East Haven (D. C. Eaton), Waterbury (A. E. Blewitt), Kent (C. K. Averill). June. Native of the Southwest.

The wood is durable in contact with the soil and is valued for fence posts. Formerly planted for hedges.

BROUSSONETIA L'Hér.**Broussonetia papyrifera** (L.) Vent. (paper-bearing).

Paper Mulberry.

Rare. Norwalk, spontaneous in waste land (Miss A. E. Carpenter). May—June. Native of Asia.

MORUS L. Mulberry.

Morus rubra L. (red).

Red Mulberry.

Rare or occasional. Dry rocky woods, fields and fence-rows. May—June; fruit July.

The wood is rather soft, coarse-grained and tough, and is very durable in contact with the soil. The fresh fruit is mawkish to some palates, agreeable to others. Medicinal.

Morus alba L. (white).

White or Silkworm Mulberry.

Occasional. Escaped from cultivation to roadsides, fence-

rows and waste places. May—June; fruit late June—July. Naturalized from the Old World.

Early in the last century extensively planted to furnish food for silkworms, and many large old trees remain about farmhouses. Birds and poultry are so fond of the fruit that one or more of these trees, when properly situated, would tend to prevent the destruction of cultivated berries maturing during the same period.

URTICA L. Nettle.

Urtica gracilis Ait. (slender).

Slender or Tall Wild Nettle.

Frequent or common. Roadsides, fence-rows and waste places. June—Aug.

A troublesome weed, best exterminated by digging.

Urtica Lyallii Wats.

Waste places, roadsides and low ground along streams. Stafford (Graves & Bissell), Southington (Andrews), Newtown (Eames); and probably occurring throughout the state, as the species has been confused with *Urtica gracilis*. July—Aug.

Urtica dioica L. (dioecious).

Stinging or Great Nettle.

Rare. Waste places in rich soil: Guilford (G. H. Bartlett), Seymour (Harger), North Canaan (M. B. Tobey). June—Aug. Adventive from Europe.

The plant is medicinal.

Urtica urens L. (burning).

Small or Dwarf Nettle.

Rare. Waste places, cultivated ground and about farmyards: Groton and Lebanon (Graves), New London (D. C. Eaton), Southington (Andrews), Woodbridge (A. W. Evans). June—Aug. Adventive from Europe.

The plant is medicinal.

LAPORTEA Gaud. Wood Nettle.

Laportea canadensis (L.) Gaud.

Urticastrum divaricatum Kuntze.

Wood or Canada Nettle. Albany Hemp.

Occasional or frequent. Moist rich woods and partial shade. July — Aug.

PILEA Lindl. Richweed. Clearweed.

Pilea pumila (L.) Gray (dwarf).

Adicea pumila Raf.

Clearweed. Coolweed. Stingless Nettle.

Frequent. Moist rich woods and shaded places. Aug.—Sept.

An objectionable weed in lawns and about dwellings. The bruised plant is sometimes applied for the relief of inflammation and poisoning by species of *Rhus*.

BOEHMERIA Jacq. False Nettle.

Boehmeria cylindrica (L.) Sw. (cylindrical).

False Nettle.

Frequent. Moist rich woods and along streams. July — Aug.

Boehmeria cylindrica (L.) Sw., var. *scabra* Porter (rough).

Rare. Rich woods: Southington (Bissell), Bridgeport (I. Holden & Baker), Fairfield (Eames). July — Aug.

PARIETARIA L. Pellitory.

Parietaria pennsylvanica Muhl.

Pellitory.

Rare or local. Rich damp shaded soil about rocks and ledges. Seldom seen, though known to occur at wide intervals throughout the state. May — Sept.

SANTALACEAE. SANDALWOOD FAMILY.

COMANDRA Nutt. Bastard Toad-flax.

Comandra umbellata (L.) Nutt. (umbellate).

Bastard Toad-flax.

Frequent. Dry woods, thickets and more open places. May — June.

LORANTHACEAE. MISTLETOE FAMILY.

ARCEUTHOBIUM Bieb.

Arceuthobium pusillum Peck (very small).

Razoumofskya pusilla Kuntze.

Dwarf Mistletoe.

Rare or local. Parasitic on Black Spruce: Norfolk, at 1400 ft. elevation, and Salisbury, about Bingham Pond at an altitude of 1800 ft. (H. S. Clark & Bissell). Kent, about Spectacle Ponds, where at an altitude of 1,200 ft. it also occurs on Tamaracks (Eames & E. H. Austin). April — May; fruit Sept.

ARISTOLOCHIACEAE.   BIRTHWORT FAMILY.

ASARUM L.   Asarabacca. Wild Ginger.

Asarum canadense L.

Wild Ginger or Ginger-root. Sweet, False or Canada Colts-foot. Heart Snakeroot.

Rich rocky woods. Rare in the southeastern part of the state and near the coast, occasional to locally common elsewhere. Mid-April — May.

The var. *REFLEXUM* (Bicknell) Robinson (bent backward), *Asarum reflexum* Bicknell, and the var. *ACUMINATUM* Ashe (taper-pointed), *Asarum acuminatum* Bicknell, occur with the species or alone, the former in its most distinct condition in the southwestern part of the state.

Readily cultivated, and makes a pleasing ground covering in rich shaded places. The rhizome is used medicinally and an oil from it is used in perfumery.

ARISTOLOCHIA L.   Birthwort.

Aristolochia Serpentaria L. (pertaining to a serpent).

Snakeroot. Virginia or Fine Snakeroot.

Dry rocky woods. Rare or local over most of its range: East Lyme (Miss A. M. Ryon), East Haddam (Dr. E. J. Thompson, Graves), Haddam (D. C. Eaton), Meriden (W. A. Russell), Southington (C. D. Bishop), Naugatuck (J. Nichols), Oxford and Southbury (Harger), Newtown (Eames). Occasional toward the coast westward. Mid-June — July.

The aromatic roots are medicinal and are officinal.

POLYGONACEAE.   BUCKWHEAT FAMILY.

RUMEX L.   Dock. Sorrel.

Rumex Patientia L. (patience).

Patience or Spring Dock. Garden or Herb Patience.

Rare. Alluvial or waste ground: Lyme (Graves), Seymour (Harger). May—June. Adventive from Europe.

Sometimes cultivated for spring greens.

Rumex Britannica L.

Great Water Dock. Horse Dock.

Occasional. Swamps, fresh and brackish marshes and shallow water along streams. July—Aug.

Rumex crispus L. (curled).

Curled, Curly, Yellow or Narrow Dock.

Common. Waste places, fields and meadows, especially in moist situations. June—July. Naturalized from Europe.

A troublesome weed in grasslands and grain fields. The leaves are often used as a pot-herb. The root is of value in medicine, and is in popular use as a blood purifier.

Rumex elongatus Guss. (lengthened).

Fields and waste ground. Southington (Andrews), and probably elsewhere, as the species has been confused with *Rumex crispus* and is presumed to occur occasionally with it. June—July. Adventive from Europe.

Rumex mexicanus Meisn.

Rumex salicifolius of Gray's Manual ed. 6, in part, not Weinm.

Rare. Waterbury, in waste ground (B. B. Bristol, A. E. Blewitt). July. Adventive or fugitive from the North or West.

Rumex altissimus Wood (tallest).

Tall, Pale or Peach-leaved Dock.

Rare. Waste ground: Plainfield (J. L. Sheldon), New London (Graves), Guilford (G. H. Bartlett), Farmington (A. W. Driggs), Waterbury (J. M. Richardson), Naugatuck (B. B. Bristol), Stratford (Mrs. R. H. Russell). July. In Connecticut probably adventive from the West.

Rumex verticillatus L. (whorled).

Swamp Dock.

Rare. Open low or swampy ground along the Connecticut River: Lyme (Graves), Haddam and East Hartford (Weath-

erby), Glastonbury (Bissell), Hartford (Harger, Bissell).
June—July.

Rumex obtusifolius L. (blunt-leaved).

Bitter, Broad or Blunt-leaved Dock.

Common. Fields, waste places and about habitations.
June—Aug. Naturalized from Europe.

The root is medicinal.

Rumex Acetosa L. (sour).

Sorrel or Belleville Dock. Cock, Garden or Meadow Sorrel.

Rare. In grassland: Norwich (Mrs. E. E. Rogers),
Southington (Bissell, Andrews), Litchfield (W. Buell). May
—June. Adventive from Europe.

Sometimes cultivated for spring greens.

Rumex Acetosella L. (diminutive of Acetosa).

Sheep, Red, Field, Common, House or Cow Sorrel. Sour
Grass.

Common. Fields, waste places and cultivated ground,
usually in poor neglected soil. April—June. Naturalized
from Europe.

Often a troublesome weed, especially in lawns where it
persists even when frequently cut. The leaves are eaten by
children, but are poisonous when eaten freely. Sometimes
used for spring greens. Medicinal.

POLYGONUM L. Knotweed.

Polygonum exsertum Small (protruding).

Rare. Salt and brackish marshes: East Haven (Harger,
A. L. Winton), Orange (Bissell), Westport and Stamford
(Eames & C. C. Godfrey). Fruit Sept.—Oct.

Polygonum prolificum (Small) Robinson (producing off-
spring; fruitful).

Polygonum ramosissimum Michx., var. *prolificum* Small.

Occasional eastward and frequent or locally common west-
ward in marshes and on shores along the coast; also occurs
along a moist roadside in Litchfield (Bissell). Fruit Aug.—
Oct.

Polygonum aviculare L. (pertaining to birds).

Doorweed. Knotweed. Wire, Goose, Way, Knot or Crab Grass. Bird's-tongue.

Common. Yards, waste places, roadsides and cultivated grounds. June — Oct.

A pernicious weed in lawns, often taking complete possession. The seeds are eaten by certain birds; the Chinese also extract a blue dye from the plant.

Polygonum aviculare L., var. **littorale** (Link) Koch (of the sea-shore).

Polygonum littorale Link.

Shore Knotweed.

Occasional on edges of salt marshes and on gravelly shores near the coast. July — Sept.

Polygonum aviculare L., var. **vegetum** Ledeb. (vigorous).

This variety has been collected at a few localities and doubtless occurs occasionally with the typical form. Its distribution is not known. July — Sept.

Polygonum erectum L. (erect).

Erect Knotweed or Goose Grass.

Frequent. Roadsides and waste places. July — Sept.

Polygonum ramosissimum Michx. (much-branched).

Bushy Knotweed.

Rare. Roadside in Ansonia, probably introduced from the West (Harger). Aug.—Oct. Native in the West.

The forma ATLANTICUM Robinson, our native representative of this species, is frequent about the borders of salt meadows and on tidal shores along the coast.

Polygonum tenue Michx. (slender).

Slender Knotweed.

Frequent. Dry sterile fields and open sandy or rocky places. July — Sept.

Polygonum lapathifolium L. (dock-leaved).

Polygonum lapathifolium L., var. *incarnatum* Wats.

Polygonum incarnatum of authors and (?) Ell.

Dock-leaved, Pale or Willow Persicaria.

Rare, local or occasional. Waste places and banks of

rivers and ponds throughout. July — Aug. Perhaps in part naturalized from Europe.

Polygonum amphibium L. (growing on land or in water equally well).

Water Persicaria.

Rare or local. Ponds and lakes: Preston (Graves), East Haven (D. C. Eaton, Eames), Milford (Harger), Southington (Andrews, Bissell), Norfolk (J. H. Barbour), Ridgefield and Kent (Eames), Salisbury (Mrs. C. S. Phelps & Bissell). Aug.— Sept.

The var. **TERRESTRE** Leers (terrestrial) occurs rarely on borders of ponds.

The var. **HARTWRIGHTII** (Gray) Bissell, *Polygonum Hartwrightii* Gray, is rare or local on borders of ponds: Preston and Griswold (Graves), Southington (Andrews & Bissell), Norfolk (J. H. Barbour), Salisbury (Bissell).

This species is remarkably variable according to the conditions under which it grows. Intergrading forms connect the typical form with the varieties and apparently with the following species also.

Polygonum Muhlenbergii (Meisn.) Wats.

Polygonum emersum Britton.

Banks and shallow water about marshes, ponds and streams. Frequent along the Connecticut River; rare or local elsewhere. Aug.— Sept.

Polygonum pennsylvanicum L.

Common or Pink Persicaria. Pink Knotweed.

Frequent. Moist rich soil in open situations. July — Oct. Often a troublesome weed.

Polygonum Carey Olney.

Rare. Moist or wet sandy soil about ponds and in open swamps: Ellington (F. M. Pease), East Hartford (Weatherby), East Windsor, Windsor and Simsbury (Bissell), Southington (Andrews, Bissell), Waterbury (Andrews), Oxford and Beacon Falls (Harger), Milford and Stratford (Eames). July — Sept.

Polygonum Hydropiper L. (its classical name).

Common Smartweed or Water Pepper. Bite-tongue.

Frequent. Open wet rich soil. July — Oct.

In popular use medicinally, and in veterinary practice as a counter-irritant.

Polygonum acre HBK. (acid; biting).

Polygonum punctatum Ell.

Smartweed. Water Smartweed.

About ponds, pools, swamps and wet places, especially in woods and shaded situations. Southington, rare (Bissell, Andrews); frequent in the southern part of the state. July — Sept.

Medicinal like *Polygonum Hydropiper*.

Polygonum acre HBK., var. **leptostachyum** Meisn. (slender-spiked).

Polygonum punctatum Ell., var. *leptostachyum* Small.

Rare or local. Shallow water about ponds, swamps and banks of streams: Waterford (Graves), Lyme (Bissell), East Hartford and Simsbury (Weatherby), Southington (Andrews, Bissell), Stratford (Eames), Waterbury (Andrews). July — Sept.

Polygonum orientale L. (eastern).

Ragged Sailor. Kiss-me-over-the-Fence. Prince's Feather.

Rare or occasional. Waste places as an escape from old gardens. July — Sept. Adventive from India.

An old-fashioned plant still frequent in cultivation.

Polygonum Persicaria L. (like a Peach-tree; referring to the shape of the leaves).

Lady's Thumb. Heartweed. Heart's-ease. Pinkweed. Red-shank.

Common. Cultivated grounds, fields, roadsides and waste places. June — Oct. Naturalized from Europe.

Sometimes a troublesome weed. Medicinal.

Polygonum hydropiperoides Michx. (like *Polygonum Hydropiper*, the Water Pepper).

Smartweed. Water Smartweed. Mild Water Pepper.

Frequent. Shallow water of swamps, margins of ponds and streams. July — Sept.

Polygonum virginianum L.

Frequent. Woods and thickets in rich soil. July — Sept.

Polygonum arifolium L. (arum-leaved).

Halberd-leaved Tear-thumb. Scratch or Sickie Grass.

Occasional. Swamps, wet woods and thickets. July — Oct.

Sometimes used medicinally.

Polygonum sagittatum L. (arrow-head shaped).

Arrow-leaved Tear-thumb. Scratch Grass.

Frequent. Swamps and wet places. June — Oct.

Polygonum Convolvulus L. (like Convolvulus, the Bindweed).

Wild Buckwheat. Black, Corn, Sow or Blackbird Bindweed.

Frequent or common. Cultivated or waste grounds. June — Oct. Naturalized from Europe.

Polygonum cilinode Michx. (having fringed nodes).

Fringed Black Bindweed.

Rocky woods and more open places. Rare over most of its range: North Stonington (Graves), Norwich (Mrs. E. E. Rogers), Farmington (Weatherby), New Haven, Seymour and Naugatuck (Harger), Waterbury (A. E. Blewitt), Hamden and Monroe (Eames). Occasional throughout northern Litchfield County. June — Sept.

The var. *ERECTUM* Peck (upright), var. *breve* Peck, occurs with the species in Litchfield County.

Sometimes used as a cover-plant for rocks.

Polygonum scandens L. (climbing).

Polygonum dumetorum L., var. *scandens* Gray.

Climbing False or Wild Buckwheat. Hedge, Bush or Thicket Bindweed.

Common. Thickets and waste places. Aug.— Oct.

Polygonum dumetorum L. (of thickets).

Bush or Thicket Buckwheat or Bindweed.

Rare. On ledges or rocky banks, in open woods or partial shade: Stratford, Trumbull and Huntington (Eames). Wood-

bury (Eames & C. C. Godfrey), New Milford (Eames & E. H. Austin), Salisbury (Mrs. C. S. Phelps). Also in waste ground at Hartford (H. S. Clark). Aug.—Oct. Except in the last locality it appears to be native. Specimens from Milford (Eames) show a transitional form approaching the forma *cristatum* (Engelm. & Gray) Robinson, *Polygonum cristatum* Engelm. & Gray.

Polygonum cuspidatum Sieb. & Zucc. (sharp-pointed).

Polygonum Zuccarinii Small.

Japanese Knotweed.

Rare. Escaped from cultivation to waste places: Stonington and New London (Graves), New Haven (J. N. Bishop), Simsbury (Bissell), Bridgeport (Eames). Sept. Adventive from Japan.

An effective plant in masses, producing abundant bloom.

Polygonum sachalinense Schmidt.

Sacaline.

Rare. Tolland, well established in a field and along a roadside (Weatherby & Bissell). Aug.—Sept. Native of eastern Asia.

A coarse forage and ornamental plant recently introduced into this country; perfectly hardy, but of little value where other crops can be grown.

FAGOPYRUM Hill. Buckwheat.

Fagopyrum esculentum Moench (eatable).

Fagopyrum Fagopyrum Karst.

Buckwheat. Beech-wheat.

Occasional. Fields and roadsides, escaping from cultivation but not persisting. June — Oct.; fruit Aug.—Oct. Fugitive from Europe.

Cultivated for its seeds which are ground for food or fed to poultry. The flowers are much frequented by honey-bees.

POLYGONELLA Michx. Jointweed.

Polygonella articulata (L.) Meisn. (jointed).

Sand, Coast or Seaside Jointweed or Knot Grass.

Frequent on barren sands in the Connecticut Valley and

the southeastern part of the state, as well as the coastal dunes and beaches throughout; occasional or rare elsewhere in similar situations. Mid-July — Oct.

CHENOPODIACEAE. GOOSEFOOT FAMILY.

CYCLOLOMA Moq. Winged Pigweed.

Cycloloma atriplicifolium (Spreng.) Coulter (having leaves like *Atriplex*).

Cycloloma platyphyllum Moq.

Cycloloma. Winged Pigweed.

Rare. Hamden, in dry ground (Miss Edwards, J. N. Bishop). July — Aug. Fugitive from the West.

KOCHIA Roth.

Kochia Scoparia (L.) Schrad. (broom-like).

Mexican Fire Plant. Mock Cypress.

Rare. Hartford, escaped from cultivation to waste ground (H. S. Clark & Weatherby). Sept. Fugitive or adventive from Europe.

Cultivated for its brilliant autumnal foliage.

CHENOPODIUM L. Goosefoot. Pigweed.

Chenopodium ambrosioides L. (like *Ambrosia*, the Ragweed). Wormseed. Mexican Tea. Sweet Pigweed.

Waste places and roadsides. Rare or local, or in populous districts even frequent or common. Aug.—Oct. Naturalized from tropical America.

The seeds are sometimes used medicinally and were formerly officinal.

Chenopodium ambrosioides L., var. *anthelminticum* (L.) Gray (opposed to worms).

Chenopodium anthelminticum L.

Wormseed.

Rare. Bridgeport, in waste ground (Eames). Aug.—Oct. Adventive from tropical America.

Chenopodium Botrys L. (a cluster of grapes; referring to the shape of the inflorescence).

Feather Geranium. Wormseed. Jerusalem Oak. *Ambrosia*. Ambrose.

Waste places and roadsides. Rare in most districts: Norwich (Mrs. E. E. Rogers), New Haven (D. C. Eaton), Hartford (H. S. Clark), Plainville (Bissell), Southington (Andrews), Oxford (Harger), New Milford (C. K. Averill). Occasional at New London (Graves), and throughout the southwestern part of the state (Eames). July—Sept. Naturalized from Europe.

The seeds are sometimes used medicinally.

Chenopodium capitatum (L.) Aschers. (having heads: referring to the clusters of fruit).

Blitum capitatum L.

Strawberry Blite or Spinach.

Rare. Waterbury, in waste ground (J. M. Richardson), Huntington, a few plants in dry soil near the Housatonic River (Miss A. Wakely). June—July.

Fugitive from the West or from Europe.

Sometimes cultivated as a pot-herb.

Chenopodium rubrum L. (red).

Red or Coast Goosefoot or Blite.

Rare on salt marshes: Guilford (G. H. Bartlett), Fairfield (Eames). Aug.—Oct.

Chenopodium glaucum L. (glaucous).

Oak-leaved Goosefoot.

Local. Bridgeport, plentiful along a sandy roadside (Eames). Aug.—Oct. Adventive from Europe.

Chenopodium hybridum L. (mongrel).

Maple-leaved Goosefoot. Sowbane.

Occasional. Roadsides, waste places and river banks. July—Oct. Native, or in part naturalized from Europe.

Chenopodium album L. (white).

Pigweed. White Goosefoot. Lamb's Quarters. Wild Spinach.

Common. Waste places, on sandy shores and as a weed in cultivated ground. June—Sept. Naturalized from Europe.

The var. *VIRIDE* Moq. (green) is frequent with the typical form.

Sometimes troublesome as a weed. Occasionally used as a pot-herb.

Chenopodium murale L. (of walls).

Nettle-leaved Goosefoot. Sowbane.

Rare. Waste places: New London, as a gutter-weed (Graves), New Haven (W. A. Setchell), Fairfield (Eames). June — Sept. Adventive from Europe.

Chenopodium urbicum L. (of the city).

City or Upright Goosefoot.

Rare. Waste places in rich soil: Ledyard (Graves), Oxford (Harger), Naugatuck (A. E. Blewitt & Harger). Mid-May — Aug. Adventive from Europe.

Chenopodium Boscianum Moq.

Rare. Rocky woods: Southington and Meriden (Andrews, Bissell). Aug.—Sept.

Chenopodium leptophyllum Nutt. (slender-leaved).

Rare. Coastal beaches, sand dunes and sandy borders of salt marshes: Groton (Graves), New Haven (F. W. Hall), Milford (Harger, Eames), Stratford (Miss A. E. Carpenter, Eames), Bridgeport, Westport and Norwalk (Eames). Aug. — Sept.

BETA L. Beet.**Beta vulgaris** L. (common).

Common Beet.

Rare and fugitive. Waste grounds: Bridgeport (Eames). July. Native of southern Europe.

ATRIPLEX L. Orach.**Atriplex tatarica** L.

Atriplex laciniata Koch and many authors, not L.

Rare. Naugatuck, in waste ground (A. E. Blewitt). Aug. Fugitive from Europe.

Atriplex patula L. (spreading).

Spreading Orach.

Rare or occasional on the shores of the Sound.

The var. **HASTATA** (L.) Gray (halberd-shaped), *Atriplex hastata* L., is the usual form of this variable species, and is common on the shores of the Sound and edges of salt marshes,

extending inland along the Connecticut River as far as Hartford (H. S. Clark); also occurs in waste ground at Bristol (C. D. Bishop), Naugatuck (A. E. Blewitt), and Litchfield (Miss E. H. Thompson). Aug.—Sept.

The leaves are sometimes eaten as a pot-herb.

Atriplex arenaria Nutt. (of sand).

Beach Orach.

Rare or local. Sandy or gravelly shores of the Sound and adjacent waters: Groton and Stonington (Graves), East Haven (Harger), Milford (Eames, Harger), Stratford and westward (Eames). Aug.—Oct.

SALICORNIA L.   Samphire. Glasswort.

Salicornia mucronata Bigel. (having a short, abrupt and small tip).

Salicornia Bigelovii Torr.

Samphire. Glasswort. Pickle Plant.

Frequent on salt marshes along the coast. Aug.—Sept.
Sometimes gathered for pickling.

Salicornia europaea L.

Salicornia herbacea L.

Samphire. Glasswort. Pickle Plant. Chicken-toes. Crab or Frog Grass.

Frequent or common on salt marshes and shores. Aug.—Sept.

Often gathered for pickling.

Salicornia ambigua Michx. (doubtful).

Woody Samphire or Glasswort.

Frequent on stony shores and edges of salt marshes along the coast. Aug.—Sept.

SUAEDA Forskål.   Sea Blite.

Suaeda maritima (L.) Dumort. (of the sea-coast).

Dondia maritima Druce.

Low Sea Blite.

Occasional on stony shores along the coast and about salt marshes and tidal rivers. July — Sept.

Suaeda linearis (Ell.) Moq. (very narrow).

Dondia americana Britton, not *Salsola salsa*, var. *americana* Pers.

Tall Sea Blite. Seaside Goosefoot.

Frequent on stony shores along the coast, about salt marshes and near tidal rivers. Aug.—Sept.

SALSOLA L.   Saltwort.

Salsola Kali L. (Arabic name).

Common or Prickly Saltwort.

Frequent on sandy shores of the Sound. July — Sept.

In Europe this species was formerly gathered and burned for soda to be used in the manufacture of glass.

Salsola Kali L., var. **tenuifolia** G. F. W. Mey. (fine-leaved).

Salsola Tragus of authors, but scarcely of L.

Russian Thistle.

Rare. Waste ground and along railroads: Hartford (H. S. Clark & Bissell), Southington (Andrews, Bissell), Naugatuck (B. B. Bristol), Ansonia (Harger), Bridgeport (Eames). July — Sept. Adventive from the West or from Asia.

The plant is a native of Asia, but is now a very troublesome weed in some parts of the West. It should always be eradicated on its first appearance.

AMARANTHACEAE.   AMARANTH FAMILY.

AMARANTHUS L.   Amaranth.

Amaranthus retroflexus L. (bent backward).

Pigweed. Amaranth. Beet-root. Green Amaranth. Rough or Common Pigweed.

Common. Waste places and cultivated ground. July — Oct. Naturalized from tropical America.

A bad weed in cultivated ground.

Amaranthus hybridus L. (mongrel).

Pigweed. Slender Pigweed. Green Amaranth. Careless.

Frequent or common. Cultivated ground and waste places. July — Oct. Naturalized from tropical America.

The forma **HYPOCHONDRIACUS** (L.) Robinson (curing melancholy), *Amaranthus hypochondriacus* L., Prince's

Feather, is cultivated in gardens, and escapes to waste places at Southington and Meriden (Andrews), and Bridgeport (Eames).

The species is often a bad weed in cultivated ground.

Amaranthus paniculatus L. (panicled).

Amaranthus hybridus L., var. *paniculatus* U. & B.

Amaranth. Purple Amaranth.

Occasional. Roadsides, waste places and about old gardens, especially in the more populous districts. July — Oct. Adventive from tropical America.

Amaranthus graecizans L.

Amaranthus albus L.

Tumble Weed. White Amaranth or Pigweed. Bushy Pigweed.

Frequent. Cultivated fields and waste ground. July — Oct.

A weed, but not usually troublesome in this state.

Amaranthus blitoides Wats. (like Blitum, the Blite).

Prostrate Amaranth.

Rare. Roadsides and waste places: Norwich (Mrs. E. E. Rogers), New London (Graves), Hartford (H. S. Clark, Bissell), Naugatuck (A. E. Blewitt & Harger), Waterbury (A. E. Blewitt), Southbury (Harger), Milford, Bridgeport and Norwalk (Eames). July — Sept. Adventive from the West.

Amaranthus spinosus L. (spiny).

Spiny or Thorny Amaranth.

Rare. Waste places: New London (Graves), Norwich (Mrs. E. E. Rogers). July — Sept. Adventive from tropical America.

Amaranthus caudatus L. (tailed).

Prince's Feather. Love-lies-bleeding.

Rare. Escaped from cultivation into waste ground in Bridgeport and Norwalk (Eames). Aug. Native of India.

ACNIDA L. Water Hemp.**Acnida cannabina** L. (like Cannabis, the Hemp).

Salt Marsh Water Hemp.

Common about salt marshes and the borders of tidal creeks and rivers. Aug.—Sept.

Acnida tuberculata Moq. (pimply).*Acnida tamariscina* Wood, var. *tuberculata* U. & B.

Rare. Waste ground on bank of the Connecticut River at Hartford (Bissell), New Milford (E. H. Austin). Aug.—Sept. Fugitive from the West.

Acnida tuberculata Moq., var. *prostrata* (U. & B.) Robinson (prostrate).*Acnida tamariscina* Wood, var. *prostrata* U. & B.

Rare. Cultivated ground at Oxford (Harger). Aug.—Sept. Fugitive from the West.

PHYTOLACCACEAE. POKEWEED FAMILY.**PHYTOLACCA L.** Pokeweed.**Phytolacca decandra** L. (ten-stamened).

Common Pokeweed, Poke or Scape. Garget. Pigeon Berry. American Nightshade. Ink Berry. Red Ink Plant. Poke Root.

Frequent. Woods, fields and waste places, especially on burnt lands. July — Oct.

The young leaves and shoots make an excellent pot-herb, but care must be taken to exclude any part of the root. The berries and root have medicinal virtues and are officinal. The root is externally applied to caked udders of cows, and the berries are sometimes employed to color vinegar. The roots have been mistaken for Horseradish, with fatal results, and the plant has proved fatal to cattle eating it.

NYCTAGINACEAE. FOUR-O'CLOCK FAMILY.**MIRABILIS L.** Four-o'clock.**Mirabilis Jalapa** L. (producing jalap).

Four-o'clock. Marvel of Peru.

Rare. Escaped from cultivation at Bridgeport (Eames). Aug.—Oct. Fugitive from tropical America.

A desirable garden plant often cultivated for ornament.

OXYBAPHUS L'Hér.

Oxybaphus nyctagineus (Michx.) Sweet (like *Nyctaginia*, a genus of this family).

Allionia nyctaginea Michx.

Umbrellawort.

Rare. Granby, in fields (I. Holcomb). June — Aug. Introduced from the West.

Oxybaphus hirsutus (Pursh) Sweet (hairy).

Allionia hirsuta Pursh.

Umbrellawort.

Rare. Southington, field in dry gravelly soil (Andrews). July — Aug. Introduced from the West.

Oxybaphus linearis (Pursh) Robinson (very narrow).

Oxybaphus angustifolius Sweet.

Allionia linearis Pursh.

Umbrellawort.

Rare. North Haven, in sandy waste ground (A. W. Evans). June — Aug. Introduced from the West.

ILLECEBRACEAE. KNOTWORT FAMILY.**SCLERANTHUS** L. Knavel.

Scleranthus annuus L. (annual).

Knotweed. German Knot Grass. Gravel Chickweed.

Frequent. Dry, sandy or sterile fields and roadsides. May — Nov. Naturalized from Europe.

ANYCHIA Michx. Forked Chickweed.

Anychia polygonoides Raf. (like *Polygonum*, the Knotweed).

Anychia dichotoma of American authors, not Michx.

Rare. Norwalk, railroad track at Wilson's Point (C. K. Averill). June — Sept. Fugitive from the West.

Anychia canadensis (L.) BSP.

Anychia dichotoma Michx., but not of late American authors.

Anychia capillacea DC.

Forked Chickweed.

Occasional or frequent. Dry, often rocky woods. June — Sept.

AIZOACEAE. CARPET WEED FAMILY.

MOLLUGO L. Indian Chickweed.

Mollugo verticillata L. (whorled).

Carpet Weed. Indian Chickweed.

Common. Waste places, roadsides, cultivated ground and on coastal beaches. June—Oct. Naturalized from the warmer parts of America.

Sometimes a troublesome weed.

TETRAGONIA L.

Tetragonia expansa Murr. (spread out).

New Zealand Spinach.

Local. Waste ground: Hartford, where hundreds of plants were growing in one locality (H. S. Clark), Fairfield (Eames). Sept. Fugitive from Eastern Asia or New Zealand.

CARYOPHYLLACEAE. PINK FAMILY.

SPERGULARIA J. & C. Presl. Sand Spurrey.

Spargularia rubra (L.) J. & C. Presl (red).

Buda rubra Dumort.

Tissa rubra Britton.

Sand Spurrey. Sandwort.

Frequent, especially near the coast. Dry, sandy or gravelly roadsides, paths and waste places. June—Sept.

Spargularia marina (L.) Griseb. (of the sea).

Buda marina Gray's Manual ed. 6.

Tissa marina Britton.

Salt Marsh Sand Spurrey. Seaside Sandwort or Spurrey.

Common on coastal shores and borders of salt marshes. June—Aug. Medicinal.

SPERGULA L. Spurrey.

Spargula arvensis L. (of cultivated ground).

Corn, Sand or Common Spurrey. Tares. Cow-quake. Sandweed. Beggar-weed.

Rare or local. Roadsides, waste places and cultivated ground throughout. June—Nov. Naturalized from Europe.

It is said to be a nutritious and quick crop for fodder or hay, adapted to and a renovator of dry sandy soils. Apt to become a nuisance in some situations.

Spergula sativa Boenn. (sown).

Field Spurrey.

Rare. New London, in a cultivated field (Graves), Norwalk, sandy waste (Eames). July — Aug. Adventive from Europe.

SAGINA L. Pearlwort.

Sagina decumbens (Ell.) Torr. & Gray (reclining).

Sagina apetala of American authors, not Ard.

Small-flowered, Annual or Spurrey Pearlwort.

Rare or local. Dry soil of roadsides, walks and waste places: Ledyard (Graves), Woodbury (Harger). Throughout the coast region of the southwestern part of the state, where it also occurs in low or moist woods (Eames). Mid-May — Aug.

Sagina procumbens L. (trailing).

Pearlwort. Break-stone. Bird's-eye.

Occasional or frequent. Dripping rocks and wet, springy places in woods or partial shade, also dry banks, crevices of walls and walks and in stony or sandy wastes or sometimes on sea-beaches. May — July.

ARENARIA L. Sandwort.

Arenaria lateriflora L. (flowering at the side).

Moechringia lateriflora Fenzl.

Blunt-leaved or Showy Sandwort.

Occasional or frequent. Moist or dry, rocky, or low woods, meadows and even sometimes on sea-beaches. Mid-May — June.

Arenaria macrophylla Hook. (large-leaved).

Moechringia macrophylla Torr.

Larged-leaved Sandwort.

Rare. In rather dry leaf-mold covering trap talus, in shade: Guilford (G. H. Bartlett), and in the adjoining town of Durham (Harger). May.

Arenaria peploides L. (like *Euphorbia Peplus*).*Ammodenia peploides* Rupr.

Sea Beach Sandwort. Sea Chickweed or Purslane.

Sandy and stony shores of the Sound. Rare in Bridgeport (Eames), and Stratford (Miss A. E. Carpenter); frequent in New London County (Graves); not reported elsewhere. May—June.

Arenaria serpyllifolia L. (thyme-leaved).

Common or Thyme-leaved Sandwort.

Frequent or common. Dry, sandy or rocky open ground. May—July. Naturalized from Europe.

Arenaria stricta Michx. (upright).*Arenaria Michauxii* Hook. f.

Rock Sandwort.

Local. Limestone ledges and banks throughout western Litchfield County and south to Brookfield (Eames). June—July.

Arenaria groenlandica (Retz.) Spreng.

Mountain Sandwort or Starwort.

Rare. Rock ledges: White Rocks, Middletown, where it was first collected by H. L. Osborn in 1877, and Durham (G. H. Bartlett). Mid-April—May.

STELLARIA L. Starwort. Chickweed.**Stellaria borealis** Bigel. (northern).*Alsine borealis* Britton.

Northern Stitchwort or Starwort.

Rare. Bogs, wet meadows and banks of woodland brooks: Groton and Ledyard (Graves), Durham, Oxford and Monroe (Harger), Southington (Andrews), New Britain and Norfolk (Bissell), Barkhamsted (Harger), Winchester (Andrews, Bissell & Harger), Salisbury (Mrs. C. S. Phelps). May—Aug.

Stellaria longifolia Muhl. (long-leaved).*Alsine longifolia* Britton.

Long-leaved Stitchwort or Starwort.

Swamps, low meadows and wet places. Rare in the south-

eastern part of the state: Franklin and Colchester (Graves). Frequent elsewhere. Mid-May — June.

***Stellaria graminea* L.** (grass-like).

Alsine graminea Britton.

Stellaria graminea L., var. *lanceolata* Fenzl.

Lesser Stitchwort or Starwort.

Wet or dry grassland, roadsides and waste places. Occasional northward; frequent near the coast. June — July. Naturalized from Europe.

***Stellaria Holostea* L.** (classical name).

Alsine Holostea Britton.

All-bone. Easter Bell. Greater Stitchwort or Starwort.

Rare. Woodbury, rich open woods (Eames & C. C. Godfrey); Norwalk, dry open wastes in Union Cemetery (Miss A. E. Carpenter). May — June. Naturalized from Europe.

***Stellaria media* (L.) Cyrill** (intermediate).

Alsine media L.

Common or Winter Chickweed. Tongue Grass. White Bird's-eye.

Common. Waste places about dwellings, cultivated ground and lawns. Feb.—Dec. Naturalized from Europe.

Sometimes a troublesome weed, especially in damp soil. Medicinal.

CERASTIUM L. Mouse-ear Chickweed.

***Cerastium arvense* L.** (of cultivated ground).

Field or Meadow Chickweed.

Rare. Lawns, fields, rocky banks and on ledges, usually in dry, sandy or sterile soil: New London (Graves), Norwich (Mrs. E. E. Rogers), East Lyme (Mrs. F. H. Dart), Middletown (M. Hitchcock), East Windsor (Bissell), Southington (Andrews & Bissell), New Haven, on West Rock (Harger, Eames et al.), Waterbury (A. E. Blewitt), Seymour and Oxford (Harger). May — mid-June.

***Cerastium vulgatum* L.** (common).

Common or Larger Mouse-ear Chickweed.

Common. Woods, fields, cultivated ground and waste places. Mid-April — Oct. Naturalized from Europe.

A persistent and bad weed in lawns.

Cerastium semidecandrum L. (five-stamened).

Spring Mouse-ear. Small Mouse-ear Chickweed.

Local. East Lyme, plentiful in dry fields and pastures near the Niantic River (Graves). May — June. Naturalized from Europe.

Cerastium nutans Raf. (nodding).

Cerastium longipedunculatum of Britton's Manual.

Nodding Chickweed. Powder-horn.

Rare or local. Moist hillside woods and drier more or less open places: Norwich (Mrs. E. E. Rogers), East Lyme (Miss A. M. Ryon), West Hartford (H. S. Clark), Farmington and Newington (Bissell), Hamden (O. D. Allen), Orange and Oxford (Harger), Huntington, Trumbull, Milford and Stratford (Eames), Wilton (Miss A. E. Carpenter). Also at East Hartford, as a weed in greenhouse soil (A. W. Driggs). May — June.

The form with apetalous flowers often occurs.

AGROSTEMMA L. Corn Cockle.**Agrostemma Githago** L. (like Gith. the Fennel-flower).

Lychnis Githago Scop.

Cockle. Corn Cockle. Rose Pink or Campion.

Rare or local. Grain fields, cultivated ground and waste places. June — July. Adventive from Europe.

In the West, where it is often abundant, its seeds injure the appearance and quality of grain. Its seeds are poisonous to poultry and stock, and flour containing a considerable proportion of them has been made into bread and eaten with fatal results. Thorough baking, however, destroys the poison. Chronic poisoning due to the regular consumption of small quantities, and finally resulting fatally, has been observed in animals. The presence of Corn Cockle seeds in flour is easily detected, unless it has been well bolted, by the black, roughened scales of the seed coat.

LYCHNIS L. Campion.**Lychnis Coronaria** (L.) Desr. (pertaining to a crown).

Mullein Pink or Lychnis. Rose Campion. Dusty Miller.

Rare. Roadsides and waste places as an escape from cul-

tivation: Southington (Andrews, Bissell), Cheshire (Harger), Bridgeport and Fairfield (Eames). Mid-June — Aug. Native of Europe.

Lychnis Flos-cuculi L. (cuckoo-flower).

Ragged Robin, Jack or Lychnis. Meadow Pink or Campion.

Rare or local. Fields and meadows, probably introduced with grass seed: Waterford (Graves), Norwich, plentiful in a meadow (Mrs. E. E. Rogers, J. Trumbull), Middletown (J. H. Barbour), Hartford, plentiful in several fields (H. S. Clark & Bissell); Canton (Weatherby), Salisbury (Mrs. C. S. Phelps). Mid-May — June. Naturalized from Europe.

Lychnis chalcedonica L.

Maltese or Jerusalem Cross. Nonesuch.

Rare. Roadsides and about old houses: Oxford and Southbury (Harger), Bridgeport (Eames). July. Adventive from Japan.

Lychnis dioica L. (dioecious).

Lychnis diurna Sibth.

Red, Morning or Day-blooming Lychnis or Campion. Red or Poor Robin.

Rare. Moist or dry roadsides and waste places: Norwich (Mrs. E. E. Rogers), Groton (Bissell), New London (Graves), Guilford (G. H. Bartlett), East Haven (Eames), New Haven (D. C. Eaton, Harger), Meriden (Andrews), Southington (Bissell, Andrews), Darien (Mrs. W. D. Barclay). June — Sept. Adventive from Europe.

Frequent in old-fashioned gardens.

Lychnis alba Mill. (white).

Lychnis vespertina Sibth.

Evening or Ever-blooming Lychnis. White Campion or Robin. Bull-rattle.

Roadsides, fields and waste places, in either dry or moist ground. Common in New London County (Graves); frequent or locally common in Kent and New Milford (C. K. Averill, E. H. Austin); occasional, local or rare elsewhere. June — Sept. Naturalized from Europe.

SILENE L.   Catchfly.   Campion.

Silene antirrhina L. (like *Antirrhinum*, the Snapdragon).

Sleepy or Snapdragon Catchfly.

Frequent or common. Dry fields, roadsides, sandy places and on rocks and ledges. Mid-May—July.

Silene antirrhina L., var. *divaricata* Robinson (widely divergent).

Rare. Dry, sandy banks or sterile soil of ledges: Southington (Andrews), Milford and Stratford (Eames), Seymour and Oxford (Harger), Warren (in Herb. C. W. Swan). May—June.

Silene Armeria L. (like *Armeria*, the Thrift).

None-so-pretty. Sweet William, Garden or Lobel's Catchfly.

Sweet Susan. Pretty Nancy.

Rare. Escaped from gardens to roadsides and waste places. June—Sept. Native of Europe.

Silene dichotoma Ehrh. (forked).

Forked Catchfly.

Rare. Waste places, fields and grasslands: New London (Graves), Southington (Andrews, Bissell), Bristol (J. N. Bishop), East Windsor and Norfolk (Bissell), Seymour (Harger), Bridgeport (Eames), Wilton (Miss A. E. Carpenter), New Milford (Eames & E. H. Austin), Salisbury (Mrs. C. S. Phelps). June—Aug. Adventive from Europe.

Silene noctiflora L. (night-flowering).

Catchfly. Night-flowering Catchfly.

Rare. Roadsides and waste places about dwellings: Norwich (W. A. Setchell), Southington (Andrews, Bissell), Guilford (G. H. Bartlett and Bissell), North Branford and Oxford (Harger), Bridgeport and Fairfield (Eames). Mid-June—Oct. Adventive from Europe.

Silene pennsylvanica Michx.

Silene caroliniana of recent authors, perhaps of Walt.

Wild Pink. Fire Pink.

Dry, sandy soil, especially on banks. Rare or local in most districts: along the Thames River from Norwich southward (Graves), Colchester (Dr. E. J. Thompson), Scotland and

Windham (G. Waldo), North Haven (Harger), Woodbury (Eames & C. C. Godfrey), Newtown (J. P. Blackman), Brookfield (Eames). Becoming occasional in the southwestern part of the state. May — mid-June.

A handsome plant in cultivation.

***Silene stellata* (L.) Ait.f. (starry).**

Starry Campion. Four-leaved Campion.

Rocky woods and thickets. Rare in its most northerly and easterly reported localities: New Milford (Eames), Beacon Falls (Harger), Plainville (Bissell), Simsbury (A. W. Driggs), Newington (H. S. Clark), Middletown (Harger), Old Lyme (Graves), East Lyme (Miss A. M. Ryon). Frequent near the coast westward. Mid-July — Sept.

A handsome plant and worthy of cultivation.

***Silene latifolia* (Mill.) Britten & Rendle (broad-leaved).**

Silene Cucubalus Wibel.

Silene vulgaris Garcke.

Bladder Campion. Behen. Rattle Bags. Cow Bells.

Occasional or frequent. Grassland, roadsides and waste places. June — Sept. Naturalized from Europe.

SAPONARIA L.

***Saponaria officinalis* L. (of the shops).**

Bouncing Bet. Soapwort. Old-maid's or Hedge Pink.

Common. Fields, roadsides and waste places. July — Oct. Naturalized from Europe.

The plant has active medicinal properties, but is now seldom used. Often occurs with double flowers.

***Saponaria Vaccaria* L. (cow-herb).**

Vaccaria Vaccaria Britton.

Cow-herb. Field Soapwort. Cow-rattle. Cockle.

Rare. Cultivated ground and waste places: Norwich (Mrs. E. E. Rogers), East Lyme (Miss A. M. Ryon), New Haven (D. C. Eaton), Mansfield and Salisbury (Mrs. C. S. Phelps), Hartford (Bissell), Southington (Andrews, Bissell), Waterbury (Mrs. C. H. Lyman, Jr.), Bridgeport and Fairfield (Eames), New Milford (E. H. Austin). June — July. Introduced from Europe.

GYPSOPHILA L.**Gypsophila muralis L.** (of walls).

Gypsophyll. Mist.

Rare. Roadside in Granby, escaped from cultivation (I. Holcomb). June — Sept. Fugitive from Europe.

Gypsophila elegans Bieb. (elegant).

Rare. Southington, escaped from cultivation to field (Andrews). June — July. Fugitive from Asia.

DIANTHUS L. Pink. Carnation.**Dianthus deltoides L.** (triangular).

Maiden Pink. Meadow Pink.

Rare. Roadsides and waste ground: South Windsor (C. C. Hanmer), Plainville (J. N. Bishop), Bristol (W. A. Terry), Litchfield (Miss E. H. Thompson, Bissell). June — July. Adventive from Europe.

Dianthus barbatus L. (bearded).

Sweet William. Bunch or French Pink. Bloomy-down.

Rare. Roadsides and waste places as an escape from cultivation: Lebanon (Mrs. C. B. Graves), Guilford (G. H. Bartlett), Southington (Bissell, Andrews), Southbury (Harger), Fairfield (Eames), Redding (Eames & C. C. Godfrey), Salisbury (Mrs. C. S. Phelps). June — July. Introduced from Europe.

Dianthus Armeria L. (like Armeria, the Thrift).

Deptford Pink.

Dry fields and roadsides and in woods. Occasional northward and frequent or locally common throughout the southern part of the state. July — Sept. Naturalized from Europe.

Dianthus plumarius L. (feathery).

Grass, Garden, Scotch or Pheasant's-eye Pink.

Rare. Escaped from cultivation: Thompson, in an old cemetery near Wilsonville where it is spontaneous in the grass (Graves). May — June. Introduced from Europe.

PORTULACACEAE. PURSLANE FAMILY.

CLAYTONIA L. Spring Beauty.

Claytonia virginica L.

Spring Beauty. Mayflower.

Rich moist woods and more open places. Occasional or frequent in the southwestern part of the state; rare or local elsewhere. April — May.

Easily cultivated in suitable situations.

Claytonia caroliniana Michx.

Spring Beauty. Broad-leaved Spring Beauty.

Rare or local. Rich moist woods: Middletown (M. Hitchcock), Bristol (W. A. Terry), Barkhamsted (A. E. Blewitt), Torrington (Miss B. A. Parker), New Milford (E. H. Austin), Cornwall (Miss J. T. Gregory), Salisbury (Mrs. C. S. Phelps). Late March — April.

PORTULACA L. Purslane.

Portulaca oleracea L. (suitable for a pot-herb).

Purslane. Pusley.

Common. Cultivated and waste ground. June — Sept. Naturalized from the South or from Europe; now cosmopolitan.

A bad weed in any cultivated ground, especially in onion fields. Difficult to eradicate because of its tenacity of life, rapid growth and prolific seeding. Excellent as a pot-herb, and some strains are cultivated for this use.

Portulaca grandiflora Hook. (large-flowered).

Portulaca. Garden or Showy Portulaca. Wax Pinks. Garden or French Purslane. Rose Moss. Sun-plant.

Rarely escaped from gardens into waste places: Bridgeport and Norwalk (Eames), Ansonia (Harger). July — Oct. Fugitive from South America.

CERATOPHYLLACEAE. HORNWORT FAMILY.

CERATOPHYLLUM L. Hornwort.

Ceratophyllum demersum L. (submerged).

Frequent. Ponds, pools and slow streams. June — July. The var. *ECHINATUM* Gray (prickly) is frequent in the

southwestern part of the state (Eames), reaching eastward to New Haven (D. C. Eaton) and northward to Middlebury and Woodbury (Harger). The fruit, July — Aug., is often present in the variety, not seen otherwise.

NYMPHAEACEAE. WATER LILY FAMILY.

NYMPHAEA L. Yellow Pond Lily. Spatter-dock.

Nymphaea advena Ait. (a stranger).

Nuphar advena Ait. f.

Yellow Pond Lily. Spatter-dock. Frog, Cow, Hog, Bull-head or Horse Lily. Brandy Bottle.

Common. Ponds, pools and slow streams. Mid-May — Sept.

The var. **VARIEGATA** (Engelm.) Fernald (variegated) has been found in Salisbury (C. C. Godfrey), Goshen (L. M. Underwood), Kent (Eames).

The rhizome is medicinal.

× (?) **Nymphaea rubrodisca** (Morong) Greene (red-disked).

Nuphar advena Ait. f., var. *minus* Morong.

Rare. In ponds: Norfolk (J. H. Barbour), Trumbull, Eames). June — Aug.

Nymphaea microphylla Pers. (small-leaved).

Nymphaea Kalmiana Sims.

Nuphar Kalmianum Ait. f.

Small Yellow Pond Lily.

Rare or local. Ponds and still water: Lyme (Graves, Bissell), Windham (J. W. Robbins), North Haven (Bissell), Milford (Eames), Derby (H. C. Beardslee), Watertown (Harger), Norfolk (J. H. Barbour). June — Aug.

CASTALIA Salisb. Water Lily. Water Nymph.

Castalia odorata (Ait.) Woodv. & Wood (fragrant).

Nymphaea odorata Ait.

Nymphaea odorata Ait., var. *minor* Sims.

White or Sweet-scented White Water Lily. Pond Lily.

Frequent or common. Ponds and still waters. June — Sept.

Introduced in many ponds for its showy and fragrant

flowers, which are often gathered and sold in market. The rhizome is medicinal.

Castalia tuberosa (Paine) Greene (bearing tubers).

Nymphaea reniformis of authors, not Walt.

White Pond or White Water Lily.

Rare. In deep water at Selden's Cove, Lyme (Graves & Bissell), and at Round Pond, Ridgefield (Eames). June — Aug.

NELUMBO Adans. Sacred Bean.

Nelumbo lutea (Willd.) Pers. (yellow).

Lotus. American or Yellow Nelumbo or Lotus. Great Water Lily. Duck Acorn. Water Chinquapin.

Very rare. In Selden's Cove, Lyme (D. C. Eaton in 1856, Graves, et al.). July — Aug.

BRASENIA Schreb. Water Shield.

Brasenia Schreberi Gmel.

Brasenia peltata Pursh.

Brasenia purpurea Casp.

Water Shield or Target. Little Water Lily. Waterleaf.

Ponds, slow streams and ditches. Frequent near the coast in New London County, occasional or rare elsewhere. Late June — Aug.

RANUNCULACEAE. CROWFOOT FAMILY.

RANUNCULUS L. Crowfoot. Buttercup.

Ranunculus circinatus Sibth. (coiled).

Batrachium divaricatum of authors, not *Ranunculus divaricatus* Schrank.

Batrachium longirostre of Britton's Manual.

Stiff or White Water Crowfoot.

Local. Salisbury, plentiful at Lakeville in a pond and in a stream flowing from it (M. L. Fernald, J. R. Churchill & Bissell). May — Aug.

Ranunculus aquatilis L. (aquatic). var. *capillaceus* DC. (hair-like).

Ranunculus aquatilis L., var. *trichophyllus* Gray.

Batrachium trichophyllum Bosch.

Batrachium flaccidum Rupr.

Batrachium Drouetii Nym.

Batrachium confervoides of authors, not Fries.

Common White Water Crowfoot. Water Milfoil. Green Eel Grass.

Occasional or frequent. Ponds and slow streams. Mid-May — Aug.

Ranunculus Cymbalaria Pursh (like *Cymbalaria*, a genus of the Figwort family).

Oxygraphis Cymbalaria Prantl.

Seaside Crowfoot.

Rare. Muddy shores: coves of the Thames River in Waterford and Montville (Graves), Bridgeport (H. C. Beardslee), Partridge Island (G. W. Hawes). July — Aug.

Ranunculus delphinifolius Torr. (having leaves like the Larkspur).

Ranunculus multifidus Pursh, not Forskål.

Yellow Water Crowfoot.

Rare or local. Ponds and pools. May — June.

The var. **TERRESTRIS** (Gray) Farwell (terrestrial) is sometimes found, especially in dry seasons. It seems to be the form taken by the species when rooting out of water, or when left in the mud of drying ponds.

Ranunculus laxicaulis (Torr. & Gray) Darby (loose-stemmed).

Ranunculus ambigens Wats.

Ranunculus obtusiusculus Raf.

Spearwort. Water Plantain Spearwort.

Occasional. Ditches, wet places and shallow water. June — Aug.

Ranunculus Flammula L. (a little flame), var. **reptans** (L.) Meyer (creeping).

Ranunculus reptans L.

Creeping or Crawling Spearwort.

Rare. Wet sandy or rocky shores: Waterford and Sprague (Graves), Preston (W. A. Setchell), Wethersfield (C. Wright), Windsor (Bissell). June — Aug.

Ranunculus sceleratus L. (cursed).

Cursed, Marsh, Ditch, or Biting Crowfoot. Water Celery. Blisterwort.

Swamps, ditches and wet places. Along the Connecticut River in East Hartford, rare (Weatherby, A. W. Driggs), and Middletown, occasional (A. W. Driggs); along the coast in Guilford (Bissell), and East Haven, rare (Harger); occasional westward, especially about the junction of salt marshes and upland. Mid-May — June.

One of our most acrid species and known to be poisonous to stock.

Ranunculus micranthus Nutt. (small-flowered).

Ranunculus abortivus L., var. *micranthus* Gray.

Rock Crowfoot.

Dry rocky woods. Occasional in the southeastern part of the state and along the tops of the trap hills in the Connecticut Valley; rare elsewhere: Oxford and Seymour (Harger), Darien (Harger, Eames & Weatherby). May.

Ranunculus abortivus L. (abortive).

Small-flowered, Kidney-leaved or Smooth Crowfoot.

Common. Rich, usually moist woods, thickets and more open places. Mid-April — July.

Ranunculus abortivus L., var. *eucyclus* Fernald (well-rounded).

Rare. Moist rich woods: Sprague (Graves), Southington (Andrews), Oxford (Harger), Brookfield (Eames), Cornwall and Salisbury (Bissell). May — June.

Ranunculus allegheniensis Britton.

Mountain Crowfoot.

Rare. Rich woods: Monroe and Cornwall (Harger), Salisbury (M. L. Fernald & Bissell). May — June.

Ranunculus recurvatus Poir. (bent backward).

Hooked, Rough or Sanicle-leaved Crowfoot.

Frequent or common. Moist rich woods and more open places. May — June.

Ranunculus fascicularis Muhl. (clustered).

Early or Tufted Buttercup or Crowfoot.

Rare. Dry woods and more open places: Franklin (R. W. Woodward), New Haven (D. C. Eaton, G. W. Hawes), Granby (I. Holcomb), Southbury (Harger), Woodbury (Eames & C. C. Godfrey), Brookfield (Eames), Salisbury (Mrs. C. S. Phelps). April — May.

Generally confused with *Ranunculus hispidus*.

Ranunculus septentrionalis Poir. (northern).

Swamp or Marsh Buttercup or Crowfoot.

Wet meadows, swamps, ditches and along streams. Locally plentiful in Franklin and Lyme (Graves), but not otherwise reported from the southeastern part of the state; elsewhere well distributed and frequent or common. Mid-May — June.

Ranunculus hispidus Michx. (rough-haired).

Wood or Early Buttercup or Crowfoot.

Dry or moist often rocky woods. Occasional in the northern part of the state, extending southward as far as Franklin (R. W. Woodward), Middletown (M. Hitchcock), Berlin (Andrews), Oxford (Harger), Darien (Miss A. E. Carpenter). Late April — mid-June.

Ranunculus repens L. (creeping).

Creeping or Spotted-leaf Buttercup or Crowfoot.

Lawns and waste places in New London County, occasional (Graves); Hartford, rare, and Stamford, roadside (A. W. Driggs); New Hartford, bank of Farmington River, and Norfolk, wet woods (Bissell); Fairfield, moist grassy roadsides and wastes (Eames); Salisbury, along a woodland brook (Mrs. C. S. Phelps & Bissell). May — July. In part naturalized from Europe.

The double-flowered form of the gardens has escaped to wet fields in Salisbury (Mrs. C. S. Phelps & Bissell).

Ranunculus pennsylvanicus L.f.

Bristly Buttercup or Crowfoot.

Rare or local. Open wet or swampy places and muddy or sandy shores: Lyme, at Selden's Cove (Graves), East Hartford (Weatherby), Enfield and Granby (A. W. Driggs), Hamden (Bissell, Andrews), Oxford (Harger), Canaan (J.

H. Barbour), Sharon (Bissell), Salisbury (Mrs. C. S. Phelps).
June — Aug.

Ranunculus bulbosus L. (bulbous).

Bulbous Buttercup or Crowfoot. Butter or Blister Flowers.

Gold-cups. King-cups.

Common. Fields, pastures and roadsides, usually in dry ground. Mid-May — July. Naturalized from Europe.

A weed of the same character as *Ranunculus acris*, and, like that and some other species of this genus, an acrid poison. The irritant properties are said to be dissipated in drying. Medicinal.

Ranunculus acris L. (acrid).

Buttercups. Tall or Meadow Buttercup or Crowfoot. Butter or Blister Flowers.

Frequent or common. Fields, meadows and roadsides, usually in moist soil. Mid-May — Nov. Naturalized from Europe.

The var. *STEVENI* (Andrz.) Lange, occurs occasionally.

A pernicious weed, especially in pastures, and avoided by grazing animals.

THALICTRUM L. Meadow Rue.

Thalictrum dioicum L. (dioecious).

Early Meadow Rue. Feathered Columbine. Quicksilver Weed.

Rocky hillsides in rich soil. Occasional or local near the coast; local, frequent or common elsewhere. Late April — May.

Thalictrum revolutum DC. (rolled back from the edge).

Thalictrum purpurascens of Gray's Manual ed. 6 in part.

Purple or Wax-leaved Meadow Rue.

Occasional northward in dry fields and on hillsides; frequent southward, especially near the coast, in copses, dry or moist fields and in meadows. June — July.

Thalictrum polygamum Muhl. (polygamous).

Common or Tall Meadow Rue.

Frequent or common. Low meadows, thickets and beside streams. Late June — Aug.

ANEMONELLA Spach.

Anemonella thalictroides (L.) Spach (like *Thalictrum*, the Meadow Rue).

Syndesmon thalictroides Hoffmg.

Rue Anemone. Wind-flower.

Dry to moist woods, banks and more open places. Rare near the coast in New London County; frequent or common elsewhere. April — May.

Easily cultivated and then often double-flowered.

HEPATICA Hill. Liverleaf. Hepatica.

Hepatica triloba Chaix (three-lobed).

Hepatica Hepatica Karst.

Hepatica. Liverleaf. Liverwort. Mayflower. Mouse-cars. Trefoil.

Rich, usually rocky woods. Rare near the coast, becoming occasional or frequent northward. March, rarely — mid-May.

Placed in a warm situation at any time during the winter, potted plants will bloom. Of native plants the Liverleaf is usually considered to be the earliest flower of spring, although in their range *Claytonia caroliniana* and *Cardamine purpurea* habitually precede it. The leaves are medicinal and are still occasionally used in domestic practice.

Hepatica acutiloba DC. (with pointed lobes).

Hepatica acuta Britton.

Hepatica. Liverleaf. Liverwort.

Rare. Rocky woods in rich soil: Torrington and Salisbury (Bissell), Cornwall (E. E. Brewster), Canaan (A. W. Driggs). Late March — mid-May.

Medicinal properties the same as those of *Hepatica triloba*.

ANEMONE L. Anemone.

Anemone cylindrica Gray (cylindrical).

Long-fruited Anemone.

Dry roadsides, banks and borders of woods. Rare on and near the coast: Groton (Graves), Norwich (Mrs. E. E. Rogers, Graves), Guilford (G. H. Bartlett), Bridgeport and

Easton (Eames). Becoming occasional northward and frequent in the northwestern part of the state. Mid-June — July.

An acrid poison with medicinal properties.

Anemone riparia Fernald (of river banks).

Rocky woods and on river banks. Oxford, along the Housatonic River (Harger), and occasional or local from Litchfield northward and westward (Bissell). June — July.

Anemone virginiana L.

Tall or Summer Anemone. Thimbleweed.

Frequent. Dry woods, partial shade and in fields. Mid-June — Aug.

Anemone canadensis L.

Anemone pennsylvanica L.

Round-leaved or Round-headed Anemone.

Moist thickets and banks. Rare over most of its range: East Haven (A. W. Evans), Southington, apparently introduced (Andrews), North Canaan and Cornwall (Bissell), Newtown (J. P. Cowles). Locally plentiful along the Housatonic River in Oxford, Monroe and Derby (H. C. Beardslee, Harger). Mid-May — June.

Anemone quinquefolia L. (five-leaved).

Anemone nemorosa of Gray's Manual ed. 6, not L.

Wind-flower. Wood or Spring Anemone. Mayflower. Snow-drop.

Common. Rich, usually moist, woods, thickets and more open places. April — May.

An acrid poison with medicinal properties.

CLEMATIS L.   Virgin's Bower.

Clematis virginiana L.

Wild Clematis. Devil's Hair. Traveler's Joy. Love Vine.

Common. Moist thickets, hedge-rows and roadsides. July — Aug.; fruit Sept. — Nov.

An acrid poison, and when bruised actively irritant to the skin or eyes. The leaves and flowers are medicinal.

Clematis verticillaris DC. (whorled).

Atragene americana Sims.

Purple or Mountain Clematis or Virgin's Bower.

Dry rocky woods. Rare or local over most of its range: North Stonington and East Haddam (Graves), Guilford (G. H. Bartlett), Bolton (Weatherby), New Haven (D. C. Eaton, et al.), Oxford (Harger), Salisbury (Mrs. C. S. Phelps). Occasional about the trap hills of central Connecticut. May.

CALTHA L. Marsh Marigold.

***Caltha palustris* L.** (of marshes).

Marsh Marigold. Cowslips. Meadow Gowan. May-blobs. Water-blobs.

Common or local. Swamps, wet places and along brooks. Mid-April — May.

The young plants are much used as a pot-herb. It is handsome in cultivation, flourishing in rich moist soil.

TROLLIUS L. Globeflower.

***Trollius laxus* Salisb.** (loose).

American, Spreading, Wild or Swamp Globeflower.

Rare. Swampy woods and meadows: Cornwall (E. E. Brewster, 1879, and at the same locality, Bissell, 1903). April — May.

COPTIS Salisb. Goldthread.

***Coptis trifolia* (L.) Salisb.** (three-leaved).

Goldthread. Canker-root. Yellow-root. Mouth-root.

Swamps and wet woods, especially in sphagnum. Not reported near the coast west of New Haven; rare near the coast eastward, mostly in sphagnum cedar swamps or cold, swampy woods; occasional northward, becoming frequent in the northern part of the state. May — mid-June.

The roots have been much used as a bitter tonic and in the form of an infusion as an astringent wash.

NIGELLA L. Fennel Flower.

***Nigella sativa* L.** (sown).

Nutmeg Flower.

Rare. Bridgeport, in waste ground (Eames). July. Fugitive from Europe.

Sometimes cultivated for its seeds which, under the name of Black Cumin, are used for seasoning.

AQUILEGIA L. Columbine.***Aquilegia canadensis* L.**

Wild or Red Columbine. Honeysuckle. Meeting-houses.
Rock Lily. Bells.

Occasional, frequent or common. Open or shaded places,
usually in rocky ground. Late April—June.

The var. *FLAVIFLORA* (Tenney) Britton (yellow-flowered)
sometimes occurs.

***Aquilegia vulgaris* L. (common).**

Garden or European Columbine. Blue Bells. Cock's-foot.

Rare. Escaped from gardens to roadsides and waste places:
Lebanon (Graves), West Hartford (H. S. Clark & Bissell),
Oxford (Harger), Milford, Westport and Woodbury (Eames
& C. C. Godfrey), Norfolk (Weatherby). Mid-May—June.
Adventive from Europe.

The herb is medicinal.

DELPHINIUM L. Larkspur.***Delphinium Consolida* L. (classical name).**

Garden or Field Larkspur. Dolphin Flower. Lark-heel.
Knight's Spur.

Rare. Waste grounds: Windham (Bissell), Bridgeport
and Fairfield (Eames), Middlebury (Harger). July—Sept.
Fugitive or adventive from Europe.

The herb and seeds are medicinal. The leaves are believed
to be poisonous to stock.

***Delphinium Ajacis* L. (from Ajax, Greek legendary hero).**

Larkspur. Rocket Larkspur.

Rare. Escaped from gardens into waste land and fields:
New London (Graves), Bridgeport and Fairfield (Eames),
Weston (Eames & C. C. Godfrey). Mid-June—Aug. Ad-
ventive from Europe.

CIMICIFUGA L. Bugbane.***Cimicifuga racemosa* (L.) Nutt. (having racemes).**

Black or Rattle Cohosh or Snakeroot. Rattle-top. Squaw-
root.

Rich, often rocky woods. Norfolk, plentiful at one locality.

but probably introduced (Miss M. C. Seymour), Southington, rare or local (Andrews, Bissell), Oxford, common (Harger); and frequent throughout the southwestern part of the state (Eames). Late June—July.

The var. *DISSECTA* Gray (finely cut) occurs with the species at Stratford (Eames).

The rootstock is valued in medicine and is officinal. In cultivation forms a fine background for lower plants in somewhat shaded situations.

ACTAEA L. Baneberry. Cohosh.

Actaea rubra (Ait.) Willd. (red).

Actaea spicata L., var. *rubra* Ait.

Red Baneberry, Cohosh or Snakeroot. Red-beads. Coral-berry. Snake-berry.

Rich, often rocky woods. Rather rare near the coast; occasional elsewhere. May—mid-June; fruit July—Aug.

Worthy of cultivation in a wild garden or rockery. The rootstock and roots are medicinal.

Actaea alba (L.) Mill. (white).

White Baneberry, Cohosh or Snakeroot. White-beads. Necklace-weed.

Rich, often rocky woods. Occasional northward; frequent southward. Mid-May—mid-June; fruit Aug.—Sept.

The rootstock and roots are medicinal. Both this and the preceding species contain irritant principles and are poisonous to stock. The berries of both species are poisonous to mankind.

HYDRASTIS Ellis. Orange-root. Yellow Puccoon.

Hydrastis canadensis L.

Golden Seal. Yellow-root. Turmeric-root. Indian Turmeric or Paint.

Rare. Rocky woods in rich soil: Plainville (J. N. Bishop), Southington (Mrs. E. R. Newell). May.

The rhizome and roots possess valued medicinal properties and are officinal.

MAGNOLIACEAE.   MAGNOLIA FAMILY.

LIRIODENDRON L.   Tulip Tree.

Liriodendron Tulipifera L. (tulip-bearing).

Tulip Tree. Tulip, Hickory or Yellow Poplar. Canoe-wood.

Saddle Tree. Whitewood.

Occasional, local or frequent. Rich woods and openings. June.

One of our largest trees and remarkable for its tall columnar trunk. A beautiful tree for roadside and park planting, rarely attacked by insects. The wood is soft, brittle, easily worked, largely used for interior finish, cabinet work, wooden ware, etc. The inner bark is medicinal.

MENISPERMACEAE.   MOONSEED FAMILY.

MENISPERMUM L.   Moonseed.

Menispermum canadense. L.

Moonseed. Yellow Parilla or Sarsaparilla.

River banks and dry rocky hillsides, in woods or partial shade. Reported only from the western half of the state; occasional near the coast and on trap hills; rare elsewhere. June—early July; fruit Sept.—Oct., or persisting through the winter.

The roots are medicinal and were formerly officinal. Sometimes cultivated.

BERBERIDACEAE.   BARBERRY FAMILY.

PODOPHYLLUM L.   May Apple. Mandrake.

Podophyllum peltatum L. (peltate).

Mandrake. May, Indian, Hog or Devil's Apple. Duck's-foot.

Wild Lemon. Raccoon-berry.

Rare. Roadsides and rich woods, nearly throughout, usually as an escape from cultivation. Mid-May—early June; fruit July—Aug.

The fruit is edible and harmless but disagreeable to many persons. The underground portion is medicinal and officinal and is the source of podophyllin. It is a desirable plant to grow in colonies for spring effects in the wild garden.

CAULOPHYLLUM Michx. Blue Cohosh.

Caulophyllum thalictroides (L.) Michx. (like *Thalictrum*, the Meadow Rue).

Pappoose Root. Squaw-root. Blue Cohosh. Blueberry Root. Blueberry.

Rich rocky woods, especially in moist situations; sometimes in low wooded swamps and openings along the coast. Rare near the coast eastward; occasional or local elsewhere. May; fruit Aug.—Oct., and sparingly persistent through the winter.

The rhizome and roots are of some value medicinally and were formerly officinal.

BERBERIS L. Barberry.

Berberis vulgaris L. (common).

Common Barberry. European Barberry. Pepperidge Bush.

Roadsides, fence-rows and pastures. Frequent or locally common southward, especially near the coast: occasional elsewhere. May—June; fruit Sept.—Oct., partly persistent through the winter. Naturalized from Europe.

The acid fruit is used to make a refreshing drink and for preserving. The bark has medicinal properties and has acquired local reputation as a spring medicine. Its beauty and other desirable qualities make it worthy of cultivation, especially as a hedge-plant.

LAURACEAE. LAUREL FAMILY.**SASSAFRAS** Nees.

Sassafras variifolium (Salisb.) Kuntze (various-leaved).

Sassafras officinale Nees & Eberm.

Sassafras Sassafras Karst.

Sassafras. Saxifrax. Cinnamon-wood. Ague Tree.

Frequent. Dry or moist woods, thickets and fence-rows, and on rocky hillsides. May—mid-June; fruit Sept.

The wood is aromatic, rather soft and brittle, but durable in contact with the soil. The root-bark is medicinal and is used as an ingredient of root beer. It furnishes a volatile oil of agreeable odor and taste, used for flavoring candy, soap,

etc., and as an ingredient of liniments. The bark of the root, the pith and the volatile oil are officinal. The leaves are sometimes chewed to allay thirst.

BENZOIN Fabric. Wild Allspice. Fever Bush.

Benzoin aestivale (L.) Nees (of summer).

Lindera Benzoin Blume.

Benzoin Benzoin Coulter.

Spice, Benjamin or Fever Bush. Wild Allspice. Spice-wood. Snapwood.

Common. Wet woods and thickets. Mid-April — mid-May; fruit Sept.— Oct.

The fragrant bark and the berries are occasionally used medicinally.

PAPAVERACEAE. POPPY FAMILY.

ESCHSCHOLTZIA Cham.

Eschscholtzia californica Cham.

California Poppy.

Rare. Fairfield, a waif in waste ground (Eames). July. Fugitive from the Pacific Coast.

SANGUINARIA L. Bloodroot.

Sanguinaria canadensis L.

Bloodroot. Red or White Puccoon. Red Indian Paint. Red-root.

Rich woods and shaded places, especially in rocky situations. Rare or local near the coast; local, frequent or common elsewhere. April — mid-May.

Flowers sometimes pink. The rootstock is employed in medicine and is officinal.

CHELIDONIUM L. Celandine.

Chelidonium majus L. (greater).

Celandine. Swallow-wort. Tetters-wort. Kill-wart.

Occasional or frequent. Fence-rows, roadsides, crevices of walls and rocky places and waste ground about dwellings, especially in shade. May — June. Naturalized from Europe.

The plant is actively poisonous to stock; is also medicinal, until recently officinal.

PAPAVER L. Poppy.***Papaver somniferum* L. (sleep-bringing).**

Garden or Opium Poppy. Common Poppy.

Rare. Waste ground as an escape from cultivation: Bridgeport (Eames). July. Adventive from the Old World.

Medicinal and extensively cultivated in the East as the source of opium.

***Papaver Rhoeas* L. (classical name for this species).**

Red, Field or Corn Poppy. Corn, Canker or African Rose. Headache.

Rare. Grassland, grain fields and roadsides: Southington (Andrews, Bissell), Stratford (Miss A. E. Carpenter, Eames), Fairfield (Eames). June — mid-July. Fugitive from Europe.

The "Shirley," one of the handsomest of poppies in cultivation, is a form of this species. Known to be poisonous to stock.

***Papaver dubium* L. (doubtful).**

Field or Smooth-fruited Poppy.

Rare. Waste ground: Fairfield (Eames), Westport (R. Thaxter, Miss A. E. Carpenter). May. Adventive from Europe.

ARGEMONE L. Prickly Poppy.***Argemone alba* Lestib. (white).**

White Prickly Poppy.

Rare. East Lyme, one plant in newly seeded grassland (Miss A. M. Ryon). June—July. Fugitive from the southwest.

***Argemone mexicana* L.**

Mexican or Prickly Poppy. Flowering or Yellow Thistle. Devil's Fig. Bird-in-the-Bush.

Rare. Roadside in New Haven (D. C. Eaton). July—Aug. Fugitive from tropical America.

FUMARIACEAE. FUMITORY FAMILY.**ADLUMIA Raf. Climbing Fumitory.*****Adlumia fungosa* (Ait.) Greene (spongy).**

Adlumia cirrhosa Raf.

Mountain or Wood Fringe. Alleghany or Canary Vine. Fairy Creeper.

Rocky hillsides, especially in shaded places or in woods. Rare in the eastern half of the state and near the coast westward: Waterford (Graves), Guilford (G. H. Bartlett), New Haven (J. A. Allen), Weston (Miss E. L. Smith). Local or occasional northward in the western half of our area. July — Sept.

A highly ornamental plant and occasionally cultivated.

DICENTRA Bernh.

Dicentra Cucullaria (L.) Bernh. (hood-like).

Bicuculla Cucullaria Millsp.

Dutchman's, Kitten or Little-boy's Breeches. White Ear-drops or Hearts. Soldier's Cap. Boys-and-Girls.

Rocky woods in rich soil. Rare in the southeastern part of the state: Franklin (Graves). Local, occasional or frequent elsewhere. April — mid-May.

Dicentra canadensis (Goldie) Walp.

Bicuculla canadensis Millsp.

Squirrel or Turkey Corn. Girls-and-Boys.

Rare or local. Moist rich soil of woodland hillsides among rocks: Bozrah (Mrs. E. E. Rogers), Plainville (J. N. Bishop), Torrington (Bissell). April — mid-May.

The tubers are medicinal.

CORYDALIS Medic.

Corydalis sempervirens (L.) Pers. (evergreen).

Corydalis glauca Pursh.

Capnoides sempervirens Borkh.

Pale or Pink Corydalis.

Occasional. Thin soil and crevices of dry exposed ledges, and in recent clearings. Mid-May — Oct.

FUMARIA L. Fumitory.

Fumaria officinalis L. (of the shops).

Common or Hedge Fumitory. Modesty.

Rare. Escaped from cultivation to waste places, roadsides and about old gardens: New Haven (D. C. Eaton), Southington (Andrews), Waterbury (A. E. Blewitt), Oxford (Harger), Fairfield and Newtown (Eames), Stamford (W. H. Hoyt). Mid-May — Sept. Adventive from Europe.

Formerly, and rarely even now, cultivated for its reputed medicinal properties.

CRUCIFERAE.   MUSTARD FAMILY.

DRABA L.

Draba verna L. (of spring; vernal).

Whitlow or Vernal Whitlow Grass. Shad-flower.

Dry roadsides, fields and cultivated ground. Rare in northern districts: East Hartford (J. O. Goodwin), Hartford (A. W. Driggs). Occasional throughout the southern part of the state. April — May. Naturalized from Europe.

Formerly possessed some reputation for the cure of whitlow.

Draba caroliniana Walt.

Whitlow Grass.

Rare. Dry sterile soil: Montville and Norwich (W. A. Setchell), Waterford (Graves), East Haven (E. B. Wilson), Oxford (Harger), Kent (H. Mosher). Mid-April — May.

BERTEROA DC.

Berteroa incana (L.) DC. (hoary).

Hoary Alyssum.

Rare or local. Waste places and fields: Norwich (Mrs. E. E. Rogers), Putnam (Harger), Guilford (G. H. Bartlett), East Windsor (Bissell), Plainville (J. N. Bishop), Southington (Andrews, Bissell), Naugatuck (A. E. Blewitt), Bridgeport and Westport (Eames), Wilton (Miss A. E. Carpenter). June — Aug. Adventive from Europe.

LOBULARIA Desv.   Sweet Alyssum.

Lobularia maritima (L.) Desv. (of the seaside).

Alyssum maritimum Lam.

Koniga maritima R. Br.

Sweet Alyssum. Sweet Allison. Madwort. Snowdrift.

Rare. Escaped from cultivation to roadsides and waste places: East Hartford (Weatherby), Southington (Andrews), Bridgeport (Eames). July — Nov. Fugitive from Europe.

ALYSSUM L.

Alyssum alyssoides L. (like Alyssum).

Alyssum calycinum L.

Small Alyssum.

Rare. Roadsides and wastes in dry ground: Branford (T. M. Prudden), East Haven (Eames), New Haven (Harger), Southington (Andrews, Bissell). May—June. Fugitive or adventive from Europe.

Alyssum saxatile L. (growing among rocks).

Golden-tuft.

Rare. Griswold, escaped from a garden to field (E. F. Burleson). June—July. Native of Europe.

THLASPI L. Penny Cress.

Thlaspi arvense L. (of cultivated land).

Field Penny or Bastard Cress. Dish, Treacle or Mithridate Mustard.

Rare. Waste places: Norwich (Mrs. E. E. Rogers), East Hartford (Weatherby), Southington and Plainville (Bissell), Waterbury (J. M. Richardson, A. E. Blewitt), Naugatuck (A. E. Blewitt), Bridgeport (J. Otis), New Milford (E. H. Austin). May—June. Fugitive or adventive from Europe.

LEPIDIUM L. Peppergrass. Pepperwort.

Lepidium virginicum L.

Wild Peppergrass. Bird's Pepper. Tongue Grass.

Common. Dry roadsides, fields and waste grounds. June—Sept.

Lepidium apetalum Willd. (without petals).

Lepidium intermedium of Gray's Manual, ed. 6.

Bird's Pepper. Tongue Grass. Wild Peppergrass.

Frequent or common. Fields and roadsides. June—Aug. Naturalized from Europe or the West.

Lepidium ruderales L. (growing among rubbish).

Roadside Peppergrass.

Rare. Bridgeport, in waste ground (Eames). June. Fugitive from Europe.

Lepidium sativum L. (sown).

Garden Cress. Garden or Golden Peppergrass. Poor Man's Pepper.

Rare. Southington, about an old garden (Andrews); Salisbury, in a poultry yard and probably introduced with grain (A. V. Osmun). June—July. Fugitive from Europe. Sometimes cultivated as a salad plant.

Lepidium campestre (L.) R. Br. (of fields).

Field, Bastard or Cow Cress. Mithridate Mustard. Poor Man's Pepper.

Rare or occasional. Cultivated fields, sandy roadsides and waste places. June. Adventive from Europe.

IBERIS L.**Iberis amara** L. (bitter).

Candytuft. Bitter or Annual Candytuft. Clown's Mustard.

Rare. Escaped from cultivation to waste places: Southington (Andrews), Bridgeport (Eames). July—Aug. Fugitive from Europe.

CAPSELLA Medic. Shepherd's Purse.**Capsella Bursa-pastoris** (L.) Medic. (shepherd's pouch).

Bursa Bursa-pastoris Britton.

Shepherd's Purse or Sprouts. Mother's Heart. Witches' Pouches.

Common. Cultivated ground, fields, roadsides and waste places. April—Oct. Naturalized from Europe.

Valued as a pot-herb because of its earliness. A bad weed in cultivated ground. Medicinal.

CAMELINA Crantz. False Flax.**Camelina sativa** (L.) Crantz (sown).

False or Dutch Flax. Gold-of-Pleasure. Cheat. Myagrum.

Rare. Oxford, in grain fields (Harger). June—July. Fugitive from Europe.

This, like the following species, was formerly frequent among flax, of which it was believed to be a transmuted or degenerate form.

Camelina microcarpa Andr. (small-fruited).*Camelina silvestris* Wallr.

False or Dutch Flax. Gold-of-Pleasure. Cheat. Myagrum.

Rare. Roadsides, grassland and grain fields: New London (Graves), Southington (Andrews), Waterbury and Naugatuck (A. E. Blewitt), Oxford (Harger), Fairfield (Eames), Litchfield (Miss E. H. Thompson, Bissell). May — July. Fugitive from Europe.

NESLIA Desv. Ball Mustard.**Neslia paniculata** (L.) Desv. (panicked).

Ball Mustard.

Rare. Waste ground: Bridgeport (Eames), Litchfield (Miss E. H. Thompson). June — July. Fugitive from Europe.

CAKILE Ludwig. Sea Rocket.**Cakile edentula** (Bigel.) Hook. (toothless).*Cakile americana* Nutt.

American Sea Rocket. Sea Cole or Rocket.

Frequent or common on the shores of the Sound and of tidal rivers and creeks. Mid-June — Oct.

RAPHANUS L. Radish.**Raphanus Raphanistrum** L.

Wild Radish. Jointed or White Charlock or Chadlock. Charlock. Chadlock.

Occasional, frequent or common. Cultivated ground and waste places. June — Oct. Naturalized from Europe.

Sometimes very troublesome as a weed.

Raphanus sativus L. (sown).

Radish. Garden Radish.

Rare. Cultivated or waste ground: Southington (Bissell, Andrews), Bridgeport and Fairfield (Eames). June — Oct. Fugitive from Europe.

BRASSICA L. Mustard. Turnip.**Brassica alba** (L.) Boiss. (white).*Sinapis alba* L.

White Mustard.

Rare or local. Waste places: Waterbury (A. E. Blewitt), Bridgeport, in several places and plentiful in one field (I. F. Moore, Eames). June — mid-Aug. Adventive from Europe.

The seeds are well known as a condiment and rubefacient, and are sometimes used to preserve cider in a sweet condition. Has been cultivated for at least 2000 years.

***Brassica arvensis* (L.) Kuntze** (of cultivated ground).

Brassica Sinapistrum Boiss.

Charlock. Chadlock. Cadlock. Kedlock. Kerlock. Wild. Corn or Bastard Mustard. Field or Corn Kale.

Occasional or frequent. Waste or cultivated ground. June — July. Naturalized from Europe.

Sometimes a bad weed.

***Brassica juncea* (L.) Cosson** (like *Juncus*, the Rush).

Indian or Chinese Mustard.

Cultivated fields and waste places. Frequent in the vicinity of the coast; occasional, local or rare elsewhere. June — Oct. Naturalized from Asia.

The seeds are used like those of White and Black Mustard, and the young leaves for greens. A bad weed in grain fields where it occurs.

***Brassica japonica* Siebold.**

Curled or Pot-herb Mustard. California Peppergrass.

Rare. Escaped from cultivation in garden soil at Southington (Andrews). June — Sept. Fugitive from Asia.

The soft, thin leaves make excellent "greens."

***Brassica nigra* (L.) Koch** (black).

Black Mustard. Cadlock. Kedlock. Kerlock.

Occasional or frequent. Waste ground and roadsides. June — Sept. Naturalized from Europe.

The young plants are sometimes used as a pot-herb. The seeds are well known as a condiment and rubefacient and are officinal.

***Brassica campestris* L.** (of fields).

Rutabaga.

Occasional. Cultivated ground and waste places. Mid-May — July. Adventive from Europe.

Sometimes a bad weed. Extensively cultivated for its roots.

Brassica Napus L. (classical name).

Rape.

Rare. Fields and waste ground. June—July. Fugitive from Europe.

Sometimes sown for forage.

Brassica Rapa L. (classical name).

Turnip.

Occasional. Waste places and cultivated ground. June—July. Fugitive from Europe.

Extensively cultivated as a vegetable.

Brassica oleracea L. (suitable for a pot-herb).

Cabbage.

Rare. Cultivated or waste ground as an escape from cultivation. June. Fugitive from Europe.

Well known as a vegetable.

DIPLLOTAXIS DC.

Diplotaxis muralis (L.) DC. (of walls).

Sand Rocket or Mustard.

Rare. Cultivated or waste ground: Southington (Andrews & Bissell), Oxford (Harger), Stamford (W. H. Hoyt). June—Sept. Fugitive from Europe.

Diplotaxis tenuifolia (L.) DC. (slender-leaved).

Wall Rocket or Mustard.

Local. Plentiful in a sandy waste in Bridgeport (Eames), and about chalk piles in Stamford (W. H. Hoyt). July—Sept. Naturalized from Europe.

CONRINGIA Adans. Hare's-ear Mustard.

Conringia orientalis (L.) Dumort. (of the Orient).

Hare's-ear.

Rare. Waste places: Fairfield (Eames), New Milford (E. H. Austin). June. Fugitive from the Northwest or from Europe.

ALLIARIA Adans.   Garlic Mustard.

Alliaria officinalis Andr. (of the shops).

Alliaria Alliaria Britton.

Sisymbrium Alliaria Scop.

Hedge Garlic.

Rare. Waste ground: Chester (Mrs. S. I. Smith), Naugatuck (A. E. Blewitt), Westport (Harger). May—June. Fugitive from Europe.

SISYMBRIUM L.   Hedge Mustard.

Sisymbrium officinale (L.) Scop. (of the shops).

Bank Cress.

Local. Fairfield, where it is plentiful in one locality in waste ground (Eames). Mid-May—Oct. Adventive from Europe.

Sisymbrium officinale (L.) Scop., var. *leiocarpum* DC.
(smooth-fruited).

Sisymbrium officinale of Manuals.

Bank Cress.

Common. Fields, roadsides and waste places. Mid-May—Oct. Naturalized from Europe.

Sisymbrium Loeselii L.

Rare. In mill waste at Naugatuck (B. B. Bristol), New Milford (Harger & Blewitt). July. Adventive from Europe.

Sisymbrium altissimum L. (tallest).

Tumble Mustard.

Rare or occasional. Waste places about roadsides and along railroads. June—Aug. Adventive from Europe or the West.

Sisymbrium canescens Nutt. (growing hoary).

Sophia pinnata Howell.

Tansy Mustard. Hoary Hedge Mustard.

Rare. Waste ground: Clinton (J. H. Sperry, 1884). May. Fugitive from the South.

Sisymbrium Sophia L.

Sophia Sophia Britton.

Flixweed. Herb Sophia.

Rare. Naugatuck, in waste ground (A. E. Blewitt). June—Aug. Fugitive from Europe.

Sisymbrium Thalianum (L.) J. Gay.

Stenophragma Thaliana Čelak.

Thale, Mouse-ear or Wall Cress.

Rocky banks, ledges and dry or sandy fields. Rare at Norwich (Mrs. E. E. Rogers), and at East Haven (Harger); frequent along the Housatonic River at Oxford (Harger), and occasional near the coast throughout the southwestern part of the state. Mid-April—June. Naturalized from Europe.

HESPERIS L. Rocket.

Hesperis matronalis L. (suitable to a matron).

Dame's or Sweet Rocket. Damask or Dame's Violet. Summer Lilac.

Rare. Escaped from gardens to roadsides and waste places. Mid-May—July. Adventive from Europe.

ERYSIMUM L. Treacle Mustard.

Erysimum cheiranthoides L. (like *Cheiranthus*, the Wall-flower).

Wormseed or Treacle Mustard.

Rare or local. Cultivated and waste ground or rocky woods: Southington (Andrews), East Hartford (C. C. Hammer), Waterbury (Mrs. C. H. Lyman, Jr.), Salisbury (Mrs. C. S. Phelps). June—July. Fugitive from Europe or farther west, except at Salisbury where it seems native.

RADICULA Hill. Water Cress.

Radicula Nasturtium-aquaticum (L.) Britten & Rendle (classical name).

Nasturtium officinale R.Br.

Roripa Nasturtium Rusby.

Water Cress. True Water Cress. Crashes. Brooklime.

In springs, ditches and along streams. Local and in all degrees of abundance but in general rare eastward and frequent westward. Late May—Oct. Naturalized from Europe.

Introduced as a salad plant and worthy of propagation for family use. Flowers rarely purple.

Radicula sylvestris (L.) Druce (of woods).

Nasturtium sylvestre R.Br.

Roripa sylvestris Bess.

Yellow Cress. Yellow Water Cress. Creeping Yellow Cress.

Local and rare to frequent or locally common. Moist ground along rivers, and in fields, roadsides and waste places; especially common in the upper Connecticut Valley. May — July, even Oct. Naturalized from Europe.

Radicula palustris (L.) Moench (of marshes).

Nasturtium palustre DC.

Roripa palustris Bess.

Yellow Cress. Marsh Cress.

Occasional, rare or local. Wet meadows, cultivated or waste ground, ditches and banks of streams. June — Sept.

Radicula palustris (L.) Moench, var. *hispida* (Desv.) Robinson (rough-hairy).

Nasturtium palustre DC., var. *hispidum* Gray.

Roripa hispida Britton.

Hairy Yellow Cress.

Occasional or frequent. Borders of streams and ponds, in ditches and wet places. June — Aug.

Radicula Armoracia (L.) Robinson (classical name for this species).

Nasturtium Armoracia Fries.

Roripa Armoracia Hitchc.

Horseradish.

Occasional throughout as an escape from gardens. Wet fields, waste places, roadsides and ditches. Mid-May — June. Naturalized from Europe.

Roots the source of a valued condiment.

BARBAREA R. Br. Winter Cress.

Barbarea vulgaris R. Br. (common).

Barbarea Barbarea MacM.

Common Winter, Bitter, Yellow, or Rocket Cress. Yellow Rocket.

Meadows, waste places and along streams, usually in moist soil. Frequent or common except in the southeastern part of the state where it is rare. May—June. Naturalized from Europe.

Sometimes used as a salad plant.

Barbarea stricta Andrz. (straight and upright).

Barbarea vulgaris R.Br., var. *stricta* Gray.

Winter Cress.

Occasional or frequent. Roadsides, waste places, fields and along streams. May—June.

Barbarea verna (Mill.) Asch. (of spring).

Barbarea praecox Sm.

Early Winter or Belle Isle Cress. Scurvy Grass.

Rare. Cultivated fields, waste places and roadsides: Waterford (Graves), New Haven and Oxford (Harger), Milford, Stratford, Bridgeport and Fairfield (Eames). May—mid-June. Adventive from Europe.

IODANTHUS Torr. & Gray.

Iodanthus pinnatifidus (Michx.) Steud. (feather-cleft).

Thelypodium pinnatifidum Wats.

Purple Rocket.

Rare. Middletown, border of pond (M. Hitchcock, 1879). June. Fugitive from the West.

LUNARIA L. Moonwort.

Lunaria annua L. (annual).

Honesty. Satin-flower. Moonwort. Money-plant.

Rare. Westport, at Green's Farms, in a dooryard but apparently self-sown (C. L. Pollard). Aug. Fugitive from Europe.

Sometimes cultivated for winter bouquets.

DENTARIA L. Toothwort. Pepper-root.

Dentaria diphylla Michx. (two-leaved).

Pepper-root. Crinkle-root. Tooth-root. Toothwort.

Rich, moist, wet or springy woods, banks and more open

places. Occasional or local except near the coast in the southeastern part of the state where it has not been reported. Late April — late May.

The fresh rootstocks are sometimes eaten as a relish.

Dentaria maxima Nutt. (greatest).

Large Pepper-root or Toothwort.

Rare. Windsor, plentiful in rich soil on banks and alluvial bottoms beside a woodland stream (Eames). Late April — mid-May.

Dentaria incisifolia Eames (cut-leaved).

Dentaria incisa Eames, not Small.

Rare. Rich, damp, hillside woods near the Housatonic River in Sherman (E. H. Austin & Eames). Late April — mid-May.

Dentaria laciniata Muhl. (slashed).

Cut-leaved Pepper-root or Toothwort.

Rare or local. Moist to rather dry soil of rich woods and more or less shaded banks, throughout, but especially rare in the southeastern part of the state: Norwich (Mrs. E. E. Rogers), Old Lyme (Bissell). Mid-April — early May.

Dentaria anomala Eames (anomalous).

Rare. Moist, rich woods and banks: Plainville (Bissell), Orange (Harger). Late April — early May.

This species occurs at stations where *Dentaria diphylla* and *Dentaria laciniata* grow together, and is possibly a hybrid.

CARDAMINE L. Bitter Cress.

Cardamine bulbosa (Schreb.) BSP. (bulbous).

Cardamine rhomboidea DC.

Spring or Bitter Cress.

Wet woods and meadows. Rare near the coast in the southeastern part of the state; occasional elsewhere. Mid-May — mid-June.

Cardamine Douglassii (Torr.) Britton.

Cardamine rhomboidea DC., var. *purpurea* Torr.

Cardamine purpurea Britton.

Cardamine bulbosa BSP., var. *purpurea* BSP.

Spring or Purple Cress.

Springy places and swamps in woods or shaded situations. Rare at Newtown (I. P. Blackman, J. Pettibone); locally plentiful in New Milford, Sherman and Kent (E. H. Austin & Eames); many plants at one locality in North Canaan (Bissell). Late March — early May.

***Cardamine pratensis* L.** (of meadows).

Cuckoo Flower. Ladies' Smock.

Rare. Bristol, about a garden but formerly plentiful in a meadow (W. A. Terry), Litchfield, in a lawn (Miss E. H. Thompson), Norfolk (Miss M. C. Seymour), Salisbury, margin of a lake and small stream (Mrs. C. S. Phelps). May. At least in part adventive from farther north.

***Cardamine parviflora* L.** (small-flowered).

Cardamine hirsuta L., var. *sylvatica* of some American authors.

Cardamine arenicola Britton.

Small Bitter Cress.

Occasional or local. Ledges, woods or open situations in barren or sterile ground. Mid-April — June.

***Cardamine pennsylvanica* Muhl.**

Cardamine hirsuta of Gray's Manual ed. 6 in great part.

Bitter Cress. Brook, Land or Lamb's Cress.

Frequent. About springs, along brooks and in wet shaded places. May — June.

Sometimes used as a salad plant and to some extent gathered for market.

ARABIS L. Rock Cress.

***Arabis lyrata* L.** (lyre-shaped).

Low Rock Cress. Wall Cress.

Rocks, ledges, banks and sandy places, in dry ground. Occasional in most districts but not reported from the southeastern part of the state. May — June.

***Arabis glabra* (L.) Bernh.** (smooth).

Arabis perfoliata Lam.

Tower Mustard or Cress.

Rare. Fields and meadows: Norwich (W. A. Setchell), Windsor (A. W. Driggs), Farmington (Andrews & Bissell, Weatherby), Southbury and New Milford (Harger), Bridgeport (Eames). June.

Arabis Drummondi Gray.

Arabis confinis Wats., in great part.

Rare. Dry wooded hillsides: Montville, Franklin, Ledyard and Old Lyme (Graves), Lisbon (Harger), Branford (A. L. Winton). West Hartford and Bloomfield (A. W. Driggs), Canaan (C. K. Averill). May—July.

Arabis hirsuta (L.) Scop. (hairy).

Hairy Rock Cress. Wall Cress.

Rare. Rocky open woods and sandy ground: Old Lyme (Graves), Bolton (A. W. Driggs), Oxford (Harger), Canaan (C. K. Averill), Salisbury (Mrs. C. S. Phelps). Mid-May—early June.

Arabis laevigata (Muhl.) Poir. (smoothed).

Smooth Rock Cress. Wall Cress.

Rocky woods and more open places. Rare in the southeastern part of the state: Norwich (Mrs. E. E. Rogers), Franklin (Graves). Occasional or frequent elsewhere. Mid-April—May.

Arabis canadensis L.

Sickle-pod. Turkey-pod.

Occasional. Dry, rich, rocky and rather open woods. June—Aug.

CAPPARIDACEAE. CAPER FAMILY.

POLANISIA Raf.

Polanisia graveolens Raf. (strong-smelling).

False Mustard. Clammy-weed.

Rare. Gravelly and sandy shores of the Hockanum River at East Hartford (Weatherby), and of the Connecticut River at Hartford (A. W. Driggs). July—Aug.

Polanisia trachysperma Torr. & Gray (rough-seeded).

Rare. Alluvial soil, Glastonbury (Mrs. F. W. Starmer),

gravelly and sandy margin of brook, Salisbury (Mrs. C. S. Phelps & Weatherby), Sharon (H. S. Clark). Aug.—Sept. Probably introduced from the West.

CLEOME L.

Cleome spinosa L. (prickly).

Spider-flower. Prickly Cleome.

Rare. Escaped from cultivation to waste grounds: Bridgeport and Fairfield (Eames), Norwalk (G. P. Ells). July—Sept. Fugitive from tropical America.

RESEDACEAE. MIGNONETTE FAMILY.

RESEDA L. Mignonette. Dyer's Rocket.

Reseda luteola L. (yellowish).

Dyer's Weed, Weld, or Rocket. Yellow-weed.

Rare. Roadsides and waste places: Guilford (W. R. Dudley), New Haven (O. Harger), Monroe (H. C. Beardslee). June—July. Fugitive from Europe.

Reseda lutea L. (yellow).

Crambling Rocket.

Rare. Roadsides, fields and waste places: Preston (E. F. Burleson), East Windsor (Bissell), Bridgeport (Eames), North Canaan (M. B. Toby, Bissell), Salisbury (Mrs. C. S. Phelps, A. V. Osmun). May—June. Adventive from Europe.

Reseda odorata L. (fragrant).

Common or Garden Mignonette.

Rare. Waste ground in Southington (Andrews), and Fairfield (Eames). July—Aug. Fugitive from North Africa.

Reseda alba L. (white).

White or Upright Mignonette.

Rare. Escaped from cultivation to waste ground in Waterbury (A. E. Blewitt), and Bridgeport (Eames). July—Sept. Fugitive from Europe.

SARRACENIACEAE. PITCHER-PLANT FAMILY.

SARRACENIA L.

Sarracenia purpurea L. (purple).

Side-saddle Flower. Pitcher-plant. Huntsman's, Adam's.

Indian or Water Cup. Indian Pitcher. Dumb Watches.

Occasional, local or frequent. Sphagnum bogs or sometimes in wet meadows. Late May—June.

The root and leaves are medicinal.

DROSERACEAE. SUNDEW FAMILY.

DROSERA L. Sundew.

Drosera rotundifolia L. (round-leaved).

Round-leaved Sundew. Dew-plant.

Occasional or frequent. Bogs, wet meadows and sandy swamps, especially in sphagnum. July—mid-Aug.

The plant is medicinal.

Drosera longifolia L. (long-leaved).

Drosera intermedia Hayne.

Drosera intermedia Hayne, var. *americana* DC.

Long-leaved Sundew. Dew-plant.

Rare, local or occasional. Sphagnum bogs and swamps. Late June—Aug.

PODOSTEMACEAE. RIVER WEED FAMILY.

PODOSTEMUM Michx. River Weed.

Podostemum ceratophyllum Michx. (horny-leaved).

River Weed. Thread-foot.

On rocks, stones and gravel in shallow running water. Rare in most districts: Shetucket River in Sprague and Franklin (Graves), Killingworth (F. W. Hall), Hartford (D. C. Eaton), Windsor (Harger). Occasional in Oxford (Harger), Newtown (Eames), and throughout the southwestern part of the state. Mid-June—Aug.; fruit July—Sept.

CRASSULACEAE. ORPINE FAMILY.

PENTHORUM L. Ditch Stonecrop.

Penthorum sedoides L. (like *Sedum*, the Stonecrop).

Ditch or Virginia Stonecrop.

Frequent. Ditches, wet places and on muddy shores. July
— Aug.

The plant is medicinal.

TILLAEA L.

Tillaea aquatica L. (aquatic).*Tillaea simplex* Nutt.

Pygmy Weed.

Rare or local. On tidal mud of rivers and creeks: New Haven, plentiful about the upper reaches of tidewater in Mill River, and Milford, sparingly along Beaver Creek (Eames). Mid-June — July.

SEDUM L. Stonecrop. Orpine.

Sedum acre L. (acrid or biting).

Mossy or Biting Stonecrop. Golden Moss or Chain.

Local. Escaped from cultivation to roadsides, banks, rocky places and walls in all quarters of the state and plentiful at some stations. Mid-June — July. Naturalized from Europe.

Sedum ternatum Michx. (in threes; referring to the arrangement of the leaves).

Wild Stonecrop.

Rare. Escaped from gardens to roadsides and waste places: Guilford (W. H. Rowland), East Haddam (Weatherby), Windsor (Bissell), Cheshire and Oxford (Harger), Norfolk (Miss M. C. Seymour), Kent and New Milford (Eames & E. H. Austin), Milford (Eames), Stamford (W. H. Hoyt). May. At least in part adventive from the South.

Sedum triphyllum (Haw.) S. F. Gray (three-leaved).*Sedum purpureum* Gray's Manual ed. 7.*Sedum Telephium* Gray's Manual ed. 6, not L.

Orpine. Garden Orpine. Live-forever. Live-long. Aaron's Rod. Bag-leaves. Witches' Money-bags. Life-of-Man.

Frequent. Dry or moist roadsides, fields, thickets and about old dwellings. Aug.—Sept. Naturalized from Europe. Rarely seen in flower.

SEMPERVIVUM L. Houseleek.

Sempervivum tectorum L. (of dwellings).

Houseleek. Hen-and-chickens.

Rare. Milford, long persistent and spreading from former cultivation (Eames). July—Aug. Introduced from Europe.

SAXIFRAGACEAE. SAXIFRAGE FAMILY.

SAXIFRAGA L. Saxifrage.

Saxifraga pennsylvanica L.

Swamp Saxifrage.

Swamps and wet meadows. Rare near the coast, occasional or frequent elsewhere. May—June.

The form with crimson petals has been collected at New Milford by Miss S. R. Armington.

Saxifraga virginensis Michx.

Saxifrage. Early or Spring Saxifrage. Mayflower.

Frequent or common. Ledges, banks and in rocky woods. April—early June.

A form with double flowers occurs at Kent (H. Mosher).

TIARELLA L. False Miterwort.

Tiarella cordifolia L. (having heart-shaped leaves).

Foam-flower. False Miterwort. Coolwort.

Rich, wet and often rocky woods. Rare or local in most districts: North Branford (F. W. Hall), New Haven (D. C. Eaton), Bridgeport (Eames), Torrington (Mrs. C. S. Phelps), Kent (C. K. Averill). Frequent in Granby and northern Litchfield County. May—mid-June.

A beautiful plant well worthy of cultivation. Herb medicinal.

HEUCHERA L. Alum Root.

Heuchera americana L.

Common Alum Root. American Sanicle.

Woods, banks and fence-rows. Occasional in the Housatonic Valley in Litchfield County, and frequent or locally common in the southwestern part of the state, extending eastward as far as New Haven (D. C. Eaton), Hamden (J. S. Smith), Plainville (J. N. Bishop). Late May — early July.

The roots are very astringent and are of value medicinally.

MITELLA L. Miterwort. Bishop's Cap.

Mitella diphylla L. (two-leaved).

Miterwort. Bishop's Cap. Fringe or Fairy Cup.

Moist woods and shaded banks. Frequent or locally common northward in the western part of the state; rare in northeastern Connecticut and near the coast westward; not reported from New London County. Late April — May.

A good plant for cultivation in rocky shaded places.

Mitella prostrata Michx. (prostrate).

Rare. Moist rich woods: New Milford, one plant only (C. K. Averill & E. H. Austin). Late April — May.

Very little is known of *Mitella prostrata*. As this plant was found growing where *Mitella diphylla* is plentiful, it is probable that the specimen represents an aberrant form of that species, even though it is a good match for the type specimen of *Mitella prostrata*.

Mitella nuda L. (naked).

Rare. Wet mossy woods: Litchfield (W. Buell), Winchester and Salisbury, several localities (Mrs. C. S. Phelps). May — June.

CHRYOSPLENIUM L. Golden Saxifrage.

Chrysosplenium americanum Schwein.

Water Carpet. Golden Saxifrage.

Frequent or common. Wet or swampy woods, springs and rills. Mid-March — June.

PARNASSIA L. Grass of Parnassus.

Parnassia caroliniana Michx.

Grass of Parnassus.

Bogs and wet meadows. Frequent or locally common ex-

cept in the southwestern part of the state, but not reported near the coast west of New Haven. Aug.—Sept.

Worthy of cultivation and may be grown in any sunny or partly shaded moist or wet situation. The plant is medicinal.

PHILADELPHUS L. Mock Orange. Syringa.

Philadelphus inodorus L. (without fragrance).

Large-flowered Syringa.

Rare. Escaped about an old nursery at Wethersfield (H. S. Clark & Bissell). June. Fugitive from the South.

Philadelphus coronarius L. (pertaining to a crown).

Syringa. Mock Orange. Orange-flower Tree.

Rare. Escaped from cultivation to roadsides and waste places: Bridgeport and Westport (Eames). June. Native of Europe.

Philadelphus pubescens Loisel. (downy).

Syringa.

Rare. Escaped from cultivation to pasture at Wethersfield (H. S. Clark & Bissell). June. Adventive from the South.

DEUTZIA Thunb.

Deutzia scabra Thunb. (rough).

Deutzia.

Rare. Wethersfield, escaped about an old nursery (H. S. Clark & Bissell), New London, brush lot near cemetery (Graves). June. Fugitive from Asia.

RIBES L. Currant. Gooseberry.

Ribes Cynosbati L. (classical name).

Prickly Gooseberry. Dogberry.

Rocky woods and thickets. Occasional in northern Litchfield County, extending southward as far as New Milford (Eames & E. H. Austin) and eastward to New Hartford (Bissell). It occurs also in Stafford and Tolland (A. W. Driggs). May; fruit July.

Ribes gracile Michx. (slender).

Ribes missouriense Nutt.

Missouri Gooseberry.

Rare. Roadside fence-row, Norwalk (Eames & C. C. Godfrey). May. Probably introduced from the West.

Ribes rotundifolium Michx. (round-leaved).

Wild Gooseberry.

Rare. Rocky woods: Meriden (W. H. Patton), Southington and Salisbury (Bissell). May—July.

Ribes oxyacanthoides L. (Hawthorn-like).

Northern, Smooth or Wild Gooseberry.

Occasional. Rocky woods and thickets, roadsides and swamps. May.

Parent of some forms well known in cultivation.

Ribes Grossularia L. (*grossulus*, a small unripe fig).

Ribes Uva-crispa L.

Garden, Common or European Gooseberry. Teaberry.

Rare. Escaped from cultivation to roadsides, fence-rows and waste places: Stonington and Groton (Graves), Old Lyme (Bissell), Southington (Andrews & Bissell), Orange, Stratford and Fairfield (Eames), New Milford (Eames & E. H. Austin). Late April—May; fruit July. Native of Europe.

Cultivated in many kitchen gardens for its fruit, which is used for tarts and jam, or in its choicer varieties for its fine flavor uncooked.

Ribes americanum Mill.

Ribes floridum L'Hér.

Wild Black, Black or Flowering Currant. Quinsy-berry.

Occasional or frequent. Native in moist woods or thickets except in the southern part of the state, where it occurs as an escape from cultivation in fence-rows, roadsides and waste places. May—mid-June; fruit mid-July—Aug.

The fruit is edible but rather insipid.

Ribes nigrum L. (black).

Garden or European Black Currant.

Rare. Bethany, escaped from cultivation to waste ground (Eames). May—June. Fugitive from Europe.

Ribes lacustre (Pers.) Poir. (of lakes or ponds).

• Swamp Black Currant. Swamp Gooseberry.

Rare. Meriden, at Lamentation Mt. (G. H. Cornwall,

1842), Salisbury, wet cold woods about Bingham Pond (Bissell). May—June.

Ribes prostratum L'Hér. (prostrate).

Skunk, Fetid or Mountain Currant.

Rare. Swampy woods: Colebrook (Weatherby), Norfolk (J. H. Barbour), Salisbury (Mrs. C. S. Phelps). May—June.

Ribes vulgare Lam. (common).

Ribes rubrum of Britton's Manual in part.

Garden Red or Red Currant. Wine Currant.

Occasional. Escaped from cultivation to fence-rows, roadsides and waste places throughout; also occurs in rocky woods and on borders of swamps in wild and remote places in the northern part of the state, appearing as if native in such situations, although the species is regarded as introduced in America. Late April—May; fruit mid-June—July. Naturalized from Europe.

A well known small fruit in cultivation. It is an interesting fact that in Southington the same plant is growing in the same rock crevice where it was fifty-five years ago (Andrews).

Ribes odoratum Wendland (fragrant).

Ribes aureum of authors, not Pursh.

Missouri, Buffalo, Flowering, Clove, Sweet or Golden Currant.

Rare. Escaped from cultivation to roadsides and about old houses: Montville (Graves), Scotland (G. Waldo), Oxford (Harger), Easton and Danbury (Eames), New Milford (Eames & E. H. Austin). Mid-April—May; fruit late July—Aug. Adventive from the West.

The fruit is edible. Often cultivated as an ornamental shrub.

HAMAMELIDACEAE. WITCH-HAZEL FAMILY.

HAMAMELIS L. Witch-hazel.

Hamamelis virginiana L.

Witch-hazel. Spotted, Witch or Snapping Alder.

Common. Moist or wet often rocky places. Sept.—Oct.

In some situations it is a valuable shrub for late-flowering

and foliage effects. The twigs were once popular as "Divining Rods" with which crafty operators were wont to impose upon the credulous. A distilled extract of the bark is extensively used as a toilet and medicinal article and is prepared in large quantities in some parts of the state. The bark, the twigs and the leaves are medicinal and are officinal.

LIQUIDAMBAR L. Sweet Gum Tree.

Liquidambar styraciflua L. (flowering with storax).

Sweet, Star-leaved or Red Gum. Bilsted.

Wet woods, fields and drier open places. South Norwalk (G. P. Ells, Bissell), and occasional or frequent westward near the shores of the of the Sound. May.

The wood is hard and close-grained but not strong; is inclined to warp and shrink badly. A beautiful tree in all stages of growth, free from injury by insects and much planted. Medicinal. The resinous exudation (liquidambar) is used in the preparation of chewing gum.

PLATANACEAE. PLANE TREE FAMILY.

PLATANUS L. Buttonwood. Sycamore.

Platanus occidentalis L. (western).

Buttonball. Buttonwood. Plane Tree. American or False Sycamore.

Frequent. Low grounds along streams or sometimes in drier places. May.

The wood is hard, compact and difficult to split or work: used for butcher's blocks, ox-yokes, small wares and interior finish of houses. When well grown one of our largest trees. Sometimes planted as an ornamental tree.

ROSACEAE. ROSE FAMILY.

PHYSOCARPUS Maxim. Nine-bark.

Physocarpus opulifolius (L.) Maxim. (maple-leaved).

Opulaster opulifolius Kuntze.

Nine-bark.

Rare. River shores: Norwich (Graves), Preston (W. A. Setchell, Graves). June.

SPIRAEA L.**Spiraea japonica L.f.**

Local. Escaped from gardens to fields and roadsides: Norwich and Preston (Mrs. E. F. Rogers), Groton (Graves & Bissell), East Haddam (Bissell), Fairfield (Eames), Stamford (W. H. Hoyt). July. Native of eastern Asia.

Spiraea prunifolia Sieb. & Zucc. (plum-leaved).

Bridal Wreath.

Local. Roadsides as an escape from gardens: Groton, Waterford and Montville (Graves), Southington (Bissell), Milford (Eames). June—July. Native of Asia.

Spiraea chamaedryfolia L. (germander-leaved), var. *ulmifolia* (Scop.) Maxim. (elm-leaved).

Roadsides and waste places as an escape from cultivation. Monroe (Eames & C. C. Godfrey), Wilton (Eames & G. P. Ells), and occasional in the southeastern part of the state (Graves). Late May—June. Native of the Old World.

Spiraea latifolia (Ait.) Borkh. (broad-leaved).

Spiraea salicifolia of Manuals in part.

Meadow-sweet. Queen of the Meadow. Bridewort. Aaron's Beard.

Frequent or common. Low wet grounds, thickets and bushy hillside pastures, or sometimes in dry ground. July—Aug.

Spiraea tomentosa L. (woolly).

Hardhack. Steeple Bush. Purple Hardhack.

Frequent or common. Moist fields and thickets, old pastures, or sometimes in drier places. July—Aug.

The leaves and root are medicinal.

SORBARIA A. Br.**Sorbaria sorbifolia (L.) A. Br. (having leaves like Sorbus, the Mountain Ash).**

Spiraea sorbifolia L.

Ash-leaved Spiraea.

Roadsides and waste places as an escape from cultivation. Rare in most districts: Granby and Plainville (Bissell), Ox-

ford and Seymour (Harger). Occasional through the southern part of the state. Mid-June — mid-Aug. Native of northern Asia.

PYRUS L.

Pyrus communis L. (common).

Pear. Choke or Wild Pear.

Occasional. Roadsides, fields and pastures as an escape from cultivation. May. Native of the Old World.

Valued in cultivation for its fruit; also its wood is used for drawing implements, for tools, in imitation of ebony, and by the wood engraver.

Pyrus baccata L. (berry-bearing).

Crab Apple. Siberian Crab. Small Crab Apple.

Rare. Roadsides and river banks as an escape from cultivation: Windsor (H. S. Clark), Hampton and Hartford (Bissell), Berlin (Andrews). May. Native of the Old World.

× **Pyrus prunifolia** Willd. (plum-leaved).

Crab Apple. Large Crab Apple.

Rare. Roadsides and fields: Ledyard (Graves), Old Saybrook (Harger), Hartford (Bissell). May. Native of the Old World.

This species is supposed to be of hybrid origin, derived from a cross between *Pyrus baccata* and *Pyrus Malus*, and it is the parent of most of the forms in cultivation.

Pyrus Malus L. (classical name for the Apple Tree).

Malus Malus Britton.

Apple. Wild Apple.

Common. Fields, roadsides, pastures and borders of woods as an escape from cultivation. May. Native of the Old World.

Our most valued cultivated fruit. The wood is close-grained, hard and tough, and is used for tool handles, shoemakers' lasts and by the cabinet-maker.

Pyrus arbutifolia (L.) L.f. (bearing leaves like the Arbutus Tree).

Aronia arbutifolia Ell.

Chokeberry. Red Chokeberry. Dogberry.

Bogs and swamps or sometimes in dry situations. Rare or occasional in the southwestern part of the state from Huntington westward (Eames). May — early June; fruit Sept., often persisting through the winter.

Pyrus arbutifolia (L.) L.f., var. **atropurpurea** (Britton) Robinson (dark-purple).

Aronia atropurpurea Britton.

Chokeberry. Purple Chokeberry.

Shrubby swamps and low woods and thickets. Apparently rare in northern districts, becoming occasional or frequent near the coast. May — mid-June; fruit Sept., long persistent.

Most reports of *Pyrus arbutifolia* should be referred to this variety.

Pyrus melanocarpa (Michx.) Willd. (black-fruited).

Pyrus arbutifolia L. f., var. *melanocarpa* Hook.

Aronia nigra Britton.

Chokeberry. Black Chokeberry.

Occasional to common. Bogs, swamps and thickets, sometimes in dry or sterile soil, even on exposed ledges at all elevations. May — early June; Fruit Aug.— Sept.

Pyrus americana (Marsh.) DC.

Sorbus americana Marsh.

American Mountain Ash. Rowan or Service Tree. Mountain Sumac. Dogberry.

Rare or local. Swamps and about ponds or sometimes on dry ledges or in rocky woods: Stafford (A. W. Driggs, Graves), Durham and Meriden (Harger), Granby (I. Holcomb), Winchester (W. M. Shepardson), Norfolk (Miss M. C. Seymour), Canaan (Bissell), Salisbury (A. W. Driggs), Kent (E. H. Austin & Eames). May — June.

The very astringent bark and berries are employed medicinally.

Pyrus Aucuparia (L.) Ehrh. (used in bird-catching).

Sorbus Aucuparia L.

European Mountain Ash. Rowan Tree.

Rare. Escaped from cultivation to open woodland in Killingly (Bissell). June. Native of Europe.

The bark and berries are employed medicinally.

CYDONIA Pers. Quince.**Cydonia vulgaris** Pers. (common).

Pyrus Cydonia L.

Common Quince.

Rare. Escaped from cultivation to waste and wet places in the southwestern part of the state. May; fruit Oct. Native of Europe.

The fruit is valued for preserving. The raw fruit and mucilaginous seeds are used in domestic medicinal practice.

Cydonia japonica (Thunb.) Pers.

Japan Quince.

Rare. Escaped from cultivation to a roadside in Stratford (Eames). April. Introduced from eastern Asia.

AMELANCHIER Medic. Juneberry.**Amelanchier canadensis** (L.) Medic.

Shad Bush. Service Berry. Sugar, Indian or May Pear.

Frequent. Dry or wet thickets, woods and banks. Mid-April — May; fruit June — early July.

The berries are edible but seldom found in good condition. The wood is heavy, very hard, close-grained and strong, and is sometimes used for tool handles and small implements.

Amelanchier canadensis (L.) Medic., var. *tomentula* Sarg. (woolly).

Amelanchier canadensis Medic., var. *Botryapium* Gray's Manual ed. 7.

Shad Bush.

Rare. Open or deep woods: Southington (Bissell), Colebrook (M. L. Fernald), New Milford and Kent (Eames), New Fairfield (Eames & C. C. Godfrey). Mid-April — May.

Amelanchier oblongifolia (Torr. & Gray) Roem. (oblong-leaved).

Amelanchier canadensis Medic., var. (?) *oblongifolia* Torr. & Gray.

Amelanchier Botryapium of Britton's Manual.

Amelanchier spicata of many authors, not K. Koch.

Shad Bush. Service Berry.

Common. Swamps, wet or dry woods, fields, sand plains

and in dry, rocky or sterile places. Late April — May; fruit June — early July.

The fruit is edible, often better than that of the previous species.

Amelanchier oblongifolia (Torr. & Gray) Roem., var. **micro-petala** Robinson (small-petaled).

Rare. Dry plains and in sterile places: Waterford (Graves), Southington (Bissell), Oxford and Seymour (Harger). May.

CRATAEGUS L. Hawthorn. White Thorn.

This genus has received much attention from botanists in recent years and many new species have been proposed. More careful study of these may show that a part of them would more properly be regarded as varieties or hybrids than as true species.

Because of this uncertainty as to the proper treatment of some forms, in the following list the recognized species are given first in the group to which they belong. Following them will be found the names of any proposed species of uncertain status that may belong there, the names being printed in italics, instead of full-faced type.

Oxyacanthae Loud.

Crataegus monogyna Jacq. (having one pistil).

Crataegus Oxyacantha of American authors, not L.

Hawthorn. English Hawthorn. Hedge Thorn. Haw or May Tree or Bush.

Rare or local. Roadsides and old pastures. Waterford (Graves), East Hartford and West Hartford (A. W. Driggs), New Haven (Harger), Bridgeport, Fairfield and Norwalk (Eames), Stamford (W. H. Hoyt), Sharon, a great many trees over a wide area (Mrs. C. S. Phelps & Bissell). Mid-May — early June. Adventive from Europe.

Often cultivated for ornament. The berries are medicinal.

Crus-galli Loud.

Crataegus Crus-galli L. (cockspur).

Cockspur or Newcastle Thorn. Red Haw.

Pastures, roadsides and fence-rows. Occasional or fre-

quent near the coast and in the valley of the Connecticut River; rare elsewhere. Early June; fruit Oct.

The var. *EXIGUA* (Sarg.) Eggleston (small), *Crataegus exigua* Sarg., occurs in Stonington, Waterford, Lyme and East Haven (Graves) and in Southington (Andrews).

Punctatae Loud.

Crataegus punctata Jacq. (dotted).

Rare or local. Fence-rows and borders of woods: Canaan, North Canaan and Salisbury (Bissell). Early June; fruit late Sept.

Forms of uncertain status.

Crataegus umbratilis Sarg. (living in the shade).

Rare. Border of thickets: Litchfield (Bissell). Late May — early June; fruit late Oct.

Intricatae Sarg.

Crataegus foetida Ashe (fetid).

Crataegus Baxteri Sarg.

Local. Old pastures in moist, heavy soil: Windsor (Bissell). Late May; fruit early Oct.

Crataegus apposita Sarg. (apposite).

Crataegus intricata Sarg., not J. Lange.

Crataegus coccinea Britton, not L.

Crataegus coccinea L., var. *viridis* Torr. & Gray in part.

Occasional. Roadsides and pastures. Mid-May — early June; fruit late Sept. — early Oct.

Crataegus apposita Sarg., var. *Bissellii* (Sarg.) Eggleston.

Crataegus Bissellii Sarg.

Rare. Old pastures: Colchester (Graves), Southington (Andrews & Bissell), Trumbull (Eames). Late May; fruit late Sept.

Crataegus coccinea L. (scarlet).

Crataegus coccinea L., var. *viridis* Torr. & Gray in part.

Crataegus modesta Sarg.

Crataegus premora Ashe.

Crataegus intricata J. Lange.

Old pastures, fields and thickets. Rare in most districts:

Preston (Graves), Trumbull (Eames), Oxford (Harger), Southington (Andrews & Bissell). Occasional in the northern Connecticut Valley and in the northeastern part of the state. Late May — early June; fruit Oct.

Crataegus Stonei Sarg.

Rare. Old pasture at Southington (Andrews). Late May — early June; fruit Oct.

Forms of uncertain status.

Crataegus Hargerii Sarg.

Local. Fields and roadsides: Guilford (G. H. Bartlett), Southington (Andrews & Bissell), Trumbull (Eames), and frequent in Southbury, Oxford and Ansonia (Harger). Late May — early June; fruit early Oct.

Probably a form of *Crataegus appposita*.

Rotundifoliae Eggleston.

Crataegus rotundifolia Moench (round-leaved).

Crataegus coccinea L., var. *rotundifolia* Sarg.

Crataegus Gravesii Sarg.

Crataegus Dodgei Ashe.

Occasional or frequent. Roadsides, pastures and hedgerows. Late May; fruit late Sept.—early Oct.

Tenuifoliae Sarg.

Crataegus macrosperma Ashe (large-seeded).

Crataegus tenella Ashe.

Local. Moist pastures and thickets: Griswold, Franklin, Waterford and East Lyme (Graves), Stratford (Eames), Oxford (Harger). Last half of May; fruit Sept.

The var. **PENTANDRA** (Sarg.) Eggleston (having five stamens), *Crataegus pentandra* Sarg., occurs at Waterford (Graves).

The var. **DEMISSA** (Sarg.) Eggleston (hanging down), *Crataegus demissa* Sarg., is occasional throughout.

The var. **MATURA** (Sarg.) Eggleston (full-grown), *Crataegus matura* Sarg., occurs at Groton (Graves).

Crataegus Grayana Eggleston.

Crataegus flabellata Sarg., not *Mespilus flabellata* Bosc.

Rare. East Lyme (Graves). Late May; fruit Sept.

Forms of uncertain status.

Crataegus dissimilis Sarg. (dissimilar).

Rare. East Lyme (Graves). Last half of May; fruit late Sept.

Crataegus Forbesae Sarg.

Occasional in the towns of New London, Lebanon and East Lyme (Graves). Late May; fruit early Oct.

Crataegus genialis Sarg. (pleasant).

Rare. Thickets: Litchfield (Bissell). Late May; fruit Sept.

Crataegus glaucophylla Sarg. (glaucous-leaved).

Rare. Fields: Griswold (Graves), North Canaan and Cornwall (Bissell). Last half of May; fruit Sept.

Crataegus monstrata Sarg. (remarkable).

Locally plentiful in moist thickets in Oxford, Middlebury, Southbury and Woodbury (Harger). Late May; fruit Sept.

Crataegus Napaea Sarg. (of a wooded dell).

Rare. Thickets in Litchfield and Cornwall (Bissell). Late May; fruit late Sept.

Crataegus viridimontana Sarg. (of the Green Mountains).

Rare. Thickets: Litchfield (Bissell). Last half of May; fruit early Sept.

Pruinosae Sarg.

Crataegus pruinosa (Wendl.) K. Koch (frosted).

Rare. Oxford, moist thicket (Harger). Late May; fruit early October.

The forma **DISSONA** (Sarg.) Eggleston (confused), *Crataegus dissona* Sarg., occurs at New London, Waterford and East Lyme (Graves), East Windsor (Bissell), Oxford (Harger), Trumbull (Eames).

Crataegus pruinosa (Wendl.) K. Koch, var. **latisepala** (Ashe)

Eggleston (broad-sepaled).

Crataegus latisepala Ashe.

Crataegus cognata Sarg.

Frequent in the shore towns of New London County (Graves); occurs also at Windsor and Stratford (Bissell).

Late May — early June; fruit Oct.

Crataegus pruinosa (Wendl.) K. Koch, var. **conjuncta** (Sarg.)

Eggleston (connected).

Crataegus conjuncta Sarg.

Rare. Pastures: Stratford (Eames), Oxford and Ansonia (Harger). Late May; fruit Oct.

***Crataegus pruinosa* (Wendl.) K. Koch, var. *Porteri* (Britton) Eggleston.**

Crataegus Porteri Britton.

Crataegus levis Sarg.

Rare or local. Old pastures: Torrington and Litchfield (Bissell). Late May; fruit early Oct.

***Crataegus Jesupi* Sarg.**

Rare. Fence-rows and pastures: East Windsor (Bissell). Last half of May; fruit late Sept.—early Oct.

Forms of uncertain status.

Crataegus festiva Sarg. (pretty).

Rare. East Lyme (Graves). Last of May; fruit Oct.

Crataegus incisa Sarg. (cut or notched).

Rare. Stratford, in rocky pastures (Eames). Late May—early June; fruit Oct.

Crataegus littoralis Sarg. (of the sea-shore).

Rare. New London, Waterford and East Lyme (Graves). Last half of May; fruit Oct.

Crataegus Pequotorum Sarg. (pertaining to the Pequot Indians).

Rare. Groton (Graves). Last half of May; fruit Oct.

Crataegus quincebaugensis Sarg.

Rare. Griswold, at Hopeville (Graves). Late May; fruit Oct.

Coccineae Loud.***Crataegus Holmesiana* Ashe.**

Rare. Fields and roadsides: Milford (Eames), Litchfield (Bissell). Last half of May; fruit Sept.

***Crataegus Pringlei* Sarg.**

Rare. Cornwall, in fields (Bissell). Mid-May; fruit Sept.

The var. *LOBULATA* (Sarg.) Eggleston (with small lobes), *Crataegus lobulata* Sarg., *Crataegus cristata* Ashe, occurs at Lyme (Graves & Bissell).

Crataegus pedicellata Sarg. (borne on a pedicel).*Crataegus fetalis* Sarg.*Crataegus sejuncta* Sarg.

Rare or local. Fields and roadsides: Groton (Graves), Beacon Falls, Oxford and Middlebury (Harger), Litchfield and Cornwall (Bissell). Last half of May; fruit early Sept.

Crataegus polita Sarg. (polished).

Rare. East Lyme (Graves). Last half of May; fruit late Aug.—early Sept.

This and the three preceding species are well shaped trees with handsome foliage, beautiful both in flower and fruit, and are well worthy of cultivation for ornament.

Forms of uncertain status.

Crataegus Eamesii Sarg.

Rare. Dry banks: Stratford (Eames), Ansonia (Harger). Last half of May; fruit late Aug.—early Sept.

Crataegus neo-londinensis Sarg.

Occasional near the coast in Groton and East Lyme (Graves). Late May; fruit early Sept.

Molles Sarg.**Crataegus Arnoldiana** Sarg.

Rare. East Lyme (Graves). Mid-May; fruit early Sept.

Anomalae Sarg.**Crataegus Brainerdi** Sarg.

In its typical form not known in Connecticut. The var. SCABRIDA (Sarg.) Eggleston (rough), *Crataegus scabrida* Sarg., occurs in thickets at Litchfield (Bissell). Late May; fruit late Sept.

Macracanthae Loud.**Crataegus macracantha** Lodd. (long-thorned).*Crataegus coccinea* L., var. *macracantha* Dudley.

Rare or local. Fields and pastures: East Windsor, Litchfield and Cornwall (Bissell). Late May—early June; fruit Sept.

The var. RHOMBIFOLIA (Sarg.) Eggleston (having lozenge-shaped leaves), *Crataegus rhombifolia* Sarg., occurs

at Norwich and Griswold (Graves), and at Southington (Bissell, Andrews).

Forms of uncertain status.

Crataegus ferentaria Sarg. (armed).

Rare. Franklin (Graves). Last half of May; fruit early Sept.

Crataegus fulgens Sarg. (shining).

Rare. Stratford, ledges on bank of Housatonic River (Eames). Early June; fruit late Sept.—early Oct.

Crataegus pellucida Sarg. (transparent).

Rare. Litchfield, in pastures (Bissell). Late May; fruit late Sept.

Crataegus spatiosa Sarg. (spacious; ample).

Rare. Groton (Graves). Last half of May; fruit Sept.

Crataegus stratfordensis Sarg.

Rare. Stratford, dry bank on the coast (Eames). Early June; fruit Sept.

FRAGARIA L. Strawberry.

Fragaria virginiana Duchesne.

Fragaria canadensis Michx. in part.

Fragaria terrae-novae Rydb.

Wild or Field Strawberry.

Common. Fields, pastures and roadsides. Late April — May.

Berries delicious. Hybrids and derivatives are common and valuable in cultivation. The leaves are medicinal.

Fragaria virginiana Duchesne, var. *illinoensis* (Prince) Gray.

Fragaria virginiana Duchesne, var. *Grayana* Rydb.

Rare. Waste ground: Southington (Bissell), Oxford (Harger), Bridgeport (Eames). Apparently an escape from cultivation. Late April — May. Introduced from the West.

Fragaria vesca L. (small or weak).

European Wood Strawberry.

Rare or local. Grassy places: New London and Griswold (Graves), Hartford (Bissell), Salisbury (M. L. Fernald). May — June. In Connecticut apparently naturalized from Europe.

The var. *ALBA* (Ehrh.) Rydb. (white) occurs at Southington (Bissell).

Fragaria vesca L., var. **americana** Porter.

Fragaria americana Britton.

Wild or American Wood Strawberry.

Rocky woods. Rare near the coast: Franklin and Preston (Graves), New Haven (D. C. Eaton). Frequent northward. May — June.

DUCHESNEA Smith. Indian Strawberry.

Duchesnea indica (Andr.) Focke.

Fragaria indica Andr.

Yellow, Indian or Mock Strawberry.

Rare. Escaped from cultivation to lawns: New London (Graves), Stratford (Mrs. R. H. Russell), Fairfield (Eames). April — Sept. Adventive from India.

Often grown in hanging-baskets for its yellow flowers and handsome but insipid berries.

WALDSTEINIA Willd.

Waldsteinia fragarioides (Michx.) Tratt. (strawberry-like).

Barren, Dry or Yellow-flowered Strawberry.

Rare. Rocky woods or thickets: Norfolk and Colebrook (H. C. Beardslee), Torrington (Miss B. A. Parker). Late April — May.

POTENTILLA L. Cinquefoil. Five-finger.

Potentilla arguta Pursh (sharp).

Drymocallis arguta Rydb.

Tall Cinquefoil.

Rare or local. Open sterile soil and on dry rocky hills. June — Aug.

Potentilla monspeliensis L.

Potentilla norvegica Gray's Manual ed. 6, not L.

Rough Cinquefoil.

Frequent. Fields, roadsides and waste places. June — Sept.

Potentilla monspeliensis L., var. **norvegica** (L.) Rydb.

Potentilla norvegica L.

Rare. East Granby, rocky slopes of Peak Mt. (A. W. Driggs). June—July.

Potentilla argentea L. (silvery).

Silvery or Hoary Cinquefoil.

Frequent to common. Dry, sterile or sandy open places. Mid-May—Sept.

Potentilla intermedia L. (intermediate).

Downy Cinquefoil.

Rare. Roadsides and waste ground in Glastonbury (Bissell), East Haven (Harger), Naugatuck (A. E. Blewitt). June—July. Native of Europe.

Potentilla recta L. (upright).

Potentilla sulphurea Lam.

Rare. Dry fields and wastes: Norwich (Mrs. E. E. Rogers), Southington (Andrews, Bissell), Bristol (W. A. Terry), Naugatuck (A. E. Blewitt), Newtown (J. M. Otis), Kent (Eames & C. C. Godfrey). June—July. Adventive from Europe.

Potentilla palustris (L.) Scop. (of marshes).

Comarum palustre L.

Marsh or Purple Cinquefoil or Five-finger. Bog Strawberry. Purple-wort.

Rare or local. Boggy swamps and borders of lakes: New Haven (D. C. Eaton), East Granby (Weatherby), Hamden, Litchfield and Danbury (Harger), Salisbury, plentiful about Twin Lakes (Bissell, Mrs. C. S. Phelps et al.), June—July.

Potentilla fruticosa L. (shrubby).

Dasiphora fruticosa Rydb.

Hardhack. Goshen Hardhack. Shrubby Cinquefoil.

Low fields, wet pastures and boggy swamps. Rare near the coast: East Lyme (Miss A. M. Ryon), Guilford (G. H. Bartlett), New Haven (G. W. Hawes). Occasional elsewhere, except in Litchfield County, where it is common and often a serious pest in low pastures. June—Sept.

Potentilla tridentata Ait. (three-toothed).

Sibbaldiopsis tridentata Rydb.

Three-toothed or Mountain Cinquefoil or Five-finger.

Rare or local. Exposed ledges and bleak mountain tops: Norfolk (Miss M. C. Seymour, Weatherby & Bissell), Cornwall (E. E. Brewster), Salisbury (Bissell et al.). May—July.

Potentilla pacifica Howell.

Potentilla Anserina of American authors in part, not L.

Argentina Anserina Rydb., var. *grandis* Rydb.

Silver Weed. *Argentina*. Wild Tansy.

Inner edges of salt marshes along the coast. Milford, locally plentiful (Eames), New Haven (Bissell), East Haven (Harger), Guilford (G. H. Bartlett); and common eastward. Mid-May—July.

Potentilla pumila Poir. (dwarf).

Frequent. Roadsides and fields. April—May.

The comparative distribution of this and the species next following has not been worked out.

Potentilla canadensis L.

Yellow Strawberry. Cinquefoil. Five-finger. Running Buttercup.

Common. Dry, open places, especially on hillsides. April—Aug.

Potentilla canadensis L., var. *simplex* (Michx.) Torr. & Gray (simple).

Potentilla simplex Michx.

Cinquefoil. Five-finger.

Frequent or common. Woods, fields and roadsides. May—Aug.

FILIPENDULA Hill.

Filipendula rubra (Hill) Robinson (red).

Ulmaria rubra Hill.

Spiraea lobata Gronov.

Queen of the Prairie.

Rare or local. Roadsides as an escape from cultivation: Groton and Sprague (Graves), Monroe, Trumbull and Fairfield (Eames). June—July. Naturalized from the West.

Filipendula Ulmaria (L.) Maxim. (*Ulmus*, the Elm).

Ulmaria palustris Moench.

Ulmaria Ulmaria Barnh.

Spiraea Ulmaria L.

Meadow-sweet. Honey-sweet. Mead-sweet. Queen of the Meadow. Meadow Queen. Bridewort. English Meadow-sweet.

Rare or local. Escaped from cultivation to roadsides and waste places: East Windsor and Southington (Bissell), Oxford (Harger), Trumbull, Norwalk and Ridgefield (Eames). July — mid-Aug. Native of Europe.

Filipendula hexapetala Gilib. (six-petaled).

Spiraea Filipendula L.

Pride of the Meadow. Dropwort.

Rare. Southington, escaped from cultivation to a roadside (Andrews). May — June. Fugitive from Europe.

GEUM L.   Avens.

Geum canadense Jacq.

Geum album J. F. Gmel.

White Avens. Herb Bennet.

Frequent or common. Woods, thickets and shaded places. Mid-June — Aug.

Geum flavum (Porter) Bicknell (yellow).

Cream-colored Avens.

Occasional. Rocky woods, thickets and partially shaded places. Mid-June — Aug.

Geum virginianum L.

Rough or White Avens. Herb Bennet. Chocolate-root.

Frequent. Wet meadows, low thickets and along streams. Mid-June — July.

Geum strictum Ait. (strict or straight).

Yellow or Field Avens. Herb Bennet.

Rare or local. Open swamps, wet pastures or sometimes in dry ground. Late June — mid-Aug.

Geum rivale L. (of brook-sides).

Purple, Water or Drooping Avens. Chocolate-root. Indian Chocolate-root.

Wet or boggy meadows. Rare near the coast: Griswold

(E. F. Burleson, Graves), Sprague (Miss Smith), Guilford (G. H. Bartlett), New Haven and Orange (D. C. Eaton). Occasional or local northward and usually plentiful where it occurs. May—June.

The root is used medicinally.

KERRIA DC.

Kerria japonica (Thunb.) DC.

Japanese Rose. Globeflower.

Rare. Ledyard, roadside as an escape from garden (Graves). Late May—June. Introduced from eastern Asia.

RUBUS L. Bramble.

Rubus idaeus L. (of Mt. Ida.)

European Red Raspberry.

Rare. Roadsides and fence-rows: Southington, escaped from an old garden (W. H. Blanchard), Oxford (Harger), Bridgeport, plentiful in one locality (Eames). Mid-May—June; fruit July. Adventive from the Old World.

Formerly much cultivated and represented by the Antwerp, Fontenay, etc.

Rubus idaeus L., var. **aculeatissimus** Regel & Tiling (very prickly).

Rubus idaeus L., var. *strigosus* Maxim.

Rubus strigosus Michx.

Red or Wild Red Raspberry.

Fence-rows, pastures and thickets. Rare in the coast region of the southwestern part of the state; occasional or frequent elsewhere. Mid-May—June; fruit late June—July.

Valued for its fruit in cultivation. The Cuthbert and other light red berries of gardens are of this type.

× ? **Rubus neglectus** Peck (neglected).

Purple Wild Raspberry.

Rare. Moist thicket: Oxford (Harger). Mid-May—June.

Thought to be a hybrid between *Rubus idaeus* var. *aculeatissimus* and *Rubus occidentalis*. The Shaffer, Gladstone and Philadelphia are cultivated forms of this species.

Rubus phoenicolasius Maxim. (having purple-red hairs).

Wineberry.

Rare. Escaped from cultivation to fields and roadsides: Southington (Andrews), Fairfield (Eames), Norwalk (E. H. Baldwin). June — Aug. Adventive from Japan.

Cultivated as an ornamental plant and for its fruit.

Rubus occidentalis L. (western).

Black Raspberry. Thimbleberry. Black-cap.

Common. Thickets, fence-rows, roadsides and pastures. Mid-May — June; fruit late June — July.

The Ohio, Gregg, etc., are cultivated forms of this species. Both wild and cultivated its fruit is valued for dessert and preserving.

The forma *PALLIDUS* (Bailey) Robinson (pale) has been found in Bridgeport (Eames) and Oxford (Harger). The Golden Queen of the gardens is a derivative of this form.

Rubus odoratus L. (fragrant).

Purple Flowering Raspberry.

Rocky woods. Rare near the coast; becoming occasional or frequent northward. June — Aug.; fruit Aug. — Sept.

Rubus triflorus Richards. (three-flowered).

Rubus americanus Britton.

Dwarf or Running Raspberry.

Wet, often rocky woods, and in wooded swamps. Rare near the coast; becoming occasional or frequent northward. May; fruit June.

Sometimes occurs with pink flowers.

Rubus allegheniensis Porter.

Rubus villosus Gray's Manual ed. 6 in large part, not Ait.

Rubus nigrobaccus Bailey.

High-bush or Mulberry Blackberry.

Common in woods, thickets and pastures in the hilly and mountainous parts of the state; occasional or local at low elevations and in sandy soil elsewhere. Mid-May — June; fruit late July — Sept.

One of our most valued wild berries and often cultivated, the Taylor being a representative. The fruit-juice and root-

bark of this and other species are valued in domestic medical practice for their astringent properties and are also officinal.

Rubus allegheniensis Porter, var. **Gravesii** Fernald.

Rare. Moist or dry thickets: Groton (Graves), Southington (Andrews), New Milford (Eames). June; fruit early Aug.

Rubus frondosus Bigel. (leafy).

Rubus villosus Ait., var. *frondosus* Torr.

Rubus philadelphicus Blanchard.

Rare or occasional. Open pastures and dry hillsides. Mid-May — June.

Rubus pergratus Blanchard (very pleasant).

Rubus orarius Blanchard.

Rubus amnicolus Blanchard.

Rare. Roadsides and thickets: Southington (Bissell), Winchester and Colebrook (M. L. Fernald). Late May — early June; fruit July.

Rubus recurvans Blanchard (recurving).

Rubus arundellanus Blanchard.

Fields and open woods. Occasional in the northwestern part of the state; frequent elsewhere. Mid-May — June; fruit July.

Rubus Randii (Bailey) Rydb.

Rubus argutus Link, var. *Randii* Bailey.

Rubus recurvicaulis Blanchard.

Woods and shaded places in moist or wet ground. Rare or occasional in central and northern Connecticut; its exact range unknown. June.

Rubus laciniatus Willd. (slashed).

Cut-leaved or Evergreen Blackberry.

Rare. Bridgeport, spontaneous along a sandy roadside and in an adjoining field (E. H. Baldwin). June — July. Probably native of Europe.

Cultivated for ornament.

Rubus cuneifolius Pursh (wedge-leaved).

Sand or Knee-high Blackberry. Ankle Brier.

Dry open sandy or sterile places. Occasional or frequent

in the southwestern part of the state, sometimes covering large areas; becoming rare northward and eastward, reaching Newtown (Eames), Southbury (Harger), Farmington (W. H. Blanchard), Glastonbury (Mrs. F. W. Starmer), Colchester (Graves). June—early July; fruit mid-July—Sept.

The fruit is delicious. The bark of the rootstock is medicinal and is officinal.

Rubus Andrewsianus Blanchard.

High-bush Blackberry.

Dry or moist open or shaded situations. Occasional or frequent over most of the state, but apparently absent from the mountainous areas. June; fruit mid-July—Sept.

The fruit of this species is commonly of good size and quality and is the High-bush Blackberry usually gathered in some parts of the state.

Rubus floricomus Blanchard (covered with flowers).

Local. Woods and pastures in heavy soils: Southington and Meriden (W. H. Blanchard). June; fruit Aug.

Rubus setosus Bigel. (bristly).

Rubus nigricans Rydb. in part.

Occasional or frequent. Usually in swamps and wet ground, but sometimes in drier places. June—July.

Rubus nigricans Rydb. (blackish).

Rubus hispidus L., var. *subcrectus* Peck.

Rubus setosus of authors in part, not Bigel.

Rubus vermontanus Blanchard.

Rubus semisetosus Blanchard (?).

Dry hills and plains. Apparently rare or occasional, but its distribution is not known. June—July.

Rubus hispidus L. (rough-hairy).

Running Swamp Blackberry.

Common. Swamps, bogs, wet woods and fields, or sometimes in drier places. Mid-June—July.

Rubus villosus Ait. (hairy).

Rubus canadensis of authors, not L.

Rubus procumbens Muhl.

Dewberry. Running Brier. Running or Low Blackberry.

Dry, especially open situations. Frequent or common at low elevations, but rare or absent in mountainous districts. Late May — June; fruit July — Aug.

Its berries are the best of the low vines and are not excelled by those of any blackberry. The Lucretia Dewberry is a cultivated form derived from a variety of this species. Several recently proposed species not included in this list are obviously closely related to *Rubus villosus* and await further study.

Rubus villosus Ait., var. **humifusus** Torr. & Gray (spreading over the ground).

Rubus Enslenii Trattinick.

Rubus Baileyanus Britton.

Rubus subuniflorus Rydb.

Frequent or common. Dry soil in open situations, nearly throughout, but especially plentiful at low elevations and near the coast. Late May — June; fruit July — Aug.

The fruit is inferior in quality to that of the typical form of the species.

DALIBARDA Kalm.

Dalibarda repens L. (creeping).

Dalibarda.

Rare. Moist rich woods: Winchester (Andrews, Bissell), Colebrook (J. W. Robbins), Norfolk (Miss M. C. Seymour). Mid-June — mid-Aug.

AGRIMONIA L. Agrimony.

Agrimonia gryposepala Wallr. (having bent or hooked sepals).

Agrimonia Eupatoria Gray's Manual ed. 6 in part, not L.

Agrimonia hirsuta Bicknell.

Stickseed. Cocklebur. Beggar-ticks. Hairy Agrimony.

Frequent. Roadsides, thickets and borders of woods. Late June — Aug.

The plant is medicinal.

Agrimonia striata Michx. (grooved).

Agrimonia Eupatoria Gray's Manual ed. 6 in part, not L.

Agrimonia Brittoniana Bicknell.

Stickseed. Beggar-ticks.

Rocky woods, thickets and more open places. Rare near the coast and in the southwestern part of the state; frequent elsewhere. Late June — Sept.

Agrimonia mollis (Torr. & Gray) Britton (soft).

Agrimonia pubescens Wallr. (?)

Soft Agrimony.

Occasional or frequent. Dry woods, thickets and more open places. July — Aug.

Agrimonia parviflora Ait. (small-flowered).

Small or Many-flowered Agrimony.

Rare. Fairfield, edge of wet meadow (Eames), Southbury, roadside (Harger, Bissell), Salisbury (Mrs. C. S. Phelps). Aug.

Agrimonia rostellata Wallr. (having a little beak).

Agrimonia striata Bicknell, not Michx.

Woodland Agrimony.

Dry rich or rocky woods. Occasional in the southern part of the state, extending northward as far as Middletown and Southington (Bissell). July — Aug.

SANGUISORBA L. Burnet.

Sanguisorba canadensis L.

Poterium canadense Gray.

Canadian, Wild or Great American Burnet.

Locally plentiful along the borders of tidal marshes and about fresh-water swamps and streams near the coast; also occurs in low grounds along the Farmington River in Windsor (H. S. Clark), Farmington (Bissell), and Simsbury (A. W. Driggs); and has been collected at Berlin (J. N. Bishop). Mid-July — mid-Oct.

Sanguisorba minor Scop. (smaller).

Poterium Sanguisorba L.

Sanguisorba Sanguisorba Britton.

Garden or Salad Burnet. Bloodwort. Bibernel. Pimpernel. Toper's-plant.

Rare. Monroe, in dry rocky ground (H. C. Beardslee). July — Sept. Fugitive from Europe or Asia.

Formerly cultivated as a salad plant.

ROSA L.   Rose.**Rosa setigera Michx.** (bristle-bearing).

Climbing or Prairie Rose.

Rare. Escaped from cultivation to roadsides, waste places and thickets: Voluntown (Graves), Farmington (H. S. Clark), Stratford and Bridgeport (Eames). June—July. Adventive from the West.

Rosa blanda Ait. (smooth).

Meadow, Thornless or Early Wild Rose.

Sandy soil. Rare in most districts: Hartford (H. J. Koehler), Milford (Andrews). Occasional along the Housatonic River from Oxford (Harger) northward. Late May—June.

Rosa spinosissima L. (very spiny).

Scotch or Burnet Rose.

Rare. Escaped from cultivation to roadsides in Preston and Franklin (Graves). June—July. Adventive from Europe.

Rosa cinnamomea L. (cinnamon-scented).

Cinnamon or Kitchen Rose.

Rare or occasional. Escaped from cultivation to roadsides and waste places near old houses; in the hills of Salisbury sometimes forming dense thickets (Bissell). June—July. Naturalized from Europe.

Rosa rugosa Thunb. (wrinkled).

Japanese Rose.

Rare. Milford, escaped from cultivation about old house-sites (Eames & C. C. Godfrey); occurs also at Bridgeport and Greenwich (Eames). June—Aug. Adventive from Asia.

Rosa canina L. (of a dog).

Dog, Canker, Hip or Brier Rose.

Rare. Pastures and roadsides: Bolton (C. C. Hanmer), Southington (Andrews). June—July. Adventive from Europe.

Rosa rubiginosa L. (rusty).

Sweetbrier. Eglantine. Hip or Kitchen Rose.

Occasional or frequent. Thickets, pastures and roadsides. June—July. Naturalized from Europe.

Rosa rubiginosa L., var. *micrantha* (Sm.) Lindl. (small-flowered.)

Small-flowered Sweetbrier.

Rare. Granby, along a roadside (H. S. Clark, Weatherby & Bissell), New Haven (A. L. Winton). June—July. Adventive from England.

Rosa gallica L.

French, Provence or Red Rose.

Rare. Escaped from cultivation to roadsides and about old house-sites: Ledyard and Franklin (Graves), Thompson (Bissell), Southington (Andrews, Bissell, Weatherby), Westport (Eames), Wilton (Miss A. E. Carpenter). June. Adventive from Europe.

An old-fashioned garden rose. The dried petals are medicinal and are officinal.

Rosa nitida Willd. (shining).

Shining or Northeastern Rose.

Rare. In swamps: Thompson (R. W. Woodward & Weatherby), Stafford (Graves). June—July.

Rosa carolina L.

Swamp Wild Rose.

Frequent or common. Swamps and in low ground. June—July.

Rosa virginiana Mill.

Rosa lucida Ehrh.

Wild or Large Wild Rose.

Occasional or frequent. Low grounds, banks of streams, fields and thickets. June—July.

Rosa humilis Marsh. (low).

Wild Rose. Dwarf, Low or Pasture Wild Rose.

Frequent or common. Pastures, thickets and open woods, often in dry ground. June—July. An apparent hybrid of this with *Rosa nitida* occurs at Stafford (Weatherby & Bissell).

PRUNUS L. Plum. Cherry.

Prunus serotina Ehrh. (late).

Wild, Rum, Whiskey or Cabinet Cherry. Wild Black Cherry.

Common. Woods, pastures, fence-rows and roadsides. Mid-May—June; fruit Aug.—Sept.

The bark is officinal under the name "*Prunus virginiana*," and is valued for its tonic as well as sedative properties, the latter due to its hydrocyanic acid, a constituent also of all other parts of the plant. The foliage of this and probably that of related species is believed to be poisonous to cattle when wilted, although harmless when fresh. The kernels of the seeds, inadvertently swallowed by children, have been fatally poisonous. The wood is light, strong, hard and close-grained, valued for cabinet work and interior finish. The tree is ornamental and worthy of planting in some situations.

***Prunus virginiana* L.**

Choke Cherry.

Thickets, woods, fence-rows and roadsides. Rare near the coast in the southeastern part of the state but frequent or common elsewhere. Mid-May—June; fruit mid-July—Aug.

***Prunus pennsylvanica* L. f.**

Wild Red Cherry. Bird, Pin or Fire Cherry.

Occasional. Found in various soils and situations, but especially in rocky woods and clearings. May; fruit July.

The wood is light, soft and close-grained.

***Prunus alleghaniensis* Porter..**

Alleghany or Mountain Plum. Sloe.

Rare. Lisbon, sandy bottoms along the Quinnebaug River, and Lyme, bank of the Connecticut River (Graves); Bridgeport, wet thicket bordering a small stream, and Monroe, hillside pasture (Eames); Southbury, roadside in sandy soil (Harger). May; fruit Aug.

***Prunus instititia* L. (grafted).**

Prunus spinosa L., var. *instititia* Gray's Manual ed. 6.

Damson. Bullace Plum.

Rare. Old Lyme, escaped from a hedge (Graves), Fairfield, rocky hillside (Eames). May; fruit Aug.—Sept. Adventive from Europe.

***Prunus maritima* Wang. (of the sea-coast).**

Beach Plum.

In sandy soil. Frequent or common on the shores of the Sound and about tidal streams and marshes, also occasional in dry places a few miles inland. Mid-May — mid-June; fruit late Aug.—Sept.

The fruit is sometimes gathered for preserves.

Prunus Mahaleb L. (Arabic name).

Mahaleb, St. Lucie or Perfumed Cherry.

Rare or local. Fields, pastures and roadsides: New London and Groton (Graves), Norwalk (E. H. Baldwin). May — June. Naturalized from Europe.

Is largely imported and used for cherry-tree stocks.

Prunus Gravesii Small.

Beach Plum.

Rare. Groton, gravelly ridge near the Sound (Graves). Last week in May; fruit first week in Sept.

Prunus cuneata Raf. (wedge-shaped).

Prunus pumila Gray's Manual ed. 6 in part.

Sand or Dwarf Cherry.

Sand plains and tops of rocky hills. Norwich (W. A. Setchell, Mrs. E. E. Rogers), and rare, local or occasional in the northern two-thirds of the state. May; fruit Aug.

Prunus avium L. (of birds).

Cherry. Sweet, Black, Bird or Mazzard Cherry.

Frequent. Roadsides, fence-rows, woods and thickets. Late April — May; fruit mid-June—July. Naturalized from Europe.

In its cultivated forms valuable for its fruit, that of the wild plants being also sometimes used. The wood is valued for cabinet work.

Prunus Cerasus L. (classical name for the Cherry-tree).

Sour, Pie, Red, Morello or Old-fashioned Cherry. Griottes.

Rare. Escaped from cultivation to roadsides: Ledyard, New London and Waterford (Graves), Thompson and Bristol (Bissell), Southington (Andrews, Bissell), Stratford (Eames). May; fruit July. Native of Europe.

Cultivated for its fruit.

Prunus nigra Ait. (black).

Wild, Canada or Horse Plum.

Rare. Norfolk, a few trees about an abandoned garden (A. W. Driggs), Oxford (Harger). May; fruit Aug.—Sept.

Has given rise to some choice fruit-bearing varieties in cultivation.

Prunus americana Marsh.

Wild Plum. Wild Yellow, Red or Goose Plum.

Wet or dry soils in various situations, especially along streams. Rare in southern districts, becoming occasional northward. May; fruit mid-Aug. Apparently, in part, introduced near the coast.

It is the most prolific source of cultivated native Plums suited to the cold North.

Prunus domestica L. (domestic).

Garden Plum.

Rare. Escaped from cultivation to roadsides and waste places: New London (Graves), Hartford (H. S. Clark & Bissell), Southington (Andrews & Bissell), Oxford (Harger), Fairfield (Eames & C. K. Averill). May; fruit Aug.—Sept. Native of the Old World.

Frequently cultivated.

Prunus Persica (L.) Stokes.

Amygdalus Persica L.

Peach.

Rare. Escaped from cultivation to roadsides, fence-rows and waste places in the southern part of the state. Late April — May; fruit Aug.—Sept. Native of Asia.

A valued fruit in cultivation. Some forms are occasionally cultivated for ornament. Medicinal.

LEGUMINOSAE. PULSE FAMILY.

GLEDITSIA L. Honey Locust.

Gleditsia triacanthos L. (three-thorned).

Honey Locust.

Rare, occasional or local. Pastures, roadsides and fence-

rows as an escape from cultivation. May — June. Naturalized from the West or South.

The wood is coarse-grained but strong and durable. The name Honey Locust is supposed to refer to the sweetness of the pulp surrounding the seeds in the pod. Often planted for hedges or as an ornamental tree.

CASSIA L.   Senna.

Cassia marilandica L.

Wild or American Senna.

Roadsides or alluvial soil, usually in moist ground. Rare or occasional in most sections, but frequent along the Housatonic River. July — Aug.

The leaves have medicinal properties like those of officinal Senna and are sometimes used as a substitute.

Cassia Chamaecrista L. (ground cock's-comb).

Partridge Pea.

Sandy fields and railroad banks. Common on and near the coast, extending inland as far as Glastonbury (H. S. Clark), and Seymour (Harger). July — Sept.

Cassia nictitans L. (winking).

Wild Sensitive Plant. Sensitive Pea.

Common. Sandy fields and dry sterile ground. July — Sept.

CERCIS L.   Redbud. Judas Tree.

Cercis canadensis L.

Redbud.

Rare. Sparingly escaped about an old nursery at Wethersfield (H. S. Clark & Bissell). April. Fugitive from the South.

BAPTISIA Vent.   False Indigo.

Baptisia tinctoria (L.) R. Br. (used for dyeing).

Wild Indigo. Horsefly-weed.

Common. Dry wastes, pastures, thickets and open woods in sandy or poor soils. July — Aug.

The leaves have been used as a substitute for Indigo and the young shoots are sometimes eaten like Asparagus. The roots and leaves have medicinal value.

CROTALARIA L. Rattle-box.**Crotalaria sagittalis L.** (shaped like an arrow-head).

Rattle-box.

Frequent to common. Dry sandy or sterile ground. July — Sept.

This plant when present in hay is known to cause serious and fatal poisoning of horses and sometimes of cattle, its mode of action being similar to that of the western Loco-weeds.

CYTISUS L. Broom.**Cytisus scoparius (L.) Link** (broom-like).

Scotch Broom.

Rare. Meriden, one colony by a roadside (Miss E. J. Leonard). July — Aug. Fugitive from Europe.

The dried tops are medicinal and are official.

LUPINUS L. Lupine.**Lupinus perennis L.** (perennial).

Wild Lupine. Blue Bean. Sundial.

Dry or sandy soil. Found nearly throughout, though very local and uneven in its distribution, but, in general, rare westward and occasional or frequent eastward. May — June.

TRIFOLIUM L. Clover. Trefoil.**Trifolium arvense L.** (of cultivated ground).

Rabbit-foot or Stone Clover.

Common. Dry fields and roadsides. June — Sept. Naturalized from Europe.

Trifolium incarnatum L. (flesh-colored).

Crimson or Italian Clover.

Rare. Fields and cultivated ground as an escape from cultivation. June — July. Fugitive from Europe.

Often grown as a cover-crop. Very brilliant when in full bloom. All the clovers, through the agency of bacterial nodules on their roots, are exceedingly valuable as storers of nitrogen in the soil.

Trifolium pratense L. (of meadows).

Red, Common Red, Meadow or Pea-vine Clover.

Common. Meadows, fields and roadsides. May—June. Naturalized from Europe.

Extensively cultivated for fodder and for fertilizer. The blossoms are used medicinally.

Trifolium repens L. (creeping).

White or Honeysuckle Clover.

Common. Fields, meadows, roadsides and lawns. May—June. Probably, at least for the most part, introduced from Europe.

Valuable for pasturage, for lawns and as a honey plant. Some authorities regard this species as the true Irish Shamrock.

Trifolium hybridum L. (mongrel).

Alsike or Swedish Clover.

Frequent. Cultivated fields, roadsides and waste ground, usually in moist places. June—Aug. Naturalized from Europe.

Valuable for hay and as a honey plant, thriving best on heavy soils.

Trifolium agrarium L. (of fields).

Trifolium aureum at least of American authors.

Yellow or Hop Clover.

Common. Fields and roadsides. June—Aug. Naturalized from Europe. Of little value as a forage plant.

Trifolium procumbens L. (trailing).

Low Hop Clover.

Dry fields. Occasional to frequent near the coast; rare elsewhere. June—July. Naturalized from Europe.

MELILOTUS Hill. Sweet Clover.

Melilotus officinalis (L.) Lam. (of the shops).

Yellow Melilot or Sweet Clover.

Occasional or local. Waste places. June—Aug. Naturalized from Europe.

The leaves and flowering tops are medicinal.

Melilotus alba Desr. (white).

White Melilot or Sweet Clover. Bokhara Clover.

Local or frequent. Roadsides and waste places. June—Aug. Naturalized from Europe.

Sometimes grown for forage or as a honey plant. The leaves and flowering tops are sometimes used medicinally.

MEDICAGO L. Medick.

Medicago sativa L. (sown).

Lucerne. Alfalfa.

Rare or occasional. Fields and roadsides as an escape from cultivation. June—Aug. Introduced from Europe.

In some parts of the United States of great value as a forage plant and important as a source of honey, but not often successfully grown in Connecticut.

Medicago lupulina L. (hop-like).

Hop or Black Medick. Nonesuch.

Frequent. Waste places and roadsides. June—July. Naturalized from Europe.

The seed is a common adulteration in clover seed.

Medicago arabica (L.) Huds.

Medicago maculata Sibth.

Spotted Medick.

Rare. New London, in cultivated ground (Graves). June—Aug. Fugitive from Europe.

Medicago hispida Gaertn. (rough-hairy).

Medicago denticulata Willd.

Toothed Medick. Bur Clover.

Rare. Hartford, in waste ground (H. S. Clark). Sept.—Oct. Fugitive from Europe.

HOSACKIA Dougl.

Hosackia americana (Nutt.) Piper.

Hosackia Purshiana Benth.

Lotus americanus Bischoff.

Rare. Bridgeport, a waif in waste ground (Eames). June—Aug. Fugitive from the western United States.

LOTUS L. Bird's-foot Trefoil.

Lotus corniculatus L. (horned).

Bloom-fell. Bird's-foot Trefoil. Ground Honeysuckle.

Rare. Fields and waste ground: Naugatuck (Mrs. C. H. Lyman & B. B. Bristol), Bridgeport (Eames). June — Sept. Adventive from Europe.

AMORPHA L.

Amorpha fruticosa L. (shrubby).

False or Bastard Indigo.

Rare. Roadsides as an escape from cultivation: Middletown (Harger), Southington (Andrews), New Haven (D. C. Eaton), Hartford and Wethersfield (Bissell). May — July. Adventive from the West.

TEPHROSIA Pers.   Hoary Pea.

Tephrosia virginiana (L.) Pers.

Cracca virginiana L.

Goat's Rue. Catgut.

Rare or local. Dry sandy or rocky soils. June.

The roots are sometimes used medicinally.

ROBINIA L.   Locust.

Robinia Pseudo-Acacia L. (false Acacia).

Common or Black Locust. False Acacia.

Frequent. Fields and roadsides as an escape from cultivation. June. Naturalized from the South.

Cultivated for ornament and sometimes planted to cover sand-blows. The wood is hard and very durable, used for fence-posts and railroad ties. The bark of the root is medicinal.

Robinia viscosa Vent. (sticky).

Clammy Locust.

Occasional. Roadsides, fields and woods, usually in sandy ground. June — July. Naturalized from the South.

Robinia hispida L. (rough-hairy).

Rose Acacia. Flowering or Bristly Locust.

Rare. Dry or sandy roadsides as an escape from cultivation: Groton (Graves), Guilford (G. H. Bartlett), South Windsor (Weatherby), North Haven (Harger), Berlin and Southington (Andrews & Bissell), Seymour and South Nor-

walk (Eames), Salisbury (Mrs. C. S. Phelps). May—June.
Adventive from the Southwest.

Cultivated as as ornamental shrub.

GLYCYRRHIZA L.   Liquorice.

Glycyrrhiza lepidota (Nutt.) Pursh (scaly).

Wild Liquorice.

Rare. New Haven, formerly well established on a road-side (D. C. Eaton); now apparently exterminated. May—Aug. Fugitive from the West.

CORONILLA L.

Coronilla varia L. (variable).

Crown Vetch. Russian Clover. Axwort.

Occasional. Roadsides, waste places and in open fields as an escape from cultivation. June—Sept. Naturalized from Europe.

Very persistent and difficult to eradicate.

DESMODIUM Desv.   Tick Trefoil.

Desmodium nudiflorum (L.) DC. (naked-flowered).

Meibomia nudiflora Kuntze.

Occasional or frequent. Dry woods. July—Aug.

Desmodium grandiflorum (Walt.) DC. (large-flowered).

Desmodium acuminatum DC.

Meibomia grandiflora Kuntze.

Occasional or frequent. Dry rocky woods, usually in rich soil. July—Aug.

Desmodium rotundifolium (Michx.) DC. (round-leaved).

Meibomia Michauxii Vail.

Occasional or local. Dry woods and hillside thickets. July—Aug.

Desmodium glabellum (Michx.) DC.

Desmodium humifusum Beck.

Meibomia glabella Kuntze.

Rare. Waterford, in dry woods (Graves). Aug.

Desmodium canescens (L.) DC.

Meibomia canescens Kuntze.

Dry woods and sandy fields. Occasional or frequent in the southern half of the state and in the Connecticut Valley; rare or local elsewhere. July — Aug.

Desmodium bracteosum (Michx.) DC. (having conspicuous bracts).

Desmodium cuspidatum Hook.

Meibomia bracteosa Kuntze.

Dry wooded banks and in thickets. Occasional or frequent in the Connecticut Valley and in the southwestern part of the state; rare or absent elsewhere. July — Aug.

Desmodium Dillenii Darl.

Meibomia Dillenii Kuntze.

Occasional. Dry woods and thickets in either sandy or rich ground. July — Aug.

Desmodium paniculatum (L.) DC. (panicled).

Meibomia paniculata Kuntze.

Occasional or frequent. Dry woods and copses. July — Aug.

Desmodium canadense (L.) DC.

Meibomia canadensis Kuntze.

Showy Tick Trefoil.

Common. Sandy fields, roadsides and open waste places. July — Aug.

Flowers rarely pure white.

Desmodium sessilifolium (Torr.) Torr. & Gray (sessile-leaved).

Meibomia sessilifolia Kuntze.

Dry open or thinly wooded banks and sandy railroad fillings. Local or occasional in the valleys of the Thames River system: Montville, Norwich, Preston and Windham (Graves), Franklin and Bozrah (R. W. Woodward). July — Aug.

Desmodium rigidum (Ell.) DC. (stiff or rigid).

Meibomia rigida Kuntze.

Occasional or frequent. Dry banks and sandy roadsides. July — Aug.

Desmodium obtusum (Muhl.) DC. (blunt).*Desmodium ciliare* DC.*Meibomia obtusa* Vail.

Dry open ground and waste places. Occasional in the southern part of the state, becoming rare northward, reaching Glastonbury (Mrs. F. W. Starmer), and Manchester (Weatherby). July — Aug.

Desmodium marilandicum (L.) DC.*Meibomia marilandica* Kuntze.

Occasional or frequent. Dry hillsides and sandy plains. Aug.—Sept.

LESPEDeza Michx. Bush Clover.**Lespedeza procumbens** Michx. (trailing).

Occasional. Dry woods or thickets in sandy or sterile soil. Aug.—Sept.

Lespedeza repens (L.) Bart. (creeping).

Rare. Dry woods: New Haven (R. W. Woodward). Aug.—Sept.

Lespedeza violacea (L.) Pers. (violet-colored).

Bush Clover.

Dry open woods. Occasional in most districts but not reported from New London County. Aug.—Sept.

Lespedeza Nuttallii Darl.

Rare. Dry wooded banks or in open ground, mostly in sandy soil: Lyme and Windham (Graves), Southington (Bissell), Seymour and Oxford (Harger). Aug.

Lespedeza Stuvei Nutt.

Dry woods and rocky banks. Occasional in the southwestern part of the state, becoming rare northward and eastward, reaching Southington (Andrews), Windsor (Bissell), and Waterford (Graves). Aug.

Lespedeza virginica (L.) Britton.*Lespedeza reticulata* Pers.

Rare or local. Dry sandy or rocky soil. Aug.—Sept.

Lespedeza frutescens (L.) Britton (shrubby).

Lespedeza Sturvei Nutt., var. *intermedia* Wats.

Frequent. Dry woods and sandy banks. Aug.—Sept.

Lespedeza simulata Mackenzie & Bush (imitating).

Rare. Dry sandy ground: Groton (Graves), Southington (Bissell). Aug.

Lespedeza hirta (L.) Hornem. (hairy).

Lespedeza polystachya Michx.

Occasional or frequent. Dry sandy soil. Aug.—Sept.

Lespedeza capitata Michx. (having a head, referring to the compact flower clusters).

Common. Dry fields and sandy places. Aug.

Lespedeza capitata Michx., var. **velutina** (Bicknell) Fernald (velvety).

Lespedeza velutina Bicknell.

Lespedeza Bicknellii House.

Dry sandy or sterile places. Rare or perhaps occasional growing with the typical form. Aug.

CICER L. Chick Pea.

Cicer arietinum L. (ram's-head, referring to the shape of the flowers).

Rare. One plant in waste ground: Waterbury (A. E. Blewitt). July. Fugitive from Europe.

VICIA L. Vetch. Tare.

Vicia sativa L. (sown).

Spring Vetch.

Rare. Waste ground as an escape from cultivation. June — Aug. Adventive from Europe.

Sometimes cultivated as a forage plant or for a cover-crop.

Vicia angustifolia Reichard (narrow-leaved).

Common Vetch or Tare.

Roadsides and waste ground. Rare in its typical form.

The var. **SEGETALIS** (Thuillier) Koch (of corn fields), *Vicia sativa* of Gray's Manual ed. 6, not L., is occasional or frequent near the coast, becoming rare northward. June — Aug. Naturalized from Europe.

Vicia Faba L. (classical name for this species).

European Garden Bean.

Rare. Waste or ballast ground: Southington (Bissell), Waterbury (A. E. Blewitt), Bridgeport (Eames). July — Sept. Fugitive from the Old World.

From prehistoric times has been cultivated for food. In the maritime provinces of Canada it is grown for fodder, but in most parts of the United States, where the summers are hot and dry, it does not thrive.

Vicia tetrasperma (L.) Moench (four-seeded).

Slender Vetch.

Dry grassland. Rare or local in most districts: Norwich (W. A. Setchell), Southington (Andrews), Hamden (Harger). Becoming occasional from Milford (Eames, C. K. Averill) westward along the coast. Late May — June. Naturalized from Europe.

Vicia hirsuta (L.) S. F. Gray (hairy).

Hairy Vetch or Tare.

Rare. Stamford, in waste ground (W. H. Hoyt). May — Sept. Fugitive from Europe.

Vicia Cracca L. (classical name for some leguminous plant).

Cow, Tufted or Blue Vetch.

Fields, meadows and roadsides. Frequent along the Connecticut River; rare, local or occasional elsewhere. June — Aug. For the most part introduced from the West or North or from Europe.

Inclined to be troublesome in grassland wherever established.

Vicia villosa Røth (hairy).

Hairy or Winter Vetch.

Rare. Borders of fields as an escape from cultivation: Southington (Andrews), Salisbury (M. L. Fernald). June — Sept. Adventive from the Old World.

Grown to a considerable extent as a cover-crop.

LENS Hill.   Lentil.

Lens esculenta Moench (fit for eating).

Ervum Lens L.

Lentil.

Rare. Waste places: Bridgeport (Eames), Stamford (W. H. Hoyt). July — Aug. Fugitive from the Old World.

This is one of the oldest, and is still one of the important food-plants for man, especially in the warmer parts of the Old World and the Orient, although but little cultivated in this country.

LATHYRUS L. Vetchling. Everlasting Pea.

Lathyrus maritimus (L.) Bigel. (of the sea).

Beach Pea.

Common on beaches and sand dunes along the coast. June — Aug.

Is found rarely with pure white flowers. The young spring shoots make an excellent pot-herb.

Lathyrus palustris L. (of marshes), var. *linearifolius* Ser. (very narrow-leaved).

Marsh Pea.

Local. Borders of salt marshes in Groton, Waterford and Old Lyme (Graves), Old Saybrook (Harger). June — July.

Lathyrus latifolius L. (broad-leaved).

Perennial or Everlasting Pea.

Rare. Escaped from cultivation to roadsides: Groton, Norwich and Preston (Graves), Guilford (G. H. Bartlett), Southington (Bissell), Bridgeport (Eames). June — Aug. Adventive from Europe.

An old-fashioned garden flower, hardy under almost all conditions of soil and light.

Lathyrus pratensis L. (of meadows).

Yellow Vetchling.

Rare. In grassland: Hartford, well established in and near an old cemetery (H. S. Clark). July. Adventive from Europe.

PISUM L. Pea.

Pisum sativum L. (sown).

Garden Pea.

Rare. Waste places as an escape from cultivation. June — July. Fugitive from Europe.

Pisum sativum L., var. **arvense** (L.) Poir. (of fields).

Field Pea.

Rare. Waste places: Bridgeport (Eames). July. Fugitive from Europe.

Sometimes grown for forage.

APIOS Ludwig. Groundnut. Wild Bean.

Apios tuberosa Moench (bearing tubers).

Apios Apios MacM.

Groundnut. Wild Bean.

Occasional to frequent. Moist thickets and near streams.

July — Sept.

The tubers are said to be edible.

PHASEOLUS L. Kidney Bean.

Phaseolus polystachyus (L.) BSP. (many-spiked).

Phaseolus perennis Walt.

Wild Bean.

Rare. Rocky woods and dry banks: Franklin (R. W. Woodward), New Haven (D. C. Eaton, R. W. Woodward), Huntington (Harger), Norwalk (Miss M. D. Lockwood, G. P. Ells, Bissell). Aug.

Phaseolus vulgaris L. (common).

Common or Kidney Pole Bean.

Rare. Sometimes occurs as an escape in waste ground. July — Aug. Native of Central and South America. A fugitive, not persistent here.

The var. **NANUS** (L.) Taubert (dwarf), Field or Bush Bean, rarely occurs in similar situations.

STROPHOSTYLES Ell.

Strophostyles helvola (L.) Britton (yellowish).

Strophostyles angulosa Ell.

Trailing Wild Bean.

Open ground in sandy soil. Common along the coast, becoming rare or local northward. Aug.—Sept.

AMPHICARPA Ell.   Hog Peanut.**Amphicarpa monoica** (L.) Ell. (monoecious).*Falcata comosa* of American authors.

Wild or Hog Peanut.

Common. Woods and thickets, more often in rich moist soil. July — Sept.

Amphicarpa Pitcheri Torr. & Gray.*Falcata Pitcheri* Kuntze.

Hog Peanut.

Low woods and thickets. Southington (Andrews), Fairfield (Eames), Norwalk (Harger, Bissell), and probably occasional or local near the coast eastward. July — Sept.

LINACEAE.   FLAX FAMILY.**LINUM** L.   Flax.**Linum usitatissimum** L. (most useful).

Common Flax. Linseed.

Rare. Roadsides, fields and waste places. June — Sept. Introduced from Europe, its nativity unknown.

Well known as a cultivated plant from time immemorial; invaluable for its fibre and oil. The fibre of the inner bark is very strong and tough, is valuable for spinning, and is used in the manufacture of fine linen threads and cloths, also a great variety of coarser cords and fabrics. The seeds are the source of linseed oil, and the residue, under the name of "oil cake," is considered a valuable food for stock. Linseed meal has important medicinal uses.

Linum sulcatum Riddell (furrowed).

Rare. Dry ground: Granby (Bissell), New Haven, Ansonia, Oxford, Southbury and Woodbury (Harger), Milford (Eames), Kent (Weatherby), Salisbury (Mrs. C. S. Phelps). July — Aug.

Linum striatum Walt. (grooved).

Occasional to frequent. Moist open or shaded places. July — Aug.

Linum virginianum L.

Wild Yellow Flax.

Frequent. Dry woods and more open places, usually in sandy soil. July — Aug.

Linum medium (Planch.) Britton (intermediate).

Rare. Dry sandy fields: Waterford and Old Lyme (Graves), Ledyard (Harger), Milford (Eames). July — Sept.

OXALIDACEAE. WOOD SORREL FAMILY.**OXALIS** L. Wood Sorrel.**Oxalis Acetosella** L. (somewhat sour).

Common or White Wood Sorrel.

Rare or local. Rich moist woods: Granby (I. Holcomb), Barkhamsted and Colebrook (Bissell), Winchester (Andrews), Norfolk (J. H. Barbour), Salisbury (Mrs. C. S. Phelps). June — July.

This and other species of the genus contain a compound of oxalic acid, and if eaten in excess may give rise to poisoning. They are somewhat medicinal.

Oxalis violacea L. (violet-colored).

Violet Wood Sorrel.

Woods and moist or dry shaded places. Rare or local, but apparently well distributed throughout the state. May — June.

Oxalis stricta L. (straight).

Oxalis corniculata L., var. *stricta* of Gray's Manual ed. 6 in part.

Yellow Wood Sorrel.

Fields, roadsides and sandy places. Rare or local in northern districts, becoming frequent near the coast. May — Sept.

Oxalis filipes Small (with thread-like stems).

Oxalis Brittoniae Small.

Slender Yellow Wood Sorrel.

Rare or local. Dry fields and roadsides: Farmington (H. S. Clark & Bissell), Newington, Litchfield and Cornwall (Bis-

sell), Orange (Eames), Southbury (Harger), Salisbury (M. L. Fernald). May — Sept.

Oxalis corniculata L. (horned).

Oxalis corniculata L., var. *stricta* of Gray's Manual ed. 6 in part.

Oxalis stricta of many authors, not L.

Oxalis Bushii Small.

Oxalis rufa Small.

Oxalis cymosa Small.

Lady's Sorrel. Tall Yellow Wood Sorrel.

Common. Woods and fields in various soils and situations. May — Sept.

Oxalis repens Thunb. (creeping).

Oxalis corniculata L. in part, and of many later authors.

Rare or local. Florist's grounds, greenhouses and street gutters: New London (Graves). May — June. A cosmopolitan species, in Connecticut probably adventive from Europe.

GERANIACEAE. GERANIUM FAMILY.

GERANIUM L. Cranesbill.

Geranium maculatum L. (spotted).

Wild Cranesbill.

Common. Fields, roadsides and woods. May — June.

The very astringent root is medicinal and is officinal.

Geranium pratense L. (of meadows).

Meadow Geranium or Cranesbill.

Rare. Naugatuck, in waste ground (B. B. Bristol). July.

Fugitive from Europe.

Geranium Robertianum L.

Herb Robert. Red Robin.

Rocky ledges, usually in shade. Rare in eastern districts, becoming occasional or frequent westward. May — Sept.

Geranium carolinianum L.

Occasional. Rocky woods, dry fields and waste ground. May — July.

Geranium pusillum Burm. f. (very small).

Small-flowered Geranium or Cranesbill.

Rare. In lawns and grasslands: New Haven (Harger), Bridgeport (Eames), Monroe (H. C. Beardslee), Litchfield (Miss E. H. Thompson). June—July. Adventive from Europe.

Geranium dissectum L. (finely cut).

Cut-leaved Geranium or Cranesbill.

Rare. Oxford, in newly seeded ground (Harger). June. Fugitive from Europe.

Geranium molle L. (soft).

Dove's-foot Geranium or Cranesbill.

Rare. Lawns and cultivated ground: Southington (Andrews), Stratford (Mrs. R. H. Russell), Bridgeport (Eames), Litchfield (Miss E. H. Thompson). May—June. Fugitive from Europe.

ERODIUM L'Hér.   Storksbill.**Erodium cicutarium** (L.) L'Hér. (like *Cicuta*, the Poison Hemlock).

Storksbill. Heron's-bill.

Rare. Waste ground: New London (Graves), Norwich (Mrs. E. E. Rogers), Glastonbury (Mrs. F. W. Starmer), Bridgeport (Miss A. E. Carpenter), Norwalk (G. P. Ells). May—June. Fugitive from Europe.

Erodium moschatum (L.) L'Hér. (smelling of musk).

Musk Erodium or Storksbill.

Rare. Hartford, in waste grounds (H. S. Clark). Sept. Fugitive from Europe.

RUTACEAE.   RUE FAMILY.**ZANTHOXYLUM** L.   Prickly Ash.**Zanthoxylum americanum** Mill.

Northern Prickly Ash. Prickly Ash. Toothache Tree.

Thickets, fence-rows or open fields, often in rocky ground. Rare in the southeastern part of the state, becoming occasional northward and westward and frequent in Litchfield

County. April — May. Probably southward largely an escape from cultivation.

The bark is medicinal and is officinal; the berries are also sometimes used medicinally.

PTELEA L. Shrubby Trefoil. Hop Tree.

Ptelea trifoliata L. (three-leaved).

Shrubby Trefoil. Hop Tree.

Rare. Roadsides and waste places as an escape from cultivation: Southington (Andrews), Seymour (Harger), Ansonia (C. K. Averill), Woodbury (Eames), Huntington (Eames & C. C. Godfrey), Litchfield (Miss E. H. Thompson). June. Adventive from the West.

The bark of the root, the leaves and the fruit are medicinal.

SIMARUBACEAE. QUASSIA FAMILY.

AILANTHUS Desf. Tree of Heaven.

Ailanthus glandulosa Desf. (glandular).

Ailanthus. Tree of Heaven.

Occasional. Waste places, fence-rows and along roadsides. June; fruit Oct. Naturalized from China.

A tree of rapid growth, well adapted to cultivation. It propagates freely from seed and from root suckers and readily accommodates itself to any soil. It was formerly supposed to counteract malarial influences arising from the soil in which it grew. The staminate tree, however, on account of its disagreeable odor when in flower, is not desirable. The bark is medicinal.

POLYGALACEAE. MILKWORT FAMILY.

POLYGALA L. Milkwort.

Polygala paucifolia Willd. (few-leaved).

Fringed Polygala. Flowering Wintergreen.

In woods, usually in light soil. Rare in New London County, frequent elsewhere. May — June.

A form with white flowers has been found at New Milford (C. K. Averill).

Polygala polygama Walt. (polygamous).

Milkwort.

Local or occasional. Dry sandy ground, often on sand plains. July — Aug.

A form with white flowers occurs at Milford (Eames).

Polygala Senega L. (from Seneca Indians).

Seneca or Senega Snakeroot.

Rare. Kent, a small colony in thinly shaded, dry and poor soil on the bank of the Housatonic River (C. K. Averill & E. H. Austin); occurs also at New Milford (C. D. Bishop). May — June.

The plant is valued medicinally and is officinal.

Polygala sanguinea L. (blood-red).

Polygala viridescens L.

Purple Milkwort.

Common. Moist or sometimes dry fields, pastures and thin woods. July — Sept.

Occurs occasionally with white flowers.

Polygala Nuttallii Torr. & Gray.

Rare or local. Open ground in sandy soil: Groton (Graves), Cheshire and Southington (Andrews), Plainville (Bissell). July — Aug.

Polygala cruciata L. (cross-shaped).

Open swamps and wet meadows. Occasional or frequent near the coast, but rare or wanting inland. July — Sept.

Polygala verticillata L. (whorled).

Whorled Polygala.

Common. Dry or sterile fields. July — Aug.

Polygala verticillata L., var. *ambigua* (Nutt.) Wood (doubtful).

Polygala ambigua Nutt.

Apparently rare. Dry places, growing with the typical form. The distinctions between this variety and the species have been little recognized, and its distribution is not known. July — Aug.

EUPHORBIACEAE. SPURGE FAMILY.

CROTONOPSIS Michx.

Crotonopsis linearis Michx. (very narrow; referring to the leaves).

Local. Sandy fields and wastes: Milford, plentiful in one locality (Eames). July — Sept.

ACALYPHA L. Three-seeded Mercury.

Acalypha virginica L.

Frequent or common. Open woods, fields and meadows. July — Sept.

Sometimes a weed in lawns and cultivated ground.

Acalypha gracilens Gray (slender).

Acalypha virginica L., var. *gracilens* Muell. Arg.

Frequent. Dry fields and roadsides. July — Sept.

RICINUS L. Castor-oil Plant.

Ricinus communis L. (growing in colonies).

Castor-oil Plant.

Rare. A fugitive in waste grounds in Bridgeport and Fairfield (Eames). Sept. — Oct. Native of India or Africa.

Cultivated for ornament. The oil expressed from the seeds is medicinal and is officinal.

EUPHORBIA L. Spurge.

Euphorbia polygonifolia L. (having leaves like Polygonum, the Knotweed).

Seaside Spurge.

Frequent along the coast on sea beaches and sand dunes. July — Sept.

Euphorbia Preslii Guss.

Euphorbia nutans of Britton's Manual.

Occasional or frequent. Fields and roadsides, especially in sandy soil. July — Sept.

The plant has medicinal properties and is locally known as Fluxweed. All species of the genus are more or less medicinal and some are strong irritants.

Euphorbia hirsuta (Torr.) Wiegand (hairy).

Frequent or common. Sandy soil along roadsides and in waste places. July — Sept.

Euphorbia maculata L. (spotted).

Milk Purslane.

Frequent. Sandy fields, roadsides and waste places. July — Sept.

Euphorbia marginata Pursh (having a distinct border).

Snow-on-the-Mountain.

Rare. Waste ground: Bridgeport (Eames). Aug. — Sept. Adventive from the West.

Often cultivated for ornament.

Euphorbia corollata L. (having a corolla).

Flowering Spurge.

Rare. Fields and waste ground: Norwich (Mrs. E. E. Rogers), Milford (Eames), Oxford (Harger). May — Aug. Adventive from the South or West.

The root is medicinal.

Euphorbia Ipecacuanhae L. (Brazilian Indian name).

Wild Ipecac. Ipecac Spurge.

Rare. There is in the Herbarium of the Boston Natural History Society a specimen of this plant collected at East Windsor by Dr. M. M. Reed. It has no date, but from what is known of Dr. Reed it must have been collected between 1825 and 1830; not otherwise reported from the state. May — Oct.

The root is medicinal. All species of spurge yield a very acrid, milky juice which is irritant to the skin. Domestic animals are sometimes poisoned by eating these plants, and the milk of such animals is also rendered poisonous.

Euphorbia Esula L. (Pre-Linnean name for certain species of spurge).

Faitour's Grass. Leafy Spurge.

Rare. Fields and waste ground: New London (Graves), Manchester (A. W. Driggs), Norwalk (G. P. Ells). May — June. Adventive from Europe.

Euphorbia Cyparissias L. (classical name for some species of spurge).

Cypress Spurge. Spurge.

Occasional. Roadsides and fields as an escape from cultivation, usually near dwellings or old cemeteries. June. Naturalized from Europe.

The plant yields a yellow dye.

Euphorbia Peplus L. (classical name for this species).

Petty Spurge.

Rare. New London, well established in one yard for at least twelve years (Graves). June — Oct. Adventive from Europe.

Euphorbia Lathyrus L. (classical name for some spurge).

Caper or Myrtle Spurge. Mole Plant.

Rare. Waste ground: well established in Trumbull and Bridgeport (Eames). July — Aug. Adventive from Europe.

CALLITRICHACEAE.

WATER STARWORT FAMILY.

CALLITRICHE L. Water Starwort.

Callitriche deflexa A. Br. (bent downward), var. **Austini** (Engelm.) Hegelm.

Callitriche Austini Engelm.

Moist shaded ground, usually in cart paths and little used roads. Local or occasional except near the coast eastward, where it is not reported. June — Aug.

Callitriche palustris L. (of marshes).

Callitriche verna L. in part.

Pools and slow running streams. Guilford (G. H. Bartlett), Windsor (Bisseli), and occasional or frequent westward. June — Sept.

Callitriche heterophylla Pursh (various-leaved).

Ponds and slow running streams: Woodstock (Weatherby & Harger), East Hartford (A. W. Driggs), Southington (Andrews, Bissell), and occasional or frequent in the vicinity of the coast. June — Sept.

LIMNANTHACEAE.

FALSE MERMAID FAMILY.

FLOERKEA Willd. False Mermaid.

Floerkea proserpinacoides Willd. (like *Proserpinaca*, the Mermaid-weed).

Rare. Damp shaded ground: North Haven (A. H. Graves), Orange (Eames & C. C. Gadsfrey), Oxford (G. H. Bartlett), Southbury (Harger). May.

ANACARDIACEAE. CASHEW FAMILY.

RHUS L. Sumach.

Rhus typhina L. (like *Typha*, the Cat-tail).

Rhus hirta Sudworth.

Staghorn Sumach.

Occasional. Open fields, thickets and fence-rows. June.

The bark and berries have properties similar to those of *Rhus glabra*.

Rhus glabra L. (smooth).

Smooth Sumach.

Frequent or common. Pastures and roadsides, usually in dry ground. June.

Sometimes forms troublesome colonies by its running root-stocks. The leaves and bark are sometimes used in tanning. Galls found on its leaves are very astringent and are used as a substitute for the imported galls. All species of the genus are handsome, especially in their autumnal foliage, and the innocuous species are particularly ornamental when grown in suitable places.

Rhus copallina L. (producing copal).

Dwarf, Black or Shining Sumach.

Occasional, frequent or common. Pastures and rocky woods. July — Aug.

The bark and leaves have properties similar to those of *Rhus glabra*.

Rhus Vernix L. (varnish).

Rhus venenata DC.

Poison Sumach, Dogwood or Elder.

Swamps and wet ground or sometimes in drier places. Occasional in most districts, becoming frequent near the coast. June—July.

All parts of the plant are poisonous to the touch, etc., as in the following species, only more actively so.

Rhus Toxicodendron L. (poison tree).

Poison Ivy, Oak or Vine. Mercury. Marcury.

Frequent or common. Fence-rows, fields, woods and meadows, in either moist or dry ground, often climbing trees and posts. May—June.

The var. *RADICANS* (L.) Torr. (rooting), *Rhus radicans* L., is often more plentiful than the typical form.

A pernicious shrub or vine that is far too plentiful. To most persons all parts of the plant at all seasons are poisonous to the touch; and its exhalations, even at some distance, are equally poisonous to some, especially in a humid atmosphere or during free perspiration. The poisonous principle is believed to be a peculiar oil which is present in all parts of the plant and which in the minutest quantity is intensely irritant. Cattle and horses are not affected by it. The leaves are valued medicinally and were formerly officinal.

Rhus canadensis Marsh.

Rhus aromatica Ait.

Sweet-scented Sumach.

Rare. Guilford, on a small outcrop of rock in a salt marsh (G. H. Bartlett). May.

The bark of the root is an active medicinal agent.

AQUIFOLIACEAE. HOLLY FAMILY.

ILEX L. Holly.

Ilex opaca Ait. (opaque).

American Holly.

Rare. Roadsides and thickets: Waterford (Miss A. H. Morgan), Milford (J. D. Dana), Wolcott (H. J. Bassett). May—June; fruit Oct., lasting into the winter. Escaped from cultivation or possibly native.

Plentiful in parts of the South, where it is extensively

gathered for use in Christmas decorations. The leaves and bark are medicinal.

***Ilex verticillata* (L.) Gray (whorled).**

Black Alder. Winterberry.

Common. Moist woods and swamps, or sometimes in drier places. June—July.

The berries turn brilliant red in autumn and continue on the bushes far into the winter. The bark and berries are used medicinally.

***Ilex verticillata* (L.) Gray, var. *tenuifolia* (Torr.) Wats. (thin-leaved).**

Ilex bronxensis Britton.

Winterberry.

Low grounds, growing with the species. Frequent in southwestern Connecticut (Eames); occasional about New London (Graves). Rare elsewhere: Southington (Andrews), Litchfield (Bissell). June—July.

***Ilex verticillata* (L.) Gray, var. *padifolia* (Willd.) Torr. & Gray (having leaves like *Padus*, the Cherry).**

Winterberry.

Occasional. Low woods and swamps, growing with the species. June—July.

***Ilex laevigata* (Pursh) Gray (smoothed).**

Smooth Winterberry.

Swamps and wet woods. Rare in the northern and western parts of the state: South Windsor and Litchfield (Bissell), Monroe and Middlebury (Harger), Salisbury (Mrs. C. S. Phelps). Occasional in southeastern Connecticut, chiefly in White Cedar swamps (Graves). June; fruit Sept.

***Ilex glabra* (L.) Gray (smooth).**

Inkberry.

Local. In and about swamps: Voluntown (Harger), Groton, New London and Waterford (Graves), Guilford (W. R. Dudley). June.

NEMOPANTHUS Raf. Mountain Holly.

***Nemopanthus mucronata* (L.) Trel. (having a short abrupt point).**

Nemopanthes fascicularis Raf.

Ilicioides mucronata Britton.

Mountain Holly.

Low woods and shaded swamps. Rare near the coast, becoming occasional or frequent northward. May.

CELASTRACEAE. STAFF TREE FAMILY.

EVONYMUS L. Spindle Tree.

Evonymus atropurpureus Jacq. (dark purple).

Burning Bush. Waahoo. Indian Arrow-wood.

Rare. Escaped from cultivation to roadsides and fence-rows: Southington (Weatherby & Bissell), Milford (Eames & C. C. Godfrey), Stratford, Bridgeport and Easton (Eames). June—July; fruit Sept.—Oct. Adventive or fugitive from the West.

Planted for ornament. The bark of the root is medicinal and is officinal.

Evonymus alatus (Thunb.) Rupr. & Maxim. (winged).

Rare. Escaped from cultivation to roadsides: Plainfield (Weatherby & Bissell), Milford (Eames), Oxford, Huntington and Monroe (Harger). June—July. Adventive from eastern Asia.

Planted for ornament.

Evonymus europaeus L.

European Spindle Tree.

Rare. Escaped from cultivation to roadside in Stratford (Eames), and Bridgeport (Miss A. E. Carpenter). June—July. Adventive from Europe.

Planted for ornament.

CELASTRUS L. Staff Tree. Shrubby Bitter-sweet.

Celastrus scandens L. (climbing).

Waxwork. Climbing Bitter-sweet.

Frequent. Thickets, fence-rows and along streams. May—June; fruit Sept.—Oct., persisting into the winter.

The dried pods are often gathered for home decorations. A highly ornamental plant and worthy of cultivation. The bark of the plant and root are medicinal.

STAPHYLEACEAE. BLADDER NUT FAMILY.

STAPHYLEA L. Bladder Nut.

Staphylea trifolia L. (three-leaved).

American Bladder Nut.

Rocky woods and thickets. Rare in New London County, occasional elsewhere. Late May; fruit Aug.—Sept.

Desirable to plant as an ornamental shrub.

ACERACEAE. MAPLE FAMILY.

ACER L. Maple.

Acer pennsylvanicum L.

Striped Maple. Moosewood.

Rocky woods in rich soil. Occasional in the northwestern part of the state, becoming rare eastward and southward, reaching Ashford (Bissell), East Haddam (Graves), Huntington and Redding (Eames). May.

An attractive tree at all seasons of the year.

Acer Pseudo-platanus L. (simulating *Platanus*, the Plane Tree).

Sycamore Maple.

Rare. Sparingly escaped from an old nursery to a pasture at Wethersfield (H. S. Clark & Bissell). May. Introduced from Europe.

Sometimes planted as an ornamental tree.

Acer spicatum Lam. (spiked).

Mountain Maple.

Cool, rocky woods. Occasional in the northern part of the state, becoming rare southward, reaching East Haddam (Graves), Guilford, at Bluff Head (G. H. Bartlett), Meriden (D. C. Eaton), Redding (Eames & C. C. Godfrey). May.

Acer saccharum Marsh. (sugar).

Acer saccharinum Wang., not L.

Sugar or Rock Maple.

Rocky woods, roadsides and fence-rows. Frequent or common in northern districts, becoming rare near the coast, except as an escape from cultivation. May.

A popular shade tree, very common in cultivation. Very valuable for its wood, which is extensively used in cabinet work, for floors and for fuel. "Bird's-eye Maple" is of this species. It is also the source of genuine maple sugar. The autumnal foliage is very brilliant.

Acer saccharum Marsh., var. **nigrum** (Michx. f.) Britton (black).

Acer saccharinum Wang., var. *nigrum* of Gray's Manual ed. 6.

Acer nigrum Michx. f.

Black Sugar Maple.

Rare. Roadside as an escape from cultivation: Salisbury (Mrs. C. S. Phelps). May. Adventive from the North or West.

Acer platanoides L. (like *Platanus*, the Plane Tree).

Norway Maple.

Rare. Escaped from cultivation to roadside thickets in Hartford (H. S. Clark & Bissell). May. Adventive from Europe.

Frequent and well known in cultivation.

Acer saccharinum L. (sugary).

Acer dasycarpum Ehrh.

White, Silver or Soft Maple.

River banks and swamps. Frequent inland along the larger streams; rare elsewhere. March—April, rarely earlier.

Often planted for shade or ornament.

Acer rubrum L. (red).

Red, Swamp or Soft Maple.

Common. Swamps, low woods or sometimes in dry ground. March—April.

The wood is largely used in the manufacture of furniture and wooden ware and for fuel. A beautiful tree at all seasons and one of the most brilliant in spring and fall; it is worthy of much more extensive cultivation. The bark is medicinal.

Acer Negundo L. (an Indian name).

Negundo aceroides Moench.

Box Elder. Ash-leaved Maple.

Rare or local. River banks or roadsides. Apparently native along the Housatonic River from Oxford (Harger) to Salisbury (Mrs. C. S. Phelps); escaped from cultivation at Putnam (Harger), Groton (Graves), Southington (Andrews), Wethersfield (Bissell), and Norwalk (Miss A. E. Carpenter). April — May.

It is a rapid grower, thriving best in moist ground. Often planted as a shade tree and in the West grown for wind-breaks.

SAPINDACEAE. SOAPBERRY FAMILY.

CARDIOSPERMUM L.

Cardiospermum Halicacabum L. (classical name).

Balloon Vine. Heart-seed.

Rare. Escaped from gardens to waste ground in Bridgeport (Eames). Oct. Fugitive from the Tropics.

AESCULUS L. Horse-chestnut. Buckeye.

Aesculus Hippocastanum L. (horse-chestnut).

Common Horse-chestnut.

Rare. Southington, escaped from cultivation to a fence-row (Andrews). June. Native of Asia.

Extensively planted for shade or ornament.

BALSAMINACEAE. TOUCH-ME-NOT FAMILY.

IMPATIENS L. Balsam. Jewelweed.

Impatiens pallida Nutt. (pale).

Impatiens aurea Muhl. (?)

Pale Touch-me-not.

Damp, rocky woods. Rare in most districts, becoming occasional in the northwestern part of the state. July — Sept.

The herb possesses the same properties as the following species.

Impatiens biflora Walt. (two-flowered).

Impatiens fulva Nutt.

Spotted Touch-me-not. Snap-weed. Silver Weed.

Common. Moist or wet, mostly shaded places. July—Sept.

A form with pale yellow flowers occurs at Thompson (Weatherby & Bissell).

The plant bears cleistogamous fertile flowers in the earlier stages of its growth. Medicinal; it is said also to be efficacious in relieving the effects of poisoning by species of *Rhus* and stinging nettles.

RHAMNACEAE. BUCKTHORN FAMILY.

RHAMNUS L. Buckthorn.

Rhamnus alnifolia L'Hér. (alder-leaved).

Dwarf Alder.

Rare or local. In swamps: Litchfield (Weatherby & Bissell), Cornwall (E. E. Brewster), Norfolk (Bissell), Salisbury (M. L. Fernald), East Granby (Harger). May.

Rhamnus cathartica L. (cathartic).

Common Buckthorn.

Rare or local. Escaped from cultivation to roadsides and pastures: Stonington, Lebanon, Woodstock and Stafford (Graves), Norwich (Mrs. E. E. Rogers), Middletown (J. D. Cochrane), East Hartford (C. C. Hanmer), Waterbury (A. E. Blewitt), New Milford and Kent (C. K. Averill), Cornwall and Norfolk (Bissell), Salisbury (Mrs. C. S. Phelps). May—June. Naturalized from Europe.

A good hedge plant. The berries and bark are actively cathartic. Another species of this genus, *Rhamnus Purshiana* DC. of western North America, furnishes the well known *Cascara sagrada*.

CEANOTHUS L. Red-root.

Ceanothus americanus L.

New Jersey Tea. Red-root.

Common. Dry, open woods and fields in sterile soil. June—July.

The leaves are said to have been used during the American revolution as a substitute for tea. The root and leaves were formerly used for dyeing wool red. Medicinal.

VITACEAE. VINE FAMILY.

PSEDERA Neck. Virginia Creeper. Woodbine.

Psedera quinquefolia (L.) Greene (five-leaved).

Ampelopsis quinquefolia Michx.

Parthenocissus quinquefolia Planch.

Woodbine. American Ivy.

Frequent or common. Woods, thickets and fence-rows.
June.

Often cultivated, and very attractive as an ornamental plant, especially in autumnal foliage. The bark and young twigs have medicinal properties.

Psedera quinquefolia (L.) Greene, var. **hirsuta** (Donn) Rehder (hairy).

Woods and thickets. Occasional or frequent in Litchfield County, not reported elsewhere. June.

Psedera vitacea (Knerr) Greene (like *Vitis*, the Grape).
Woodbine.

Woods and thickets. Apparently occurs in most parts of the state, but its exact distribution and frequency are not known. June.

VITIS L. Grape.

Vitis labrusca L. (classical name).

Northern Fox Grape. Fox or Skunk Grape.

Frequent or common. Woods, swamps and thickets.
June; fruit mid-Aug.—Sept.

The fruit is often gathered for making jelly and preserves. The cultivated Isabella, Catawba, Concord and Brighton grapes are derived from this species, and it is the parent of the greater part of American cultivated grapes. Rarely occurs with fruit amber-green or reddish brown in color. The Niagara and some other so-called White Grapes are derivatives of this form.

Vitis aestivalis Michx. (belonging to summer).

Summer, Pigeon or Bunch Grape.

Frequent or common. Woods and thickets. June; fruit Sept.—Oct.

Hybridizes to some extent with *Vitis labrusca* and is next

in importance to that species as a source of cultivated varieties. Its derivatives are largely wine grapes.

Vitis bicolor Le Conte (two-colored).

Summer or Blue Grape.

Rare. In thickets: Southington and Colebrook (Bissell).
June; fruit Sept.—Oct.

Vitis vulpina L. (pertaining to a fox).

Vitis riparia Michx.

River-bank or Frost Grape.

Frequent on banks of rivers and streams; rare or occasional in other situations. June; fruit Sept.—Oct.

The leaves, tendrils and fruit are somewhat medicinal, as are those of other species of the genus.

TILIACEAE. LINDEN FAMILY.

TILIA L. Linden. Basswood.

Tilia americana L.

Basswood. American Linden. Whitewood.

Occasional. Woods, fence-rows and fields. June—July.

The wood is light, white and soft, but is durable, and well adapted for carriage bodies, cabinet work, interior finish of houses, and light boxes, such as honey boxes. It also makes a fine grade of charcoal. The fibrous inner bark is made into mats and cordage. It is an important honey plant and the saps yields sugar. The flowers and bark are sometimes used medicinally.

Tilia Michauxii Nutt.

Tilia pubescens of Gray's Manual, ed. 6, not Ait.

Basswood.

Rare. Wooded hillsides: Ledyard (Graves), Franklin (Graves, R. W. Woodward), Old Lyme (Miss A. M. Ryon).
Late June—early July.

Tilia vulgaris Hayne (common).

European Linden.

Rare. Escaped from cultivation to roadsides in Hartford (H. S. Clark & Bissell). June. Introduced from Europe.

This is the species so much esteemed for street decoration in Berlin.

MALVACEAE. MALLOW FAMILY.

ABUTILON Mill. Indian Mallow.

Abutilon Theophrasti Medic.*Abutilon Avicennae* Gaertn.*Abutilon Abutilon* Rusby.

Velvet Leaf.

Occasional. Waste places and roadsides. Aug.—Sept.
Naturalized from Asia.**Abutilon pictum** (Gill.) Walp. (painted).*Abutilon striatum* Dicks.

Flowering Maple. Tassel Tree.

Rare. Salisbury, a few plants in waste ground as an escape from cultivation (H. S. Clark). June—Aug. Fugitive from Brazil.

SIDA L.

Sida spinosa L. (spiny).

Rare. Bridgeport, several plants in a dry sandy waste (Eames). Sept. Fugitive from the Tropics.

ALTHAEA L. Marsh Mallow.

Althaea officinalis L. (of the shops).

Marsh Mallow. Sweatweed. Mortification Root.

Rare. Borders of marshes: Norwich (Mrs. E. E. Rogers), Guilford (G. H. Bartlett & Bissell). July—Aug. Naturalized from Europe.

The root, the leaves and the flowers are medicinal, the first named officinal. The root is very mucilaginous and is used in the manufacture of confectionery.

Althaea rosea (L.) Cav. (rose-colored).

Hollyhock.

Rare. Waste places and street gutters as an escape from gardens: New London (Graves), Hartford (H. S. Clark & Bissell), New Britain (J. N. Bishop), Meriden (Andrews), Bridgeport and Fairfield (Eames). July—Aug. Adventive from southern Europe.

An old and deservedly popular garden plant.

MALVA L. Mallow.**Malva rotundifolia L.** (round-leaved).

Common or Dwarf Mallow. Cheeses.

Common. Waste places and cultivated fields. May — Oct.
Naturalized from Europe.

Sometimes troublesome as a weed. The plant is medicinal,
and like most species of this family abounds in mucilage.

Malva crispa L. (curled).

Curled Mallow.

Rare. Escaped from gardens to cultivated ground: East
Lyne (Miss A. M. Ryon), Oxford (Harger). June — Aug.
Adventive from Europe.

Malva sylvestris L. (of woods).

High Mallow.

Rare or local. Roadsides and waste ground: Norwich
(Mrs. E. E. Rogers), East Lyne (Miss A. M. Ryon), New
Haven (O. D. Allen), Southington (Bissell), Oxford (Har-
ger), Bridgeport (Eames), Litchfield (Miss E. H. Thomp-
son). Aug.—Sept. Adventive from Europe.

The plant is medicinal.

Malva moschata L. (musky).

Musk Mallow or Rose.

Rare, but found throughout the state. Escaped from
gardens to roadsides and waste ground. June — Aug. Ad-
ventive from Europe.

Malva Alcea L. (classical name for some mallow).

European Mallow.

Rare. Roadsides and waste ground as an escape from
gardens: Griswold and East Lyne (Graves), Stafford and
Southington (Bissell), East Granby (H. S. Clark), Trumbull
(J. P. Coles), Weston (Eames & C. C. Godfrey), Salisbury
(Mrs. C. S. Phelps). June — Sept. Adventive from Europe.

HIBISCUS L. Rose Mallow.**Hibiscus syriacus L.**

Rose of Sharon. Shrubby Althaea.

Rare. Meriden, ballast ground (Andrews), Fairfield,

freely escaped to a shrubby hillside (Eames), Salisbury (C. C. Godfrey). Aug. Naturalized from Asia.

Hibiscus Moscheutos L. (producing offsets).

Wild or Swamp Rose Mallow.

Frequent along the coast in brackish and saline marshes; rare inland as at Woodbury (Harger). Aug.—Sept.

The root is sometimes used medicinally. Will thrive in any garden soil and is well worthy of cultivation.

Hibiscus Trionum L.

Bladder Ketmia. Flower-of-an-Hour.

About old gardens and in waste places as an escape from cultivation. Rare in most districts: Ledyard (Graves), Guilford (G. H. Bartlett), East Windsor (Bissell), Southington (Andrews). Occasional in the southwestern part of the state. July—Aug. Adventive from Europe.

Hibiscus esculentus L. (edible).

Okra. Gumbo.

Rare. Waste ground in Fairfield (Eames). Aug.—Sept. Fugitive from tropical Asia.

Much cultivated in the South for its young pods which are added to soups and stews. It can be grown successfully in southern Connecticut.

HYPERICACEAE. ST. JOHN'S-WORT FAMILY.

HYPERICUM L. St. John's-Wort.

Hypericum Ascyron L. (classical name for some species of St. John's-wort).

Great St. John's-wort.

Alluvial soil on banks of streams. Rare in most districts: Wethersfield and Simsbury (A. W. Driggs), Southington (Andrews). Occasional along the Housatonic River throughout its course. July—Aug.

Hypericum perforatum L. (perforated).

Common St. John's-wort.

Common. Waste places, open fields and roadsides. May—June. Naturalized from Europe.

The herb is medicinal and is used as a substitute for Arnica.

Hypericum punctatum Lam. (dotted).

Hypericum maculatum Walt., not Crantz.

Hypericum corymbosum Muhl.

Hypericum maculatum Walt., var. *subpetiolatum* Bicknell.

Frequent. Moist ground. July — Aug.

Hypericum prolificum L. (prolific; fertile).

Shrubby St. John's-wort.

Rare. Escaped from cultivation to fields and roadsides: Woodstock (Graves & Harger), Salisbury (Mrs. C. S. Phelps). June — Aug. Adventive from the South.

Hypericum adpressum Bart. (appressed).

Rare. Wet shores: Lisbon (W. A. Setchell & Graves), Lebanon (Mrs. C. B. Graves), East Lyme (Miss A. M. Ryon). June — July.

Hypericum Bissellii Robinson.

Rare. Open rocky woods: Southington (Bissell). July — Aug.

Hypericum ellipticum Hook. (oval).

Pale St. John's-wort.

Common. Moist places and along streams. Late June — July.

Hypericum boreale (Britton) Bicknell (northern).

Hypericum canadense L., var. *minimum* Gray's Manual ed. 6.

Wet or moist sandy soil. Probably occasional or frequent throughout but its exact distribution is not known. July — Sept.

Hypericum mutilum L. (mutilated).

Dwarf St. John's-wort.

Common. Moist or wet sandy ground along streams and in ditches and about ponds. July — Sept.

Hypericum majus (Gray) Britton (larger).

Hypericum canadense L., var. *majus* Gray.

Moist sandy ground, usually along streams. Rare or local in most parts of the state: Groton (Graves), Union (Bissell), Southington (Andrews, Bissell). Occasional along the Connecticut River and in parts of New Haven and Fairfield Counties. July — Aug.

Hypericum canadense L.

Common. Sandy ground, usually in moist or wet but sometimes in dry places. July — Sept.

Hypericum gentianoides (L.) BSP. (gentian-like).

Hypericum nudicaule Walt.

Sarothra gentianoides L.

Orange Grass. Pineweed.

Common. Dry sandy or rocky ground, often plentiful on sand plains. Aug.—Sept.

Hypericum virginicum L.

Triadenum virginicum Raf.

Elodea campanulata Pursh.

Marsh St. John's-wort.

Frequent. Swamps and in shallow water. July — Sept.

ELATINACEAE. WATERWORT FAMILY.

ELATINE L. Waterwort.**Elatine americana** (Pursh) Arn.

Mud Purslane.

Muddy shores and in shallow water. Rare or local in most districts: Norwich (Mrs. E. E. Rogers), Groton, Lyme and Old Lyme (Graves), Guilford (G. H. Bartlett), Southington (Andrews & Bissell), Middlebury (Harger), Kent (Eames & E. H. Austin). Local or occasional in southwestern Connecticut. July — Aug.

CISTACEAE. ROCKROSE FAMILY.

HELIANTHEMUM Mill. Rockrose.**Helianthemum canadense** (L.?) Michx.

Frostweed.

Frequent. Dry sandy or gravelly places. Mid-May — July.
The plant is medicinal.

Helianthemum majus BSP. (larger).

Frostweed.

Frequent. Dry open ground in sandy or gravelly soil.
June — July.

HUDSONIA L.

Hudsonia tomentosa Nutt. (woolly).

False Heather. Poverty Grass.

Rare, occasional or local on sand dunes along the coast from Groton (Graves), westward as far as Westport (Eames & C. C. Godfrey); occurs also inland at Ledyard (Graves). Late May—June.

LECHEA L. Pinweed.

Lechea villosa Ell. (hairy).

Lechea major Michx., not L.

Hairy Pinweed.

Common. Roadsides, fields and waste ground in sterile soil. July—Aug.

Lechea minor L. (smaller).

Lechea thymifolia Michx.

Rare or local. Dry open ground or in half-shade: New London and East Lyme (Graves), Middletown and Enfield (Bissell), Southington (Andrews), Kent (Eames), Salisbury (Mrs. C. S. Phelps). July—Aug.

Lechea intermedia Leggett (intermediate).

Lechea minor Gray's Manual ed. 6.

Open ground or thin woods in sterile soil. Rare near the coast, becoming frequent or common northward. July—Aug.

Lechea maritima Leggett (of the seaside).

Lechea minor L., var. *maritima* Gray.

Beach Pinweed.

Frequent on sandy beaches and dunes along the coast. July—Aug.

Lechea maritima Leggett, var. *interior* Robinson (inland).

Dry sandy or sterile soil. Rare or occasional in the southeastern part of the state, extending to Sterling (Graves), East Hartford (Weatherby), and Southington (Andrews). July—Aug.

Lechea tenuifolia Michx. (fine-leaved).

Frequent. Dry sandy or sterile ground. July—Aug.

Lechea Leggettii Britton & Hollick.

Lechea moniliformis Bicknell.

Dry or sandy places. Occasional or local in New London County (Graves); not reported elsewhere. July—Aug.

VIOLACEAE. VIOLET FAMILY.

VIOLA L. Violet. Heart's-ease.

Viola pedata L. (like a bird's foot; referring to the form of the leaves).

Viola pedata L., var. *bicolor* Pursh.

Bird-foot Violet.

Dry sandy or rocky ground. Rare in its typical form: New Milford (Miss S. Hartwell), Branford (Miss R. Doolittle), and rarely near the coast eastward (Graves).

The var. *LINEARILOBA* DC. (very narrow-lobed), *Viola pedata* of Gray's Manual ed. 6, not L., is frequent in most parts of the state and is sometimes common on sandy plains. May and sometimes again in Sept.

Occasionally occurs with white or pink flowers.

Viola cucullata Ait. (hooded).

Viola palmata L., var. *cucullata* Gray in part.

Marsh Blue Violet.

Frequent or common. Wet meadows, swamps and banks of streams. May—June.

Sometimes occurs with white, pale or variegated flowers.

A hybrid with *Viola fimbriatula* is frequent; a hybrid with *Viola palmata* occurs at East Lyme (Miss A. M. Ryon); hybrids with *Viola papilionacea* and *Viola sororia* are occasional; a hybrid with *Viola Brittoniana* occurs locally along the coast westward (Eames); a hybrid with *Viola septentrionalis* occurs at Killingly (Weatherby & Bissell); a hybrid with *Viola sagittata* occurs at Windsor (Bissell) and Fairfield (Eames).

This and the twelve species immediately following constitute a group of closely related species that hybridize freely when growing together. These hybrids show characters more or less intermediate between those of the parents, and many of

them have been described as species. They are often plentiful locally and vigorous in growth, but show impaired fertility, a large proportion of the ovules never forming seeds.

***Viola nephrophylla* Greene (kidney-leaved).**

Viola vagula Greene.

Rare. Rich humus about a cold spring on a wooded hillside, Salisbury (Mrs. C. S. Phelps & Bissell), New Milford, moist ledges on river bank (Bissell). May.

***Viola affinis* Le Conte (related).**

Viola venustula Greene.

Viola obliqua of Britton's Manual.

Rich woods and thickets, mostly in alluvial soil. East Lyme (Miss A. M. Ryon), Windsor (Weatherby), Plainville (Andrews), Southington (Bissell), and occasional along the Housatonic River in the northwestern part of the state. May—June.

***Viola latiuscula* Greene (somewhat broad).**

Rare. Rich woods or moist grassland: Southington and Cornwall (Bissell). May.

***Viola papilionacea* Pursh (butterfly-like).**

Viola palmata L., var. *cucullata* Gray in part.

Common. Meadows, pastures and open places. May—June.

A hybrid with *Viola sagittata* occurs at Glastonbury (Bissell); a hybrid with *Viola sororia* is occasional throughout.

Sometimes found with pure white flowers, or white flecked with blue.

***Viola palmata* L. (palmate).**

Dry woods. Rare in New London County: Ledyard (Graves), East Lyme (Miss A. M. Ryon). Occasional elsewhere. May—June.

A hybrid of this with *Viola papilionacea* is sometimes found.

***Viola triloba* Schwein. (three-lobed).**

Viola palmata L., var. *dilatata* Pollard, not Ell.

Occasional. Rich woods either dry or moist. May—June.

Viola sororia Willd. (sisterly).

Viola palmata L., var. *sororia* Pollard.

Woolly Blue Violet.

Occasional or frequent. Woods and dry open ground.

May—June.

Viola septentrionalis Greene (northern).

Rare. Roadsides and shaded banks: Union, East Windsor, Plainville, New Hartford and Winchester (Bissell). May—June.

Viola fimbriatula J. E. Smith (finely fringed).

Viola sagittata Gray's Manual ed. 6 in part.

Viola ovata Nutt.

Common. Dry fields and woods. April—May.

Hybrids of this with *Viola palmata*, *Viola papilionacea*, *Viola sagittata* and *Viola sororia* are occasional. A hybrid with *Viola Brittoniana* is reported from Southington (Andrews), and occurs at Fairfield (Eames).

Rarely seen with white flowers.

Viola sagittata Ait. (arrow-head shaped).

Viola subsagittata Green.

Moist or dry sandy or heavy soils. Generally rare: East Lyme (Miss A. M. Ryon), Glastonbury, Windsor and Bloomfield (Bissell). Plainville and Southington (Andrews). Occasional along the coast in Fairfield County (Eames). May—June.

A hybrid of this with *Viola Brittoniana* is reported from Southington (Andrews), and occurs along the coast in Fairfield County (Eames).

Viola Brittoniana Pollard.

Viola septemloba of authors, not LeConte.

Viola atlantica Britton, not Pomel.

Meadows or sometimes dry open places. Occasional or local along the coast from New Haven westward (Eames). May—June.

Viola pectinata Bicknell (comb-like).

Rare. Stratford, inner edge of salt meadows (C. C. Godfrey). May—June.

A hybrid of this with *Viola Brittoniana* occurs at Stratford (Eames).

***Viola lanceolata* L. (lance-shaped).**

Lance-leaved Violet.

Low meadows, swamps and wet places about ponds. Rare or occasional in Litchfield County but frequent or common elsewhere. May—June.

***Viola primulifolia* L. (primrose-leaved).**

Primrose-leaved Violet.

Moist sandy woods, meadows and open swamps. Occasional over most of the state but not reported from Litchfield County. May—June.

***Viola pallens* (Banks) Brainerd (pale).**

Viola blanda of recent American authors, not Willd.

Sweet White Violet.

Common. Moist or wet fields and woods or in swamps. May—June.

***Viola blanda* Willd. (mild).**

Viola amoena LeConte.

Viola blanda Willd., var. *palustriformis* Gray.

Occasional or frequent. Moist or wet woods in rich soil. May—June.

***Viola incognita* Brainerd (unknown).**

Rare. Deep moist or wet woods: North Canaan (Bissell), Salisbury (Mrs. C. S. Phelps, Weatherby), Colebrook (Weatherby). May.

***Viola rotundifolia* Michx. (round-leaved).**

Early Yellow Violet. Round-leaved Violet.

Damp woods and cool shaded banks. Rare or local in New London County: Waterford and Franklin (Graves), Norwich (Mrs. E. E. Rogers). Becoming occasional or frequent northward and westward. April—May.

***Viola odorata* L. (fragrant).**

English or Sweet Violet.

Rare. About gardens as an escape from cultivation: New London (Graves), Norwich (Mrs. E. E. Rogers), East Wind-

sor (Bissell), Southington (Andrews), Waterbury (A. E. Blewitt), Oxford (Harger), Bridgeport (Miss A. E. Carpenter). April — May. Adventive from Europe.

The herb and the flowers are medicinal.

Viola pubescens Ait. (downy).

Downy Yellow Violet.

Occasional or frequent. Rich woods. May — June.

Viola scabriuscula Schwein. (slightly rough).

Viola pubescens Ait., var. *scabriuscula* Torr. & Gray.

Smooth Yellow Violet.

Rare or occasional. Rich woods usually in moist soil.

Late April — May.

Viola canadensis L.

Canada Violet.

Rare. Rocky woods in moist rich soil: New Haven, station now obliterated (H. W. Bailey), Guilford (W. R. Dudley), Torrington (Miss B. A. Parker), Colebrook (H. C. Beardslee). May — July.

Viola conspersa Reichenb. (sprinkled).

Viola canina L., var. *Muhlenbergii* Gray.

Viola labradorica of recent American authors, not Schrank.

Viola Muhlenbergii Torr.

Dog Violet.

Frequent. Moist or dry woods and fields. May — June.

Viola rostrata Pursh (beaked).

Long-spurred Violet.

Rich woods. Guilford (G. H. Bartlett), Meriden (D. C. Eaton), Wilton (G. P. Ells): becoming occasional northward in western Connecticut. May.

Viola tricolor L. (three-color).

Heart's-ease. Johnny-jump-up. Pansy.

Rare or occasional. An escape about old gardens. May — July. Introduced from Europe.

One of the oldest of garden flowers, of which the modern Pansy is an improved form.

Viola arvensis Murr. (of cultivated land).

Field or Wild Pansy.

Rare. Cultivated ground, meadows and waste places: Southington (Mrs. J. Dunham), Oxford (Harger), Bridgeport (Eames). May — Oct. Adventive from Europe.

CACTACEAE. CACTUS FAMILY.

OPUNTIA Mill. Prickly Pear. Indian Fig.

Opuntia vulgaris Mill. (common).

Opuntia Opuntia Coult.

Prickly Pear. Indian Fig.

Exposed rocks and in sandy soils. Occasional along the coast; rare inland, reaching Scotland (G. Waldo), Guilford, at North Guilford (G. H. Bartlett), Naugatuck and Beacon Falls (J. K. Goodrich), Seymour and Oxford (Harger). June — July.

THYMELAEACEAE. MEZEREUM FAMILY.

DIRCA L. Leatherwood. Moosewood.

Dirca palustris L. (of marshes).

Wicopy. Leatherwood. Moosewood.

Damp rich woods. Rare near the coast and in eastern Connecticut: Scotland (G. Waldo), Guilford (G. H. Bartlett), Orange (Harger), Bridgeport (Eames). Becoming occasional northward and westward. April — May.

The bark is very tough and was formerly used by the Indians for thongs. Medicinal.

LYTHRACEAE. LOOSESTRIFE FAMILY.

ROOTALA L.

Rotala ramosior (L.) Koehne (very branching).

Rare or local. Moist meadows and shores of ponds: Griswold (Harger & Graves), Stratford, Milford and Bridgeport (Eames). July — Sept.

DECODON J. F. Gmel. Swamp Loosestrife.

Decodon verticillatus (L.) Ell. (whorled).

Water Willow. Swamp Loosestrife.

Local or frequent. Shallow water of swamps or edges

of ponds and streams, sometimes plentifully bordering such places. July — Sept.

A form with double flowers occurs at Plainville (J. N. Bishop).

LYTHRUM L. Loosestrife.

Lythrum alatum Pursh (winged).

Rare or local. Moist fields and open swamps: Norwich (Mrs. E. E. Rogers), Farmington (A. W. Driggs & Weatherby), Fairfield (Eames), Orange and Norfolk (Bissell), Salisbury (Mrs. C. S. Phelps). June — Aug.

Lythrum Salicaria L. (willow-like).

Spiked or Purple Loosestrife.

Rare or local. River banks and moist meadows: East Haddam (Dr. E. J. Thompson), Southington (Andrews, Bissell), Bristol (D. C. Eaton), Fairfield (Eames), Woodbury (H. S. Clark & Bissell), Litchfield (Miss E. H. Thompson), Danbury (C. K. Averill), New Milford (E. H. Austin), Salisbury (Mrs. C. S. Phelps). July — Aug. Naturalized from Europe.

CUPHEA P. Br.

Cuphea petiolata (L.) Koehne (having leaf-stalks).

Cuphea viscosissima Jacq.

Parsonsia petiolata Rusby.

Clammy Cuphea.

Moist or dry open ground and pastures. Rare in most districts: Groton (Harger & Graves), Guilford (G. H. Bartlett & Bissell), East Hartford (A. W. Driggs & Weatherby), Wallingford and Oxford (Harger), Plainville (J. N. Bishop), Danbury (Miss G. L. Northrop). Local throughout southwestern Connecticut (Eames). Aug.—Sept.

MELASTOMACEAE. MELASTOMA FAMILY.

RHEXIA L. Deergrass. Meadow Beauty.

Rhexia virginica L.

Meadow Beauty.

Low fields and meadows. Rare or absent in northwestern Connecticut, becoming occasional eastward and southward and frequent in the vicinity of the coast. July — Sept.

ONAGRACEAE. EVENING PRIMROSE FAMILY.

LUDVIGIA L. False Loosestrife.

Ludvigia alternifolia L. (alternate-leaved).

Seedbox.

Occasional or frequent. Moist places and about swamps.

June — Aug.

Ludvigia sphaerocarpa Ell. (globular-fruited).

Rare. Guilford, shallow water of ponds (W. H. Dudley, G. H. Bartlett). Aug.; fruit Sept.— Oct.

Ludvigia polycarpa Short & Peter (many-fruited).

Local. Hartford, plentiful about shallow ponds in meadows along the Connecticut River (C. Wright, H. S. Clark & Bissell). July — Aug.

Ludvigia palustris (L.) Ell. (of marshes).*Isnardia palustris* L.

Marsh or Water Purslane.

Frequent or common. In streams, on muddy shores or in shallow water. June — Sept.

EPILOBIUM L. Willow-herb.

Epilobium angustifolium L. (narrow-leaved).*Chamaenerion angustifolium* Scop.

Great Willow-herb. Fireweed.

Occasional or frequent. Woodlands and pastures, more often in newly cleared land. July — Sept.

The leaves and roots are used medicinally.

Epilobium molle Torr. (soft).*Epilobium strictum* Muhl. (?).

Open bogs and swamps. Rare or local in the northwestern part of the state, extending eastward to East Hartford (Weatherby) and southward to Fairfield (Eames). Aug.— Sept.

Epilobium densum Raf. (close together).*Epilobium lineare* Muhl. (?).

Occasional to frequent. Swamps and wet places. July — Sept.

Epilobium palustre L. (of marshes).

Rare. Litchfield, only one plant in a shaded sphagnum bog (Bissell). Aug.—Sept.

Epilobium palustre L., var. **monticola** Haussk. (living in mountains).

Rare. Sphagnum bogs: Wolcott (Bissell), Monroe (Harger), New Fairfield (Eames). Aug.—Sept.

The leaves and root are medicinal, as are those of the species.

Epilobium coloratum Muhl. (colored).

Moist or wet shaded places. Rare in the southeastern part of the state: Lyme (Graves). Frequent or common elsewhere. July — Aug.

Epilobium adenocaulon Haussk. (having glandular stems).

Damp woods and moist open ground. Rare in most districts: Salisbury (Mrs. C. S. Phelps), Norfolk and Middletown (Bissell), Watertown (Harger), Stratford (Eames), New Britain (Bissell). Frequent in New London County (Graves). July — Sept.

OENOTHERA L. Evening Primrose.**Oenothera cruciata** Nutt. (cross-shaped).

Oenothera biennis L., var. *cruciata* Torr. & Gray.

Onagra cruciata Small.

Rare or local. Waste ground: Hartford (H. S. Clark), Salisbury (Mrs. C. S. Phelps). July — Aug.

Oenothera Oakesiana Robbins.

Oenothera biennis L., var. *Oakesiana* Gray.

Onagra Oakesiana Britton in part.

Frequent along the coast on sea beaches, sand dunes and railway embankments (Graves, Eames). July — Oct.

Oenothera biennis L. (of two years).

Onagra biennis Scop.

Common Evening Primrose.

Common. Dry fields, pastures and roadsides. June — Oct.

All parts of the plant are used medicinally.

Oenothera grandiflora Ait. (large-flowered).*Oenothera biennis* L., var. *grandiflora* Lindl.*Onagra biennis* Scop., var. *grandiflora* Lindl.

Rare. Open ground: Franklin and Griswold (Graves), Southington (Andrews), Bridgeport (Eames), Norfolk (J. H. Barbour), Litchfield (Miss E. H. Thompson). Aug.—Oct. Adventive or fugitive from the South.

Oenothera laciniata Hill (slashed).*Oenothera sinuata* L.

Rare. Waste ground: Norwich (Mrs. E. E. Rogers), East Lyme (Miss A. M. Ryon), East Hartford (J. F. Smith), Derby (Harger), Bridgeport (Eames). May—June. Fugitive from the southern United States.

Oenothera pumila L. (dwarf).*Kneiffia pumila* Spach.

Frequent or common. Moist or dry open fields and roadsides. June—Aug.

Oenothera fruticosa L. (shrubby).

Sundrops.

Kneiffia fruticosa Raimann.

Rare. Borders of marshes: East Haven (G. Thurber), Fairfield (Eames). June—July.

The var. *HIRSUTA* Nutt. (rough-hairy), *Kneiffia fruticosa* Raimann, var. *pilosella* Britton, has been found in a field at Southington (H. M. Whitney), but afterward disappeared.

Oenothera linearis Michx. (very narrow).*Oenothera fruticosa* L., var. *linearis* Wats.*Kneiffia linearis* Spach.

Wet meadows and about marshes. Frequent or local along the coast from New Haven (H. S. Clark) westward; extending inland to Oxford and Southbury (Harger) and Woodbury (H. S. Clark). June—Aug.

Kneiffia Alleni Small or *Oenothera fruticosa* L. var. *humifusa* Allen is a sprawling or decumbent form of this, growing in barren sand; it occurs at Stratford (Eames).

The var. *EAMESII* Robinson is rare: Stratford, sandy shore of a salt pond (Eames).

Oenothera longipedicellata (Small) Robinson (having long flower-stalks).

Kneiffia longipedicellata Small.

Low meadows and borders of marshes. Occasional on the coast from Milford (Eames) westward; and inland at Southbury (A. E. Blewitt) and Woodbury (H. S. Clark & Bissell). June — July.

Oenothera pratensis (Small) Robinson (of meadows).

Kneiffia pratensis Small.

Rare. Border of salt marsh: Bridgeport (I. F. Moore). June.

GAURA L.

Gaura biennis L. (of two years).

Rare or local. Dry open ground: Southington (Bissell), New Haven (H. S. Clark, Harger), Oxford and Seymour (Harger). Aug.—Sept. In part adventive from the West.

CIRCAEA L. Enchanter's Nightshade.

Circaea lutetiana L.

Occasional or frequent. Moist woods. July — Aug.

Circaea alpina L. (alpine).

Rocky woods in moist humus. Rare in southern districts: North Stonington (Graves), Guilford (G. H. Bartlett), Orange and Huntington (Eames). Becoming occasional northward. June — July.

HALORAGIDACEAE.

WATER MILFOIL FAMILY.

MYRIOPHYLLUM L. Water Milfoil.

Myriophyllum spicatum L. (spiked).

Rare. Litchfield, in Bantam Lake (T. F. Allen), Kent, in Spectacle Ponds (Eames). July — Aug.

Myriophyllum verticillatum L. (whorled). var. *pectinatum* Wallr. (comb-like).

Myriophyllum verticillatum Gray's Manual ed. 6 in part.

Rare. In ponds and rivers: Lyme (Graves), Guilford

(G. H. Bartlett), Southington (Bissell, Andrews), Plainville (J. N. Bishop), Litchfield (Miss E. H. Thompson), New Milford and Kent (Eames). June — Aug.

Myriophyllum scabratum Michx. (roughened).

Myriophyllum pinnatum BSP., at least in part, possibly
Potamogeton pinnatum Walt.

Water Milfoil.

Rare. Muddy shores of ponds: Groton and East Lyme (Graves). July — Sept.

Myriophyllum humile (Raf.) Morong (lowly).

Myriophyllum ambiguum Nutt., var. *limosum* Nutt.

Water Milfoil.

Rare to frequent. Borders of ponds and on muddy shores.
July — Sept.

The forma *NATANS* (DC.) Fernald (floating), *Myriophyllum ambiguum* Nutt., and the forma *CAPILLACEUM* (Torr.) Fernald (hair-like), *Myriophyllum ambiguum* Nutt., var. *capillaceum* Torr., both occur in shallow or deep water of ponds, the latter even in rapid water.

Myriophyllum tenellum Bigel. (delicate).

Rare. Muddy shores and in shallow water: New London County (Graves), Litchfield (T. F. Allen), Kent (E. H. Austin & Eames). July — Aug.

PROSERPINACA L. Mermaid-weed.

Proserpinaca palustris L. (of marshes).

Mermaid-weed.

Frequent. Borders of ponds and in swamps. July — Aug.

ARALIACEAE. GINSENG FAMILY.

ACANTHOPANAX Dcne. & Planch.

Acanthopanax pentaphyllum (Thunb.) Marchal (five-leaved).
Acanthopanax.

Rare. Hartford, escaped from cultivation to roadside (H. S. Clark & Bissell). July. Adventive from Japan.

ARALIA L.***Aralia spinosa* L. (spiny).**

Angelica Tree. Hercules' Club. Devil's Walking-stick.

Rare. Escaped from cultivation to a roadside in Bridgeport (Eames). July—Aug. Adventive from the South.

***Aralia racemosa* L. (racemose).**

Spikenard. American Spikenard. Spignet. Hungry-root.

Occasional. Rich woods and thickets. July—Aug.

The root is medicinal and is much used both in professional and domestic practice.

***Aralia hispida* Vent. (rough-haired).**

Bristly Sarsaparilla. Wild Elder.

Occasional or local. Dry rocky woods or in sandy ground.

June—Aug.

The root is of medicinal value.

***Aralia nudicaulis* L. (naked-stemmed).**

Wild, False or American Sarsaparilla.

Frequent or common. Dry or moist woodlands. May—June.

The aromatic root is used medicinally.

PANAX L.   Ginseng.***Panax quinquefolium* L. (five-leaved).**

Aralia quinquefolia Dcne. & Planch.

Ginseng.

Rare. Rich woods or rocky hillsides: Lyme and East Haddam (Graves), Guilford (G. H. Bartlett), Middletown (Harger), Southington (Andrews & Bissell), West Hartford (Miss A. Lorenz), Farmington (Bissell), Wolcott (Andrews), Woodbridge (P. P. Sperry), Colebrook (J. W. Robins), Goshen (L. M. Underwood), Danbury (F. Mills), New Fairfield (Eames). June; fruit Aug.

The roots are much prized by the Chinese and are exported to China in large quantities, but they seem to be of no great medicinal value.

***Panax trifolium* L. (three-leaved).**

Aralia trifolia Dcne. & Planch.

Dwarf Ginseng. Groundnut.

Rich moist woods, often in sandy soil. Mid-April—June.

UMBELLIFERAE.   PARSLEY FAMILY.

ERYNGIUM L.   Eryngo.

Eryngium planum L. (flat).

Rare. Fairfield, in sandy waste ground (Eames). Aug.—Sept. Fugitive from Europe.

Eryngium yuccifolium Michx. (having leaves like Yucca, the Spanish Bayonet).

Eryngium aquaticum of Britton's Manual.

Rattlesnake Master. Button Snakeroot.

Rare. Bridgeport, in a sandy field (Eames). July. Introduced from the South, or possibly native.

The rootstock is medicinal.

SANICULA L.   Sanicle. Black Snakeroot.**Sanicula marilandica** L.

Frequent. Rich woods and more open places in either moist or dry ground. June—July.

The roots of this and the other species of the genus are used medicinally and their fibres in veterinary practice.

Sanicula gregaria Bicknell (herding together).

Rich moist or wet woods. Rare in most districts: New Britain (Bissell), Southington (Andrews, Bissell), Norfolk (J. H. Barbour), Seymour (Harger). Occasional in the southwestern part of the state (Eames). June—July.

Sanicula canadensis L.

Sanicula marilandica L., var. *canadensis* Torr.

Occasional or frequent. Dry rocky woods. June—July.

Sanicula trifoliata Bicknell (three-leaved).

Rare or local. Woods and fence-rows: New Britain and Plainville (Bissell), Southington (Andrews, Bissell), Oxford (Harger). June—July.

HYDROCOTYLE L.   Water Pennywort.**Hydrocotyle umbellata** L. (umbellate).

Rare or local. Muddy shores and in shallow water: Thompson (R. W. Woodward & Weatherby), Groton, East

Lyme and Old Lyme (Graves), Guilford (G. H. Bartlett), New Haven (C. Wright), Hamden and Litchfield (D. C. Eaton), Oxford (Harger), Ridgefield (Eames). June — Sept.

Hydrocotyle americana L.

Common. Moist woods and shaded places and in bogs. June — Sept.

OSMORHIZA Raf. Sweet Cicely.

Osmorhiza Claytoni (Michx.) Clarke.

Osmorhiza brevistylis DC.

Washingtonia Claytoni Britton.

Sweet Cicely.

Rocky woods. Rare in the eastern part of the state, becoming occasional or frequent westward. Late May — June.

The roots are less aromatic than those of *Osmorhiza longistylis*.

Osmorhiza longistylis (Torr.) DC. (long-styled).

Washingtonia longistylis Britton.

Sweet Cicely. Anise-root. Sweet Chervil.

Frequent. Rich woods, thickets and fence-rows. May — June.

An aromatic oil is obtained from the root.

CONIUM L. Poison Hemlock.

Conium maculatum L. (spotted).

Poison Hemlock. Spotted Parsley.

Rare. Roadsides and waste places: Groton and New London (Graves), Oxford and Woodbury (Harger), Bridgeport (Eames), Sharon (Bissell), Salisbury (Mrs. C. S. Phelps, Bissell). June — Aug. Naturalized from Europe.

An actively poisonous plant well known as the Hemlock of the ancients. The fruit and leaves are medicinal, the first named officinal. Cases of accidental poisoning to man have arisen from mistaking the seed for anise seed, the leaves for those of parsley, and the root for parsnips. The seed has been found to some extent as an adulterant of anise seed.

Blowing whistles made from the hollow stem has also been reported as a cause of poisoning.

PTILIMNIUM Raf.   Mock Bishop's-weed.

Ptilimnium capillaceum (Michx.) Raf. (hair-like).

Discopleura capillacea DC.

Mock Bishop's-weed.

Occasional to frequent in salt, brackish and fresh marshes along the coast and within tidal influence a few miles inland: also extends up the Connecticut River as far as East Haddam (Dr. E. J. Thompson). Late July — Sept.

AEGOPODIUM L.   Goutweed.

Aegopodium Podagraria L. (pertaining to gout).

Goutweed. Goutwort. Herb Gerard.

Rare. Yards, streets and waste places as an escape from cultivation: East Windsor (Bissell), Hartford (Mrs. W. Seliger), Norwalk (E. H. Baldwin). June. Adventive from Europe.

Occurs only in the variegated form.

CICUTA L.   Water Hemlock.

Cicuta maculata L. (spotted).

Spotted Cowbane. Musquash Root. Beaver Poison. Water Hemlock.

Frequent. Swamps and borders of streams. July — Aug.

One of the most dangerously poisonous of native plants, and many cases of fatal poisoning to man have been reported. As a rule the root has been mistaken for some edible or innocent root like Horseradish, Sweet Cicely, etc. Cattle are poisoned by eating the rootstock or by drinking water containing juice from the bruised root. The leaves are used medicinally.

Cicuta bulbifera L. (bulb-bearing).

Water Hemlock.

Occasional or frequent. Banks of ponds and streams. July — Aug.

CARUM L. Caraway.

Carum Carvi L. (classical name for this species).

Caraway.

Occasional or local. Escaped from cultivation to fields and roadsides. June—July. Adventive from Europe.

The seeds are much used to flavor cakes and cookies and are eaten as a carminative.

PETROSELINUM Hoffm. Parsley.

Petroselinum hortense Hoffm. (of gardens).

Petroselinum Petroselinum Karst.

Carum Petroselinum Benth. & Hook.

Apium Petroselinum L.

Common or Garden Parsley.

Rare. Escaped from cultivation to waste ground in Bridgeport and Stratford (Eames). July—Aug. Adventive from Europe.

SIUM L. Water Parsnip.

Sium cicutaefolium Schrank (hemlock-leaved).

Sium lineare Michx.

Sium Carsonii Durand.

Occasional. Swamps and along streams in wet places. June—Sept.

CRYPTOTAENIA DC. Honewort.

Cryptotaenia canadensis (L.) DC.

Deringa canadensis Kuntze.

Honewort.

Frequent. Moist shady places. June—July.

ZIZIA Koch.

Zizia aurea (L.) Koch (golden).

Golden Alexanders. Golden Meadow Parsnip.

Common. Low fields and wet meadows. May—June.

The var. **OBTUSIFOLIA** Bissell (blunt-leaved), occurs at South Windsor and Canaan (A. W. Driggs); and Salisbury (Bissell).

Zizia cordata (Walt.) DC. (heart-shaped).

Dry or wet copses. Rare in most districts: Groton (Graves), Branford (Andrews), Farmington (D. C. Eaton). Occasional in Fairfield County (Eames). June — Oct.

FOENICULUM Hill. Fennel.

Foeniculum vulgare Hill (common).

Foeniculum officinale All.

Foeniculum Foeniculum Karst.

Common or Garden Fennel.

Rare or local. Escaped from cultivation to roadsides and ballast grounds: Southington (Andrews), New Milford (E. H. Austin & Eames), Bridgeport (Eames). July — Sept. Adventive from Europe.

The seeds are aromatic, well known for their medicinal properties, and are officinal.

TAENIDIA Drude.

Taenidia integerrima (L.) Drude (quite entire).

Pimpinella integerrima Gray.

Yellow Pimpernel.

Rare. New Haven (A. B. Eaton, 1859), Stratford and Milford, dry, lightly wooded banks along the Housatonic River (Eames), also at Wilton (Miss A. E. Carpenter). May — June.

LILAEOPSIS Greene.

Lilaeopsis lineata (Michx.) Greene (marked with lines).

Crantzia lineata Nutt.

Muddy tidal shores: Norwich (W. A. Setchell), Montville, East Lyme and Old Lyme (Graves). Local or occasional along the coast westward. June — Aug.

LIGUSTICUM L. Lovage.

Ligusticum scothicum L.

Sea Parsley. Scotch Lovage.

Rocky shores of the Sound. Occasional from East Lyme (Graves) eastward. July — Aug.

CORIANDRUM L. Coriander.**Coriandrum sativum L.** (sown).

Coriander.

Rare. Escaped from cultivation or spontaneous in waste places in Bridgeport (Eames). June—July. Fugitive from Europe.

The seeds are commonly used as flavoring in confections, pastries, liquors, etc.

AETHUSA L. Fool's Parsley.**Aethusa Cynapium L.** (dog-parsley).

Fool's Parsley.

Rare. Waste ground: Norwalk (E. H. Baldwin, Eames). June—Sept. Adventive from Europe.

The plant is poisonous.

PASTINACA L. Parsnip.**Pastinaca sativa L.** (sown).

Wild or Poison Parsnip.

Common. Roadsides and waste places. June—Sept. Naturalized from Europe.

Well known in cultivation, from which the wild plant is an escape. The plant is poisonous to some persons.

LEVISTICUM Hill. Lovage.**Levisticum officinale (L.) Koch** (of the shops).

Ligusticum Levisticum L.

Levisticum Levisticum Karst.

Lovage.

Rare. Roadsides and waste ground: Oxford (Harger), Salisbury (Mrs. C. S. Phelps). July—Aug. Adventive from Europe.

Commonly cultivated in old gardens for its carminative seeds, which are believed to possess several medicinal properties.

ANETHUM L. Dill.**Anethum graveolens L.** (strong-smelling).

Dill.

Rare. Escaped from cultivation or spontaneous in waste

places: Stratford and Bridgeport (Eames). July—Aug.
Fugitive or adventive from Europe.

The seeds are commonly used as flavoring in confections, pastries, liquors, etc.

HERACLEUM L. Cow Parsnip.

Heracleum lanatum Michx. (woolly).

Cow Parsnip. Masterwort.

Occasional or frequent. Roadsides and waste ground in moist soils. June—July.

The root, leaves and seeds are medicinal.

CONIOSELINUM Fisch. Hemlock Parsley.

Conioselinum chinense (L.) BSP.

Conioselinum canadense Torr. & Gray.

Hemlock Parsley.

Rare. Wet, cold woods and banks: Kent (E. H. Austin & Eames), Cornwall (E. E. Brewster), Canaan (C. K. Averill), Salisbury (Bissell). Aug.—Sept.

ANGELICA L. Angelica.

Angelica villosa (Walt.) BSP. (hairy).

Angelica hirsuta Muhl.

Moist or dry fields and woods. New Haven (D. C. Eaton), Southington (Andrews & Bissell), and occasional westward, becoming frequent near the coast. July—Aug.

Angelica atropurpurea L. (dark purple).

Masterwort. Purple or High Angelica.

Rare to occasional. Wet ground along streams. June—July.

The root and seeds are used medicinally. The fresh root is poisonous.

DAUCUS L. Carrot.

Daucus Carota L. (classical name for the Carrot).

Wild Carrot.

Common. Fields, roadsides and waste places. June—Sept. Naturalized from Europe.

One of our most persistent, troublesome and wide-spread

weeds. A statute of Connecticut enacted in 1881, provides that "Every owner or possessor of lands shall cut down all wild carrots and Canada thistles growing thereon, or in the highway adjoining, so often as to prevent going to seed; and upon failure so to do, any person aggrieved, or any citizen of the town wherein the lands are situated, may complain to any grand juror of said town, who shall thereupon forthwith notify such owner or possessor of such complaint. If said owner or possessor shall still neglect to comply with the provisions of this section, he shall be fined not more than five dollars for each and every day of such neglect after such notice." Revised Statutes, Sec. 1374.

All parts of the plant have medicinal properties.

CORNACEAE. DOGWOOD FAMILY.

CORNUS L. Cornel. Dogwood.

Cornus canadensis L.

Dwarf or Low Cornel. Bunchberry.

Low or rocky woods and in swamps. Rare over most of the state, becoming frequent in Litchfield County. May—June.

Cornus florida L. (flowering).

Flowering Dogwood. Boxwood.

Occasional, local or frequent, mostly in rocky woods. May.

One of the most beautiful of our flowering trees and worthy of much more extensive cultivation. The bark, especially of the root, is used medicinally, and the powdered bark makes a good tooth-powder. The bark also yields a scarlet dye, and mixed with sulphate of iron makes a good black ink. The wood is heavy and close-grained and is used to make tool-handles and other small articles of turnery.

Cornus circinata L'Hér. (rounded).

Round-leaved Cornel or Dogwood.

Usually in rocky woods or on ledges. Rare in New London County (Graves); local or occasional elsewhere. May—June.

The bark is used medicinally.

Cornus Amomum Mill. (classical name for some shrub).

Cornus sericea L.

Cornus Purpusi Koehne.

Silky Cornel. Kinnikinnik. Swamp Dogwood.

Frequent. Low thickets and along streams. June—July.

The bark is used medicinally.

Cornus stolonifera Michx. (shoot-bearing).

Red-osier Cornel or Dogwood.

Wet places. Common in northwestern Connecticut, extending eastward to East Granby (I. Holcomb) and southward to New Milford (C. K. Averill); occurs also at East Hartford on a river bank (A. W. Driggs). May—June.

A good shrub for planting in moist soils.

Cornus paniculata L'Hér. (panicled).

Cornus candidissima Marsh. (?), not Mill.

Panicled Cornel.

Occasional or frequent. Roadsides, thickets and borders of woods in either dry or moist ground. July.

A handsome shrub both in flower and fruit, and well worthy of cultivation.

Cornus alternifolia L. f. (alternate-leaved).

Dogberry.

Frequent. Fence-rows, copses and open woods. May—June.

NYSSA L. Tupelo. Pepperidge. Sour Gum.

Nyssa sylvatica Marsh. (of woods).

Black or Sour Gum. Pepperidge. Tupelo.

Frequent. Woods and fields, usually in moist or wet ground. June.

The wood is soft but very hard to split; it is used for beetle-heads, chopping-bowls, rollers, etc. A tree of interesting habit and, especially in autumn, very ornamental. Worthy of cultivation, but very difficult to transplant from the wild.

ERICACEAE. HEATH FAMILY.

CLETHRA L. White Alder.

Clethra alnifolia L. (alder-leaved).

Sweet Pepperbush.

Swamps and low thickets. Rare in Litchfield County: Kent (E. H. Austin), Litchfield (Miss E. H. Thompson). Frequent elsewhere. July — Aug.

Often cultivated for its very fragrant white flowers.

CHIMAPHILA Pursh. Pipsissewa.

Chimaphila umbellata (L.) Nutt. (umbellate).

Prince's Pine. Pipsissewa.

Occasional or frequent. Dry woods. June — July.

The leaves are medicinal and are officinal.

Chimaphila maculata (L.) Pursh (spotted).

Spotted Wintergreen.

Occasional or frequent. Dry woods. July — Aug.

Has medicinal properties similar to those of *Chimaphila umbellata*.

MONESES Salisb. One-flowered Pyrola.

Moneses uniflora (L.) Gray (one-flowered).

Moneses grandiflora S. F. Gray.

One-flowered Pyrola or Wintergreen.

Rare or local. Pine woods: Woodstock (Graves), Union (H. E. Back), Avon (H. S. Clark), East Granby (I. Holcomb), Norfolk (Miss M. C. Seymour), Newtown (I. P. Blackman), Canaan (W. H. Leggett), Salisbury (Mrs. C. S. Phelps). June — July.

PYROLA L. Wintergreen. Shin Leaf.

Pyrola secunda L. (one-sided).

Dry woods, often under pines and hemlocks. Rare near the coast: Ledyard (Graves), Hamden (Harger), Orange (Eames), Fairfield (L. N. Johnson). Occasional or local elsewhere. June — July.

Pyrola chlorantha Sw. (green-flowered).

Dry woods, usually under evergreens. Rare near the

coast: Ledyard (Graves), Guilford (W. R. Dudley). Becoming occasional northward. June.

Pyrola elliptica Nutt. (oval).

Shin Leaf.

Occasional to frequent. Dry woods, usually in rich soil. June—July.

Pyrola americana Sweet.

Pyrola rotundifolia Gray's Manual ed. 6, not L.

Round-leaved Shin Leaf.

Frequent or local. Dry woods. June—July.

This, like all other species of the genus, is sometimes used medicinally.

MONOTROPA L. Indian Pipe. Pinesap.

Monotropa uniflora L. (single-flowered).

Indian Pipe. Corpse Plant. Fit-root. Ghost-flower.

Frequent. Moist or dry woods in rich soil. July—Aug.

The root is sometimes employed medicinally and has been used as a substitute for opium.

Monotropa Hypopitys L. (under pine trees).

Hypopitys Hypopitys Small.

Hypopitys lanuginosa Nutt.

Hypopitys americana Small.

Pinesap. False Beech-drops.

Occasional. Rich woods. Aug.—Sept.

LEDUM L. Labrador Tea.

Ledum groenlandicum Oeder.

Ledum latifolium Ait.

Labrador Tea.

Rare or local. Bogs or sphagnum swamps: Willington (Graves), Norfolk (Miss M. C. Seymour). June.

The leaves are medicinal.

RHODODENDRON L.

Rhododendron viscosum (L.) Torr. (sticky).

Azalea viscosa L.

Clammy Azalea. White Swamp Honeysuckle.

Low thickets and swamps. Rare or occasional in northwestern Connecticut; frequent elsewhere. June—July.

The var. *GLAUCUM* (Michx.) Gray (glaucous) is occasional growing with the typical form. The var. *NITIDUM* (Pursh) Gray (shining) is rare: Groton and Waterford (Graves), Huntington (Eames), Oxford (Harger).

Rarely occurs with pink flowers.

Rhododendron nudiflorum (L.) Torr. (naked-flowered).

Azalea nudiflora L.

Purple, Pink or Wild Azalea. Pinxter Flower. May Apple. Wild Honeysuckle.

Frequent or common. Woods and thickets. May—June.

This and the following species are desirable shrubs for cultivation.

Rhododendron canescens (Michx.) G. Don (hoary).

Azalea canescens Michx.

Purple Azalea.

Rare. Woods and thickets: Colchester and Voluntown (Graves), Norfolk and Salisbury (Bissell). May—June.

Rhododendron canadense (L.) BSP.

Rhododendron Rhodora Don.

Rhodora canadensis L.

Rhodora.

Swamps and low woods and thickets. Rare in most districts: Voluntown (Graves), East Hartford (A. W. Driggs), Enfield (Mrs. G. S. Phelps), Burlington (J. N. Bishop), Southington (J. Shepard), North Haven (A. W. Evans), Middlebury (Harger). Occasional or local in northeastern Connecticut. May.

Noteworthy as the subject of one of Emerson's best known poems.

Rhododendron maximum L. (greatest).

Great Laurel. *Rhododendron*. Rose Bay.

Rare or local. Swampy woods or rarely on dry wooded hillsides: Litchfield, New London and Tolland Counties. July.

One of the most striking of the broad-leaved evergreens, and extensively planted for ornament. The leaves contain a poisonous principle and are sometimes used in medicine.

KALMIA L. American Laurel.**Kalmia latifolia L.** (broad-leaved).

Mountain Laurel. Calico Bush. Spoon-wood.

Frequent, local or common. Woods and thickets. June.

Often planted for ornament. All parts of the plant are poisonous except the wood. Many instances of fatal poisoning of stock from eating this and allied plants have been reported. Sheep and young cattle are most susceptible, but horses and even goats have been known to die from the effects of it. Cases of human poisoning are quite rare. The leaves are employed medicinally.

The following act of the General Assembly was approved and became a law April 17, 1907: — "The Mountain Laurel, *Kalmia latifolia*, is hereby made, constituted, and declared to be the State Flower of the State of Connecticut."

Kalmia angustifolia L. (narrow-leaved).

Sheep Laurel. Lambkill. Wicky.

Bogs, wet ground or open pastures. Local in Fairfield County; frequent or common elsewhere. June—July.

Its medicinal and poisonous properties are as in *Kalmia latifolia*.

Kalmia polifolia Wang. (gray-leaved).

Kalmia glauca Ait.

Pale or Swamp Laurel.

Rare. Sphagnum bogs: Burlington (J. N. Bishop), Norfolk (J. H. Barbour), Litchfield (Bissell), Woodbury (Harger), Ridgefield (S. B. Mead), Kent (C. K. Averill), Salisbury (Mrs. C. S. Phelps). May—June.

LEUCOTHÖE D. Don. Fetter Bush.**Leucothöë racemosa (L.) Gray** (racemose).

Leucothöë.

Rare or local. Moist woods or in swamps: Groton, Waterford, Ledyard and East Haddam (Graves), Haddam and Durham (Dr. E. J. Thompson), Middlefield (C. S. Phelps), East Hartford (A. W. Driggs), Stratford (Eames), Huntington (Harger). May—June.

ANDROMEDA L.

Andromeda glaucophylla Link (glaucous-leaved).

Andromeda Polifolia mostly of American authors, not L.

Bog or Marsh Rosemary. Marsh Holy Rose.

Rare. Sphagnum bogs: East Granby (Bissell), Litchfield (J. P. Brace, Harger, Weatherby & Bissell), Norfolk (J. H. Barbour), Kent (Eames, C. K. Averill), Ridgefield (S. B. Mead), Danbury (Miss G. L. Northrop). May—June.

LYONIA Nutt.

Lyonia mariana (L.) D. Don.

Andromeda mariana L.

Pieris mariana Benth. & Hook.

Stagger-bush.

Rare. Stratford, shrubby bank near the coast (J. P. Coles). June.

In New Jersey and southward it is injurious to sheep when eaten by them, producing a disease called "Staggers," hence its common name. A valuable shrub in cultivation.

Lyonia ligustrina (L.) DC. (like *Ligustrum*, the Privet).

Andromeda ligustrina Muhl.

Xolisma ligustrina Britton.

Male Berry.

Frequent or common. Woods, thickets and pastures; sometimes in dry but usually in moist ground. June—July.

Like the preceding species, is poisonous to stock, especially to sheep.

Lyonia ligustrina (L.) DC., var. *foliosiflora* (Michx.) Fernald
(having leaves intermixed with the flowers).

Xolisma foliosiflora Small.

Low thickets. Forms that apparently belong with this variety occur rarely near the coast. June—July.

CHAMAEDAPHNE Moench. Leather Leaf. Cassandra.

Chamaedaphne calyculata (L.) Moench (calyculate).

Cassandra calyculata D. Don.

Leather Leaf.

Occasional or frequent. Sphagnum swamps and wet places. April — May.

EPIGAEA L. Ground Laurel. Trailing Arbutus.

Epigaea repens L. (creeping).

Trailing Arbutus. Mayflower.

Occasional or local. Rocky or sandy woods, usually preferring granite regions. April — May.

The leaves are used medicinally. In the neighborhood of cities it has been nearly exterminated by careless flower-gatherers. A statute of Connecticut, enacted in 1899, provides that "Every person who shall wilfully destroy, pull up, tear up, or dig up, any trailing arbutus from the land of another, or who shall sell, expose for sale, or purchase or have in his possession, any trailing arbutus with the roots or under-ground stems attached, taken from land not owned or occupied by him, shall be fined not more than twenty dollars." Revised Statutes, sec. 1224.

GAULTHERIA L. Aromatic Wintergreen.

Gaultheria procumbens L. (trailing).

Wintergreen. Checkerberry. Boxberry. Teaberry. Ivory Plum.

Occasional or frequent. Dry woods or sometimes in moist open ground, growing in colonies. July — Aug.

The berries and the young leaves are often eaten. The leaves and the volatile oil distilled from them are officinal and widely used in medical practice. The oil is also largely used as a flavoring agent.

ARCTOSTAPHYLOS Adans. Bearberry.

Arctostaphylos Uva-ursi (L.) Spreng. (bear-grape).

Bearberry. Uva-ursi.

Dry sandy or rocky places: Voluntown and Griswold (Graves), Norwich (Mrs. E. E. Rogers), Somers and West Hartford (Miss A. Lorenz), Middletown (J. D. Cochrane), Southington (D. C. Eaton, Andrews). Occasional or local near the coast. May — June.

The leaves are officinal and much used in medicine.

CHIOGENES Salisb.   Creeping Snowberry.

Chiogenes hispidula (L.) Torr. & Gray (having fine rough hairs).

Chiogenes serpyllifolia Salisb.

Creeping Snowberry. White Teaberry. Moxie Plum. Capillaire.

Rare. Sphagnum swamps, usually in shade: Preston (W. A. Setchell & Graves), Voluntown (Graves), Burlington (J. N. Bishop), Bethany and Middlebury (Harger), Litchfield (Miss E. H. Thompson), Kent (E. H. Austin), Salisbury (Mrs. C. S. Phelps), Stafford (Weatherby). May—June.

This plant yields a volatile oil identical with that of *Gaultheria procumbens*.

GAYLUSSACIA HBK.   Huckleberry.

Gaylussacia dumosa (Andr.) Torr. & Gray (bushy).

Dwarf Huckleberry.

Rare. Sphagnum bogs: Thompson (Harger), Southington (Andrews), Stratford and Huntington (Eames), Bethany and Middlebury (Harger), Litchfield (J. P. Brace, 1822; Weatherby & Bissell). June—July.

Gaylussacia frondosa (L.) Torr. & Gray (leafy).

Dangleberry. Blue Tangle.

Swamps or open sandy woods. Frequent in New London County (Graves), becoming rare northward and westward, reaching Putnam (Harger), Stafford and East Hartford (Weatherby), Manchester (A. W. Driggs), East Haven, Bethany and Oxford (Harger). June.

The berries are delicious.

Gaylussacia baccata (Wang.) K. Koch (berry-bearing).

Gaylussacia resinosa Torr. & Gray.

Common or Black Huckleberry.

Common. Moist or dry ground in various situations. May—June.

The forma **GLAUCOCARPA** (Robinson) Mackenzie (glaucous-fruited), Blue Huckleberry, is rare or occasional growing with the typical form.

The common Huckleberry, extensively gathered for market

and for home consumption. The fruit of the blue is often larger and better than that of the ordinary black form.

VACCINIUM L. Blueberry. Cranberry.

Vaccinium stamineum L. (having prominent stamens).

Polycodium stamineum Greene.

Buckberry. Deerberry. Squaw Huckleberry.

Dry woods: Waterbury (J. M. Richardson), New Canaan (E. H. Baldwin), and occasional in western Litchfield County. Late May—June.

A desirable shrub for planting in shaded situations.

Vaccinium pennsylvanicum Lam.

Dwarf Blueberry. Low Sweet or Early Sweet Blueberry.

Common. Dry rocky or sandy woods. May; fruit late June—early July.

The var. *ANGUSTIFOLIUM* (Ait.) Gray (narrow-leaved) is rare: Voluntown (Graves).

The fruit is sweet and delicious but not usually plentiful.

Vaccinium pennsylvanicum Lam., var. nigrum Wood (black).

Vaccinium nigrum Britton.

Low Black Blueberry.

Rare. Rocky woods: Salisbury (Mrs. C. S. Phelps). May.

Vaccinium canadense Kalm.

Sour-top or Velvet-leaf Blueberry.

Rare. Cold moist woods at an altitude of 1900 ft., Salisbury (Weatherby). May; fruit Aug.

Vaccinium vacillans Kalm (swaying).

Late Low Blueberry.

Common. Dry or rocky places. May; fruit July.

Fruit inferior to that of the following species.

Vaccinium corymbosum L. (corymbose).

High-bush or Tall Blueberry. Common or Swamp Blueberry or Bilberry.

Common. Swamps, borders of ponds and drier places. May—June; fruit late July—Aug.

Fruit much gathered for market and for domestic use.

Vaccinium corymbosum L., var. amoenum (Ait.) Gray (pleasant).

Swamps and wet places. Occasional in the vicinity of the coast. May — early June.

Vaccinium atrococcum (Gray) Heller (having black berries).

Vaccinium corymbosum L., var. *atrococcum* Gray.

Black High Blueberry.

Occasional. Swampy woods and wet thickets. May — June.

Vaccinium Oxycoccus L. (sour berry).

Oxycoccus Oxycoccus MacM.

Small Cranberry.

Sphagnum bogs: Willington (Graves), Bloomfield (Weatherby), Southington (Andrews), Bethany (Harger), Stratford (Eames). Becoming occasional in northwestern Connecticut. May — June; fruit Sept. and through the winter.

The var. *ovalifolium* Michx. (oval-leaved), var. *intermedium* Gray's Manual ed. 7, occurs at Willington, Norfolk and Salisbury (Bissell), Simsbury (A. W. Driggs), Cornwall (E. E. Brewster).

Vaccinium macrocarpon Ait. (large-fruited).

Oxycoccus macrocarpus Pursh.

Cranberry. Large or American Cranberry.

Occasional or frequent. Wet meadows, bogs and low pastures. June — Aug.; fruit Sept.

Extensively cultivated on Cape Cod, Massachusetts, and in some parts of New Jersey, for its fruit, which is of much value and is sold everywhere in the markets. "Turkey and Cranberry Sauce" is almost a national dish.

PLUMBAGINACEAE. LEADWORT FAMILY.

LIMONIUM Hill. Sea Lavender. Marsh Rosemary.

Limonium carolinianum (Walt.) Britton.

Statice Limonium L., var. *caroliniana* Gray.

Marsh Rosemary. Sea Lavender. Ink-root. Canker-root.

Common along the coast on salt marshes and meadows. July — Sept.

The root has long been used in medicine.

PRIMULACEAE. PRIMROSE FAMILY.

HOTTONIA L. Featherfoil. Water Violet.

Hottonia inflata Ell. (inflated).

Water Violet. American Featherfoil.

Ditches and shallow water. Rare or local near the coast; not reported far inland. June.

SAMOLUS L. Water Pimpernel. Brook-weed.

Samolus floribundus HBK. (abounding in flowers).

Samolus Valerandi L., var. *americanus* Gray.

Water Pimpernel. Brook-weed.

Occasional in salt or brackish marshes along the coast, and rare inland as at Ridgefield (Eames & C. C. Godfrey). June — Oct.

LYSIMACHIA L. Loosestrife.

Lysimachia vulgaris L. (common).

Golden Loosestrife.

Rare. Wilton, along roadside (Miss A. E. Carpenter). July. Fugitive from Europe.

Lysimachia punctata L. (dotted).

Spotted Loosestrife.

Rare. Escaped from gardens to roadsides and waste places: Norwich (W. A. Setchell, Mrs. E. E. Rogers & Graves), Preston (Graves), Guilford (G. H. Bartlett), Westport (Eames), Wilton (Miss A. E. Carpenter). June — July. Naturalized from Europe.

Lysimachia quadrifolia L. (four-leaved).

Cross-wort.

Common. Woods and thickets. June — July.

The root is medicinal.

× **Lysimachia producta** (Gray) Fernald (lengthened).

Lysimachia foliosa Small.

Rare. Fields and thickets, mostly near the coast: Ledyard (Graves), Groton and Putnam (Harger), Stratford and Fairfield (Eames), Norwalk (Bissell), Stamford (W. H. Hoyt). June — July.

This is regarded as a hybrid between *Lysimachia quadrifolia* and *Lysimachia terrestris*.

Lysimachia terrestris (L.) BSP. (terrestrial).

Lysimachia stricta Ait.

Frequent. Low grounds and open swamps. Late June — Aug.

Lysimachia Nummularia L. (coin-like, referring to the shape of the leaves).

Moneywort. Yellow Myrtle.

Frequent. Lawns, roadsides and waste places, usually in moist soil. June — July. Naturalized from Europe.

An escape from gardens and often a pest in lawns.

The plant is medicinal, in domestic practice applied to sores and wounds.

Lysimachia thyrsiflora L. (having its flowers in a thyrse).

Naumburgia thyrsiflora Duby.

Tufted Loosestrife.

Rare or local. Wet places about ponds: North Branford (G. H. Bartlett), Bloomfield and East Granby (Weatherby), Plainville (J. N. Bishop), Southington (Andrews), Hamden and Litchfield (Harger), Norfolk (J. H. Barbour), Kent (C. K. Averill), Salisbury (Mrs. C. S. Phelps, Bissell). June — early July.

STEIRONEMA Raf.

Steironema ciliatum (L.) Raf. (fringed).

Fringed Loosestrife.

Frequent. Thickets and low grounds. July — Aug.

Steironema lanceolatum (Walt.) Gray (lance-shaped).

Swamps and borders of ponds and streams. Rare inland: Ledyard and North Stonington (Graves), New Milford (I. Holden & Baker). Occasional near the coast. July — Aug.

TRIENTALIS L. Chickweed Wintergreen.

Trientalis americana (Pers.) Pursh.

Star Flower.

Occasional to frequent. Rich, usually moist woods. May — June.

ANAGALLIS L. Pimpernel.**Anagallis arvensis L.** (of cultivated ground).

Common Pimpernel. Poor Man's Weather-glass.

Sandy or rocky ground and waste places. Rare inland: Southington (Andrews), Oxford (Harger). Frequent on or near the coast. June — Sept. Naturalized from Europe.

The var. *CAERULEA* (Schreb.) Ledeb. (sky-blue) is rare in lawns or waste ground: Granby (I. Holcomb), Norwalk (Miss A. E. Carpenter).

EBENACEAE. EBONY FAMILY.**DIOSPYROS L.** Persimmon.**Diospyros virginiana L.**

Common Persimmon.

Rare. In New Haven, at Lighthouse Point, there is a grove of about one hundred and twenty-five small trees on the beach not far from the water's edge. Here they are exposed to fierce winds and winter storms which drive the salt water up around them, consequently they are not in a flourishing condition. This station is said to have been known as early as 1846, when the ground where they now stand was grassy and fertile. This is the only known station for this species in New England, and it is possible that it may not be native here but introduced from some more southern locality. July; fruit Oct.

OLEACEAE. OLIVE FAMILY.**FRAXINUS L.** Ash.**Fraxinus americana L.**

White Ash.

Frequent. Woods and fields. May.

The wood is hard, white and tough; valued for interior finish, furniture, carriage-building, ladders, oars, tool-handles and agricultural implements. The bark is medicinal.

Fraxinus pennsylvanica Marsh.

Fraxinus pubescens Lam.

Fraxinus Darlingtonii Britton.

Red, Brown or River Ash.

Frequent. Along streams and in swamps, sometimes in drier places. May.

The timber is of less value than that of the White Ash, though used for furniture and the interior finish of buildings. Its medicinal properties are the same as those of *Fraxinus americana*.

Fraxinus pennsylvanica Marsh., var. *lanceolata* (Borkh.) Sarg.
(lance-shaped).

Fraxinus viridis Michx.

Fraxinus lanceolata Borkh.

Green Ash.

Rare. Low grounds: Norwich, Bozrah and Stonington (Graves), Rocky Hill (Andrews), New Haven (D. C. Eaton). May.

Fraxinus nigra Marsh. (black).

Fraxinus sambucifolia Lam.

Black, Swamp, Basket or Hoop Ash.

Occasional. Swamps and along streams. May.

The wood is much used for interior finish, cabinet work, barrel hoops and basket making. Medicinal properties the same as those of *Fraxinus americana*.

Fraxinus excelsior L. (taller).

Rare. Fairfield, roadside distant from any known source of origin (Eames). May. Native of the Old World.

FORSYTHIA Vahl.

Forsythia viridissima Lindl. (very green).

Golden Bell.

Rare. Wethersfield, escaped from cultivation to a pasture (H. S. Clark & Bissell). May. Fugitive from Asia.

SYRINGA L. Lilac.

Syringa vulgaris L. (common).

Common Lilac.

Occasional. Escaped from cultivation to roadsides and about abandoned house-sites. May. Naturalized from Europe.

LIGUSTRUM L. Privet.**Ligustrum vulgare L.** (common).

Privet. Prim.

Roadsides and thickets as an escape from cultivation.
Rare inland: Thompson and Wethersfield (Bissell), Woodbury and Oxford (Harger). Occasional or frequent near the coast. June—July. Naturalized from Europe.

GENTIANACEAE. GENTIAN FAMILY.**SABATIA Adans.****Sabatia campestris Nutt.** (growing in fields).

Rare. Bridgeport, in waste ground (Eames). Aug.—
Sept. Fugitive from the Southwest.

Sabatia stellaris Pursh (star-shaped).Sea or Marsh Pink. *Sabatia*.

Occasional or local on borders of salt marshes along the coast. July—Sept.

Rarely occurs with white flowers.

Sabatia dodecandra (L.) BSP. (having twelve stamens).*Sabatia chloroides Pursh.*

Large Marsh Pink.

Rare. Marshes near the coast: Old Lyme (F. H. Dart), Saybrook (Berzelius Catalogue), Guilford (Miss K. Dudley).
July—Sept.

GENTIANA L. Gentian.**Gentiana crinita Froel.** (having long hairs; referring to the fringed corolla).

Fringed Gentian.

Occasional or local. Moist meadows and pastures. Sept.—Oct.

The gentian root of medicine, much used as a bitter tonic, comes from *Gentiana lutea* of Europe, but our American species have similar properties and are also used somewhat in the same way.

Gentiana quinquefolia L. (five-leaved).*Gentiana quinqueflora Hill.*

Moist fields, roadsides and thickets. New Milford (C. D. Bishop, C. K. Averill), Litchfield (Miss E. H. Thompson), Norfolk (Miss M. C. Seymour), and occasional or frequent in northwestern Connecticut. Sept.—Oct.

Gentiana Andrewsii Griseb.

Closed Gentian. Bottle Gentian.

Occasional or frequent. Moist places and along streams. Sept.—Oct.

Sometimes occurs with white flowers.

BARTONIA Muhl.

Bartonia virginica (L.) BSP.

Bartonia tenella Muhl.

Occasional or frequent. Moist meadows and woods. July —Sept.

Bartonia paniculata (Michx.) Robinson (panicled).

Bartonia lanceolata Small.

Rare or local. Wet woods and meadows: Griswold (Harger), Hartford (H. S. Clark), Plymouth (Bissell), Stratford (Eames), New Milford (C. K. Averill). Aug.—Sept.

MENYANTHES L. Buckbean.

Menyanthes trifoliata L. (three-leaved).

Bog Bean. Marsh Trefoil. Water Shamrock.

Bogs, borders of ponds and in wet meadows. Occasional or local in most parts of the state; frequent in Litchfield County. May—June.

The leaves and rootstock are used medicinally. In parts of northern Europe it is used as a substitute for hops.

NYMPHOIDES Hill. Floating Heart.

Nymphoides lacunosum (Vent.) Fernald (of ponds).

Limnanthemum lacunosum Griseb.

Floating Heart.

Rare or local. In ponds and rivers: Groton and Lyme (Graves), Ledyard (W. A. Setchell), Branford (W. A. Setchell & Harger). Woodstock, Mansfield and Glastonbury

(Weatherby), Windsor (H. S. Clark, Weatherby & Bissell), Southington (Andrews), Litchfield (C. K. Averill), Danbury (F. Mills), Salisbury (Mrs. C. S. Phelps). July—Aug.

APOCYNACEAE. DOGBANE FAMILY.

VINCA L. Periwinkle.

Vinca minor L. (smaller).

Common Periwinkle. Blue Myrtle.

Occasional. Roadsides near dwellings and about cemeteries, escaped from cultivation. April—May. Naturalized from Europe.

Rarely occurs with white or variegated flowers or leaves.

APOCYNUM L. Dogbane. Indian Hemp.

Apocynum androsaemifolium L. (having leaves like *Hypericum Androsaemum*, the Tutsan).

Spreading Dogbane. Honey-bloom.

Frequent. Fields and roadsides. June—Aug.

The plant is medicinal.

Apocynum medium Greene (intermediate).

Apocynum Milleri Britton.

Apocynum urceolifer G. S. Miller.

Occasional or frequent. Dry fields, roadsides and open woods. June—Aug.

Very variable and several forms have been described.

Apocynum cannabinum L. (hemp-like).

American, Canadian or Indian Hemp.

Frequent. Fields, thickets and roadsides, often in sterile soil. June—July. The so-called *Apocynum album* Greene is a dwarfed or prostrate form of this species growing on rocky or sandy banks of streams or ponds, and is occasional.

The fibre has been used as hemp. The rootstock of this and closely allied species has active medicinal properties and is officinal.

Apocynum cannabinum L., var. *pubescens* (R. Br.) DC. (downy).

Apocynum pubescens R.Br.

Rare. Dry open places: East Lyme (Graves), East Haven and Southington (Bissell), Huntington (Harger), Bridgeport (Eames). July.

ASCLEPIADACEAE. MILKWEED FAMILY.

ASCLEPIAS L. Milkweed. Silkweed.

Asclepias tuberosa L. (tuberous).

Asclepias tuberosa L., var. *decumbens* Pursh.

Asclepias decumbens L.

Butterfly-weed. Pleurisy-root.

Dry fields and roadsides. Rare in Litchfield County, occasional to frequent in other sections. July — Aug.

The root was formerly officinal and is used medicinally.

Asclepias purpurascens L. (purplish).

Purple Milkweed.

Occasional or frequent. Moist fields and open pastures.

June — July.

Asclepias incarnata L. (flesh-colored).

Swamp Milkweed.

Borders of ponds and streams. Occasional along the Connecticut and Housatonic Rivers and in the northwestern part of the state; rare elsewhere. July — Aug.

Asclepias incarnata L., var. *pulchra* (Ehrh.) Pers. (beautiful).

Asclepias pulchra Ehrh.

Swamp Milkweed.

Swamps and wet places. Frequent except in Litchfield County where it is occasional or rare. July — Aug.

The root is medicinal.

Asclepias syriaca L.

Asclepias Cornuti Dcne.

Common Milkweed or Silkweed.

Common. Roadsides, pastures and waste places. July — Aug.

The root is medicinal. The young shoots are used as Asparagus. Sometimes troublesome as a weed.

Asclepias amplexicaulis Sm. (stem-clasping; referring to the leaves).

Asclepias obtusifolia Michx.

Open ground in sandy soil. Rare or local in southern Fairfield County, occasional or frequent elsewhere. June—July.

Asclepias phytolaccoides Pursh (like *Phytolacca*, the Poke-weed).

Asclepias exaltata Muhl. (?).

Poke Milkweed.

Occasional. Moist woods and thickets. Late June—July.

Asclepias variegata L. (of various colors).

Rare. Dry woods: Norwich (Miss Wohlfurth), East Lyme (Miss A. M. Ryon), Portland (Dr. E. J. Thompson). July.

Asclepias quadrifolia Jacq. (four-leaved).

Occasional. Dry woods. June—July.

Asclepias verticillata L. (whorled).

Whorled Milkweed.

Occasional or local. Sandy or sterile ground. July—Aug.

ACERATES Ell. Green Milkweed.

Acerates viridiflora Ell. (green-flowered).

Rare. Dry open ground: East Haven (O. Harger, H. S. Clark), Oxford (Harger), New Milford (Eames). July—Aug.

The var. **LANCEOLATA** (Ives) Gray (lance-shaped), var. *Ivesii* Britton, has been found at New Haven (E. Ives).

CYNANCHUM L.

Cynanchum nigrum (L.) Pers. (black).

Vincetoxicum nigrum Moench.

Black Swallow-wort.

Rare. Roadsides and fields as an escape from cultivation: Stonington (W. E. Britton), New London (Graves), New Haven (H. S. Clark, Harger), Oxford (Harger), Orange and Bridgeport (Eames), Stamford (W. H. Hoyt). June—July. Adventive from Europe.

CONVOLVULACEAE. CONVULVULUS FAMILY.

IPOMOEA L. Morning Glory.

Ipomoea coccinea* L. (red).Quamoclit coccinea* Moench.

Small Red Morning Glory.

Rare. Southington, in waste ground (Andrews), Orange (Harger). July—Sept. Fugitive from the Southwest or from tropical America.

***Ipomoea hederacea* Jacq. (like *Hedera*, the Ivy).**

Ivy-leaved Morning Glory.

Rare. Roadsides and waste ground as an escape from gardens: New London (Graves), Glastonbury (Bissell), Stratford (Eames), Oxford (Harger), Darien (Miss A. E. Carpenter). Aug.—Sept. Adventive from tropical America.

***Ipomoea purpurea* (L.) Roth (purple).**

Common Morning Glory.

Occasional. Waste places and about old gardens as an escape from cultivation. July—Sept. Adventive or fugitive from tropical America.

***Ipomoea pandurata* (L.) G. F. W. Mey. (fiddle-shaped).**

Wild Potato-vine. Man-of-the-Earth.

Rare. Dry soil of upland pastures: New Milford (J. W. Robbins), Kent (E. H. Austin). June—Aug.

The root is medicinal.

CONVOLVULUS L. Bindweed.

***Convolvulus spithameus* L. (a span long).**

Rare or local. Gravelly hillsides: Southington (Andrews), Oxford (Harger), Southbury (B. B. Bristol), New Milford (C. K. Averill & E. H. Austin), Salisbury (Mrs. C. S. Phelps). May—June.

***Convolvulus japonicus* Thunb.**

California Rose.

Rare. Sandy fields as an escape from cultivation, mostly in the double-flowered form: Plainville (Bissell), Southington (Andrews), Trumbull (Eames), Wilton (Miss A. E. Carpenter). July. Adventive from eastern Asia.

Convolvulus sepium L. (of hedges).

Convolvulus sepium L., var. *americanus* Sims.

Wild Morning Glory. Hedge Bindweed.

Frequent. Sandy fields, roadsides and waste places. June — Aug.

The root is medicinal.

Convolvulus sepium L., var. *pubescens* (Gray) Fernald (downy).

Convolvulus sepium L., var. *repens* Gray.

Convolvulus repens L.

Open fields or stony and gravelly places on and near the coast. Frequent eastward, becoming occasional westward. June — Aug.

The root is medicinal.

Convolvulus arvensis L. (of cultivated ground).

Field Bindweed.

Rare. Waste ground and roadsides: New London (Graves), Hartford (H. S. Clark, Bissell), New Haven (Miss A. E. Carpenter), Southington (Andrews), Ansonia (Harger), Orange and Bridgeport (Eames), Westport (Eames & C. C. Godfrey). July. Adventive from Europe.

CUSCUTA L. Dodder. Love Vine.**Cuscuta Epithymum** Murr. (upon thyme).

Clover Dodder.

Rare. Clover fields: Mansfield (Mrs. C. S. Phelps), East Windsor and Granby (Bissell), Southington (Andrews), Oxford (Harger), Litchfield (Miss E. H. Thompson), East Lyme (Miss A. M. Ryon), Fairfield (Eames). July — Sept. Adventive from Europe.

Cuscuta arvensis Beyrich (of cultivated ground).

Field Dodder.

Rare. In fields: Granby (Bissell), Oxford and Southbury (Harger). July — Sept.

Cuscuta Coryli Engelm. (of hazel).

Cuscuta inflexa Engelm.

Hazel Dodder.

Rare. On shrubs: Norwich (Mrs. E. E. Rogers). Aug.

Cuscuta Gronovii Willd.

Dodder. Love Vine.

Common. On herbs and low shrubs, often very plentiful in open swamps. July — Sept.

Cuscuta compacta Juss. (compact).

Rare or local. On shrubs: Groton (Graves), Franklin (R. W. Woodward), Milford, Stratford and Westport (Eames). Aug. — Sept.

POLEMONIACEAE. POLEMONIUM FAMILY.**PHLOX L.****Phlox paniculata** L. (panicled).

Phlox acuminata Pursh.

Phlox glandulosa Shuttlw.

Phlox amplifolia Britton.

Garden Phlox.

Occasional. Roadsides and about old gardens. Aug. — Sept. Adventive from the Southwest.

Phlox maculata L. (spotted).

Wild Sweet William.

Rare. Escaped from cultivation to roadsides and waste places: Waterford (Graves), Franklin (R. W. Woodward & Weatherby), Fairfield, well established at two localities (Eames). June — Aug. In Connecticut adventive from the South or West.

The var. *CANDIDA* Michx. (shining white) occurs at Fairfield (Eames).

Phlox pilosa L. (hairy).

Rare. Moist grassy bank, Southbury (Harger). May — June.

This is the only reported station for the species in New England.

Phlox subulata L. (awl-shaped).

Ground or Moss Pink.

Rare to occasional. Escaped from cultivation, often in and near old cemeteries. May. Adventive from the West.

It is seen rarely with white flowers.

POLEMONIUM L. Greek Valerian.**Polemonium Van-Bruntiae** Britton.

Polemonium coeruleum Gray's Manual ed. 6, not L.

Rare. In swamps: Salisbury (Mrs. C. S. Phelps).
June—July.

HYDROPHYLLACEAE. WATERLEAF FAMILY.**HYDROPHYLLUM L.** Waterleaf.**Hydrophyllum virginianum L.**

Waterleaf.

Rare or local. Moist or wet shady places: South Windsor (Weatherby), Waterbury (W. H. Paton), Wilton (Miss E. A. Carpenter, Eames), Norwalk (G. P. Ells), North Canaan (H. N. Adams, M. B. Tobey), Salisbury (Mrs. C. S. Phelps). June.

ELLISIA L.**Ellisia Nyctelea L.**

Macrocalyx Nyctelea Kuntze.

Rare. New London, in a pasture (Mrs. E. M. Tilton).
May—July. Fugitive from the South or West.

PHACELIA Juss.**Phacelia viscida** (Benth.) Torr. (sticky).

Rare. Meriden, escaped from cultivation and spontaneous in a spot on which muck had been deposited (Miss E. J. Leonard). June. Fugitive from California.

Phacelia Purshii Buckley.

Rare. Branford, waste ground at Short Beach (Miss E. J. Leonard). May—June. Fugitive from the Central States.

BORAGINACEAE. BORAGE FAMILY.**CYNOGLOSSUM L.** Hound's Tongue.**Cynoglossum officinale L.** (of the shops).

Common Hound's Tongue.

Rare. Roadsides and pastures: Ledyard (Graves), Meriden and New Haven (Harger), Bridgeport (C. K.

Averill), Salisbury (Mrs. C. S. Phelps). June — Aug. Adventive from Europe.

Cynoglossum boreale Fernald (northern).

Cynoglossum virginicum of Gray's Manual ed. 6 in part.
Wild Comfrey.

Rare. Rocky woods: East Haven (J. A. Allen), Meriden (Andrews), Norfolk (J. H. Barbour), Barkhamsted and Salisbury (Mrs. C. S. Phelps), Cornwall (E. E. Brewster). June — July.

LAPPULA Moench. Stickseed.

Lappula virginiana (L.) Greene.

Echinosperrnum virginicum Lehm.
Stickseed. Beggar's Lice.

Frequent. Woods, hedge-rows and thickets in dry ground.
July — Aug.

Lappula echinata Gilib. (prickly).

Echinosperrnum Lappula Lehm.
Lappula Lappula Karst.

Rare. Waste places: New Haven (Merrill), Seymour (Harger), New Milford (Eames & E. H. Austin), Salisbury (Mrs. C. S. Phelps). July — Aug. Adventive from Europe.

AMSINCKIA Lehm.

Amsinckia lycopoides Lehm. (like *Lycopsis*, the Bugloss).

Rare. Cultivated or waste ground: Hartford (Bissell), Southington (Andrews), Salisbury (Mrs. C. S. Phelps). May — July. Fugitive from the Pacific Coast.

SYMPHYTUM L. Comfrey.

Symphytum officinale L. (of the shops).

Common Comfrey.

Rare or local. Roadsides, waste places and along streams, usually in moist ground and as an escape from cultivation.
June — Aug. Naturalized from Europe.

Formerly used medicinally.

Symphytum tuberosum L. (tuberous).

Rare. Ditches and wet places: Guilford (G. H. Bartlett), Southington (Andrews). May — June. Adventive from Europe.

Symphytum aspernum Donn (very rough).

Rough Comfrey.

Rare. Moist roadsides: Oxford (Harger), Kent (Eames). June — Aug. Adventive from Europe.

BORAGO L. Borage.**Borago officinalis** L. (of the shops).

Borage.

Rare. Bridgeport, escaped from gardens (I. Holden & Baker). June — Sept. Fugitive from Europe.

Cultivated for ornament and for its supposed medicinal properties.

ANCHUSA L. Alkanet.**Anchusa officinalis** L. (of the shops).

Rare. Waste ground in Fairfield (Eames). June — Aug. Adventive from Europe.

MYOSOTIS L. Forget-me-not. Scorpion Grass.**Myosotis scorpioides** L. (scorpion-like).*Myosotis palustris* Hill.

True Forget-me-not.

Rare. Along streams as an escape from cultivation: North Branford and Oxford (Harger), Stratford (Eames), Southington (Andrews). May — June. Native of Europe.

Myosotis laxa Lehm. (loose).

Wild Forget-me-not.

Frequent. Along streams and in wet places. May — June.

Myosotis arvensis (L.) Hill (of cultivated ground).

Rare. In grassland: Norwich (Mrs. E. E. Rogers), Ledyard (Graves), Granby (I. Holcomb). May — June.

Myosotis virginica (L.) BSP.*Myosotis verna* Nutt.

Occasional or local. Dry, sterile and rocky places. May — June.

LITHOSPERMUM L. Gromwell. Puccoon.**Lithospermum arvense** L. (of cultivated ground).

Corn Gromwell. Stone-seed.

Occasional. Sandy or waste places. May—June. Naturalized from Europe.

Lithospermum officinale L. (of the shops).

Common Gromwell.

Rare or local. Dry fields and in rocky ground: New Britain (Bissell), Southington (Andrews), North Canaan (Weatherby), New Milford (A. E. Blewitt). June—Sept. Naturalized from Europe.

ONOSMODIUM Michx. False Gromwell.

Onosmodium virginianum (L.) A. DC.

Gravel-weed. Pearl-plant. Wild Job's Tears. False Gromwell.

Rare. Dry or sandy ground: Preston (Graves), East Haddam (Dr. E. J. Thompson), Hartford and Windsor (H. S. Clark), New Haven (D. C. Eaton), Fairfield (Eames), Ansonia and Southbury (Harger), Kent (E. H. Austin). June—July.

The root and seeds are medicinal.

ECHIUM L. Viper's Bugloss.

Echium vulgare L. (common).

Viper's Bugloss. Blue-weed. Blue Devil.

Open sandy or sterile places. Rare or local over most of the state: Montville (Graves), Windsor (H. S. Clark), Southington (Andrews), New Haven (Harger), New Hartford (Andrews & Bissell). Becoming occasional in western Connecticut. July—Aug. Naturalized from Europe.

Sometimes occurs with rose-colored flowers. A showy plant when in bloom, but a bad weed, difficult to eradicate.

VERBENACEAE. Vervain FAMILY.

VERBENA L. Vervain.

Verbena officinalis L. (of the shops).

European Vervain.

Rare. Waste ground: New Haven (J. S. Smith), Bridgeport (Eames). June—Sept. Fugitive from the Old World.

The herb was reputed to have many desirable properties and was highly esteemed in old times, but is rarely if ever used now.

***Verbena urticaefolia* L.** (having leaves like *Urtica*, the Nettle).
White Vervain.

Frequent. Fields, roadsides and waste ground. July — Aug.

***Verbena angustifolia* Michx.** (narrow-leaved).

Rare or local. Sandy fields: Waterford (Graves), New Haven (Harger), Orange (Eames, Andrews & Bissell), Stratford (I. Holden & Baker), Southington (Andrews & Bissell), Kent (E. H. Austin, Eames & C. C. Godfrey), Salisbury (Mrs. C. S. Phelps). June — July.

***Verbena hastata* L.** (spear-shaped).

Verbena hastata L., var. *pinnatifida* Britton.

Blue Vervain.

Frequent. Roadsides, fields and waste places. July — Aug. A hybrid of this with *Verbena urticaefolia* has been collected at Oxford (Harger).

Flowers sometimes rose color. The root and leaves are medicinal and are occasionally used in domestic practice.

***Verbena stricta* Vent.** (upright; straight).

Hoary Vervain.

Rare. Fields and waste places: Old Lyme (Graves), Naugatuck (Mrs. C. H. Lyman), Bridgeport (Eames). June — Aug. Adventive from the West.

***Verbena bracteosa* Michx.** (having bracts).

Rare or local. Waste ground: Hebron (Graves), Naugatuck (Mrs. C. H. Lyman), Bridgeport (Eames), Winchester (M. L. Fernald & Weatherby). June — Aug. Adventive from the West.

***Verbena canadensis* (L.) Britton.**

Verbena Aubletia Jacq.

Verbena Drummondii of authors.

Verbena.

Rare. Escaped from old gardens: Southington (Bis-

sell), Oxford (Harger). June — Sept. Fugitive from the Southwest.

Many of the cultivated forms of *Verbena* are derived from this species.

LABIATAE. MINT FAMILY.

AJUGA L. Bugle Weed.

Ajuga genevensis L.

Erect Bugle.

Rare. Along roadsides and about dwellings as an escape from cultivation: Middletown (Miss Day), New Haven (D. C. Eaton), Southington (Andrews & Bissell), Plainville (J. N. Bishop), Bristol (W. A. Terry), Milford (Eames & C. C. Godfrey). May — June. Adventive from Europe.

Flowers sometimes rose-colored or white.

TEUCRIUM L. Germander.

Teucrium canadense L.

American Germander. Wood Sage.

Rare or occasional. Fields, roadsides and in alluvial soil along streams. July — Aug.

Teucrium canadense L., var. *littorale* (Bicknell) Fernald (of the sea shore).

Teucrium littorale Bicknell.

Coast Germander.

Frequent on beaches and about salt meadows along the coast. July — Aug.

TRICHOSTEMA L. Blue Curls.

Trichostema dichotomum L. (forked in pairs).

Blue Curls. Bastard Pennyroyal.

Common. Dry sandy or sterile soil. July — Sept.

Sometimes occurs with pink flowers.

Trichostema lineare Walt. (very narrow).

Rare. Milford, in sandy soil (J. W. Robbins, 1829). July — Aug.

SCUTELLARIA L. Skullcap.**Scutellaria lateriflora L.** (side-flowering).

Mad-dog Skullcap.

Frequent. Wet places, usually in shade. July—Sept.

Sometimes occurs with white flowers. The plant was formerly used as a remedy for hydrophobia, whence its common name. It is officinal in medical practice.

Scutellaria galericulata L. (having a small helmet; referring to the calyx).

Marsh Skullcap.

Occasional. Borders of ponds, wet places along streams, open swamps or sometimes also on dry banks or even in sand near the coast. June—Aug.

Sometimes occurs with pink flowers.

Scutellaria integrifolia L. (entire-leaved).

Rare. Sandy fields and in woodland, either dry or moist: Union (G. Towne), Norwich (Mrs. E. E. Rogers), Lyme (Graves), East Haddam (W. E. Nichols), East Hartford (Weatherby), East Windsor and Rocky Hill (Bissell), Hartford (H. S. Clark), Windsor Locks (Miss A. E. Carpenter). July.

Scutellaria parvula Michx. (small), var. *ambigua* (Nutt.)

Fernald (doubtful).

Scutellaria parvula Britton, not Michx.

Rare. Dry sandy or rocky ground: Guilford (G. W. Hawes), East Haven (H. C. Beardslee, Harger), Plainville (J. N. Bishop), Orange (A. H. Young), Salisbury (Mrs. C. S. Phelps). June—Aug.

MARRUBIUM L. Horehound.**Marrubium vulgare L.** (common).

Common Horehound.

Rare or occasional. Roadsides and waste ground as an escape from cultivation. June—July. Naturalized from Europe.

Used as a cough medicine and in candy. An official medicine.

SIDERITIS L. Ironwort.

Sideritis montana L. (of mountains).

Rare. Naugatuck, one plant in waste ground (A. E. Blewitt). July. Fugitive from southeastern Europe.

AGASTACHE Clayt. Giant Hyssop.

Agastache nepetoides (L.) Kuntze (like *Nepeta*, the Catnip).

Lophanthus nepetoides Benth.

Rare or local. Rocky woods and thickets: Meriden (D. C. Eaton), Southington (Andrews), Derby (Harger), Norwalk (Bissell). Aug.—Sept.

Agastache scrophulariaefolia (Willd.) Kuntze (having leaves like *Scrophularia*, the Figwort).

Lophanthus scrophulariaefolius Benth.

Rare or occasional. Woods, thickets and waste ground, either moist or dry. July — Aug.

The var. **MOLLIS** (Fernald) Heller (soft) occurs at Fairfield (Eames).

Agastache Foeniculum (Pursh) Kuntze (like *Foeniculum*, the Fennel; referring to its odor).

Lophanthus anisatus Benth.

Agastache anethiodora Britton.

Rare. Waste ground: Portland (Mrs. F. W. Starmer). Aug. Fugitive from the West.

NEPETA L. Cat Mint.

Nepeta Cataria L. (of a cat).

Catnip.

Frequent. Fields and waste ground. July — Oct. Naturalized from Europe.

The herb is well known to have strong attraction for cats. Much used in domestic medical practice.

Nepeta hederacea (L.) Trevisan (like *Hedera*, the Ivy).

Nepeta Glechoma Benth.

Glechoma hederacea L.

Gill-over-the-Ground. Ground Ivy. Gill. Robin Runaway.

Frequent. Moist shaded places in fields, waste ground

and about old yards. April—June. Naturalized from Europe.

Sometimes a bad weed in lawns and gardens. Formerly used in domestic medical practice.

DRACOCEPHALUM L. Dragon Head.

Dracocephalum parviflorum Nutt. (small-flowered).

Dragon Head.

Rare. Southington, one plant as a fugitive in a garden (Andrews); also occurs at New Milford (Eames & E. H. Austin). June—July. Native from New York westward.

PRUNELLA L. Self-heal.

Prunella vulgaris L. (common).

Brunella vulgaris of Manuals.

Common Self-heal or Heal-all. Carpenter-weed.

Common. Fields, woods and waste ground, both dry and moist. June—Oct.

Often a troublesome weed in lawns and difficult to eradicate. Formerly used as a medicine. Sometimes occurs with white flowers.

PHYSOSTEGIA Benth. False Dragon Head.

Physostegia virginiana (L.) Benth.

Lion's Heart.

Roadsides and waste ground. Occasional in New London County, becoming rare or local northward and westward. Aug. Introduced from the West.

GALEOPSIS L. Hemp Nettle.

Galeopsis Tetrahit L.

Common Hemp Nettle.

Rare or occasional. Roadsides and waste grounds. July—Sept. Introduced from Europe.

A troublesome weed in some parts of northern New England.

Galeopsis Ladanum L.

Red Hemp Nettle.

Rare. Naugatuck, in waste ground (B. B. Bristol). June—July. Fugitive from Europe.

LAMIUM L.   Dead Nettle.

Lamium amplexicaule L. (stem-embracing; referring to the leaves).

Henbit.

Waste or cultivated ground. Occasional in Fairfield County; rare or local elsewhere. May — Oct. Naturalized from Europe.

Lamium purpureum L. (purple).

Red Dead Nettle.

Rare. Waste ground: Fairfield (Eames). May — June. Adventive from Europe.

Lamium hybridum Vill. (mongrel).

Local. Waste or cultivated ground: Cornwall, becoming a weed (T. S. Gold). May — June. Adventive from Europe.

Lamium maculatum L. (spotted).

Spotted Dead Nettle.

Rare. Along roadsides and in yards as an escape from cultivation: Norwich (Mrs. E. E. Rogers), New Haven (D. C. Eaton), Southington (Andrews & Bissell), Woodbury (Harger). May — Oct. Introduced from Europe.

Sometimes occurs with white flowers.

LEONURUS L.   Motherwort.

Leonurus Cardiaca L. (of the heart).

Common Motherwort. Lion's Tail. Throw-wort.

Frequent. Roadsides and waste places. June — July. Naturalized from Europe.

Formerly used in domestic medical practice, especially for diseases of women, whence the common name.

BALLOTA L.   Fetid Horehound.

Ballota nigra L. (black).

Black Horehound.

Rare. An escape to roadsides: New Haven (D. C. Eaton), Milford (Eames). June — Aug. Native of Europe.

Formerly cultivated because of supposed medicinal qualities.

STACHYS L. Hedge Nettle.**Stachys hyssopifolia** Michx. (hyssop-leaved).

Rare. Killingly, sandy border of pond (Bissell), Wallingford (N. Coleman), West Hartford (H. S. Clark). July — Aug.

Stachys tenuifolia Willd. (thin-leaved), var. **aspera** (Michx.) Fernald (rough).

Stachys aspera Michx.

Rare or local. Moist ground along streams or on roadsides: Lyme (Graves), Glastonbury (A. W. Driggs, Bissell), East Windsor (Bissell), Stratford (Eames). July — Aug.

Stachys palustris L. (growing in marshes).

Woundwort.

Rare. Roadsides, fields and wet meadows: Fairfield and Bridgeport (Eames), Salisbury (Mrs. C. S. Phelps), New Fairfield (Harger). July — Aug.

The var. **HOMOTRICHA** Fernald (having the hairs alike) occurs at Oxford (Harger).

SALVIA L. Sage.**Salvia lyrata** L. (lyre-shaped).

Lyre-leaved Sage.

Local. About a fourth of an acre of grassy meadow is covered with this species in Woodbridge (Harger). May — June.

Salvia pratensis L. (belonging to a meadow).

Meadow Sage.

Rare. Fields and cultivated ground: Norwich (Mrs. E. E. Rogers), Southington (L. Fox). June. Fugitive from Europe.

Salvia officinalis L. (of the shops).

Garden Sage.

Rare. Roadsides and cultivated ground as an escape from cultivation: Southington (Andrews), Milford (Eames). June. Adventive from Europe.

The leaves are officinal in medical practice, also used for flavoring meats, cheese, etc.

Salvia splendens Ker (shining).

Scarlet Sage.

Rare. Escaped from cultivation to waste places: Westport (Eames). Sept.—Oct. Fugitive from Brazil.

MONARDA L. Horse Mint.**Monarda didyma** L. (twin).

Bee Balm. Oswego Tea. Fragrant Balm.

Rare or occasional. Roadsides, about old houses and borders of woods as an escape from cultivation. July — Aug. Naturalized from the West.

The herb finds some popular uses in medical practice, depending on its aromatic properties. All our species are similar in this respect and are one of the sources of thymol.

Monarda clinopodia L. (like *Clinopodium*, the Basil).

Basil Balm.

Rare. Waste ground and roadsides: Ledyard (Graves), Waterbury (A. E. Blewitt). July — Aug. Adventive from the West.

Monarda fistulosa L. (tubular).

Wild Bergamot.

Rare. Dry soil of shrubby and waste places: East Lyme (Miss A. M. Ryon), Bolton (Bissell), Manchester (H. S. Clark), West Hartford and Southbury (Harger), Stratford, Bridgeport, Fairfield and Norwalk (Eames). July — Aug.

The var. *RUBRA* Gray (red), *Monarda media* Willd., is rare as an escape from gardens: Groton (Graves), Andover (Mrs. C. S. Phelps & Weatherby), Somers and Southington (Bissell), Bridgeport (Eames). The variety is adventive from the West as is the species in part.**Monarda mollis** L. (soft).*Monarda fistulosa* L., var. *mollis* Benth.

Downy Bergamot.

Occasional or frequent. Dry pastures, waste places and roadsides. July — Aug.

BLEPHILIA Raf.**Blephilia ciliata** (L.) Raf. (fringed).

Wood Mint.

Rare. Dry open ground: Plainville (Bissell), Orange (A. W. Evans), Beacon Falls (Harger), Salisbury (Mrs. C. S. Phelps). June.

Blephilia hirsuta (Pursh) Benth. (hairy).

Wood Mint.

Rare. Border of woods: Waterbury and Thomaston (A. E. Blewitt). June—July.

HEDEOMA Pers.   Mock Pennyroyal.

Hedeoma pulegioides (L.) Pers. (like *Mentha Pulegium*, the Pennyroyal).

American Pennyroyal.

Common. Open or shaded ground, usually in dry soil. July—Aug.

The leaves and flowering tops as well as the oil distilled from them are officinal in medical practice and find many popular uses in home medication. The taste and odor are nearly the same as those of true Pennyroyal, *Mentha Pulegium* of Europe.

Hedeoma hispida Pursh (rough-hairy).

Rare. Putnam, dry plains near the Quinebaug River (Harger). June—Aug. Adventive from the West.

MELISSA L.   Balm.

Melissa officinalis L. (of the shops).

Common or Lemon Balm.

Rare. Roadsides, yards and fields near old houses as an escape from cultivation: Ledyard and Lyme (Graves), New Haven (D. C. Eaton), Huntington, Trumbull, Fairfield and Norwalk (Eames). July—Sept. Native of Europe.

The leaves and tops are medicinal and were formerly officinal.

SATUREJA L.   Savory. Calamint.

Satureja vulgaris (L.) Fritsch (common).

Clinopodium vulgare L.

Calamintha Clinopodium Benth.

Basil.

Frequent. Woods, fields and thickets. June—Sept.

HYSSOPUS L. Hyssop.**Hyssopus officinalis L.** (of the shops).

Hyssop.

Rare. Roadsides as an escape from cultivation: Salisbury (Mrs. C. S. Phelps). June — Sept. Native of Europe.

The plant is medicinal.

ORIGANUM L. Wild Marjoram.**Origanum vulgare L.** (common).

Wild Marjoram.

Rare or local. Dry pastures, roadsides and waste places: New Haven (O. Harger et al.), Sherman (E. H. Austin & Eames), Kent (C. K. Averill), Sharon (Bissell), Salisbury (Mrs. C. S. Phelps). July — Sept. Adventive from Europe.

PYCNANTHEMUM Michx. Mountain Mint. Basil.**Pycnanthemum clinopodioides Torr. & Gray** (like *Clinopodium*, the Basil).*Koellia clinopodioides* Kuntze.

Rare. Dry ground: Southington (Andrews), Cheshire (A. E. Blewitt), Hamden (O. Harger). Aug.

Pycnanthemum flexuosum (Walt.) BSP. (flexuous).*Pycnanthemum linifolium* Pursh.*Koellia flexuosa* MacM.

Occasional. Open sandy ground either dry or moist. July — Aug.

Pycnanthemum virginianum (L.) Durand & Jackson.*Pycnanthemum lanceolatum* Pursh.*Koellia lanceolata* MacM.

Wild Isaac.

Common. Sterile ground either dry or moist. July — Aug.

Pycnanthemum pilosum Nutt. (hairy).*Pycnanthemum muticum* Pers., var. *pilosum* Gray.*Koellia pilosa* Britton.

Rare. Edge of thicket in rather dry gravelly soil, Plainfield (Bissell & Weatherby). Aug.—Sept.

Pycnanthemum verticillatum (Michx.) Pers. (whorled).

Koellia verticillata Kuntze.

Rare or occasional. Hillsides and pastures either moist or dry. July — Aug.

Pycnanthemum incanum (L.) Michx. (hoary-white).

Koellia incana Kuntze.

Occasional. Rocky copses, thin woods and clearings. Aug.

Pycnanthemum muticum (Michx.) Pers. (pointless).

Koellia mutica Britton.

Frequent. Poor soils either dry or wet. July — Aug.

THYMUS L. Thyme.

Thymus Serpyllum L. (classical name for this plant).

Wild or Creeping Thyme.

Rare or occasional. Fields and waste places, usually in dry ground. June — Sept. Adventive from Europe.

Sometimes cultivated and used for seasoning in cookery.

LYCOPUS L. Water Horehound.

Lycopus virginicus L.

Bugle Weed.

Wet open ground or shaded swamps. Rare in most districts: Franklin (R. W. Woodward), Windsor (Bissell), Hartford (H. S. Clark). Occasional or frequent near the coast and in the southwestern part of the state. July — Sept.

The herb has medicinal properties, like other species of the genus.

Lycopus uniflorus Michx. (one-flowered).

Lycopus communis Bicknell.

Lycopus membranaceus Bicknell.

Bugle Weed.

Common. Wet or dry places in various soils. Aug.—Sept.

Lycopus sessilifolius Gray (sessile-leaved).

Rare. Wet ground about ponds: Voluntown, Ledyard, Groton and East Lyme (Graves), Old Saybrook and Middlebury (Harger). Aug.—Sept.

Lycopus rubellus Moench (reddish).

Rare. Low ground: Groton and New London (Graves), Southington (Andrews, Bissell), Huntington (Harger). Aug.—Sept.

Lycopus americanus Muhl.

Lycopus sinuatus Ell.

Frequent. Moist or wet places. Aug.—Sept.

MENTHA L. Mint.**Mentha longifolia** (L.) Huds. (long-leaved).

Mentha sylvestris L.

Horse Mint of Europe.

Rare. Fields and waysides: Ledyard (Graves), Milford (Eames & C. C. Godfrey), Westport (Eames). July—Sept. Naturalized from Europe.

Mentha alopecuroides Hull (like *Stachys Alopecuros*, the Betony).

Mentha sylvestris L., var. *alopecuroides* Baker.

Rare. Roadsides in Fairfield (Eames). Aug.—Sept. Adventive from Europe.

Mentha spicata L. (spiked).

Mentha viridis L.

Spearmint.

Frequent. Fields and roadsides in wet ground. July—Sept. Naturalized from Europe.

The leaves and flowering tops as well as the oil distilled from them are officinal in medical practice and are in popular use. The herb is used in sauce for roast lamb, etc.

Mentha piperita L. (peppery).

Peppermint.

Occasional. Wet places. Aug.—Sept. Naturalized from Europe.

The source of oil of peppermint. Like the preceding species officinal, much used in medical practice and as a flavor for confectionery.

Mentha aquatica L. (aquatic).

Water Mint.

Rare or local. Moist ground: New London (Graves), Southbury (T. M. Prudden), Litchfield (T. M. Allen). Aug.—Sept. Adventive from Europe.

***Mentha crispa* L. (curled).**

Mentha aquatica L., var. *crispa* Benth.

Curled Mint.

Rare or local. Roadsides: Norwich (Mrs. E. E. Rogers), New London, Ledyard and Preston (Graves), Stratford (Eames, Harger), Waterbury (Mrs. C. H. Lyman), Oxford (Harger), Bridgeport (Eames). Aug.—Sept. Adventive from Europe.

Properties similar to those of peppermint. Often cultivated both for ornament and use.

***Mentha citrata* Ehrh. (like *Citrus Limonum*, the Lemon: referring to its odor).**

Bergamot Mint.

Rare. Roadsides and waste places in moist ground: East Hartford (Weatherby), Rocky Hill (Mrs. F. W. Starmer), Oxford (Harger), Litchfield (T. F. Allen), Salisbury (Mrs. C. S. Phelps). Aug.—Sept. Adventive from Europe.

***Mentha Cardiaca* Gerarde (of the heart).**

Mentha sativa of many American authors.

Rare. Southington, wet ground (Andrews & Bissell). Aug.—Sept. Adventive from Europe.

***Mentha gentilis* L. (related).**

Mentha sativa L.

Spotted or Whorled Mint. Runaway Robin.

Rare. Roadsides, waste places and about old houses: Ledyard and Preston (Graves), Union and Salisbury (Bissell), Bolton (Weatherby), Plainville (J. N. Bishop), Southington (Andrews & Bissell), Bridgeport, Fairfield, Newtown and Sherman (Eames). July—Sept. Naturalized from Europe.

***Mentha arvensis* L. (of cultivated ground).**

Field Mint.

Occasional. Low fields and wet places. July—Sept.

Mentha arvensis L., var. **canadensis** (L.) Briquet.

Mentha canadensis L.

Wild Mint.

Frequent. Wet places, often along streams. July — Sept.

COLLINSONIA L. Horse Balm.

Collinsonia canadensis L.

Richweed. Stone-root.

Common. Moist rich woods. July — Sept.

The root and herb are used in medicine.

PERILLA L.

Perilla frutescens (L.) Britton (shrubby).

Perilla ocymoides L.

Rare. About old gardens as an escape from cultivation: Groton (Mrs. C. B. Graves), Southington (Andrews), Oxford (Harger), Bridgeport (Eames). July — Sept. Native of Asia.

Sometimes cultivated as a foliage plant.

SOLANACEAE. NIGHTSHADE FAMILY.

CAPSICUM L. Pepper.

Capsicum annuum L. (annual).

Red, Cayenne or Chili Pepper.

Rare. Waste ground: Hartford (H. S. Clark), Bridgeport (Eames). July — Aug. Fugitive from the Tropics.

Well known in cultivation.

LYCOPERSICUM Mill. Tomato.

Lycopersicum esculentum Mill. (edible).

Lycopersicon Lycopersicon Karst.

Tomato.

Rare. An escape in waste places and on river shores. Aug.—Sept. Introduced from South America.

Cultivated for its edible fruit.

SOLANUM L. Nightshade.

Solanum tuberosum L. (producing tubers).

Potato.

Rare. Cultivated ground and waste places. July. Fugitive from temperate South America.

One of the important food plants of the world.

Solanum Dulcamara L. (bitter-sweet).

Woody Nightshade. Bittersweet. Wolf Grape. Violet Bloom.

Frequent. Moist or wet thickets, waste grounds, roadsides, about ponds and along streams. June — Aug.; fruit July — Sept. Naturalized from Europe.

The young branches and leaves are sometimes used medicinally and were formerly officinal. The berries are somewhat poisonous.

Solanum nigrum L. (black).

• Black or Common Nightshade.

Frequent. Moist rich soil or often in drier places or on sea beaches. July — Sept.; fruit Aug. — Oct.

Stock are sometimes poisoned by eating this plant. All parts of the plant are said to be more or less poisonous. This plant has recently been somewhat extensively advertised in seed catalogues as Garden Huckleberry, and it is claimed the ripe berries are entirely safe and wholesome either fresh or cooked. The testimony is somewhat conflicting.

It is stated that in some countries the leaves are eaten as a pot-herb after thorough cooking; that in the Dakotas the plant is called Stubbleberry, and the ripe fruit is much used for making pies and preserves.

On the other hand the best chemical authorities state that active poisonous principles have been found in the ripe berries as well as in other parts of the plant. The species is quite variable, and it is probable that some plants are more poisonous than others, in consequence of conditions of growth not yet understood.

All things considered, its indiscriminate use as a food plant cannot be recommended.

Solanum carolinense L.

Horse or Bull Nettle. Sand Brier.

Rare. Fields and meadows: Middletown (Bissell), Nau-

gatuck (A. E. Blewitt), Seymour (Harger), Milford and Bridgeport (Eames), Norwalk (G. P. Ells), Salisbury (Mrs. C. S. Phelps), New Milford (E. H. Austin), Greenwich (J. W. Robbins). July — Sept.; fruit Aug.—Oct. Naturalized from the South.

A pernicious weed in the South, destructive to cattle. The root and leaves are employed medicinally.

***Solanum rostratum* Dunal** (beaked).

Sand Bur. Buffalo Bur.

Rare. Waste or cultivated ground: New London (Miss E. Shelly), Hartford and East Haddam (Dr. E. J. Thompson), Southington (Miss L. Upson, Andrews), Naugatuck (B. B. Bristol), Milford (Harger), Wilton (Miss A. E. Carpenter), Kent and New Milford (E. H. Austin), Salisbury (Mrs. C. S. Phelps). July — Sept. Adventive from the West.

A pernicious weed which should be eradicated on its first appearance.

PHYSALIS L. Ground Cherry.

***Physalis angulata* L.** (angular).

Rare. Hartford, in waste ground (H. S. Clark & Bissell). July — Sept. Fugitive from the South.

***Physalis pruinosa* L.** (frosted).

Strawberry Tomato.

Cultivated or waste ground. Rare in most districts: Norwich (Mrs. E. E. Rogers), Groton (Mrs. C. B. Graves), Southington (Andrews & Bissell). Occasional in the southwestern part of the state (Eames). July — Oct.

***Physalis Alkekengi* L.**

Winter Cherry.

Rare. New Milford, spreading from cultivation (E. H. Austin). Fruit Aug.—Oct. Introduced from eastern Asia.

***Physalis heterophylla* Nees** (various-leaved).

Physalis virginiana Gray's Manual ed. 6, not Mill.

Occasional. Dry fields and waste places. June — Sept.; fruit Aug.—Oct.

The var. **AMBIGUA** (Gray) Rydb. (doubtful) sometimes occurs with the typical form.

The var. *NYCTAGINEA* (Dunal) Rydb. (like the Four-o'clock) is rare: Windsor, shaded alluvial soil on bank of the Connecticut River (Bissell).

Physalis subglabrata Mackenzie & Bush (nearly smooth).

Physalis philadelphica Gray's Manual ed. 6, perhaps not Lam.

Rare. Waste grounds, roadsides and fields: East Windsor and Norwalk (Bissell), Bridgeport (Eames), Waterbury (A. E. Blewitt), New Milford (Eames & E. H. Austin), Salisbury (Mrs. C. S. Phelps). July—Sept.

Sometimes cultivated for its edible fruit.

Physalis virginiana Mill.

Physalis lanceolata Gray's Manual ed. 6 in part, not Michx.

Rare. Dry or moist fields: Southington (Andrews), Southbury (Harger). June—Aug.

NICANDRA Adans. Apple of Peru.

Nicandra physalodes (L.) Pers. (like *Physalis*, the Ground Cherry).

Physalodes physalodes Britton.

Apple of Peru.

Rare. Waste ground and cultivated fields: Norwich (Mrs. E. E. Rogers), Southington (Andrews), New Haven (O. Harger), Waterbury (H. S. Clark), Oxford and Ansonia (Harger), Bridgeport and Norwalk (Eames), Winchester (A. E. Blewitt), Norfolk (H. S. Clark & Bissell). July—Sept. Adventive from Peru.

LYCIUM L. Matrimony Vine.

Lycium halimifolium Mill. (having leaves like *Atriplex Halimus*, the Orach).

Lycium vulgare Dunal.

Common Matrimony Vine.

Rare or local. Roadsides and about old houses. May—Sept.; fruit Aug.—Oct. Adventive from Europe.

DATURA L. Jamestown or Jimson Weed. Thorn Apple.

Datura Stramonium L. (old name for this species).

Stramonium. Jimson Weed. Thorn Apple.

Rare or occasional. Waste places, mostly in rich soil.
July — Oct.; fruit Oct. Naturalized, probably from Asia.

The leaves are officinal and with the seeds are valued in medicine. The plant is poisonous. In numerous instances children have been killed by eating the seeds.

Datura Tatula L. (Persian name for this species).

Purple Stramonium. Jimson Weed. Purple Thorn Apple.

Rich waste places and on sea beaches. Occasional, becoming frequent or common in villages and cities. July — Oct.; fruit Oct. Naturalized from tropical America.

Poisonous and medicinal like *Datura Stramonium*.

Datura Metel L. (Arabic name for this species).

Rare. Waste ground: New Haven (H. S. Clark), Bridgeport (Eames). July — Oct.; fruit Oct.

Fugitive from tropical America.

A narcotic poison.

Datura meteloides DC. (like *Datura Metel*).

Rare. Waste ground: Southington, two plants seen for a single season (Bissell & Andrews). Aug.—Sept. Fugitive from tropical America.

A narcotic poison. Sometimes cultivated for ornament.

NICOTIANA L. Tobacco.

Nicotiana rustica L. (of the country).

Wild Tobacco.

Rare. New Haven, waste fields (F. W. Hall, 1873), New London (Graves). Aug.—Sept. A fugitive, its nativity unknown, but formerly cultivated by the Indians.

Nicotiana alata Link & Otto (winged).

Rare. Waste places: Bridgeport, several stations (Eames), Southington (Andrews). Aug.—Sept. Native of South America.

Often cultivated as an ornamental plant.

Nicotiana Tabacum L. (Indian name).

Tobacco.

Rare. Waste ground: Bridgeport and Fairfield (Eames). Aug.—Sept. Fugitive from South America.

Well known in cultivation.

PETUNIA Juss.

Petunia axillaris (Lam.) BSP. (growing in an axil).

White Petunia.

Rare. Waste places: New London (Graves), Southington (Andrews), Ansonia (Harger), Bridgeport and Norwalk (Eames). July — Sept. Fugitive or in part adventive from tropical America.

Commonly cultivated for ornament.

Petunia violacea Lindl. (violet).

Purple Petunia.

Rare. Waste ground: New London (Graves), Oxford (Harger), Bridgeport (Eames). July — Sept. Fugitive or in part adventive from South America.

Cultivated. Most of the forms in cultivation are hybrids of this species with *Petunia axillaris*.

SCROPHULARIACEAE. FIGWORT FAMILY.**VERBASCUM** L. Mullein.

Verbascum Thapsus L. (classical name for this species).

Common Mullein. Velvet Dock. Flannel-leaf.

Frequent or common. Dry fields, pastures and newly cleared land. June — Oct. Naturalized from Europe.

The leaves, tops and flowers are used medicinally, and the leaves are often dried and smoked like tobacco for respiratory affections.

Verbascum phlomoides L. (like *Phlomis*, the Jerusalem Sage).

Rare. Granby, a few plants in grassland (I. Holcomb). July. Fugitive from Europe.

Verbascum Blattaria L. (classical name for this species).

Moth Mullein.

Occasional. Fields, mostly in grassland and in dry soil. June — Sept. Naturalized from Europe.

The var. **ALBIFLORUM** Kuntze (white-flowered) sometimes occurs with the species.

Medicinal, having the same properties as *Verbascum Thapsus*.

Verbascum Pseudo-Lychnitis Schur (simulating *Verbascum Lychnitis*).

Rare. Kent, a few plants in grassland (Miss J. T. Gregory). Aug. Fugitive from Europe.

LINARIA Hill. Toadflax.

Linaria vulgaris Hill (common).

Linaria Linaria Karst.

Ramsted. Butter and Eggs.

Common. Fields, roadsides and waste places. June—Oct. Naturalized from Europe.

A troublesome weed, difficult to eradicate. Medicinal.

Linaria canadensis (L.) Dumont.

Blue Toadflax.

Common. Dry to moist mostly sterile or sandy soil. May—Sept.

A part of the flowers are usually cleistogamous, sometimes all of them.

Linaria minor (L.) Desf. (smaller).

Chaenorhinum minus Lange.

Rare. Stamford, in waste ground (W. H. Hoyt). June—Aug. Fugitive from Europe.

Linaria Elatine (L.) Mill. (classical name for some kind of Toadflax).

Kickxia Elatine Dumont.

Elatinoides Elatine Wettst.

Rare. There is in the Eaton Herbarium a specimen of this species collected in Connecticut by Charles Wright, but the exact locality is not known. Not otherwise reported from the state. June—Sept. Fugitive from Europe.

Linaria Cymbalaria (L.) Mill. (like a cymbal).

Cymbalaria Cymbalaria Wettst.

Kenilworth or Coliseum Ivy.

Rare. Roadsides, waste places and on walls: Norwich, Groton and New London (Graves), Windham (Bissell), Bridgeport (Eames), Fairfield (Mrs. Mabel Osgood Wright. Eames), Seymour (Harger). June—Sept. Adventive from Europe.

ANTIRRHINUM L. Snapdragon.**Antirrhinum Orontium L.**

Small Snapdragon.

Rare. Bridgeport, one plant in waste ground (Eames).

June. Fugitive from Europe.

SCROPHULARIA L. Figwort.**Scrophularia marilandica L.**

Scrophularia nodosa L., var. *marilandica* Gray.

Figwort. Scrofula Plant.

Fields and thickets. Rare east of the Connecticut River: Franklin (R. W. Woodward). Occasional or frequent in the western part of the state. July — Sept.

The herb and root are medicinal in both this and the following species.

Scrophularia leporella Bicknell (a little hare).

Occasional or frequent. Fields, thickets and fence-rows.

Late May — early July.

A form of this with deeply laciniate leaves occurs at Bridgeport (H. S. Clark).

PENTSTEMON Ait. Beard-tongue.**Pentstemon hirsutus (L.) Willd.** (hairy).

Pentstemon pubescens Ait.

Dry fields and banks. Frequent in Litchfield County; rare, occasional or local in other parts of the state. Late May — early July.

Pentstemon tubiflorus Nutt. (tubular-flowered).

Rare. Pastures and grassland: Granby (I. Holcomb), Sharon (Bissell), Kent (H. Mosher), Salisbury (Mrs. C. S. Phelps). June — July. Adventive from the West.

Pentstemon laevigatus Ait. (smoothed).

Pentstemon Pentstemon Britton.

Rare or occasional. Wet or dry grassland and waste places. June — early July. Adventive from the West.

Pentstemon laevigatus Ait., var. **Digitalis** (Sweet) Gray (like *Digitalis*, the Foxglove).

Pentstemon Digitalis Nutt.

Pentstemon calycosus Small.

Occasional, frequent or common. Moist or dry grassland.
June — early July. Introduced from the West.

Pentstemon grandiflorus Nutt. (large-flowered).

Rare. Granby, a few plants in a field (I. Holcomb).
June. Fugitive from the West.

CHELONE L. Turtlehead. Snakehead.

Chelone glabra L. (smooth).

Turtlehead. Snakehead. Balmoney.

Frequent. Wet places. Aug. — Sept.

The leaves and tops are medicinal.

MIMULUS L. Monkey Flower.

Mimulus ringens L. (gaping).

Frequent. Wet thickets and open places. July — Sept.

Mimulus alatus Ait. (winged).

Rare. Wet places and banks of streams: Lyme (Bissell),
East Hartford (J. F. Smith), Hartford (H. S. Clark), Stamford (W. H. Hoyt). July — Sept.

Mimulus Langsdorffii Donn.

Mimulus luteus Gray's Manual ed. 6, not L.

Mimulus guttatus DC.

Yellow Monkey Flower.

Rare or local. Wet ground along brooks: Norfolk (J. H. Barbour), New Milford (Miss J. T. Gregory). June — Aug.
Adventive from the Pacific Coast.

LIMOSELLA L. Mudwort.

Limosella aquatica L. (aquatic). var. **tenuifolia** (Wolf) Pers.
(slender-leaved).

Limosella tenuifolia Wolf.

Mudwort.

Occasional on muddy tidal shores. June — Oct.

ILYSANTHES Raf. False Pimpernel.

Ilysanthes dubia (L.) Barnhart (doubtful).

Ilysanthes riparia Gray's Manual ed. 6 in part, and perhaps
of Raf.

Ilysanthes gratioloides Benth.

Ilysanthes attenuata Small.

Frequent. Wet muddy or sandy open places and about ponds and streams. June — Sept.

Ilysanthes anagallidea (Michx.) Robinson (like *Anagallis*, the Pimpernel).

Ilysanthes dubia of American authors, not *Gratiola dubia* L.
Ilysanthes riparia Raf. (?).

Wet muddy or sandy places. East Haddam (Eaton Herb.), and occasional in the southwestern part of the state (Eames). June — Sept.

GRATIOLA L. Hedge Hyssop.

Gratiola virginiana L.

Common. Wet places. June — Sept.

The plant is medicinal.

Gratiola aurea Muhl. (golden).

Lake and river shores. Monroe (H. C. Beardslee), and occasional or frequent in central and eastern Connecticut. June — Sept.

DIGITALIS L. Foxglove.

Digitalis purpurea L. (purple).

Common Foxglove.

Rare. Bridgeport, in waste places (Eames). June — July.
Fugitive from Europe.

VERONICA L. Speedwell.

Veronica virginica L.

Leptandra virginica Nutt.

Culver's-root. Culver's Physic.

Occasional to frequent. Fields, thickets and fence-rows. July — Aug.

The rhizome and roots are medicinal and are officinal.

Veronica longifolia L. (long-leaved).

Rare. Roadsides as an escape from cultivation: Waterford (E. F. Burleson), Union (Bissell), Milford and Fairfield (Eames). July — Aug. Native of Europe.

Veronica americana Schwein.

American Brooklime.

Springs and wet places. Windsor (Eames & Harger),

Southington (Andrews & Bissell), and occasional throughout the western part of the state. May—Aug.

Medicinal. Said to be also used as a salad plant.

Veronica scutellata L. (platter-like, in allusion to the flat flowers).

Swamp or Marsh Speedwell.

Occasional or frequent. Wet places. May—Oct.

Veronica officinalis L. (of the shops).

Speedwell. Paul's Betony. Common Speedwell.

Common. Dry fields and woods. May—June.

The plant has medicinal uses.

Veronica Chamaedrys L. (classical name for Germander).

Bird's-eye.

Rare. In grassland: New London (Graves), Norfolk (Miss M. C. Seymour). May—June. Adventive from Europe.

Veronica Teucrium L. (like the Germander).

Rare. Fairfield, grassy roadside (Eames), Salisbury (Mrs. C. S. Phelps). June. Native of Europe.

The plant is medicinal.

Veronica serpyllifolia L. (thyme-leaved).

Creeping or Thyme-leaved Speedwell.

Frequent or common. Fields and thickets, usually in moist, but sometimes in dry soil. May—July.

Often troublesome as a weed in lawns.

Veronica peregrina L. (foreign).

Neckweed. Purslane Speedwell.

Frequent. Cultivated and waste ground either dry or moist. April—June.

Medicinal, resembling *Veronica officinalis* in its properties. Sometimes troublesome as a weed.

Veronica arvensis L. (of cultivated ground).

Corn Speedwell.

Occasional or frequent. Along the shore a weed in cultivated ground or along sandy roadsides; inland mostly in dry

rocky woods or on ledges. May—June. Naturalized from Europe.

Medicinal like *Veronica officinalis*.

Veronica Tournefortii C. C. Gmel.

Veronica Buxbaumii Tenore.

Veronica byzantina BSP.

Rare. Cultivated or waste ground: Oxford (Harger), Litchfield (Miss E. H. Thompson). April—Nov. Adventive from Europe.

Veronica hederaefolia L. (ivy-leaved).

Ivy-leaved Speedwell.

Rare. Norfolk, introduced along roadsides (Miss M. C. Seymour). April—June. Fugitive from Europe.

GERARDIA L. Gerardia.

Gerardia pedicularia L. (like *Pedicularis*, the Lousewort).

Dasystoma pedicularia Benth.

Lousewort.

Occasional. Dry sandy or rocky woods and fields. Aug.—Sept.

The plant is medicinal.

Gerardia flava L. (yellow).

Dasystoma flava Wood.

Downy Yellow or False Foxglove.

Frequent. Dry woods and thickets. July—Sept.

Gerardia virginica (L.) BSP.

Gerardia quercifolia Pursh.

Dasystoma virginica Britton.

Oak-leaved or Smooth False Foxglove.

Dry woods. Occasional, becoming frequent near the coast. Aug.—Sept.

This and the preceding species are root-parasitic.

Gerardia purpurea L. (purple).

Purple Gerardia.

Frequent along the coast in moist fields and borders of marshes. Aug.—Oct.

Gerardia paupercula (Gray) Britton (stunted).*Gerardia purpurea* L., var. *paupercula* Gray.

Wet sandy places. Rare inland: Thompson (Weatherby & Bissell), Union and Salisbury (Bissell), East Hartford and Simsbury (Weatherby), Enfield and Southington (Andrews & Bissell), Litchfield (Miss E. H. Thompson). Occasional or frequent along the coast. Aug.—Oct.

Gerardia maritima Raf. (of the seaside).Seaside *Gerardia*.

Occasional or local on the coast in salt marshes. Aug.—Oct.

Gerardia tenuifolia Vahl (slender-leaved).*Gerardia Gattingeri* Small.*Gerardia*.

Frequent or common. Woods, thickets and fields, mostly in dry soils. Aug.—Sept.

The var. *MACROPHYLLA* Benth. (large-leaved), *Gerardia Besseyana* Britton, occurs at Wethersfield (C. Wright), and at Orange (Bissell).

Gerardia parvifolia Chapman (small-leaved).*Gerardia Skinneriana* Gray's Manual ed. 6, not Wood.

Rare. Farmington, in sandy woods (Miss C. A. Shepard). Aug.—Sept.

CASTILLEJA Mutis. Painted Cup.**Castilleja coccinea** (L.) Spreng. (scarlet).

Scarlet Painted Cup. Meadow Pink. Nosebleed. Headache Plant. Soldiers on the Green.

Occasional, local or frequent. Wet meadows and pastures. April—June.

The root was formerly used in medicine. The species is root-parasitic. Sometimes seen with yellow flowers.

MELAMPYRUM L. Cow Wheat.**Melampyrum lineare** Lam. (very narrow).*Melampyrum americanum* Michx.

Cow Wheat.

Common. Dry woods. June—Aug.

PEDICULARIS L.   Lousewort.**Pedicularis canadensis L.**

Common Lousewort. Wood Betony. Greaseweed.

Frequent or common. Fields and woods in either dry or moist ground. May—June.

Pedicularis lanceolata Michx. (lance-shaped).

Swamp Lousewort.

Bogs and wet meadows. Rare, occasional or local in most parts of the state, but not reported from Fairfield County. Aug.—Sept.

RHINANTHUS L.   Yellow Rattle.**Rhinanthus Crista-galli L.** (cock's-comb).

Rhinanthus minor Ehrh.

Rattle. Yellow Rattle. Rattle-box.

Local. Fields and meadows, either moist or dry: North Branford and New Haven (Harger), Cheshire (Miss Hotchkiss), Waterbury (Eaton Herb.), and occasional westward and southward as far as Milford (W. A. Setchell, H. S. Clark, Eames), and Stratford (Eames). May—June.

SCHWALBEA L.   Chaff-seed.**Schwalbea americana L.**

Chaff-seed.

Rare. East Lyme, gravelly roadside (Mrs. C. B. Graves). May—July.

LENTIBULARIACEAE.**BLADDERWORT FAMILY.****UTRICULARIA L.**   Bladderwort.**Utricularia inflata Walt.** (inflated).

In still water. Rare in most districts: Mansfield (Weatherby), Windsor (A. W. Driggs & Weatherby), Bristol (J. N. Bishop). Occasional in New London County (Graves). July—Sept.

Utricularia clandestina Nutt. (secret).

Rare. Muddy pools or shores: Waterford (Graves), Fairfield (L. N. Johnson). July.

Utricularia vulgaris L. (common), var. *americana* Gray.

Utricularia vulgaris of Manuals in part.

Greater Bladderwort.

Occasional or local. Still water or slow streams. June—Aug.

Utricularia minor L. (lesser).

Smaller Bladderwort.

Rare. In still water: East Lyme (Miss A. M. Ryon), New Haven (Eaton Herb.), Fairfield, Milford and Ridgefield (Eames), Easton (Eames & C. C. Godfrey), Salisbury (Mrs. C. S. Phelps). May—June.

Utricularia gibba L. (humped).

Rare, local or occasional. Shallow water or mud about swamps, pools and ponds. July—Oct.

Utricularia biflora Lam. (two-flowered).

Rare. Ponds and pools: Groton (Graves), Southington (Andrews). July—Sept.

Utricularia intermedia Hayne (intermediate).

Sphagnum bogs and borders of ponds. Rare in northern districts, becoming occasional in the southern part of the state. May—July.

The flowers are seldom seen.

Utricularia purpurea Walt. (purple).

Purple Bladderwort.

In ponds. Rare or local in most districts: Middlebury (Harger), Mansfield (Weatherby), Guilford (G. H. Bartlett). Occasional near the coast in New London County (Graves). Aug.

Utricularia resupinata B. D. Greene (bent backward).

Rare. East Lyme, at Dodge's Pond (Graves), Woodbury, in a sphagnum bog (B. B. Bristol et al.). July—Sept.

Utricularia cornuta Michx. (horned).

Muddy or sphagnum bogs. Salisbury (Bissell), Norfolk (J. W. Robbins, J. H. Barbour), Woodbury, Bethany and Kent (Harger), Southington (Andrews), and occasional in New London County (Graves). Aug.

OROBANCHACEAE. BROOM-RAPE FAMILY.

EPIFAGUS Nutt. Cancer-root. Beech-drops.

Epifagus virginiana (L.) Bart.*Leptamnium virginianum* Raf.

Beech-drops.

Occasional. Dry woods, under beech trees. Aug.—Sept.

The earlier flowers are cleistogamous. Medicinal.

CONOPHOLIS Wallr. Squaw-root. Cancer-root.

Conopholis americana (L. f.) Wallr.

Cancer-root.

Rare. Rich woods: Plainville (J. N. Bishop), Southington (Andrews & Bissell), Guilford (G. H. Bartlett), New Haven (Eaton Herb.). June.

OROBANCHE L. Broom-rape.

Orobanche uniflora L. (one-flowered).*Aphyllon uniflorum* L. Gray.*Thalesia uniflora* Britton.

One-flowered Cancer-root.

Occasional or frequent. Dry or moist woods and thickets, sometimes in fields or by roadsides. May—June.

The plant is medicinal.

BIGNONIACEAE. BIGNONIA FAMILY.

TECOMA Juss. Trumpet-flower.

Tecoma radicans (L.) Juss. (rooting).

Trumpet Creeper.

Rare or local. Roadsides and thickets as an escape from cultivation. Aug.—Sept. Adventive from the South.

Cultivated for ornament. In the South it becomes a pernicious weed in cultivated ground.

CATALPA Scop. Indian Bean. Catalpa.

Catalpa bignonioides Walt. (like Bignonia).*Catalpa Catalpa* Karst.

Catalpa. Candle or Bean Tree.

Rare: Fields and roadsides as an escape from cultivation: Norwich and New London (Graves), Southington (An-

draws), Huntington and Southbury (Harger), Bridgeport (Eames). June. Adventive from the Gulf States.

Planted for ornament and valuable farther south for its timber.

MARTYNIACEAE. MARTYNIA FAMILY.

MARTYNIA L. Unicorn-plant.

Martynia louisiana Mill.

Martynia proboscidea Gloxin.

Unicorn-plant. Proboscis Flower.

Rare. Cultivated ground: Oxford (Harger). July — Oct. Fugitive from the Southwest.

The young pods are used for pickling.

PHRYMACEAE. LOPSEED FAMILY.

PHRYMA L. Lopseed.

Phryma Leptostachya L. (slender-spiked).

Lopseed.

Occasional. Rich woods and thickets. July — Aug.

PLANTAGINACEAE. PLANTAIN FAMILY.

PLANTAGO L. Plantain. Ribwort.

Plantago major L. (larger).

Common Plantain.

Common. Fields, waste places and especially along paths and roadsides. June — Sept.

The var. *INTERMEDIA* (Gilib.) Dcne. (intermediate), *Plantago halophila* Bicknell, is frequent on the borders of salt marshes and rarely occurs inland.

The leaves and root are medicinal. The young leaves are used as a pot-herb. An unsightly and pernicious weed in lawns.

Plantago Rugelii Dcne.

Plantain.

Common. Moist fields, yards, thickets and woods. June — Aug.

The young leaves are used as a pot-herb.

Plantago decipiens Barneoud (deceiving).

Plantago maritima Gray's Manual ed. 6, not L.

Seaside Plantain.

Occasional to common in salt marshes and on tidal shores.

July — Oct.

Plantago lanceolata L. (lance-shaped).

English Plantain. Rib Grass. Ripple Grass.

Common. Fields, roadsides and waste ground. May — Sept. Naturalized from Europe.

A troublesome weed. The plant is medicinal.

Plantago aristata Michx. (bearing bristles).

Plantago patagonica Jacq., var. *aristata* Gray.

Occasional. Dry fields and roadsides. June — Aug. Introduced from the West and becoming more frequent.

Plantago virginica L.

Dry rocky or sandy soil. Rare or local in most districts: Rocky Hill (M. Hitchcock), New Haven and Oxford (Harger), Norwalk (Miss A. E. Carpenter, Eames), New Milford (E. H. Austin). Occasional in New London County (Graves). May — June.

Plantago elongata Pursh (lengthened).

Plantago pusilla Nutt.

Rare. Old Lyme, sandy roadside (Bissell), Guilford, thin soil on the edges of granite outcrops (G. H. Bartlett). May.

RUBIACEAE. MADDER FAMILY.**ASPERULA L.****Asperula glauca** (L.) Bess. (glaucous).

Asperula galioides Bieb.

Woodruff.

Rare. Southington, in fields (Bissell). June. Adventive from Europe.

GALIUM L. Bedstraw. Cleavers.

Galium Aparine L. (classical name for some species of Bedstraw).

Cleavers. Goose Grass.

Frequent. Moist thickets and waste places. May—June.
The plant is medicinal.

Galium verum L. (true).

Yellow Bedstraw.

Rare. Fields and waste ground: Waterford (Graves), Guilford (G. H. Bartlett), Plainville (C. D. Bishop), Naugatuck (B. B. Bristol), Huntington (Eames), Stratford (Mrs. R. H. Russell), Norfolk (Miss M. C. Seymour), Southbury (Weatherby & Harger), Monroe (Eames & C. C. Godfrey), Stamford (W. H. Hoyt), Salisbury (Mrs. C. S. Phelps). June—July. Adventive from Europe.

Galium Wirtgenii F. Schultz.

Rare. Norfolk, in grassland (Miss M. C. Seymour).
June. Fugitive from Europe.

Galium pilosum Ait. (hairy).

Frequent. Dry soil of woods and fields. July—Aug.

Galium pilosum Ait., var. **puncticulosum** (Michx.) Torr. & Gray (minutely punctate).

Rare. Dry ground: South Windsor (A. W. Driggs).
July—Aug.

Galium circaezans Michx. (imitating *Circaea*, the Enchanter's Nightshade).

Wild Liquorice.

Occasional or frequent. Rich woods. June—July.

Galium lanceolatum Torr. (lance-shaped).

Wild Liquorice.

Rich woods. Rare in New London County: Norwich (Mrs. E. E. Rogers), Ledyard and Salem (Graves). Becoming occasional to frequent northward and westward. June—July.

Galium boreale L. (northern).

Northern Bedstraw.

Fields and rocky banks. Farmington (Miss Willard), New Britain (Bissell), Derby (Harger), Milford (Eames), and occasional northwestward. June—July.

Galium Mollugo L. (classical name for some bur-bearing plant).

Wild Madder.

Rare. Roadsides and grassland: East Haddam (Dr. E. J. Thompson), Granby (I. Holcomb), Southington and Winchester (Bissell), Bridgeport, Fairfield and Westport (Eames). June—July. Naturalized from Europe.

The plant is medicinal.

Galium erectum Huds. (erect).

Rare. Grassy fields: Plainville (Bissell), Southington (Andrews & Bissell), Westport (Eames), Norwalk (Eames & C. C. Godfrey), Salisbury (Mrs. C. S. Phelps). May—June. Adventive from Europe.

Galium palustre L. (of marshes).

Rare or local. Swamps: New London (Graves), Lyme (Graves, Harger), Plainville and Southington (Bissell), Litchfield (Bissell & Weatherby). June—July.

Galium trifidum L. (three-cleft).

Galium trifidum L., var. *pusillum* Gray.

Rare. Cold swamps: Norfolk and Sharon (Bissell), Salisbury (Mrs. C. S. Phelps & Bissell). July—Aug.

Galium Claytoni Michx.

Galium trifidum Gray's Manual ed. 6 in part.

Frequent. Swamps and bogs. June—Aug.

Galium tinctorium L. (used for dyeing).

Galium trifidum L., var. *latifolium* Torr.

Frequent. Bogs and swamps. June—July.

Galium labradoricum Wiegand.

Galium tinctorium L., var. *labradoricum* Wiegand.

Rare. Larch swamps: Norfolk (H. S. Clark & Bissell), Salisbury (M. L. Fernald). Late May—June.

Galium asprellum Michx. (slightly rough).

Rough Bedstraw.

Frequent. Swamps and borders of streams. July.

Galium triflorum Michx. (three-flowered).

Sweet-scented Bedstraw.

Frequent. Dry woods, often in rocky ground. June—Aug.

DIODIA L. Buttonweed.

Diodia teres Walt. (rounded).

Rare or local. Beaches along the coast and in dry sandy

fields: Old Saybrook (Bissell), New Haven (O. Harger), Bridgeport (L. N. Johnson), Fairfield, plentiful on the beach (Eames), Sherman, introduced in grassland (Eames, E. H. Austin & J. Pettibone). July — Oct.

MITCHELLA L. Partridge Berry.

Mitchella repens L. (creeping).

Partridge Berry. Squaw Vine. Checkerberry.

Frequent or common. Rich woods. June — July; fruit Sept., persisting through the winter.

The berries are edible but insipid. A form with white berries is reported from Canaan. The plant is medicinal and was formerly much used by Indian squaws.

CEPHALANTHUS L. Buttonbush.

Cephalanthus occidentalis L. (western).

Buttonbush.

Common. Shallow water of ponds, swamps and ditches. July — Aug.

The bark is medicinal.

HOUSTONIA L.

Houstonia caerulea L. (sky-blue).

Bluets. Innocence. Mayflower.

Common. Fields and woods, mostly in moist ground. April — June.

Houstonia longifolia Gaertn. (long-leaved).

Houstonia purpurea L., var. *longifolia* Gray.

Rare or local. Dry ground: Ledyard (Mrs. C. B. Graves), Norwich (Mrs. E. E. Rogers), Waterford (Miss Crofton), East Lyme (Mrs. F. H. Dart & Miss Bond), Sprague (Miss Smith), Granby (I. Holcomb), Oxford (Harger), Salisbury (Mrs. C. S. Phelps). June — July.

Houstonia lanceolata (Poir.) Britton (lanceolate).

Houstonia purpurea L., var. *calycosa* Gray.

Rare. Upland meadow in Wilton (Miss M. K. Jennings). June — July. Adventive from the West or possibly native.

CAPRIFOLIACEAE. HONEYSUCKLE FAMILY.

DIERVILLA Adans. Bush Honeysuckle.

Diervilla Lonicera Mill. (like *Lonicera*, the Honeysuckle).

Diervilla trifida Moench.

Diervilla Diervilla MacM.

Bush Honeysuckle.

Frequent. Dry or moist woods and on banks. May — July.

Medicinal.

LONICERA L. Honeysuckle.

Lonicera caerulea L. (sky-blue), var. *villosa* (Michx.) Torr. & Gray (hairy).

Lonicera caerulea of Gray's Manual ed. 6, not L.

Mountain Fly Honeysuckle.

Swamps and low or rocky pastures and thickets. Plainville (J. N. Bishop), Griswold and Voluntown (Graves); and occasional or even common in northeastern Connecticut, where it is sometimes troublesome in pastures and is locally known as Hardhack. May — June; fruit June — July.

The berries are edible, resembling the blueberry in flavor.

Lonicera tatarica L.

Tartarian Honeysuckle.

Rare. Roadsides as an escape from cultivation: Fairfield (Eames), Redding (Eames & C. C. Godfrey), Cornwall (H. S. Clark & Bissell). May. Introduced from Asia.

Lonicera canadensis Marsh.

Lonicera ciliata Muhl.

American Fly Honeysuckle.

Dry rocky woods. Old Lyme (Graves), North Branford (A. W. Evans), Middletown (L. N. Johnson), Meriden (Eaton Herb.), and occasional in Litchfield County. May; fruit June.

Lonicera Xylosteum L. (bone-wood; referring to the hardness of the wood).

European Fly Honeysuckle.

Rare. Westport, escaped from cultivation to a roadside

(Eames). Mid-May — early June; fruit Aug.—Sept. Native of the Old World.

Lonicera orientalis Lam. (of the Orient).

Rare. Escaped from an old nursery to a pasture at Wethersfield (H. S. Clark & Bissell). June. Adventive from Asia.

Lonicera japonica Thunb.

Japanese Honeysuckle.

Roadsides and thickets. Occasional or local in most districts, becoming frequent near the coast. June — Oct. Naturalized from Asia.

Medicinal. Often cultivated for ornament.

Lonicera sempervirens L. (evergreen).

Trumpet Honeysuckle.

Occasional in woods and copses near the coast; also escaped from cultivation inland at South Windsor (A. W. Driggs), East Hartford (Weatherby), Salisbury (Mrs. C. S. Phelps). June; fruit Aug.

Cultivated for ornament. Medicinal.

Lonicera dioica L. (dioecious).

Lonicera glauca Hill.

Wild Honeysuckle.

Occasional. Woods and thickets. May — mid-June; fruit July.

SYMPHORICARPOS Ludwig. Snowberry.

Symphoricarpos orbiculatus Moench (circular).

Symphoricarpos vulgaris Michx.

Symphoricarpos *Symphoricarpos* MacM.

Indian Currant. Coral-berry.

Rare. Roadsides as an escape from cultivation: Waterford (Graves), Hartford (H. S. Clark & Bissell), Monroe and Seymour (Harger), Bridgeport and Darien (Eames), New Milford (C. K. Averill), Salisbury (Mrs. C. S. Phelps). July — Sept.; fruit Oct.—Dec. Introduced from the West or South.

Cultivated for ornament, as is the following species.

Symphoricarpos racemosus Michx. (racemed), var. *laevigatus* Fernald (smoothed).

Symphoricarpos racemosus of authors, not Michx.

Snowberry. Snowball.

Rare. Roadsides and about old house sites as an escape from cultivation: Ledyard and Montville (Graves), Southington (Andrews), Goshen (Bissell), Oxford (Harger), Milford, Fairfield and Ridgefield (Eames). June—Aug.; fruit Sept.—Oct. Introduced from the Northwest.

LINNAEA L. Twin-flower.

Linnaea borealis L. (northern), var. *americana* (Forbes) Rehder.

Linnaea borealis Gray's Manual ed. 6, not L.

Linnaea. Twin-flower.

Rare. Woods, either moist or dry: Ledyard and Franklin (Graves), Glastonbury (Mrs. F. W. Starmer), Granby (I. Holcomb), New Haven, formerly on East Rock (H. C. Beardslee), Milford (G. B. Grinnell, W. A. Setchell), Cornwall (E. E. Brewster). June.

TRIOSTEUM L. Horse Gentian. Feverwort.

Triosteum perfoliatum L. (with leaves meeting around the stem).

Feverwort. Tinker's Weed. Wild Coffee.

Frequent in dry fields and copses in the shore towns; not reported inland. Late May—June; fruit Sept.—Oct.

Medicinal, as is the following species.

Triosteum aurantiacum Bicknell (orange-colored).

Feverwort. Wild Coffee. Horse Gentian.

Dry woods, copses or pastures. Groton (Bissell), Franklin (Graves), and occasional or local westward and northward. May—June; fruit Aug.—Sept.

Triosteum angustifolium L. (narrow-leaved).

Rare. Rocky or sandy open woods: South Windsor and East Granby (H. S. Clark), Milford and Stratford, four widely separated stations (Eames). May; fruit Aug.

VIBURNUM L. Arrow-wood. Laurestinus.**Viburnum alnifolium** Marsh. (alder-leaved).*Viburnum lantanoides* Michx.

Hobble-bush. Witch Hobble. Moosewood.

Rich woods. Union (Graves, Bissell), Hamden (D. C. Eaton), Monroe (H. C. Beardslee), Redding (F. Mills), and occasional or frequent in the northwestern part of the state. May; fruit July.

Viburnum Opulus L. (classical name for some Maple), var. **americanum** (Mill.) Ait.*Viburnum Opulus* Gray's Manual ed. 6, not L.*Viburnum americanum* Mill.

High-bush Cranberry. Cranberry Tree. Cramp-bark. Pimbina.

Swamps and wet ground. Southington (Andrews), Waterbury (H. J. Bassett), Brookfield (C. K. Averill), and rare or local through the northwestern part of the state. May—June; fruit Aug.

The fruit is edible. The bark is of considerable value medicinally and is officinal. A cultivated form of the European *Viburnum Opulus* with transformed florets is the common Snowball of cultivation.

Viburnum acerifolium L. (maple-leaved).

Maple-leaved Viburnum. Dockmackie. Arrow-wood.

Common. Dry woods and thickets. June; fruit July—Aug.

Medicinal.

Viburnum pubescens (Ait.) Pursh (downy).

Downy Arrow-wood.

Rare. Dry rocky woods; Guilford (G. H. Bartlett), New Haven (Eaton Herb.), Meriden (Bissell), Southington (Andrews), Cheshire (Harger), Hamden and Kent (Eames), Salisbury (C. K. Averill). May—June; fruit Aug.

Viburnum dentatum L. (toothed).

Arrow-wood. Mealy Tree.

Frequent. Swamps and on banks of streams. June; fruit Aug.

Viburnum cassinoides L. (like *Ilex Cassine*, the Yaupon).

Withe-rod. Wild Raisin.

Swamps and wet woods. Frequent except in the southwestern part of Fairfield County where it is not known. June; fruit Aug.—Sept.

Viburnum nudum L. (naked).

Wild Raisin.

Rare. Swampy woods: Milford and Derby (Eames). Late June—July.

Viburnum Lentago L. (tough; pliant).

Sweet Viburnum. Sheepberry. Nannyberry. Wild Raisin.

Occasional or frequent. Thickets and fence-rows in either dry or wet ground. Late May—June; fruit Sept.—Oct.

The var. *SPHAEROCARPUM* Gray (round-fruited) sometimes occurs with the species, but its distribution is not known.

The fruit is edible but is unpalatable to many persons. The bark of the root is medicinal and is officinal, with, and under the name of, *Viburnum prunifolium*.

Viburnum prunifolium L. (plum-leaved).

Black Haw. Sloe. Stag-bush.

Rocky woods and thickets. Fairfield (Eames), and occasional or frequent near the coast westward. May—early June; fruit Sept.

The var. *GLOBOSUM* Nash (spherical) occurs at Greenwich (Bissell).

The bark of the root is much valued for its medicinal properties and is officinal.

SAMBUCUS L. Elder.

Sambucus canadensis L.

Common or Black-berried Elder.

Common. Moist thickets and fence-rows. Mid-June—July; fruit Aug.—Sept.

The berries are used for making wine. The fruit and bark are medicinal, as are the flowers which were formerly officinal.

Sambucus racemosa L. (racemed).

Sambucus pubens Michx.

Red-berried Elder.

Rocky woods and thickets. Norwich (Mrs. E. E. Rogers), North Stonington, Preston and East Haddam (Graves), New Haven and Trumbull (Eames), Wilton (Eames & G. P. Ells), and occasional or frequent northward. May; fruit June—July.

VALERIANACEAE. VALERIAN FAMILY.

VALERIANA L. Valerian.

Valeriana officinalis L. (of the shops).

Garden Valerian or Heliotrope.

Rare. Roadsides as an escape from cultivation: Waterford and Lebanon (Graves), Southington (Andrews), Norfolk (Miss M. C. Seymour), Fairfield (Eames), Westport (Eames & C. C. Godfrey), Darien (Miss A. E. Carpenter). June. Introduced from Europe.

The root is well known for its medicinal properties and is officinal.

VALERIANELLA Hill. Corn Salad. Lamb's Lettuce.

Valerianella Locusta (L.) Betcke (old name for this plant).

Valerianella olitoria Poll.

Corn Salad.

Rare. Escaped from cultivation to waste ground in Fairfield (Eames). Aug. Fugitive from Europe.

Abroad is prized as a fall and winter salad plant, but is little known in America.

Valerianella radiata (L.) Dufr. (having rays).

Rare. Waterford, many plants on the banks of the Niantic River (Miss E. Shelly). June—July.

DIPSACACEAE. TEASEL FAMILY.

DIPSACUS L. Teasel.

Dipsacus sylvestris Huds. (of the woods).

Wild Teasel. Gipsy Combs.

Rare. Roadsides, pastures and waste places: Middletown (W. H. Blanchard), Southington (Andrews), New Haven

(Eaton Herb.), Milford, Bridgeport and Newtown (Eames), Southbury (Harger), Goshen (Bissell), Salisbury (C. C. Godfrey). July — Sept. Naturalized from Europe.

The plant is medicinal.

KNAUTIA L.

Knautia arvensis (L.) T. Coulter (of cultivated ground).

Scabiosa arvensis L.

Field Scabious.

Rare. Southington, a few plants in an old field (W. N. Clute). June — July. Fugitive from Europe.

CUCURBITACEAE. GOURD FAMILY.

MOMORDICA L. Balsam-apple.

Momordica Charantia L.

Balsam-apple. Art Pumpkin. La-kwa.

Rare. Waste ground in Hartford (H. S. Clark & Bissell). Aug. — Sept. Fugitive from the Tropics.

The fruit is sometimes used medicinally. Cultivated for its fruit by the Chinese.

CITRULLUS Neck.

Citrullus vulgaris Schrad.

Citrullus Citrullus Karst.

Watermelon. Citron.

Rare. Waste places and about dumping grounds. July — Sept. Fugitive from Africa.

CUCUMIS L.

Cucumis Melo L. (an apple-shaped melon).

Melon. Muskmelon. Cantaloupe.

Rare. Waste or cultivated ground. June — Aug. Fugitive from southern Asia.

Common in cultivation, having many varieties dependent on the nature of the fruit.

Cucumis sativus L. (sown; planted).

Cucumber.

Rare. Waste ground about gardens and on dumps. July — Aug. Fugitive from southern Asia.

CUCURBITA L.   Gourd. Squash. Pumpkin.**Cucurbita maxima** Duchesne (greatest).

Hubbard Squash. Marrow Squash.

Rare. Cultivated and waste ground. July — Aug. Fugitive, probably from tropical America.

Cucurbita moschata Duchesne (musky).

China Squash. Canada or Winter Crookneck Squash.

Rare. Waste ground and about dumps. July — Aug. Fugitive, probably from tropical America.

Cucurbita Pepo L. (classical name).

Pumpkin.

Rare or occasional. Waste places and cultivated ground. July — Aug. Fugitive, probably from tropical America.

Was formerly cultivated by the Indians.

Cucurbita Pepo L., var. **condensa** Bailey (condensed).

Summer Crookneck Squash. Scallop Squash.

Rare. Waste and cultivated ground. June — Aug. Fugitive from tropical America.

SICYOS L.   One-seeded Bur Cucumber.**Sicyos angulatus** L. (angular).

Star Cucumber.

Moist rich soil of river banks and waste places. Frequent to common along the coast and larger rivers; rare elsewhere. Aug.—Sept.

ECHINOCYSTIS Torr. & Gray.   Wild Balsam-apple.**Echinocystis lobata** (Michx.) Torr. & Gray (lobed).*Micrampelis lobata* Greene.

Wild Cucumber.

Occasional or frequent. Moist rich soil along streams and in waste places. July — Sept.

Often planted for ornament.

CAMPANULACEAE.   **BLUEBELL FAMILY.****SPECULARIA** Fabricius.   Venus's Looking-glass.**Specularia perfoliata** (L.) A. DC. (with leaves that meet around the stem).*Legouzia perfoliata* Britton.

Venus's Looking-glass.

Frequent to common. Dry woods and fields. June — Aug.

Reduced forms occur having all the flowers cleistogamous.

CAMPANULA L. Bellflower.

Campanula rapunculoides L. (like *Campanula Rapunculus*, the Rampion).

Bellflower.

Occasional. Roadsides and waste places. June — Oct.
Naturalized from Europe.

The var. *UCRANICA* (Bess.) K. Koch occurs at Groton (Graves), Putnam and Southington (Bissell), Huntington (Eames).

Campanula rotundifolia L. (round-leaved).

Campanula intercedens Witasek.

Harebell. Bluebell.

Dry, often rocky soil or on ledges. Rare in the eastern, central and southern parts of the state, becoming frequent or common in northwestern Connecticut. June — Sept.

Campanula patula L. (open; spreading).

Rare. Plainfield, a few plants in a newly seeded field (J. L. Sheldon). June. Fugitive from Europe.

Campanula aparinoides Pursh (like *Galium Aparine*, the Bed-straw).

Marsh Bellflower.

Frequent. Bogs and wet meadows. Late June — July.

Campanula carpatica Jacq.

Rare. Southington, a few plants in newly seeded ground (Andrews & Bissell). May — June. Fugitive from Europe.

JASIONE L. Sheep's-bit.

Jasione montana L. (of mountains).

Sheep's-bit.

Rare. Plainfield, a few plants in a newly seeded field (J. L. Sheldon), East Lyme (Miss F. McCook). June. Fugitive from Europe.

LOBELIACEAE. LOBELIA FAMILY.

LOBELIA L.

Lobelia cardinalis L. (cardinal).

Cardinal-flower.

Frequent. Open or shaded wet places. July — Sept.

One of our most brilliant flowers, and often succeeds well in cultivation. The plant is sometimes used medicinally.

Lobelia siphilitica L. (syphilitic).

Great Blue Lobelia.

Moist grassland or borders of streams. Orange (Eames), Oxford (Harger), and occasional westward and northward, becoming frequent or common in Litchfield County. July — Sept.

The plant is sometimes used medicinally.

Lobelia spicata Lam. (spiked).

Frequent to common. Fields and meadows. June — Aug.

Lobelia Kalmii L.

Swamps and on wet ledges. Goshen (J. P. Brace, 1822), Litchfield and Norfolk (Bissell), New Milford (C. K. Averill & E. H. Austin), becoming frequent in the limestone district of northwestern Connecticut. July — Oct.

Lobelia inflata L. (inflated).

Indian Tobacco.

Common. Woods, fields, roadsides and cultivated ground. July — Oct.

The leaves, tops and seeds are medicinal, the leaves and tops officinal. Somewhat poisonous, resembling tobacco in its action.

Lobelia Dortmanna L.

Water Lobelia.

In ponds and lakes. Rare in most districts: Salisbury (Mrs. C. S. Phelps), Canaan (J. H. Barbour), Litchfield (L. M. Underwood), Middlebury (Harger), Ridgefield (Eames), Monroe (H. C. Beardslee), Mansfield (Weatherby), Thompson (R. W. Woodward & Weatherby), Killingly (Weatherby & Bissell), Salem (W. A. Setchell), Griswold (E. F. Burle-

son. Occasional near the coast in New London County.
July — Sept.

COMPOSITAE. COMPOSITE FAMILY.

VERNONIA Schreb. Ironweed.

Vernonia noveboracensis Willd.

Ironweed.

Occasional, frequent or common. Low pastures and open swamps. July — Sept.

The root is medicinal. Sometimes a troublesome weed in low pastures.

EUPATORIUM L. Thoroughwort.

Eupatorium purpureum L. (purple).

Joe-Pye Weed. Purple Boneset. Trumpet Weed. Queen of the Meadow. Gravel-root.

Rare, local or frequent. Moist woods and in swamps.
July — Sept.

The root is valued for its medicinal properties and the leaves are also used.

Eupatorium purpureum L., var. *maculatum* (L.) Darl.
(spotted).

Eupatorium maculatum L.

Joe-Pye Weed. Trumpet Weed. Purple Boneset.

Common. Open swampy places. July — Sept.

Sometimes occurs with white flowers. Medicinal like the typical form of the species.

Eupatorium purpureum L., var. *amoenum* (Pursh) Gray
(pleasant).

Eupatorium maculatum L., var. *amoenum* Britton.

Rare. In swamps: Preston (Graves), Huntington (Eames). July — Sept.

Eupatorium hyssopifolium L. (having leaves like Hyssop).

Rare. Dry ground, mostly in the shore towns: East Lyme (Miss A. M. Ryon & Graves), Old Saybrook, Westbrook and Orange (Harger), Bridgeport (Eames). Inland at Southington (Bissell). Aug.—Sept.

Eupatorium verbenaefolium Michx. (having leaves like *Verbena*, the Vervain).

Eupatorium teucrifolium Willd.

Rough Boneset.

Open woods and borders of swamps, usually in sandy soil. Rare at Monroe (Harger), and Southington (Bissell); occasional in the valley of the Connecticut River, becoming frequent near and along the coast. Aug.—Sept.

Medicinal like *Eupatorium perfoliatum*.

Eupatorium pubescens Muhl. (downy).

Eupatorium rotundifolium L., var. *ovatum* Torr.

Open woods and thickets, mostly in dry ground. Rare at Stratford (Eaton Herb., Eames), and East Haven (Bissell); occasional in New London County and in the valley of the Connecticut River. Aug.—Sept.

Eupatorium sessilifolium L. (sessile-leaved).

Upland Boneset.

Dry woods. Rare in most districts: Southington and Meriden (Andrews & Bissell), Beacon Falls, Ansonia and Seymour (Harger), Salisbury (Mrs. C. S. Phelps). Occasional in the vicinity of the coast. Aug.—Sept.

Eupatorium perfoliatum L. (with leaves meeting around the stem).

Boneset. Thoroughwort. Ague-weed. Wild Sage.

Common. Low or wet ground. Aug.—Sept.

The var. *TRUNCATUM* Gray (cut off) is rare: Old Saybrook (Harger), Woodbury (Eames & C. C. Godfrey).

A form with the leaves in whorls of three has been collected at Bolton (Dr. E. J. Thompson).

The leaves and tops are much used in domestic medicine and are officinal.

Eupatorium urticaefolium Reichard (having leaves like *Urtica*, the Nettle).

Eupatorium ageratoides L.f.

White Snakeroot.

Occasional, local or frequent. Rocky woods in rich soil. Aug.—Sept.

The root is medicinal.

Eupatorium aromaticum L. (aromatic).

White Snakeroot.

Rare. Dry woods: Lisbon (Graves), Norwich (Mrs. E. Rogers), New Haven (Eaton Herb.). Aug.

The root is used medicinally like that of *Eupatorium urticaefolium*.

MIKANIA Willd. Climbing Hemp-weed.

Mikania scandens (L.) Willd. (climbing).

Willoughbya scandens Kuntze.

Climbing Boneset or Hemp-weed.

Swamps and along streams. Occasional or local in most parts of the state; frequent in southwestern Connecticut. Aug.—Sept.

LIATRIS Schreb. Button Snakeroot. Blazing Star.

Liatris scariosa Willd. (thin and dry).

Lacinaria scariosa Hill.

Devil's Bit. Blazing Star.

Dry, mostly sandy soil of fields, thickets and sand dunes. Frequent in the shore towns; occasional or local northward, especially in the central part of the state. Aug.—Oct.

The root is medicinal.

GRINDELIA Willd. Gum-plant. Tar-weed.

Grindelia squarrosa (Pursh) Dunal (with spreading scales).

Gum-plant.

Rare. Waste ground: Naugatuck (B. B. Bristol). July — Sept. Fugitive from the West.

The plant is used as a medicine by the Indians. The leaves and fruiting tops are officinal.

CHRYSOPSIS Nutt. Golden Aster.

Chrysopsis falcata (Pursh) Ell. (sickle-shaped).

Golden Aster.

In sand, especially on sea beaches. Rare inland: Colchester (Dr. E. J. Thompson). Plentiful on the coast from Milford (Harger. Eames) westward to Westport, especially on beaches in Stratford and Bridgeport (Eames). July — Oct.

SOLIDAGO L.   Golden-rod.**Solidago squarrosa** Muhl. (with spreading scales).

Rare or local. Dry rocky woods in either trap or limestone soils: Meriden (Eaton Herb.), Berlin and New Britain (Bissell), Southington (Andrews), Farmington and Cheshire (Harger), Salisbury (Bissell). Aug.—Sept.

Solidago caesia L. (bluish-gray).

Frequent. Woods and thickets, usually in rich soil. Late Aug.—Oct.

The var. *AXILLARIS* (Pursh) Gray (axillary) is occasional with the species. The var. *PANICULATA* Gray (panicled) occurs at Willington (Bissell) and New Haven (D. C. Eaton). A hybrid with *Solidago latifolia* has been collected at Lantern Hill, North Stonington (Graves).

Solidago latifolia L. (broad-leaved).

Solidago flexicaulis L. in part.

Occasional or local. Rich, often rocky, woods. Aug.—Oct.

Solidago bicolor L. (two-colored).

White Golden-rod.

Common. Dry fields and open woods. Aug.—Oct.

Solidago hispida Muhl. (rough-hairy).

Solidago bicolor L., var. *concolor* Torr. & Gray.

Rare. Dry rocky woods or fields: Franklin (R. W. Woodward), Waterford (Graves), Meriden (Andrews), Simsbury (I. Holcomb), Waterbury (A. E. Blewitt), Oxford (Harger), Farmington and Winchester (Bissell). Aug.—Sept.

Solidago puberula Nutt. (slightly downy).

Rare or local. Rocky or sandy woods and fields, sometimes in moist ground: North Stonington, Voluntown, Waterford and Stafford (Graves), Union (Graves, Bissell), Hampton and East Hartford (Weatherby), Glastonbury (Mrs. F. W. Starmer), Guilford (G. H. Bartlett), Southington (Andrews & Bissell), Oxford (Harger), Milford (Eames), Salisbury (Bissell). Aug.—Sept.

A handsome species.

Solidago uliginosa Nutt. (growing in marshes).

Rare. Salisbury, in swamps (Bissell). Aug.—Sept.

Solidago speciosa Nutt. (showy).

Dry fields, pastures and open woods. Putnam (Weatherby & Bissell), Willington (Graves & Bissell), Hampton and South Windsor (Weatherby), Salisbury (Mrs. C. S. Phelps, Bissell); becoming occasional southward and frequent near the coast. Sept.—Oct.

Of striking habit and a beautiful plant when in flower.

Solidago sempervirens L. (evergreen).

Common on and about salt marshes and along tidal streams. Aug.—Oct.

Solidago patula Muhl. (open; spreading).

Wet places, either open or shaded. Rare in New London County. Occasional or frequent elsewhere. Aug.—Sept.

Solidago arguta Ait. (sharp).

Rocky woods or in half-shade. Rare in New London County: Franklin (R. W. Woodward). Occasional or frequent elsewhere. Aug.—Sept.

Solidago juncea Ait. (like *Juncus*, the Rush).

Common. Dry fields and roadsides. July — Aug.

This is the earliest to bloom of our common Golden-rods.

A form approaching var. *ramosa* Porter & Britton has been found at Wolcott (H. S. Clark & Bissell), and Derby (Eames).

Solidago neglecta Torr. & Gray (neglected).

Frequent. Swamps and open bogs. Aug.—Sept.

Solidago uniligulata (DC.) Porter (having one ray flower).

Solidago neglecta Torr. & Gray, var. *linoides* Gray.

Rare. In swamps: Groton (Graves), Thompson (Weatherby & Bissell), Franklin (R. W. Woodward), Salisbury (Bissell). Aug.

Solidago odora Ait. (fragrant).

Sweet Golden-rod.

Dry woods and copses, usually in sandy soil. Occasional

in the central part of the state and in the valley of the Housatonic River; frequent near the coast. July — Aug.

The leaves and tops are used medicinally.

Solidago Elliottii Torr. & Gray.

Rare. Usually in swampy ground but sometimes in drier places: Voluntown, Groton and Waterford (Graves), Windsor (H. S. Clark, Weatherby & Bissell), Southington (Andrews & Bissell), Glastonbury and Goshen (Bissell). Sept.

Solidago ulmifolia Muhl. (having leaves like *Ulmus*, the Elm).

Occasional. Dry woods and copses. Aug.—Sept.

Solidago rugosa Mill. (wrinkled).

Solidago altissima of authors, not L.

Golden-rod. Wallweed.

Common. Fields, thickets and roadsides in various soils.

Aug.—Oct.

The var. *SPHAGNOPHILA* Graves (loving peat-moss) occurs in sphagnum swamps in Voluntown and Waterford (Graves).

× **Solidago asperula** Desf. (roughish).

Rocky ground. Occasional on the coast from the mouth of the Connecticut River eastward (Graves). Aug.—Sept.

This is believed to be a hybrid between *Solidago rugosa* and *Solidago sempervirens*.

Solidago aspera Ait. (rough).

Solidago rugosa of Gray's Manual ed. 6 in part.

Occasional. Woods, fields and roadsides, usually in dry ground. Aug.—Sept.

Solidago nemoralis Ait. (of groves).

Common. Dry fields and open places. Aug.—Sept.

Solidago canadensis L.

Solidago canadensis L., var. *glabrata* Porter.

Rare. Alluvial soil at Selden's Cove, Lyme (Graves).

Late July — Aug.

Solidago altissima L. (tallest).

Solidago canadensis of Gray's Manual ed. 6 in part.

Solidago canadensis L., var. *scabra* Torr. & Gray.

Solidago canadensis L., var. *scabriuscula* Porter.

Golden-rod.

Common. Fields, roadsides and fence-rows. Aug.—Sept.
A handsome and well-marked species.

Solidago serotina Ait. (late).

Rare, occasional or local. Moist places, often in alluvial soil. July — Aug.

Solidago serotina Ait., var. **gigantea** (Ait.) Gray (gigantic).

Occasional or frequent. Low fields and thickets and borders of swamps. Aug.—Sept.

Solidago rigida L. (stiff).

Rare or local. Dry fields and open woods: Stonington and Mansfield (Graves), Andover (Mrs. C. S. Phelps), East Lyme (Miss A. M. Ryon, Graves), Guilford (G. H. Bartlett), Branford (O. Harger), East Haven and Brookfield (Harger), Milford (Bissell), Stratford (Eames), Monroe (H. C. Beardslee), Norwalk (E. H. Baldwin). Aug.—Oct.

Solidago graminifolia (L.) Salisb. (grass-leaved), var. **Nuttallii** (Greene) Fernald.

Solidago lanceolata Gray's Manual ed. 6 in part.

Euthamia graminifolia Britton's Manual in part.

Frequent or common. Moist ground, usually in rich soil, and in swamps. Aug.—Sept.

Solidago tenuifolia Pursh (narrow-leaved).

Euthamia caroliniana of American authors in part, not Greene.

Euthamia tenuifolia Greene.

Dry or moist fields. Common in southwestern Connecticut; occasional or local elsewhere. Aug.—Oct.

Sometimes troublesome to farmers as a weed in pastures.

BOLTONIA L'Hér.

Boltonia asteroides (L.) L'Hér. (aster-like).

Boltonia.

Rare. Roadsides, waste ground and rocky woods: Thompson (Weatherby & Bissell), Hartford (A. W. Driggs), Meriden (R. W. Woodward & Andrews). Sept. Introduced from the West.

A good plant for hardy borders and often cultivated for ornament.

ASTER L. Starwort. Aster. Frost-flower.

Aster divaricatus L. (widely divergent).

Aster corymbosus Ait.

Aster carmesinus Burgess.

Aster tenebrosus Burgess.

Aster divaricatus and varieties Burgess.

Aster Claytoni Burgess.

Aster Claytoni Burgess, var. *crispicans* Burgess.

Common. Woods and thickets, in either moist or dry ground. Aug.—Sept.

A very variable species with many described forms.

Aster Schreberi Nees.

Aster curvescens Burgess.

Aster curvescens Burgess, var. *umbelliformis* Burgess.

Aster curvescens Burgess, var. *oviformis* Burgess.

Rare, local or frequent. Woods and thickets, usually in rich soil. July — Aug.

Aster macrophyllus L. (large-leaved).

Aster roscidus Burgess.

Aster macrophyllus and varieties Burgess.

Rare or occasional. Rich woods, more often in rocky places. Mid-July — Sept.

The var. **PINGUIFOLIUS** Burgess (greasy-leaved) occurs at Colchester (Graves), Meriden and Southington (Andrews & Bissell), Bristol and Norwalk (Bissell), Trumbull and Fairfield (Eames), Bridgeport and New Milford (C. K. Averill).

The var. **IANTHINUS** (Burgess) Fernald (violet-colored), *Aster ianthinus* Burgess, *Aster violaris* Burgess, *Aster multiformis* Burgess, *Aster nobilis* Burgess, is rare: Groton (Graves), Union (Bissell), Meriden (Andrews), Milford (H. S. Clark), Fairfield County (Eames).

Aster Herveyi Gray.

Rare. Dry woods: Groton (Graves), Stratford (Eames). Aug.—Sept.

Aster spectabilis Ait. (showy).

Rare. Dry rocky or sandy soil: Voluntown, Groton and Waterford (Graves). Sept.

Aster radula Ait. (a scraper; referring to the rough leaves).

Rare. Low ground: Voluntown (Graves), East Hartford (Weatherby), Hamden (Eaton Herb.). Sept.

Aster novae-angliae L.

New England Aster.

Frequent. Fields and roadsides, usually in moist rich soil. Aug.—Oct.

The var. *ROSEUS* (Desf.) DC. (rosy; pink) is sometimes seen.

One of the most beautiful of our Asters.

Aster patens Ait. (spreading).

Frequent. Dry fields and open woods, in sandy or sterile soil. Aug.—Sept.

Aster undulatus L. (wavy).

Aster undulatus and varieties Burgess.

Common. Woods, thickets and fields in dry soil. Aug.—Oct.

A very variable species.

Aster cordifolius L. (having heart-shaped leaves).

Aster cordifolius and varieties Burgess.

Common. Woods, thickets and roadsides. Sept.—Oct.

The var. *POLYCEPHALUS* Porter (many-headed) is occasional, as well as a variety of forms intermediate between it and the species. A hybrid with *Aster ericoides* occurs at Salisbury (Mrs. C. S. Phelps & Bissell).

Aster Lowrieanus Porter.

Rare. Dry open woods: New Haven (R. W. Woodward). Sept.

The var. *LANCEOLATUS* Porter (lance-shaped), var. *lanceifolius* Porter, *Aster cordifolius* L., var. *lanceolatus* Porter, is rare or local in rich woods.

A great variety of intermediates between the variety and the typical form have been noted.

Aster laevis L. (smooth).

Frequent or common. Moist or dry fields, thickets and borders of woods. Late July — Sept.

The var. *AMPLIFOLIUS* Porter (large-leaved) occurs at Hampton (A. W. Driggs).

Very variable as to form of leaf. A handsome species.

Aster concinnus Willd. (neat; elegant).

Rare. Southington, rock crevices of dry shaded ledges at Meriden Mt. (Andrews). Sept.

One of the rarest plants of North America. Three, or doubtfully four, other stations only are known. See *Rhodora* 2:166.

Aster ericoides L. (like *Erica*, the Heath).

Common. Dry mostly open places. Sept.—Oct.

The var. *VILLOSUS* Torr. & Gray (hairy), var. *pilosus* Porter, is occasional in New London County (Graves), and occurs as far west as New Haven (J. A. Allen). A hybrid with *Aster undulatus* occurs at Oxford (Harger).

Aster amethystinus Nutt. (of the color of amethyst).

Rare. Dry to moist open ground: New London and Sprague (Graves), Oxford and Southbury (Harger), Salisbury (Mrs. C. S. Phelps). Sept.

Aster multiflorus Ait. (many-flowered).

Common. Dry fields and roadsides. Sept.—Oct.

The var. *EXIGUUS* Fernald (small; mean) sometimes occurs with the typical form.

Aster dumosus L. (bushy).

Dry soil of open fields or in half shade. Southington (Andrews & Bissell), Farmington (Bissell), Manchester (Weatherby), Stafford (Graves), Old Saybrook (Bissell); becoming frequent in eastern Connecticut. July—Sept. The so-called *Aster Gravesii* Burgess is apparently a hybrid of *Aster dumosus* with some other species, probably *Aster laevis*, and occurs at Waterford (Graves).

Aster dumosus L., var. *coridifolius* (Michx.) Torr. & Gray (having leaves like *Coris*, a genus of the Primrose Family).

Rare. Sandy thickets or more open ground: Ellington (Weatherby), Southington (Bissell). Aug.—Sept.

Aster dumosus L., var. *strictior* Torr. & Gray (more upright).

Rare. Dry fields: Stafford and Groton (Graves). Aug.—Sept.

Aster vimineus Lam. (bearing long flexible twigs).

Common. Moist fields and roadsides. Aug.—Oct.

The var. *FOLIOLOSUS* Gray (leafy) is occasional, growing with the typical form.

Aster lateriflorus (L.) Britton (having one-sided flower-clusters).

Aster diffusus Ait.

Aster lateriflorus Britton, var. *pendulus* Burgess.

Common. Fields and woods in either moist or dry ground. Aug.—Oct.

Aster lateriflorus (L.) Britton, var. *hirsuticaulis* (Lindl.) Porter (hairy-stemmed).

Aster hirsuticaulis Lindl.

Aster diffusus Ait., var. *hirsuticaulis* Gray.

Occasional. Moist shaded ground. Sept.—Oct.

Aster lateriflorus (L.) Britton, var. *thyrsoides* (Gray) Sheldon (wand-like).

Aster diffusus Ait., var. *thyrsoides* Gray.

Rare. Fields: Fairfield and Westport (Eames). Sept.—Oct.

Aster Tradescanti L.

Rare. In swamps: East Hartford (A. W. Driggs), Stratford (Eames), Salisbury (Bissell). Aug.—Sept.

Aster paniculatus Lam. (panicled).

Frequent or common. Moist roadsides and thickets, and in alluvial soil along streams. Aug.—Sept.

The var. *SIMPLEX* (Willd.) Burgess (simple) and the var. *ACUTIDENS* Burgess (having sharp teeth) occur rarely in moist ground.

Aster longifolius Lam. (long-leaved).

Rare. In swamps: Farmington and Litchfield (Bissell). Sept.

Aster novi-belgii L.

Moist or wet ground or in swamps. Common along the

coast; frequent in the Connecticut Valley; occasional, local or rare elsewhere. Sept.—Oct.

Aster tardiflorus L. (late-flowering).

Rare. Borders of swamps and in low thickets: Stafford, Plymouth and Salisbury (Bissell). Sept.

Aster prenanthoides Muhl. (like *Prenanthes*, the Rattlesnake-root).

Rare. Wet thickets: Trumbull (Eames). A specimen in the Bassett Herbarium at Waterbury, labelled "Ct.," is apparently of this species. Sept.

Aster puniceus L. (crimson).

Red-stalked Aster.

Frequent to common. Open or wooded wet places. Aug.—Sept.

The var. *COMPACTUS* Fernald (close); the var. *FIRMUS* (Nees) Torr. & Gray (strong), var. *laevicaulis* Gray; the var. *DEMISSUS* Lindl. (low); and the var. *LUCIDULUS* Gray (somewhat shining) are all reported to occur rarely or occasionally with the species.

The root is medicinal.

Aster umbellatus Mill. (umbellate).

Doellingeria umbellata Nees.

Frequent. Moist woods and thickets. July — Sept.

Aster infirmus Michx. (not strong).

Doellingeria infirma Greene.

Rare. Dry woods and thickets: West Hartford (Harger), Southington (Andrews & Bissell), Meriden and Wolcott (Andrews), New Milford and Kent (C. K. Averill), New Fairfield (Eames & C. C. Godfrey). July — Aug.

Aster linariifolius L. (having leaves like *Linaria*, the Toad-flax).

Ionactis linariifolius Greene.

Frequent or local. Dry open sandy or sterile soil. Aug.—Oct.

Aster tataricus L. f.

Siberian Aster.

Rare. Killingly, escaped from cultivation to waste ground (Graves). Oct. Introduced from Asia.

Aster acuminatus Michx. (taper-pointed).

Occasional or frequent. Rich woods. Aug.—Sept.

Aster tenuifolius L. (slender-leaved).

Frequent in salt marshes and about tidal waters. Aug.—Oct.

Aster subulatus Michx. (awl-shaped).

Common in salt marshes. Sept.—Oct.

ERIGERON L. Fleabane.

Erigeron pulchellus Michx. (pretty).

Erigeron bellidifolius Muhl.

Robin's Plantain.

Common. Fields, meadows and open woods, usually in moist soil. May—June.

Erigeron philadelphicus L.

Daisy Fleabane. Skevish.

Fields, meadows and roadsides. Norwich (J. Trumbull), Guilford (G. H. Bartlett), Southington (Andrews), and frequent in towns along the Connecticut and Housatonic Rivers. June—July.

The herb is medicinal.

Erigeron annuus (L.) Pers. (annual).

Daisy Fleabane. Sweet Scabious.

Common. Fields and waste places. June—Sept.

The herb has medicinal properties.

Erigeron ramosus (Walt.) BSP. (branching).

Erigeron strigosus Muhl.

Daisy Fleabane.

Common. Fields and waste places. June—Sept.

The var. *DISCOIDEUS* (Robbins) BSP. (having disk flowers only) is occasional with the species.

Erigeron canadensis L.

Leptilon canadense Britton.

Horse-weed. Canada Fleabane. Butter-weed.

Common. Cultivated and waste ground. July — Oct.

The herb is used medicinally and the oil distilled from it is officinal. Often a troublesome weed.

SERICOCARPUS Nees. White-topped Aster.

Sericocarpus asteroides (L.) BSP. (aster-like).

Sericocarpus conyzoides Nees.

Common. Dry woods and fields. July — Aug.

Sericocarpus linifolius (L.) BSP. (having leaves like *Linum*, the Flax).

Sericocarpus solidagineus Nees.

Rare or local. Dry fields, woods and on rocky summits: Groton and Waterford (Graves), East Hartford (A. W. Driggs & Weatherby), East Windsor (Bissell), Southington and Plainville (Andrews, Bissell), Hamden, Waterbury and Oxford (Harger), Beacon Falls and Huntington (Eames). July — Aug.

BACCHARIS L. Groundsel Tree.

Baccharis halimifolia L. (having leaves like *Atriplex Halimus*). Groundsel Tree. Pencil Tree.

Rare. Borders of salt marshes: Stonington and Groton (Graves), New London (Miss M. Crofton), East Lyme (Miss A. M. Ryon, Gen. Haskins), East Haven (Harger), Bridgeport (C. K. Averill, Eames), Norwalk (Miss A. E. Carpenter, Bissell). Sept.; fruit Oct.

PLUCHEA Cass. Marsh Fleabane.

Pluchea camphorata (L.) DC. (having the odor of camphor). Salt Marsh Fleabane.

Frequent on salt marshes along the coast. Aug.—Oct.
Rarely occurs with white flowers.

ANTENNARIA Gaertn. Everlasting. Ladies' Tobacco.
Pussy's Toes.

Antennaria Parlinii Fernald.

Antennaria arnoglossa Greene.

Rare. Dry woods and banks: Guilford (G. H. Bartlett), East Hartford (Weatherby), New Haven (M. L. Fernald),

Woodstock, Wallingford and Monroe (Harger), Winchester (Bissell). May.

***Antennaria canadensis* Greene.**

Rare or local. Dry woods and fields: Stafford (Graves), Lisbon and Southbury (Harger), Bolton, East Hartford and Salisbury (Weatherby), West Hartford (A. W. Driggs), Southington (Andrews & Bissell), North Canaan (Bissell). May.

***Antennaria plantaginifolia* (L.) Richards. (plantain-leaved).**

Antennaria plantaginea R. Br.

Plantain-leaved Everlasting.

Frequent to common. Dry woods and fields. Late April — May.

***Antennaria fallax* Greene (deceitful).**

Antennaria ambigens Fernald.

Dry woods and fields. Frequent in the southwestern part of the state, becoming local or occasional eastward and northward. May.

***Antennaria neodioica* Greene.**

Frequent. Dry fields and open woods. April — May.

***Antennaria neglecta* Greene (neglected).**

Indian Tobacco.

Common. Dry or sterile places, mostly in open fields. April — May.

The earliest flowering and most plentiful species of the genus.

ANAPHALIS DC. Everlasting.

***Anaphalis margaritacea* (L.) Benth. & Hook. (pearly).**

Pearly Everlasting.

Frequent to common. Fields and pastures, usually in dry soil. July — Sept.

The leaves are medicinal and reputed to be a cure for rattlesnake bite.

GNAPHALIUM L. Cudweed.

***Gnaphalium polycephalum* Michx. (many-headed)**

Gnaphalium obtusifolium of Britton's Manual.

Common or Sweet Everlasting.

Common. Dry ground in various soils. Aug.—Sept.

Gnaphalium decurrens Ives (decurrent).

Everlasting.

Rare or local. Dry fields and woods: Southington (Bissell), New Haven (E. Ives), Oxford, Seymour and Middlebury (Harger), Litchfield (Eaton Herb.), Huntington, New Milford and Kent (Eames), Salisbury (Mrs. C. S. Phelps). Aug.—Sept.

Gnaphalium uliginosum L. (growing in marshes).

Cudweed. Low Cudweed.

Common. Fields and roadsides in moist ground. June—Sept.

Gnaphalium purpureum L. (purple).

Purplish Cudweed.

Rare or local. Dry fields and pastures: Stonington, Groton and Waterford (Graves). June—Aug.

INULA L. Elecampane.

Inula Helenium L. (classical name).

Elecampane.

Occasional to frequent. Fields, pastures and roadsides, mostly in moist rich soil. July—Sept. Naturalized from Europe.

The root is medicinal and was formerly officinal.

POLYMNIA L. Leafcup.

Polymnia canadensis L.

Leafcup.

Rare or local. Rocky open woods on slopes of loose trap rock: North Branford (G. H. Bartlett), Durham, north end of Pistapaug Pond (O. D. Allen), also in Wallingford, in a similar situation $\frac{1}{4}$ mile from the Durham locality (Harger). Sept.

SILPHIUM L. Rosin-weed.

Silphium perfoliatum L. (having leaves that meet around the stem).

Cup Plant.

Rare. Waste ground: Southington (Weatherby & Bis-sell), Fairfield (Eames). Aug. Introduced from the West. The rhizome is medicinal.

IVA L. Marsh Elder. Highwater-shrub.

Iva oraria Bartlett (of the coast).

Iva frutescens of Gray's Manual ed. 6, not L.

Highwater-shrub.

Common on salt marshes and seashores. July — Sept.

Iva xanthifolia Nutt. (having leaves like *Xanthium*, the Clot-bur).

Rare. Waste places: Naugatuck (A. E. Blewitt), Bridgeport (Eames), New Milford (E. H. Austin). July — Sept. Introduced from the West.

AMBROSIA L. Ragweed.

Ambrosia bidentata Michx. (two-toothed).

Rare. Bridgeport, in waste ground (Eames). Sept. Fugitive from the West.

Ambrosia trifida L. (three-cleft).

Great Ragweed.

Moist places and alluvial flats. Usually rare; but local, frequent or common along the larger rivers and in south-western Connecticut. Aug.—Sept.

The var. **INTEGRIFOLIA** (Muhl.) Torr. & Gray (having entire leaves) is occasional with the typical form.

A coarse and unsightly weed.

Ambrosia artemisiifolia L. (having leaves like *Artemisia*, the Wormwood).

Ragweed. Hog-weed. Bitter-weed. Roman Wormwood.

Common. Open places, especially in waste and cultivated ground. July — Sept.

A troublesome and pernicious weed in all soils. Its pollen is said to cause hay fever. The plant is medicinal.

XANTHIUM L. Clotbur. Cocklebur.

Xanthium spinosum L. (spiny).

Prickly or Spiny Clotbur.

Rare. Waste ground: Bridgeport (Eames), Naugatuck (A. E. Blewitt). Aug.—Sept.; fruit Sept.—Nov. Adventive from tropical America.

The leaves are medicinal.

Xanthium canadense Mill.

Xanthium glabratum Britton.

Xanthium pungens Wallr. (?).

Xanthium strumarium of Britton & Brown's Ill. Flora.

Rare or local. Sandy roadsides and beaches, banks of streams and in waste places: Stratford and Fairfield (Eames), Oxford (Harger), West Hartford, Goshen, Norwalk and Sharon (Bissell). Aug.—Sept.

Xanthium commune Britton (growing in colonies).

Rare. Banks of streams and in waste places: East Windsor (Bissell), Stratford, Bridgeport, Fairfield and New Milford (Eames), Stamford (A. W. Driggs). Aug.—Sept.

Xanthium echinatum Murr. (hedgehog-like).

Xanthium canadense Mill., var. *echinatum* Gray.

Frequent or common. Waste places, banks of streams and about ponds. Aug.—Sept.

HELIOPSIS Pers. Ox-eye.

Heliopsis helianthoides (L.) Sweet (like *Helianthus*, the Sunflower).

Heliopsis laevis Pers.

Rare. Waste ground and sandy woods: Southington (Andrews & Bissell), Seymour (Harger), Naugatuck (A. E. Blewitt), Fairfield (Eames). July — Sept. Introduced from the West.

Heliopsis scabra Dunal (rough).

Rare. Dry fields and roadsides: East Lyme (Miss A. M. Ryon & Graves), Montville (Graves), Berlin (Andrews & Bissell), Cheshire (A. E. Blewitt), Oxford (Harger), Seymour and Huntington (Eames). July — Sept.

RUDBECKIA L. Cone-flower.

Rudbeckia triloba L. (three-lobed).

Rare. Roadsides and banks of streams: Hartford (H. S.

Clark & Bissell), Meriden (Andrews), Waterbury (A. E. Blewitt), Woodbury (Eames & C. C. Godfrey), New Milford (C. K. Averill, Eames), Salisbury (Mrs. C. S. Phelps). Aug.—Sept. Introduced from the West.

Rudbeckia subtomentosa Pursh (somewhat woolly).

Rare. Roadside in Windsor (Bissell). Aug.—Sept. Adventive from the West.

Rudbeckia hirta L. (rough).

Yellow Daisy. Black-eyed Susan. Nigger-head.

Common. Fields and meadows, more often in dry ground. June—Aug. Introduced from the West.

Rudbeckia speciosa Wenderoth (showy).

Cone-flower.

Local. Waterford (Miss A. Smith), Brookfield, fairly plentiful in a field and along a roadside (Harger). Aug.—Sept. Adventive from the south-central United States.

Rudbeckia laciniata L. (slashed).

Tall Cone-flower. Thimble-weed.

Occasional to frequent. Moist thickets and along streams. July—Sept.

A double-flowered form of this is often cultivated for ornament under the name of Golden Glow, and sometimes escapes to roadsides and waste ground. The plant is medicinal.

BRAUNERIA Neck. Purple Cone-flower.

Brauneria pallida (Nutt.) Britton (pale).

Echinacea angustifolia of authors, not DC.

Purple Cone-flower.

Rare. Dry ground: Griswold (E. F. Burleson), East Lyme (Mrs. F. H. Dart), Vernon (A. W. Driggs), Southington (Andrews). July. Adventive from the West.

LEPACHYS Raf.

Lepachys pinnata (Vent.) Torr. & Gray (pinnate).

Ratibida pinnata Barnhart.

Cone-flower.

Rare. Oxford, in dry fields (Harger). Aug. Fugitive from the West.

HELIANTHUS L. Sunflower.**Helianthus annuus L.** (annual).

Common Sunflower.

Occasional. Waste places as an escape from cultivation.
July — Sept. Adventive from the western United States.

Cultivated for ornament and for its seeds which yield an oil or are fed to poultry. The plant is medicinal.

Helianthus petiolaris Nutt. (provided with leaf-stalks).

Rare. Roadsides and waste ground as an escape from cultivation: East Lyme (Miss A. M. Ryon), Hartford (H. S. Clark), Naugatuck (B. B. Bristol), New Milford (E. H. Austin). Aug.—Sept. Introduced from the western United States.

Helianthus debilis Nutt. (weak).

Rare. Waste ground: Waterbury (A. E. Blewitt).
Sept.—Oct. Fugitive from the South.

Helianthus debilis Nutt., var. cucumerifolius (Torr. & Gray)
Gray (cucumber-leaved).

Rare. New London, escaped from gardens (Graves),
Bridgeport (Eames). July — Aug. Fugitive from the South-west.

Helianthus scaberrimus Ell. (very rough).

Helianthus rigidus Desf.

Rare. Dry fields: Waterbury (A. E. Blewitt), Oxford
(Harger). Aug.—Sept. Adventive from the West.

Helianthus laetiflorus Pers. (flowering abundantly).

Rare. Glastonbury, along roadside and in waste ground
(Bissell). Aug.—Sept. Adventive from the West.

Helianthus grosseserratus Martens (coarsely toothed).

Rare. Fields and open places: Newington, apparently
native at this station (Weatherby), Oxford, probably introduced (Harger). Aug.—Sept.

Helianthus giganteus L. (gigantic).

Helianthus giganteus L., var. *ambiguus* Torr. & Gray.

Moist ground and banks of streams. Occasional or frequent near the coast eastward, becoming common in the south-

western part of the state; extending inland as far as Waterbury (H. J. Bassett) and Kent (Eames). Aug.—Sept.

Helianthus Maximiliani Schrad.

Rare. Waste ground: Naugatuck (A. E. Blewitt), New Milford (E. H. Austin), Bridgeport (Eames). Mid-July — Aug. Fugitive from the western United States.

Helianthus divaricatus L. (widely diverging).

Common. Dry fields, thickets and open woods. July — Sept.

Helianthus strumosus L. (bearing wens or swellings).

Frequent. Thickets and borders of woods. Aug.—Sept.

The var. *MOLLIS* Torr. & Gray (soft), var. *macrophyllus* Britton, is rare: Groton (Graves), Norwich (Mrs. E. E. Rogers), Willington (Graves & Bissell).

Helianthus tracheliifolius Mill. (having leaves like *Trachelium*, the Throatwort).

Rare. There is a specimen of this in the Gray Herbarium collected at New Haven by Charles Wright. Not otherwise known from the state. Aug.—Sept.

Helianthus decapetalus L. (having ten petals).

Wild Sunflower.

Frequent. Moist or dry woods, thickets and fence-rows. Aug.—Sept.

Helianthus tuberosus L. (bearing tubers.)

Jerusalem Artichoke.

Occasional. Waste places and roadsides. Aug.—Oct. Naturalized from the West.

The tubers are edible and are used for pickles and salads; they also furnish a valuable food for stock. The plant was formerly cultivated by the Indians.

COREOPSIS L. Tickseed.

Coreopsis tinctoria Nutt. (used for dyeing).

Rare. Waste places: New London (Graves), Southington (Andrews), Bridgeport, Stratford and Norwalk (Eames). June — Sept. Adventive from the West.

Coreopsis lanceolata L. (lance-shaped).

Rare. Roadsides: Southington (Andrews & Bissell), Oxford (Harger). July. Adventive from the Southwest.

BIDENS L. Bur Marigold.**Bidens discoidea** (Torr. & Gray) Britton (having only disk flowers).

Coreopsis discoidea Torr. & Gray.

Swamps and about ponds. Occasional near the coast and throughout the valley of the Connecticut River. Aug.—Sept.

Bidens frondosa L. (leafy).

Bidens melanocarpa Wiegand.

Common Beggar-ticks. Stick-tight.

Common. Moist fields, swamps, waste places and cultivated ground. Aug.—Sept.

Bidens vulgata Greene (common).

Bidens frondosa Wiegand, not L.

Beggar-ticks. Stick-tight.

Frequent. Fields, roadsides and cultivated ground, in moist soil. Aug.—Sept.

Bidens comosa (Gray) Wiegand (bearing a tuft of hairs).

Bidens connata Muhl., var. *comosa* Gray.

Frequent. Moist soil in various situations. Aug.—Oct.

Bidens connata Muhl., var. *petiolata* (Nutt.) Farwell (having leaf-stalks).

Bidens connata of authors in part.

Swamp Beggar-ticks.

Frequent. Swamps and wet woods. Aug.—Sept.

A form with ray flowers occurs occasionally.

Bidens cernua L. (nodding).

Bidens cernua L., var. *elliptica* Wiegand.

Stick-tight.

Common. Wet meadows, along ditches and on shores. Sept.—Oct.

Bidens laevis (L.) BSP. (smooth).

Bidens chrysanthemoides Michx.

Bur Marigold.

Marshes and borders of ponds and streams. Frequent near the coast in southwestern Connecticut and inland as far as Ridgefield (Eames & C. C. Godfrey); occurs also along the Connecticut River throughout its course; not reported elsewhere. Aug.—Oct.

Bidens bipinnata L. (twice-pinnate).

Spanish Needles.

Rocky woods, roadsides and waste places in sandy soil. New London (Graves), Oxford (Harger), and occasional in the southwestern part of the state. Aug.—Oct.

The plant is medicinal.

Bidens leucantha Willd. (white-flowered).

Rare. Hartford, in waste ground (H. S. Clark). Sept. Fugitive from the South.

Bidens trichosperma (Michx.) Britton (with hairy seeds).

Coreopsis trichosperma Michx.

Tickseed Sunflower.

Rare. New Haven, Goffe St. (O. Harger). Aug.—Oct.

Bidens aristosa (Michx.) Britton (bearing bristles).

Coreopsis aristosa Michx.

Rare. Waste places: Norwich (Mrs. E. E. Rogers), Lebanon and Windham (Graves). Sept. Fugitive from the West.

Bidens Beckii Torr.

Water Marigold.

Rare. In ponds: Lyme (Graves), Guilford (G. H. Bartlett), Wallingford (Harger), North Haven (Eaton Herb.), Plainville (J. N. Bishop), East Granby (Harger), Danbury (Eames & C. C. Godfrey). Aug.—Sept.

GALINSOGA Ruiz & Pavon.

Galinsoga parviflora Cav. (small-flowered).

Galinsoga.

Local. Waste ground, mostly in cities. July — Sept. Adventive from tropical America.

The var. *HISPIDA* DC. (rough-hairy) is often more plentiful than the typical form.

HELENIUM L. Sneezeweed.**Helenium nudiflorum** Nutt. (naked-flowered).

Rare. Fields: Groton (Mrs. C. B. Graves), East Lyme (F. H. Dart), Bridgeport (Eames). June—Oct. Introduced from the South.

Helenium autumnale L. (autumnal).

Sneezeweed. Staggerwort.

Occasional or frequent. Swamps and on river banks. Aug.—Oct.

The herb is used as a substitute for Arnica and in powder as a snuff for catarrh. The flowers are poisonous and cattle and horses are sometimes killed by eating freely of them.

Helenium tenuifolium Nutt. (fine-leaved).

Rare. Bridgeport, in railroad wastes (Eames). Aug.—Sept. Adventive from the South.

ACHILLEA L. Yarrow.**Achillea Millefolium** L. (thousand-leaved).

Common Yarrow. Milfoil.

Common. Fields and waste ground. June—Nov.

A form with pink or reddish flowers is grown for ornament and sometimes escapes from gardens to roadsides. The plant is medicinal.

Achillea lanulosa Nutt. (woolly).

Yarrow.

Rare. Fields and waste ground: Southington (Andrews), and probably elsewhere, as it has not been distinguished from *Achillea Millefolium*. July—Aug. Introduced from the West.

ANTHEMIS L. Chamomile.**Anthemis Cotula** L. (like Cotula, the Buck's-horn).

May-weed. Dog Fennel. Fetid Chamomile.

Common. Roadsides and waste places. June—Nov. Naturalized from Europe.

The plant is medicinal.

Anthemis arvensis L. (of cultivated ground).

Corn Chamomile.

Rare. Roadsides and waste ground. May—June. Adventive from Europe.

The var. *AGRESTIS* (Wallr.) DC. (of fields) occurs rarely in waste ground.

Both the-species and the variety are medicinal.

***Anthemis nobilis* L. (well-known).**

Garden Chamomile.

Rare. Wolcott, roadside near a deserted dwelling (Andrews & Bissell). Aug. Fugitive from Europe.

The plant is medicinal, the flower-heads officinal.

***Anthemis tinctoria* L. (used for dyeing).**

Golden Marguerite. Yellow Chamomile.

Rare. Roadsides and grassland as an escape from cultivation: Franklin (Mrs. E. E. Rogers), East Windsor (Bissell), Southington (Andrews), Oxford (Harger), Fairfield (Eames), Wilton (Miss A. E. Carpenter), Litchfield (Miss E. H. Thompson). June—Aug. Adventive from Europe.

Often cultivated for ornament.

MATRICARIA L. Wild Chamomile.

***Matricaria inodora* L. (odorless).**

Rare. Waste places and in grain fields: Naugatuck (B. B. Bristol), Bridgeport (Eames), Oxford and Southbury (Harger), Wilton (Miss A. E. Carpenter). June—Sept. Fugitive from Europe.

***Matricaria Chamomilla* L. (classical name for this plant).**

German Chamomile.

Rare. Naugatuck, waste ground (B. B. Bristol). July—Aug. Fugitive from Europe.

The dried flower-heads are officinal, and are much used in household practice, especially by German people.

***Matricaria suaveolens* (Pursh) Buchenau (sweet-smelling).**

Matricaria matricarioides Porter.

Matricaria discoidea DC.

Pineapple-weed.

Rare. Waste places: Naugatuck (B. B. Bristol), Bridgeport (Eames). July. Fugitive from the Pacific Coast.

CHRYSANTHEMUM L.

Chrysanthemum Leucanthemum L. (white-flowered), var. *pinnatifidum* Lecoq & Lamotte (pinnately cleft).

Chrysanthemum Leucanthemum of Manuals.

Daisy. White or Ox-eye Daisy. White-weed. Marguerite.

Common. Fields, meadows and roadsides. May—July. Naturalized from Europe.

Often a troublesome weed in grassland. The plant is medicinal.

Chrysanthemum Parthenium (L.) Bernh. (ancient name of some plant).

Feverfew.

Rare. Waste ground as an escape from gardens. June—Aug. Introduced from Europe.

The herb is medicinal.

Chrysanthemum Balsamita L., var. *tanacetoides* Boiss. (like *Tanacetum*, the Tansy).

Costmary. Alecost. Mint Geranium.

Rare. Escaped from gardens to fields and roadsides: East Lyme (Graves), Groton (Graves & Bissell), Southington (Andrews & Bissell), Oxford (Harger), Trumbull (Eames), Wilton (Miss A. E. Carpenter). Sept.—Oct. Adventive from Asia.

Medicinal.

TANACETUM L. Tansy.

Tanacetum vulgare L. (common).

Common Tansy.

Frequent. Roadsides and waste places. July—Oct. Naturalized from Europe.

The var. *CRISPUM* DC. (crisped) is occasional with the species.

The leaves and flowering tops are medicinal and were formerly officinal.

ARTEMISIA L. Wormwood.

Artemisia caudata Michx. (tailed).

Dry sandy ground. Common along the coast, extending

inland as far as Wallingford and Haddam (Bissell), and Seymour (Harger). Aug.—Sept.

Artemisia campestris L. (of fields). var. *pubescens* (Jord. & Fourr.) Rouy & Foucaud (downy).

Rare. Naugatuck, in waste ground (A. E. Blewitt, Harger). Mid-Aug.—Sept. Fugitive from Europe.

Artemisia Abrotanum L. (classical name for this species).

Old Man. Southernwood.

Rare. Waste ground as an escape from gardens: Bridgeport and Fairfield (Eames). July—Oct. Fugitive from Europe.

Medicinal much like *Artemisia Absinthium*.

Artemisia vulgaris L. (common).

Common Mugwort. Felon-herb. Sailor's Tobacco.

Rare or occasional. Roadsides, waste ground and about old gardens: New London and Sprague (Graves), East Hartford (Weatherby), Southington (Andrews & Bissell), Lisbon, Oxford and Southbury (Harger), Fairfield County (Eames). July—Sept. Adventive from Europe.

The plant is medicinal.

Artemisia Dracunculus L. (classical name for this species).

Tarragon. Estragon.

Rare. Naugatuck, in waste ground (B. B. Bristol). July—Sept. Fugitive from Europe.

In Europe it is cultivated for its leaves which are used for seasoning.

Artemisia Stelleriana Bess.

Dusty Miller. Beach Wormwood. Old Woman.

Occasional on sea-shores in New London County (Graves). July—Aug. Naturalized from Asia.

Sometimes cultivated for ornament.

Artemisia biennis Willd. (biennial).

Rare. Waste ground: Bloomfield (Bissell), Naugatuck (B. B. Bristol), Stratford (Harger), New Milford (E. H. Austin). Sept. Adventive from the West.

Artemisia annua L. (annual).

Rare. Waste ground: East Lyme (Graves), Naugatuck

(B. B. Bristol), Bridgeport (Eames). Aug.—Sept. Fugitive from Asia.

Artemisia Absinthium L. (classical name for this plant).
Wormwood.

Rare. Roadsides and waste places as an escape from gardens: East Windsor (Bissell), Naugatuck (A. E. Blewitt), Oxford (Harger), Milford and Fairfield (Eames), Salisbury (Mrs. C. S. Phelps). Aug.—Sept. Adventive from Europe.

The leaves and tops were formerly much prized in domestic medicine and were until recently officinal.

Artemisia pontica L.
Roman Wormwood.

Rare. Roadsides as an escape from cultivation: Scotland (Graves), Southington (Weatherby & Bissell), Salisbury (Mrs. C. S. Phelps). July—Aug. Adventive from Europe.

In Europe this species is much used in the preparation of absinthe.

Artemisia frigida Willd. (cold).

Rare. Naugatuck, in waste ground (B. B. Bristol). Aug. Fugitive from the western United States.

TUSSILAGO L. Coltsfoot.

Tussilago Farfara L. (classical name for this species).
Coltsfoot. Coughwort.

Occasional or local. Wet places, roadsides and along streams, usually in heavy soils. March—May. Naturalized from Europe.

A popular remedy for coughs and colds and much used in domestic medical practice.

PETASITES Hill. Sweet Coltsfoot.

Petasites palmatus (Ait.) Gray (palmate).
Sweet Coltsfoot.

Rare. Salisbury, wet cold woods (Mrs. C. S. Phelps). April.

Petasites vulgaris Hill (common).
Petasites Petasites Karst.
Butterbur.

Rare. Hartford, escaped from a garden (Mrs. W. Seliger). April. Fugitive from Europe.

The plant is medicinal.

ERECHTITES Raf. Fireweed.

Erechtites hieracifolia (L.) Raf. (having leaves like *Hieracium*, the Hawkweed).

Erechtites praealta Raf.

Fireweed. Pilewort.

Common. Fields, roadsides and woodland clearings in either dry or moist ground; also on borders of salt marshes. July — Oct.

The plant is medicinal.

CALENDULA L. Marigold.

Calendula officinalis L. (of the shops).

Pot Marigold. Calendula. Mary-bud.

Rare. Waste ground as an escape from gardens: Southington (Andrews, Bissell), South Norwalk (Miss A. E. Carpenter). July — Aug. Fugitive from southern Europe.

This is the "Marygold" of Shakespeare. The dried flowers are medicinal, often used in the treatment of wounds.

CACALIA L. Indian Plantain.

Cacalia suaveolens L. (sweet-smelling).

Synosma suaveolens Raf.

Indian Plantain.

Dry or moist open woods or banks. Rare in most districts: East Haven (D. C. Eaton et al.), Derby (H. C. Beardslee). Local near the coast from Orange westward (Eames). July — Sept.

SENECIO L. Groundsel. Ragwort. Squaw-weed.

Senecio vulgaris L. (common).

Common Groundsel.

Rare. Waste and cultivated ground: New London (Graves), Hartford (H. S. Clark), Southington (Andrews), Bridgeport (Miss A. E. Carpenter). June — Nov. Adventive from Europe.

The plant is medicinal.

Senecio viscosus L. (sticky).

Rare. Waste ground: Stamford (Eames & W. H. Hoyt).
July — Aug. Adventive from Europe.

Senecio obovatus Muhl. (inversely egg-shaped; the broad end up).

Senecio aureus L., var. *obovatus* Torr. & Gray.

Squaw-weed. Ragwort.

Dry soil, mostly in open woods. Occasional to frequent west of the Connecticut River, but not reported from the eastern part of the state. May — June.

Senecio aureus L. (golden).

Life-root. Golden Ragweed or Ragwort. Swamp Squaw-weed.

Frequent to common. Swamps or in wet ground. May — June.

The roots and tops of this and allied species are used medicinally.

Senecio Balsamitae Muhl., var. *praelongus* Greenman (very long).

Senecio aureus L., var. *Balsamitae* Gray's Manual ed. 6 in part.

Rare. Dry grassland and open woods: Oxford and Southbury (Harger), Woodbury (Eames & C. C. Godfrey). June.

No other specimens of this variety have been seen and none of the typical form. Probably most reports of the latter are based on forms of *Senecio obovatus*.

ARCTIUM L. Burdock.**Arctium Lappa** L. (a bur).

Arctium Lappa L., var. *majus* Gray.

Great Burdock.

Roadsides and waste ground. Rare or local in the southern part of the state, becoming occasional northward. July — Sept. Naturalized from Europe.

The roots of this and allied species are officinal and the seeds and leaves are also used medicinally. Both this and the following species are unsightly weeds.

Arctium minus (Hill) Bernh. (smaller).

Arctium Lappa L., var. *minus* Gray.

Arctium Lappa L., var. *tomentosum* Gray.

Arctium tomentosum of Britton's Manual in part.

Common Burdock.

Common. Roadsides and waste places. July — Oct.
Naturalized from Europe. A form with woolly involucreal
bracts sometimes occurs.

CARDUUS L.   Plumeless Thistle.

Carduus acanthoides L. (like *Acanthus*, the Bear's-breech).

Curled Thistle.

Rare. Waste ground: Salisbury (Mrs. C. S. Phelps).
July — Aug. Fugitive from Europe.

CIRSIUM Hill.   Common or Plumed Thistle.

Cirsium lanceolatum (L.) Hill (lance-shaped).

Carduus lanceolatus L.

Cnicus lanceolatus Willd.

Common or Bull Thistle.

Frequent. Roadsides and pastures. July — Sept. Natural-
ized from Europe.

Cirsium spinosissimum (Walt.) Scop. (very spiny).

Carduus spinosissimus Walt.

Cnicus horridulus Pursh.

Yellow Thistle.

Occasional in fields and borders of salt marshes along the
coast. June — July.

Rarely occurs with purple flowers.

Cirsium discolor (Muhl.) Spreng. (of different colors).

Carduus discolor Nutt.

Cnicus altissimus Willd., var. *discolor* Gray.

Field Thistle.

Fields and thickets. Occasional in most sections, but fre-
quent to common along the coast and throughout the Housa-
tonic Valley. Aug. — Sept.

Flowers sometimes white.

Cirsium altissimum (L.) Spreng. (tallest).*Carduus altissimus* L.*Cnicus altissimus* Willd.

Tall Thistle.

Rare. Introduced with garden seed about a yard, a few plants only, Salisbury (Mrs. C. S. Phelps). Aug.—Sept. Fugitive from the West.

Cirsium muticum Michx. (pointless).*Carduus muticus* Pers.*Cnicus muticus* Pursh.

Swamp Thistle.

Frequent. Swamps and moist thickets. Aug.—Sept.

Cirsium pumilum (Nutt.) Spreng. (low).*Carduus odoratus* Porter.*Cnicus pumilus* Torr.

Pasture or Bull Thistle.

Common. Fields and pastures. July — Sept.

Cirsium arvense (L.) Scop. (of cultivated ground).*Carduus arvensis* Robson.*Cnicus arvensis* Hoffm.

Canada Thistle.

Frequent. Fields, meadows, pastures and waste ground. June — Aug. Naturalized from Europe.

The var. *VESTITUM* Wimm. & Grab. (clothed) and the var. *INTEGRIFOLIUM* Wimm. & Grab. (entire-leaved) occur in grassland in Salisbury (Mrs. C. S. Phelps & Bissell); the first named variety has also been found at Orange (Weatherby).

A pernicious weed extremely difficult to eradicate. The root is medicinal.

A statute of Connecticut enacted in 1881, provides that "Every owner or possessor of lands shall cut down all wild carrots and Canada thistles growing thereon, or in the highway adjoining, so often as to prevent them going to seed; and upon failure so to do, any person aggrieved, or any citizen of the town wherein the lands are situated, may complain to any grand juror of said town, who shall thereupon forthwith notify such owner or possessor of such complaint. If said

owner or possessor shall still neglect to comply with the provisions of this section, he shall be fined not more than five dollars, for each and every day of such neglect after such notice." Revised Statutes, sec. 1374.

ONOPORDUM L. Cotton or Scotch Thistle.

Onopordum Acanthium L.

Cotton Thistle.

Rare. Fields and roadsides: Ledyard, Groton and Waterford (Graves), New Haven (Harger). July — Sept. Adventive from Europe.

CENTAUREA L. Star Thistle.

Centaurea Jacea L.

Meadow Centaury.

Rare. Fields: Norwich (Mrs. E. E. Rogers), Guilford (G. H. Bartlett), Southington (Bissell), Bridgeport (Eames). June — Sept. Adventive from Europe.

Centaurea Jacea L., var. lacera Koch (torn).

Rare. In fields: Granby (Bissell), Naugatuck (A. E. Blewitt), Oxford (Harger), Bridgeport (Eames). June — Sept. Adventive from Europe.

Centaurea Cyanus L. (classical name for this species).

Corn-flower. Bluebottle. Bachelor's Button.

Rare. Waste ground and about gardens as an escape from cultivation: Ledyard and Lyme (Graves), East Windsor (Bissell), Southington (Andrews, Bissell), Seymour and Oxford (Harger), Fairfield County (Eames). June — Oct. Introduced from Europe.

Often cultivated for ornament. The plant is medicinal.

Centaurea nigra L. (black).

Spanish Buttons. Hardheads. Knapweed. Black Centaury.

Rare. Roadsides and waste ground: New London and Waterford (Graves), Waterbury (A. E. Blewitt), Bridgeport (Eames), Norwalk (G. P. Ells), Salisbury (Bissell). May — Aug. Introduced from Europe.

Centaurea nigra L., var. radiata DC. (bearing rays).

Rare. Waste ground: Waterbury (J. N. Bishop), Oxford

(Harger), Bridgeport (Eames). May — Aug. Introduced from Europe.

Centaurea maculosa Lam. (spotted).

Rare. Fields and waste ground: Griswold (E. F. Burleson), Granby (I. Holcomb), Litchfield (Miss E. H. Thompson), Salisbury (Mrs. C. S. Phelps). Aug. Adventive from Europe.

Centaurea vochinensis Bernh.

Rare. Fields and roadsides: Southington (Andrews & Bissell), Fairfield and Darien (G. P. Ells). June — Sept. Adventive from Europe.

LAPSANA L. Nipple-wort.

Lapsana communis L. (growing in colonies).

Nipple-wort.

Rare. Waste ground: New Haven (A. W. Evans). June — Sept. Adventive from Europe.

CICHORIUM L. Succory. Chicory.

Cichorium Intybus L. (classical name for this species).

Cichorium Intybus L., var. *divaricatum* of American authors, probably not DC.

Common Chicory. Blue Sailors.

Occasional or frequent. Fields and roadsides. June — Aug. Naturalized from Europe.

The root is medicinal; it is also used as an adulterant of and substitute for coffee. The flowers are sometimes rose-color or rarely pure white.

KRIGIA Schreb. Dwarf Dandelion.

Krigia virginica (L.) Willd.

Adopogon carolinianum Britton.

Dwarf Dandelion.

Frequent. Dry sandy or sterile ground. April — Sept.

Krigia amplexicaulis Nutt. (stem-clasping).

Adopogon virginicum Kuntze.

Cynthia.

Rare. Dry sandy soil: Litchfield (Miss E. H. Thompson),

Southbury (Mrs. H. G. Morse), Washington (C. C. Godfrey), Greenwich (W. P. Alcott). May — July.

HYPOCHAERIS L. Cat's-ear.

Hypochaeris radicata L. (having roots; referring to the long tap-roots).

Cat's-ear.

Rare. In grassland: Southington (Bissell), Bridgeport and Fairfield (Eames). July. Adventive from Europe.

Has proved to be a bad weed in some parts of New England.

LEONTODON L. Hawkbit.

Leontodon autumnalis L. (autumnal).

Fall Dandelion. Arnica.

Moist grassland. Guilford (G. H. Bartlett); and frequent or common in the town of Thompson (Weatherby & Bissell), also in Hartford County and some adjacent towns. May — Nov. Naturalized from Europe.

Leontodon autumnalis L. var. *pratensis* Koch (of meadows).

Fall Dandelion.

Moist grassland. Norwich (Mrs. E. E. Rogers), Litchfield (Miss E. H. Thompson); and occasional in Hartford County. May — Nov. Naturalized from Europe.

Leontodon hastilis L. (like a spear-shaft).

Rare. Southington, in fields (Bissell). May — June. Fugitive from Europe.

Leontodon nudicaulis (L.) Banks (naked-stemmed).

Leontodon hirtus L.

Local. In grassland: Waterford, plentiful at one station (Graves), East Lyme (Miss A. M. Ryon). July — Aug. Naturalized from Europe.

PICRIS L.

Picris hieracioides L. (like Hieracium, the Hawkweed).

Rare or local. Fields and waste places: Old Lyme (E. F. Williams), Guilford (G. H. Bartlett), Westport, plentiful in one locality, and Bridgeport (Eames), Salisbury

(Mrs. C. S. Phelps & Bissell). June — July. Adventive from Europe.

Picris echioides L. (like *Echium*, the Viper's Bugloss).

Ox-tongue.

Rare. Southington, in cultivated ground (Andrews), Fairfield, in grassland (Eames). July — Sept. Fugitive from Europe.

TRAGOPOGON L. Goat's Beard.

Tragopogon porrifolius L. (having leaves like *Allium Porrum*, the Leek).

Oyster-plant. Salsify.

Rare. Fields and roadsides: Tolland (Weatherby & Bissell), Southington (Andrews, Bissell), Ridgefield (W. H. Hoyt). May — June. Adventive from Europe.

Tragopogon pratensis L. (of meadows).

Goat's Beard.

Fields and roadsides. Norwich (Mrs. E. E. Rogers), Orange (Harger), and occasional in the western part of the state. June — Sept. Naturalized from Europe.

The root is medicinal.

TARAXACUM Ludwig. Dandelion.

Taraxacum officinale Weber (of the shops).

Taraxacum Taraxacum Karst.

Common Dandelion.

Common. Fields, lawns and waste ground. April — Nov., but especially in May. Naturalized from Europe.

The root is medicinal and is officinal; it is also used as a substitute for coffee. The plant is much used as a pot-herb.

Taraxacum officinale Weber, var. **palustre** (Sm.) Blytt (of marshes).

Frequent. Moist fields and waste places. April — Nov. Naturalized from Europe.

Uses and properties as in the typical form of the species.

Taraxacum erythrospermum Andrz. (red-seeded).

Red-seeded Dandelion.

Local. Usually in dry but sometimes in moist fields or

open woods. May — Nov., especially in May. Naturalized from Europe.

Uses and properties as in *Taraxacum officinale*.

SONCHUS L. Sow Thistle.

Sonchus arvensis L. (of cultivated ground).

Field Sow Thistle.

Rare. Roadsides and waste places: Norwich (W. A. Setchell), New London and Montville (Graves), Preston (Mrs. E. E. Rogers), East Hartford (Weatherby), Bridgeport (Eames). Late June — Sept. Naturalized from Europe.

Sonchus oleraceus L. (suitable for a pot-herb).

Common Sow Thistle.

Occasional. Waste and cultivated grounds. July — Oct. Naturalized from Europe.

Medicinal.

Sonchus asper (L.) Hill (rough).

Spiny-leaved Sow Thistle.

Rare to occasional. Waste ground and on shores. July — Aug. Naturalized from Europe.

LACTUCA L. Lettuce.

Lactuca scariola L.

Prickly Lettuce.

Rare. Waste ground: New London (Graves), Naugatuck (B. B. Bristol), Norwalk (Eames). July — Aug. Adventive from Europe.

The herb is medicinal.

Lactuca scariola L., var. *integrata* (Gren. & Godr. (entire)).

Lactuca virosa of American authors, not L.

Prickly Lettuce.

Occasional. Waste ground, mostly near railroads or in populous districts. Aug. — Sept. Naturalized from Europe. The herb is medicinal.

Lactuca canadensis L.

Wild Lettuce. Horse-weed.

Common. Fields and roadsides. June — Aug.

The var. *MONTANA* Britton (of mountains), var. *integrata*.

folia of some authors, not *Lactuca integrifolia* Bigel., is rare or occasional with the typical form.

The plant is medicinal.

Lactuca integrifolia Bigel. (entire-leaved).

Lactuca sagittifolia of Britton's Manual in part.

Rare. Roadsides and fields: Union (Bissell), Hartford (A. W. Driggs), Seymour (Eames & C. K. Averill). Probably occurring at other localities, its distribution unknown. July — Sept.

Lactuca hirsuta Muhl. (hairy).

Rare. Dry woods or fields: Groton, Montville and Waterford (Graves), Norwich (Mrs. E. E. Rogers), Ellington, Bristol and Wolcott (Bissell), Southington (Andrews, Bissell), Meriden (Andrews), Oxford and Southbury (Harger), Stratford and Fairfield (Eames). July — Aug.

Lactuca spicata (Lam.) Hitchc. (having spikes).

Lactuca leucophaea Gray.

Wild Blue Lettuce.

Frequent. Roadsides, thickets and woodlands. Aug.—Sept.

Lactuca sativa L. (sown; planted).

Lettuce.

Rare. Waste ground as an escape from cultivation: Bridgeport (Eames). June — Aug. Fugitive from Europe. Well known as a salad plant.

CREPIS L. Hawk's Beard.

Crepis capillaris (L.) Wallr. (hair-like).

Crepis virens L.

Crepis virens L., var. *dentata* Bisch.

Rare. In grassland: Groton (Graves), North Stonington and Norwich (Mrs. E. E. Rogers), Plainfield (J. L. Sheldon), East Hartford (C. C. Hanmer), East Windsor (Bissell), Oxford (Harger), Norwalk (G. P. Ells), Greenwich (W. E. Wheelock). Aug.—Sept. Adventive from Europe.

Crepis tectorum L. (of dwellings).

Rare. North Stonington (Mrs. E. E. Rogers). Sept. Adventive from Europe.

Crepis taraxacifolia Thuill. (having leaves like *Taraxacum*, the Dandelion).

Rare. Southington, in grassland (Bissell). May—June.
Fugitive from Europe.

Crepis setosa Haller f. (bristly).

Rare. Fairfield, in grassland, probably introduced with grass seed (Eames). Sept.—Oct. Adventive from Europe.

Crepis rigida W. & K. (stiff).

Rare. Southington, in fields (Bissell). June—July.
Fugitive from Europe.

PRENANTHES L. Rattlesnake-root.

Prenanthes alba L. (white).

Nabalus albus Hook.

White Lettuce. Rattlesnake-root.

Rare, local or frequent. Open woods, copses and fence-rows. Aug.—Oct.

The plant and roots are medicinal.

Prenanthes serpentaria Pursh (classical name).

Nabalus serpentarius Hook.

Lion's-foot. Gall-of-the-earth.

Woods and thickets. Voluntown, Waterford and Windham (Graves), Groton and Oxford (Harger), Southington (Bissell), and occasional toward the south and southwest. Aug.—Oct.

The root and leaves are medicinal.

Prenanthes trifoliolata (Cass.) Fernald (with three leaflets).

Nabalus trifoliolatus Cass.

Prenanthes serpentaria Gray's Manual ed. 6 in part, not Pursh.
Gall-of-the-earth.

Frequent. Woods and thickets. Aug.—Oct.

Extremely variable in leaf form.

Prenanthes altissima L. (very tall).

Nabalus altissimus Hook.

Gall-of-the-earth.

Occasional or frequent. Rich woods. Aug.—Oct.

The var. **HISPIDULA** Fernald (minutely hispid) occurs at Stafford (Graves & Bissell), and Oxford (Harger).

The plant is medicinal. All species of *Prenanthes* have been used as a remedy for the bites of venomous snakes.

HIERACIUM L. Hawkweed.

Hieracium Pilosella L. (somewhat hairy).

Mouse-ear.

Rare. Dry grassland: Southington (Andrews), Wilton (Miss A. E. Carpenter). May—July. Adventive from Europe.

Hieracium aurantiacum L. (orange-colored).

Orange Hawkweed. Devil's Paint-brush. Grim the Collier.

Rare, occasional or local. Dry to wet woods, fields and roadsides. June. Naturalized from Europe.

A bad weed in some parts of northern New England.

Hieracium floribundum Wimm. & Grab. (many-flowered).

Rare. Fields and waste ground: Guilford (G. H. Bartlett), Wallingford (A. W. Evans & Harger), East Haven (Andrews), Cheshire (Bissell), Southington (M. W. Frisbie). May—June. Adventive from Europe.

Hieracium pratense Tausch (of meadows).

King Devil.

Rare. Fields: Norwich (Mrs. E. E. Rogers), Bristol (H. S. Clark & J. N. Bishop), Waterbury (A. E. Blewitt), Stamford (W. H. Hoyt). June. Adventive from Europe.

Hieracium venosum L. (veiny).

Rattlesnake-weed. Poor Robin's Plantain.

Frequent. Dry woods and fields. June—July.

The var. *SUBCAULESCENS* Torr. & Gray (having a short stem) is occasional with the species.

The leaves and tops are medicinal.

Hieracium paniculatum L. (having an open, branched flower-cluster).

Frequent. Dry woods. July—Sept.

Hieracium marianum Willd.

Rare. Dry woods: Norwich (Mrs. E. E. Rogers), Franklin (R. W. Woodward), Glastonbury (A. W. Driggs),

Orange and Oxford (Harger), Huntington and Woodbury (Eames), Salisbury (Bissell). July.

Hieracium scabrum Michx. (rough).

Frequent. Woods and thickets, mostly in dry soil. July
— Sept.

Hieracium Gronovii L.

Hairy Hawkweed.

Dry fields or open woods, in sandy or sterile soil. Frequent in most districts but not reported from Litchfield County. Aug.— Oct.

Hieracium canadense Michx.

Canada Hawkweed.

Occasional. Fields and thickets in either moist or dry soil. Aug.— Sept.

Appendix.

ADDITIONS AND CORRECTIONS.

Page 19, under *Woodwardia virginica*, add: Stafford (Weatherby).

Page 22, under *Aspidium marginale*, add: The var. *ELEGANS* J. Robinson (elegant) has been found in rich woods at New Fairfield (Eames & C. C. Godfrey). Forms approaching this variety are not rare.

Page 33, after *Isoetes Dodgei*, insert:

Isoetes Dodgei A. A. Eaton, var. **Robbinsii** A. A. Eaton.

Rare. North Stonington, shallow water of Lantern Hill Pond (Graves & Bissell). July — Sept.

Page 35, under *Pinus sylvestris*, add: Wethersfield (H. S. Clark & Bissell).

Page 39, under *Sparganium eurycarpum*, after "A. W. Driggs" change text to read: East Windsor, Windsor and Sharon, at Indian Pond (Bissell). Occasional along the Housatonic River from Oxford (Harger) northward, and near the coast in New Haven and Fairfield Counties.

Page 43, under *Potamogeton bupleuroides*, add: Kent (Eames).

Page 49, under *Sorghum halepense*, add: New Haven (Bissell).

Page 51, under *Panicum philadelphicum*, add: Sharon, at Mudge Pond (Weatherby).

Page 52, under *Panicum Werneri*, add: Southbury (Weatherby), New Milford (Bissell).

Page 54, under *Panicum subvillosum*, add: Orange (Bissell).

Pages 54-55, under *Panicum villosissimum*, omit "Southbury (Harger)," and add: Kent (Bissell).

Page 66, under *Trisetum spicatum*, add: East Granby, on trap ledges (Harger).

Page 69, under *Spartina patens*, var. *caespitosa*, add: Bridgeport (Eames).

Page 72, under *Briza media*, add: Southbury, along roadside (Harger).

Page 72, under *Cynosurus cristatus*, add: Oxford, in a lawn (Harger).

Page 77, under *Bromus commutatus*, add: Middletown, at several widely separated localities (Bissell). Omit "Fugitive" and substitute: Adventive.

Page 77, after *Bromus tectorum*, insert:

Bromus sterilis L. (sterile).

Local. Middletown, well established on sandy railroad embankments (Bissell). June. Adventive from Europe.

Pages 77-78, under *Bromus altissimus*, add: Franklin (R. W. Woodward).

Page 78, after *Bromus altissimus*, insert:

Bromus incanus (Shear) Hitchc. (hoary).

Rare. Putnam, thicket near river bank (Weatherby & Bissell). July — Aug.

Page 81, after *Elymus canadensis*, insert:

Elymus brachystachys Scribn. & Ball (short-spiked).

Rare. Naugatuck, in dry ground, introduced with mill waste (A. E. Blewitt). Fugitive from the southwestern United States.

Page 84, under *Eleocharis diandra*, add: Hartford (Bissell).

Page 84, under *Eleocharis ovata*, add: Hartford (Weatherby & Bissell).

Page 85, under *Eleocharis intermedia*, add: Sharon, at Indian Pond (R. W. Woodward).

Page 87, under *Scirpus rubrotinctus*, add: New Milford (Harger).

Page 87, under *Scirpus atrovirens*, add: Franklin (R. W. Woodward), New Britain and Canaan (Bissell).

Page 88, under *Scirpus cyperinus*, var. *pelius*, add: Colebrook and Salisbury (M. L. Fernald).

Page 90, under *Rhynchospora alba*, add: the var. *MACRA* Clarke (large) occurs at Southington (Bissell).

Page 92, under *Carex tribuloides*, var. *reducta*, change statement of range to read: Rare or occasional in the northern half of the state.

Page 93, under *Carex straminea*, change statement of range to read: Occasional or local in the northern half of the state.

Page 94, under *Carex foenea*, var. *perplexa*, add: Thomaston (A. E. Blewitt).

Page 96, after *Carex trisperma*, insert:

Carex trisperma Dewey, var. **Billingsii** Knight.

Local. Bethany, plentiful in a swamp (B. B. Bristol & A. E. Blewitt). June—July.

Page 98, under *Carex aurea*, add: Sherman (A. E. Blewitt & Harger).

Page 99, under *Carex Davisii*, add: East Granby (Harger).

Page 100, under *Carex aestivalis*, add: Colebrook (M. L. Fernald).

Page 100, after *Carex umbellata*, insert:

Carex umbellata Schk., var. **brevirostris** Boott (short-beaked).

Rare. Cheshire, dry rocky hills (A. E. Blewitt). June. Very large plants growing in large tufts.

Page 101, under *Carex polymorpha*, add: Waterbury (A. E. Blewitt).

Page 104, under *Carex flava*, add: Waterbury (A. E. Blewitt).

Page 105, under *Carex castanea*, add: Canaan, moist sandy thicket (Mrs. C. S. Phelps & A. E. Blewitt).

Page 106, under *Carex trichocarpa*, add: New Milford, plentiful in meadows along the Housatonic River.

Page 107, under *Carex retrorsa*, add: Sherman (A. E. Blewitt & Harger).

Page 108, under *Carex intumescens*, var. *Fernaldii*, add: Colebrook, many plants in rich woods (M. L. Fernald).

Page 112, under *Wolffia columbiana*, add: Orange (Harger).

Page 112, before *Xyris caroliniana*, insert:

Xyris montana Ries (of mountains).

Rare. Woodbury, in sphagnum bog (Harger). July — Aug.

Pages 114-115, under *Juncus tenuis*, var. *anthelatus*, add: East Haven (Bissell).

Page 115, under *Juncus Dudleyi*, change statement of habitat and range to read: Sandy or sterile ground, in either moist or dry places. East Granby (Harger), South Windsor (Bissell), Meriden (Andrews), and occasional in the north-western part of the state.

Pages 115-116, under *Juncus brachycephalus*, add: Kent (Eames), New Milford (Bissell).

Page 123, under *Smilacina trifolia*, add: Stafford (Weatherby).

Page 131, under *Habenaria orbiculata*, add: Ledyard (B. T. Avery, Jr.).

Page 133, under *Pogonia affinis*, add: Ledyard (B. T. Avery, Jr.).

Page 134, under *Spiranthes cernua*, var. *ochroleuca*, add: Occasional in the southern part of the state.

Page 136, under *Microstylis monophyllos*, add: Colebrook (Bissell).

Pages 139-140, under *Salix discolor*, var. *ericecephala*, add: Durham (J. Barratt).

Pages 139-140, under *Salix discolor*, var. *prinoides*, add: Durham (J. Barratt).

Page 140, after *Salix sericea*, insert:

Salix subsericea (Anders.) Schneider (somewhat silky).

Rare or local. Colebrook, wet ground along roadsides and borders of woods (M. L. Fernald & Bissell). April — mid-May; fruit May — June.

Page 143, under *Myrica Gale*, omit "not reported from the vicinity of the coast."

Page 146, after *Corylus rostrata*, insert:

Corylus heterophylla Fisch. (various-leaved).

Rare. Wethersfield, sparingly escaped about an old nursery (H. S. Clark & Bissell). April; fruit Sept. Fugitive from Europe.

Page 154, under *Maclura pomifera*, add: Wethersfield (Bissell).

Page 158, under *Rumex elongatus*, add: New Britain (Bissell).

Pages 160-161, under *Polygonum lapathifolium*, add: The var. **NODOSUM** (Pers.) Weinmann (knotty) occurs at Lyme (Graves & Bissell).

Page 164, under *Polygonum cuspidatum*, add: Southington (Andrews).

Page 165, under *Cycloloma atriplicifolium*, add: Danbury (Eames & C. C. Godfrey).

Page 165, under *Kochia Scoparia*, add: New London (Graves), Derby, along a roadside (Harger).

Page 167, under *Beta vulgaris*, add: Sometimes found about dumping grounds.

Page 169, under *Salsola Kali*, add: The var. CAROLINIANA (Walt.) Nutt. occurs with the typical form.

Page 173, after *Spergularia marina*, insert:

Spergularia canadensis (Pers.) Don.

Buda borealis Wats.

Tissa canadensis Britton.

Rare. Groton, border of salt marsh at Esker Point (Graves & Bissell). June — Aug.

Page 179, under *Silene noctiflora*, add: Winchester (M. L. Fernald & Weatherby).

Page 186, under *Ranunculus sceleratus*, add: Wethersfield (Dr. E. J. Thompson), Newington (Bissell).

Page 186, under *Ranunculus allegheniensis*, add: Redding (Eames & C. C. Godfrey).

Page 191, after *Nigella sativa*, insert:

Nigella damascena L.

Love-in-a-Mist.

Rare. Newtown, about a garden (Eames & C. C. Godfrey). June. Fugitive from Eurasia.

Sometimes cultivated for ornament.

Page 194, under *Podophyllum peltatum*, add: Perhaps native at Southington (Bissell).

Page 196, under *Eschscholtzia californica*, add: Roadside, Salisbury (R. W. Woodward & Weatherby).

Page 200, under *Alyssum alyssoides*, add: Griswold (E. F. Burleson).

Page 201, after *Lepidium campestre*, insert:

Lepidium Draba L. (like *Draba*, the Whitlow Grass).

Hoary Cress.

Rare. Guilford, a few plants in a field (G. H. Bartlett).
May—June. Fugitive from Europe.

Page 202, under *Brassica alba*, add: Hartford (Bissell).

Page 242, under *Rosa setigera*, add: Middlefield (Bissell).

Page 242, under *Rosa spinosissima*, add: Cornwall
(Miss M. J. Whitney).

Page 292, under *Epilobium adenocaulon*, add: Monroe
(Harger).

Page 347, after *Lycium halimifolium*, insert:

HYOSCYAMUS L. Henbane.

Hyoscyamus niger L. (black).

Black Henbane.

Rare. Middletown, in waste ground (J. Barratt). June—
July. Fugitive from Europe.

The plant is medicinal, the leaves of the second year's
growth officinal.

Page 396, after *Bidens comosa*, insert:

Bidens connata Muhl. (united).

Rare. Swamps and borders of streams: Lyme (Graves
& Bissell), Huntington and Milford (Harger). Aug.—Sept.

NATIVE PLANTS NOT FOUND IN RECENT YEARS.

The species named below were found growing in Connecticut
by former collectors whose specimens have been preserved, but
none of them have been seen within the last twenty years, and
most of them have not been found for a much longer period.
They are listed here to call special attention to them that it may
be ascertained whether they can at present be found growing in
the state or not.

Lycopodium Selago L.

Isoëtes foveolata A. A. Eaton.

Sparganium angustifolium Michx.

Sparganium fluctuans (Morong) Robinson.
Potamogeton lateralis Morong.
Elymus australis Scribn. & Ball.
Carex livida (Wahlenb.) Willd.
Melanthium latifolium Desr.
Euphorbia Ipecacuanhae L.
Acerates viridiflora Ell., var. *lanceolata* (Ives) Gray.
Trichostema lineare Walt.
Helianthus tracheliiifolius Mill.
Bidens trichosperma (Michx.) Britton.

EXCLUDED SPECIES.

The following species and varieties, reported from Connecticut in earlier lists, have been omitted from the present Catalogue, either because of known errors, or because no authentic specimens of them have been found.

The names are those of the older lists; in all cases, however, in which they differ from those in the seventh edition of Gray's Manual, the latter are also given, after the original names.

Abbreviations indicate the list or lists in which each species appears. These abbreviations and the lists they represent, are as follows:

- Berz.** A Catalogue of the Flowering Plants and Higher Cryptogams growing without cultivation within thirty miles of Yale College. Published by the Berzelius Society. New Haven, 1878.
- B1.** Bishop, James N. A Catalogue of all Phaenogamous Plants at present known to grow in the State of Connecticut. Rep. Sec. Conn. Board Agric. 1884-5. Hartford, 1885.
- B2.** Same, 2d edition. Vascular Cryptogams added. Rep. Sec. Conn. Board Agric. 1895. Hartford, 1896.
- Ba.** Same, Additions and Corrections. Rep. Sec. Conn. Board Agric. 1897. Hartford, 1898.
- B3.** Same, 3d edition. Rep. Sec. Conn. Board Agric. 1900. Hartford, 1901.

- Biss.** Bissell, C. H. Fern Flora of Connecticut. Fern Bulletin, vol. xiv, 1906.
- B. & A.** Bissell, C. H., and Andrews, Luman. Flora of the Town of Southington and Vicinity. Conn. School Document No. 222. [Hartford] 1902.
- Br.** Brace, John P. List of Plants growing spontaneously in Litchfield and in its Vicinity. American Jour. of Science, vol. iv, 1822.
- C. & S.** Case, George R., and Setchell, William A. A Catalogue of Wild Plants growing in Norwich and Vicinity, arranged in the order of flowering for the year 1882. Norwich, 1883.
- D.** Driggs, A. W. Notes on the Flora of Connecticut. Conn. School Document No. 198. [Hartford] 1901.
- Leon.** Leonard, Emily J. Catalogue of the Phaenogamous and Vascular Cryptogamous Plants found growing in Meriden, Conn. Trans. Meriden Sci. Ass., 1, 1884. Meriden, 1885.
- R.** Rogers, Mrs. Elisha E. Flora of Norwich. Conn. School Document No. 213. [Hartford] 1902.

Cryptogramma acrostichoides R. Br. **Biss.**

An error in transcribing. Should have read *Cryptogramma Stelleri*.

Asplenium viride Huds. **B2.**

Noted as doubtful by Bishop.

Dryopteris aculeata Braunii (Spenner) Underw. *Polystichum Braunii* (Spenner) Fée **B2.**

Botrychium Lunaria Sw. **B2, B3, R.**

Probably *Botrychium simplex*.

Isoetes lacustris L. **B2, B3.**

An error in determination. Plant was *Isoetes Tuckermani*.

Pinus inops Ait. *Pinus virginiana* Mill. **Ba.**

An error in determination. Tree was *Pinus sylvestris*.

Juniperus Sabina L., var. *procumbens* Pursh. *Juniperus horizontalis* Moench. **B2, B3.**

An error in determination. Plant was *Juniperus communis*, var. *depressa*.

Potamogeton crispus L. B2, B3.

Triglochin palustris L. Berz., B1, B2, B3.

Paspalum laeve Michx. Berz., B1, B2, B3, R.

Avena fatua L. B2, B3.

Danthonia sericea Nutt. Leon.

Poa flexuosa Muhl. *Poa autumnalis* Muhl. B1, B2, B3.

Festuca ovina L., var. *duriuscula* Hack. Ba, B3.

An error in determination. Plant was *Festuca rubra*.

Cyperus Houghtonii Torr. B3.

An error in determination. Plant was *Cyperus filiculis*.

Scirpus supinus L., var. *Hallii* Gray. *Scirpus Hallii* Gray.
B2.

Rhynchospora capillacea Torr. B2, B3.

Carex adusta Boott. Berz., B1.

Carex exilis Dewey. C. & S., B3, R.

Perhaps correct, but no specimen has been seen by the committee.

Carex Goodenowii J. Gay. B3.

Lemna perpusilla Torr. Ba.

Juncus scirpoides Lam. B1, B2, B3.

Helonias bullata L. Leon.

Allium sativum L. B1, B2, B3.

Lilium Catesbaei Walt. Leon.

Cypripedium arietinum R. Br. Berz., B1, B2, B3.

Perhaps correct, but no specimen has been seen.

Cypripedium candidum Willd. B3, D.

Habenaria rotundifolia Richards. *Orchis rotundifolia* Banks.
B1, B2, B3.

Probably actually collected by Dr. J. W. Robbins, but no specimen has been seen.

Habenaria peramoena Gray. Leon.

Salix petiolaris Sm. B₃.

An error in determination.

Alnus viridis DC. B₃.

Rumex sanguineus L. B₂, B₃.

Rumex maritimus L. *Rumex persicarioides* L. B₁, B₂.

Polygonum maritimum L. B₂.

Chenopodium Bonus-Henricus L. B₂, B₃.

An error in determination. Plant was *Atriplex patula*,
var. *hastata*.

Stellaria pubera Michx. Leon.

Cerastium viscosum L. Berz., C. & S., B₁, B₂, B₃, R.

Holosteum umbellatum L. Leon.

Silene nivea Otth. B₂, B₃.

Talinum teretifolium Pursh. Berz., B₁, B₂, B₃.

Specimen extant, but not certainly from Connecticut.

Ranunculus Flammula L. Br.

Thalictrum clavatum DC. Leon.

Berberis canadensis Pursh. B₂.

An error in determination. Plant was *Berberis vul-*
garis.

Crataegus tomentosa L. Berz., Leon., B₁, B₃.

Geum macrophyllum Willd. B₂, B₃.

Probably *Geum strictum*.

Rubus invisus Bailey. B. & A.

An error in determination. Plant was a form of *Rubus*
villosus.

Baptisia australis R. Br. Leon.

Trifolium medium L. Leon.

Desmodium strictum DC. B₃.

Clitoria mariana L. Leon.

Euphorbia glyptosperma Engelm. Ba, B₃.

Euphorbia dentata Michx. Br., Leon.

Vitis indivisa Willd. *Cissus Ampelopsis* Pers. **Leon.**

Vitis bipinnata Torr. & Gray. *Cissus arborea* (L.) Des Moulins. **Leon.**

Vitis cordifolia Michx. **Berz., Leon., B1, B2, B3, R.**

An error in determination. Plant was *Vitis vulpina*.

Helianthemum corymbosum Michx. **Leon.**

Viola striata Ait. **B1, B2, B3.**

Specimens extant, but not certainly from Connecticut.

Viola canina L. **Leon.**

Probably carelessly written for *Viola canina*, var. *sylvestris* of Gray's Manual ed. 5 (= *Viola conspersa*).

Opuntia Rafinesquii Engelm. **Berz., B1, B2, B3.**

Epilobium Hornemanni Reichenb. **B2.**

An error in determination. Plant was probably *Epilobium adenocaulon*.

Hippuris vulgaris L. **Berz., B1, B2, B3.**

Bupleurum rotundifolium L. **Berz., B1, B2, B3.**

Probably correct, but no specimen has been seen.

Thaspium aureum Nutt. **Br. (as Smyrneum), C & S., Leon., B1, B2.**

Probably *Zizia aurea*.

Thaspium trifoliatum Gray. **Berz., B1, B2.**

Probably *Zizia aurea*.

Thaspium barbinode Nutt. **C. & S.**

An error in determination.

Azalea arborescens Pursh. *Rhododendron arborescens* (Pursh) Torr. **Leon.**

Vaccinium arboreum Marsh. **C. & S.**

An error in determination.

Vaccinium corymbosum Ait., var. *pallidum* Gray. **Leon.**

Samolus Valerandi L. **B2, B3, R.**

Probably *Samolus floribundus*.

Gentiana Amarella L. **B2, B3.**

Probably *Gentiana quinquefolia*.

Gentiana Saponaria L. Br., B2.

Probably *Gentiana Andrewsii*.

Apocynum cannabinum L., var. *hypericifolium* Gray. Ba.

Periploca graeca L. Leon.

Perhaps correct, but no specimen has been seen.

Asclepiodora viridis Gray. B2.

Probably meant for *Acerates viridiflora*.

Asclepias paupercula Michx. *Asclepias lanceolata* Walt.
Leon.

Asclepias ovalifolia Decsne. Leon.

Asclepias parviflora Pursh. *Asclepias perennis* Walt. Leon.

Cuscuta tenuiflora Engelm. *Cuscuta Cephalanthi* Engelm.
Leon.

Ajuga reptans L. Berz., B1, B2, B3, B. & A.

An error in determination. The plant was *Ajuga gen-
eensis*.

Isanthus caeruleus Michx. *Isanthus brachiatus* (L.) BSP.
Br., B2, B3.

Scutellaria saxatilis Riddell. Leon.

Lamium album L. Berz., B1, B2, B3, B. & A.

Probably wrong determination. In two cases the plant
is known to have been a white-flowered form of *Lamium
maculatum*.

Stachys palustris L., var. *cordata* Gray. *Stachys cordata* Rid-
dell. Berz., B1, B2, B3.

Probably a form of *Stachys tenuifolia*, var. *aspera*.

Monarda punctata L. Leon.

Satureja hortensis L. Berz., B1, B2, B3.

Pycnanthemum aristatum Michx. Br.

Mentha rotundifolia L. B1, B2, B3.

Physalis pubescens L. Leon., B1, B2.

Linaria genistifolia Mill. C. & S.

Antirrhinum majus L. B3.

Mimulus Jamesii Torr. *Mimulus glabratus* HBK., var. *Jamesii* (Torr. & Gray) Gray. Ba.

An error in determination. Probably *Minulus Langsdorffii*.

Micranthemum Nuttallii Gray. *Micranthemum micranthemoides* (Nutt.) Wettst. B1, B2, B3.

Veronica Anagallis L. *Veronica Anagallis-aquatica* L. B2.
Probably *Veronica americana*.

Veronica Beccabunga L. Br.

Veronica agrestis L. C. & S.

Gerardia linifolia Nutt. Leon.

Utricularia striata LeConte. *Utricularia fibrosa* Walt. B1.

Lonicera Caprifolium L. Leon., B1, B2, B3.

Valeriana edulis Nutt. B1, B2, B3.

Campanula americana L. C. & S., Leon.

C. & S. report later corrected by them.

Liatris squarrosa Willd. B2, B3.

An error in determination. Plant was *Liatris scariosa*.

Liatris cylindracea Michx. B2, B3.

Chrysopsis mariana Nutt. B3.

Specimens extant, but not certainly from Connecticut.

Solidago stricta Ait. Leon.

Aster concolor L. B1, B2, B3.

Aster sagittifolius L. B2, B3.

Aster salicifolius Willd. B2, B3.

An error in determination.

Diplopappus amygdalinus Torr. & Gray. *Aster umbellatus* Mill., var. *latifolius* Gray. Leon.

Helianthus angustifolius L. B2, B3.

Helianthus doronicoides Lam. B1, B2, B3.

Coreopsis rosea Nutt. B3.

In B3 occurs also the combination *Helianthus scabra* (sic),

without author citation, and in **Leon.** the combinations *Saponaria inflata*, *Ampelopsis trifolia* and *Centaurea arvense* (sic). Of these the first two are probably errors for *Heliopsis scabra* and *Silene inflata* respectively. The others are presumably mistakes of the same sort, but it is not apparent for what they were intended.

According to Britton's Manual, 3d ed., *Scleria reticularis* Michx., var. *pubescens* Britton, occurs in Connecticut; and, on the strength of presumably reliable records, Gray's Manual, 7th ed., credits *Setaria imberbis* R. & S. to the state. The committee, however, have seen no specimens of these plants from Connecticut, and they are therefore omitted from the present Catalogue.

FUGITIVE SPECIES.

The species named in the following lists of fugitives are known to have occurred spontaneously in Connecticut, thus requiring mention in the Catalogue. For convenience of reference they are given in their proper place under the families to which they belong. They are not, however, to be regarded as properly forming a part of our uncultivated flora, and in making up the tables of statistics that follow they are left out of account entirely.

These fugitives may be separated into groups as follows:

GROUP I.

Species of which neither seed nor plant is ordinarily hardy in this climate and which can therefore continue but for a single season; mostly plants of dumping grounds.

Zea Mays L.

Eichhornia crassipes (Mart.) Solms.

Cicer arietinum L.

Vicia Faba L.

Pisum sativum L.

Pisum sativum L., var. *arvense* (L.) Poir.

Phaseolus vulgaris L.

Phaseolus vulgaris L., var. *nanus* (L.) Taubert.

Ricinus communis L.

Abutilon pictum (Gill.) Walp.

Hibiscus esculentus L.

GROUP 2.

Annual or biennial species cultivated either for use or ornament, that persist for a year or two in the locality where cultivated or where the seeds may be accidentally scattered; perennials, often grown for ornament, that rarely escape and maintain themselves for a few years and later disappear; and species that appear spontaneously but remain only a year or two.

Polypogon monspeliensis (L.) Desf.

Avena sativa L.

Cynodon Dactylon (L.) Kuntze.

Secale cereale L.

Triticum sativum Lam.

Hordeum vulgare L.

Cyperus fuscus L.

Juncus brachycarpus Engelm.

Sisyrinchium albidum Raf.

Fagopyrum esculentum Moench.

Beta vulgaris L.

Portulaca grandiflora Hook.

Papaver Rhoeas L.

Argemone alba Lestib.

Argemone mexicana L.

Lobularia maritima (L.) Desv.

Lepidium sativum L.

Raphanus sativus L.

Brassica Napus L.

Brassica Rapa L.

Brassica oleracea L.

Lunaria annua L.

Cleome spinosa L.

Reseda alba L.

Cytisus scoparius (L.) Link.

Trifolium incarnatum L.

Glycyrrhiza lepidota (Nutt.) Pursh.

Geranium dissectum L.

Anethum graveolens L.

Lysimachia vulgaris L.
Ipomoea coccinea L.
Verbena officinalis L.
Salvia pratensis L.
Salvia splendens Ker.
Capsicum annuum L.
Solanum tuberosum L.
Datura meteloides DC.
Nicotiana rustica L.
Nicotiana Tabacum L.
Linaria Elatine (L.) Mill.
Pentstemon grandiflorus Nutt.
Citrullus vulgaris Schrad.
Cucumis Melo L.
Cucumis sativus L.
Cucurbita maxima Duchesne.
Cucurbita moschata Duchesne.
Cucurbita Pepo L.
Cucurbita Pepo L., var. *condensa* Bailey.
Anthemis nobilis L.
Artemisia Abrotanum L.
Calendula officinalis L.
Cirsium altissimum (L.) Spreng.
Leontodon hastilis L.
Lactuca sativa L.
Crepis taraxacifolia Thuill.
Crepis rigida W. & K.

GROUP 3.

Species that are cultivated and inclined to escape, and species that appear spontaneously, the latter mostly brought in with hay or grain, with grass or clover seed, in mill supplies and by railroads; that are of so recent introduction or have been so little observed that it is not yet known whether they will persist.

The line drawn between this group and a number of species regarded as adventive is of necessity somewhat arbitrary, and no doubt further observation will show that some of the species listed here have become a part of our uncultivated flora. It is

also possible that a species now considered adventive and well established may later disappear.

Sorghum halepense (L.) Pers.
Echinochloa frumentacea (Roxb.) Link.
Bromus squarrosus L.
Agropyron tenerum Vasey.
Elymus brachystachys Scribn. & Ball.
Salix incana Schrank.
Corylus heterophylla Fisch.
Cycloloma atriplicifolium (Spreng.) Coulter.
Chenopodium capitatum (L.) Aschers.
Atriplex tatarica L.
Acnida tuberculata Moq.
Acnida tuberculata Moq., var. *prostrata* (U. & B.) Robinson.
Mirabilis Jalapa L.
Anychia polygonoides Raf.
Tetragonia expansa Murr.
Gypsophila muralis L.
Gypsophila elegans Bieb.
Nigella sativa L.
Nigella damascena L.
Eschscholtzia californica Cham.
Lepidium ruderales L.
Lepidium Draba L.
Iberis amara L.
Camelina sativa (L.) Crantz.
Camelina microcarpa Andrz.
Neslia paniculata (L.) Desf.
Brassica japonica Siebold.
Diploaxis muralis (L.) DC.
Conringia orientalis (L.) Dumort.
Alliaria officinalis Andrz.
Sisymbrium canescens Nutt.
Sisymbrium Sophia L.
Iodanthus pinnatifidus (Michx.) Steud.
Reseda Luteola L.
Reseda odorata L.
Philadelphus inodorus L.
Deutzia scabra Thunb.

Ribes nigrum L.
Filipendula hexapetala Gilib.
Sanguisorba minor Scop.
Cercis canadensis L.
Medicago arabica Huds.
Medicago hispida Gaertn.
Hosackia americana (Nutt.) Piper.
Vicia hirsuta (L.) S. F. Gray.
Lens esculenta Moench.
Geranium pratense L.
Geranium molle L.
Erodium cicutarium (L.) L'Hér.
Erodium moschatum (L.) L'Hér.
Cardiospermum Halicacabum L.
Sida spinosa L.
Oenothera laciniata Hill.
Eryngium planum L.
Coriandrum sativum L.
Forsythia viridissima Lindl.
Sabatia campestris Nutt.
Ellisia Nyctelea L.
Phacelia viscida (Benth.) Torr.
Phacelia Purshii Buckley.
Amsinckia lycopsoides Lehm.
Borago officinalis L.
Verbena canadensis (L.) Britton.
Sideritis montana L.
Agastache Foeniculum (Pursh) Kuntze.
Galeopsis Ladanum L.
Physalis angulata L.
Hyoscyamus niger L.
Datura Metel L.
Verbascum phlomoides L.
Verbascum Pseudo-Lychnitis Schur.
Linaria minor (L.) Desf.
Antirrhinum Orontium L.
Digitalis purpurea L.
Veronica hederaefolia L.
Martynia louisiana Mill.

Galium Wirtgenii F. Schultz.
Valerianella Locusta (L.) Bectke.
Knautia arvensis (L.) T. Coulter.
Momordica Charantia L.
Campanula patula L.
Campanula carpatica Jacq.
Jasione montana L.
Grindelia squarrosa (Pursh) Dunal.
Ambrosia bidendata Michx.
Lepachys pinnata (Vent.) Torr. & Gray.
Helianthus debilis Nutt.
Helianthus debilis Nutt., var. *cucumerifolius* (Torr. & Gray) Gray.
Helianthus Maximiliani Schrad.
Bidens leucantha Willd.
Bidens aristosa (Michx.) Britton.
Matricaria inodora L.
Matricaria Chamomilla L.
Matricaria suaveolens (Pursh) Buchenau.
Artemisia campestris L., var. *pubescens* (Jord. & Fourr.) Rouy & Foucaud.
Artemisia Dracunculus L.
Artemisia annua L.
Artemisia frigida Willd.
Petasites vulgaris Hill.
Carduus acanthoides L.
Centaurea nigra L., var. *radiata* DC.
Picris echioides L.

Total number of fugitive species and varieties listed 169.

STATISTICAL SUMMARIES.

TABULAR LIST OF FAMILIES.

Families.	Genera.		Species.		Varieties and Named Forms.	
	Native.	Introd.	Native.	Introd.	Native.	Introd.
PTERIDOPHYTA						
Polypodiaceae	16	...	37	...	10	...
Schizaeaceae	1	...	1	...	...	...
Osmundaceae	1	...	3	...	3	...

Families.	Genera.		Species.		Varieties and Named Forms.	
	Native.	Introd.	Native.	Introd.	Native.	Introd.
Ophioglossaceae	2	...	7	...	2	...
Marsileaceae	1	...	1	...	...	...
Equisetaceae	1	...	8	...	1	...
Lycopodiaceae	1	...	8	...	3	...
Selaginellaceae	1	...	2	...	...	...
Isoëtaceae	1	...	7	...	3	...

SPERMATOPHYTA

GYMNOSPERMAE

Taxaceae	1	...	1	...	...	...
Pinaceae	8	...	12	4	1	...

ANGIOSPERMAE

MONOCOTYLEDONEAE

Typhaceae	1	...	2	...	...	...
Sparganiaceae	1	...	7	...	2	...
Najadaceae	5	...	33	...	10	...
Juncaginaceae	2	...	2	...	...	...
Alismaceae	3	...	9	...	7	...
Hydrocharitaceae	2	...	2	...	...	...
Gramineae	47	10	146	41	13	3
Cyperaceae	12	...	174	...	72	...
Araceae	6	...	7	...	...	...
Lemnaceae	3	...	5	...	...	...
Eriocaulaceae	1	...	1	...	...	...
Xyridaceae	1	...	4	...	...	...
Commelinaceae	1	1	1	1	...	...
Pontederiaceae	2	...	3	...	1	...
Juncaceae	2	...	20	...	6	...
Liliaceae	17	7	30	12	...	...
Haemodoraceae	1	...	1	...	...	...
Dioscoreaceae	1	...	1	...	...	...
Amaryllidaceae	1	2	1	3	...	...
Iridaceae	2	1	6	4	...	...
Orchidaceae	12	...	40	...	2	...

DICOTYLEDONEAE

Piperaceae	1	...	1	...	...	...
Salicaceae	2	...	18	8	5	1
Myricaceae	1	...	3	...	...	...
Juglandaceae	2	...	7	...	...	...
Betulaceae	5	...	11	...	1	...
Fagaceae	3	...	14	...	...	...
Urticaceae	9	3	11	9	2	...
Santalaceae	1	...	1	...	...	...
Loranthaceae	1	...	1	...	...	...

Families.	Genera.		Species.		Varieties and Named Forms.	
	Native.	Introd.	Native.	Introd.	Native.	Introd.
Aristolochiaceae	2	...	2	...	2	...
Polygonaceae	3	...	22	14	8	...
Chenopodiaceae	5	1	12	7	2	3
Amaranthaceae	2	...	2	6	...	1
Phytolaccaceae	1	...	1	...	...	...
Nyctaginaceae	...	1	...	3	...	...
Illecebraceae	1	1	1	1	...	...
Aizoaceae	...	1	...	1	...	...
Caryophyllaceae	6	5	11	24	1	...
Portulacaceae	1	1	2	1	...	...
Ceratophyllaceae	1	...	1	...	1	...
Nymphaeaceae	4	...	7	...	1	...
Ranunculaceae	13	1	37	5	5	1
Magnoliaceae	1	...	1	...	...	...
Menispermaceae	1	...	1	...	...	...
Berberidaceae	1	2	1	2	...	...
Lauraceae	2	...	2	...	...	...
Papaveraceae	1	2	1	3	...	...
Fumariaceae	3	1	4	1	...	...
Cruciferae	9	9	22	25	1	1
Capparidaceae	1	...	1	1	...	...
Resedaceae	...	1	...	1	...	...
Sarraceniaceae	1	...	1	...	...	...
Droseraceae	1	...	2	...	...	...
Podostemaceae	1	...	1	...	...	...
Crassulaceae	2	2	3	3	...	...
Saxifragaceae	7	1	15	6	...	...
Hamamelidaceae	2	...	2	...	...	...
Platanaceae	1	...	1	...	...	...
Rosaceae	15	5	79	35	21	3
Leguminosae	13	8	38	23	1	1
Linaceae	1	...	4	1	...	...
Oxalidaceae	1	...	5	1	...	...
Geraniaceae	1	...	3	1	...	...
Rutaceae	1	1	1	1	...	...
Simarubaceae	...	1	...	1	...	...
Polygalaceae	1	...	7	...	1	...
Euphorbiaceae	3	...	8	6	...	...
Callitrichaceae	1	...	3	...	...	...
Limnanthaceae	1	...	1	...	...	...
Anacardiaceae	1	...	6	...	1	...
Aquifoliaceae	2	...	5	...	2	...
Celastraceae	1	1	1	3	...	...
Staphyleaceae	1	...	1	...	...	...
Aceraceae	1	...	6	2	...	1

Families.	Genera.		Species.		Varieties and Named Forms.	
	Native.	Introd.	Native.	Introd.	Native.	Introd.
Sapindaceae	...	I	...	I	...	...
Balsaminaceae	I	...	2	...	...	...
Rhamnaceae	2	...	2	I	...	...
Vitaceae	2	...	6	...	I	...
Tiliaceae	I	...	2	I	...	...
Malvaceae	I	3	I	10	...	...
Hypericaceae	I	...	II	2	...	...
Elatinaceae	I	...	I	...	...	...
Cistaceae	3	...	9	...	I	...
Violaceae	I	...	25	3	I	...
Cactaceae	I	...	I	...	...	...
Thymelaeaceae	I	...	I	...	...	...
Lythraceae	4	...	4	I	...	...
Melastomaceae	I	...	I	...	...	...
Onagraceae	5	...	2I	I	3	...
Haloragidaceae	2	...	6	...	2	...
Araliaceae	2	I	5	2	...	...
Umbelliferae	15	10	23	10	I	...
Cornaceae	2	...	8	...	...	...
Ericaceae	18	...	39	...	8	...
Plumbaginaceae	I	...	I	...	...	...
Primulaceae	5	I	9	3	...	I
Ebenaceae	I	...	I	...	...	...
Oleaceae	I	2	3	3	I	...
Gentianaceae	5	...	9	...	...	...
Apocynaceae	I	I	3	I	I	...
Asclepiadaceae	2	I	10	I	2	...
Convolvulaceae	3	...	7	5	I	...
Polemoniaceae	2	...	2	3	...	I
Hydrophyllaceae	I	...	I	...	...	...
Boraginaceae	4	4	6	10	...	...
Verbenaceae	I	...	3	2	...	...
Labiatae	15	14	34	31	4	I
Solanaceae	2	6	5	12	2	...
Scrophulariaceae	15	I	32	12	I	2
Lentibulariaceae	I	...	10	...	...	...
Orobanchaceae	3	...	3	...	...	...
Bignoniaceae	...	2	...	2	...	...
Phrymaceae	I	...	I	...	...	...
Plantaginaceae	I	...	5	2	I	...
Rubiaceae	5	I	17	1	I	...
Caprifoliaceae	6	I	20	6	2	...
Valerianaceae	I	I	I	I	...	...
Dipsacaceae	...	I	...	I	...	...
Cucurbitaceae	2	...	2	...	...	...

Families.	Genera.		Species.		Varieties and Named Forms.	
	Native.	Introd.	Native.	Introd.	Native.	Introd.
Campanulaceae	2	...	3	1	...	1
Lobeliaceae	1	...	6	...	...	...
Compositae	34	22	146	69	33	10

SUMMARY BY DIVISIONS AND CLASSES.

Pteridophyta	25	...	74	...	22	...
Spermatophyta	454	142	1407	461	233	31
Gymnospermae	9	...	13	4	1	...
Angiospermae	445	142	1394	457	232	31
Monocotyledoneae	123	21	495	61	113	3
Dicotyledoneae	322	121	899	396	119	28

SUMMARY BY MINOR GROUPS.

Families	.	.	.	.	134	
Genera						
native	.	.	.	479		
introduced	.	.	.	142		
total	.	.	.	.	621	
Species						
native	.	.	.	1481		
introduced	.	.	.	461		
total	.	.	.	.	1942	
Varieties and Named Forms						
native	.	.	.	255		
introduced	.	.	.	31		
total	.	.	.	.	286	

Whole number of different plants (species, varieties and named forms), not including those listed as fugitives, 2,228.

ORIGIN OF INTRODUCED SPECIES.

	Temperate North America.	Tropical America.	Europe.	Eurasia.	Asia.	Unknown.
Pinaceae	1	...	3	...	...	...
Gramineae	...	...	42	1	1	...
Commelinaceae	1	...	...	...	...	...
Liliaceae	1	...	8	...	3	...
Amaryllidaceae	...	...	3	...	...	...
Iridaceae	...	...	2	...	2	...
Salicaceae	...	...	8	...	1	...
Urticaceae	2	...	3	1	3	...
Polygonaceae	3	...	7	1	3	...
Chenopodiaceae	...	2	7	...	1	...
Amaranthaceae	1	5	...	...	1	...
Nyctaginaceae	3	...	...	...	...	...
Illecebraceae	...	...	1	...	...	...

	Temperate North America.	Tropical America.	Europe.	Eurasia.	Asia.	Unknown.
Aizoaceae	I	...	...	...	...	...
Caryophyllaceae	...	...	21	2	I	...
Portulacaceae	...	...	I	...	...	...
Ranunculaceae	...	...	6	...	...	...
Berberidaceae	I	...	I	...	...	...
Papaveraceae	...	...	3	...	...	...
Fumariaceae	...	...	I	...	...	...
Cruciferae	...	...	24	I	I	...
Capparidaceae	I	...	...	...	...	...
Resedaceae	...	...	I	...	...	...
Crassulaceae	...	...	3	...	...	...
Saxifragaceae	3	...	3	...	...	...
Rosaceae	3	...	13	12	8	2
Leguminosae	5	...	16	3	...	...
Linaceae	...	...	...	...	...	I
Oxalidaceae	...	...	I	...	...	...
Geraniaceae	...	...	I	...	...	...
Rutaceae	I	...	...	...	...	...
Simarubaceae	...	...	...	...	I	...
Euphorbiaceae	2	...	4	...	...	...
Celastraceae	I	...	...	I	I	...
Aceraceae	I	...	I	I	...	...
Sapindaceae	...	...	...	...	I	...
Rhamnaceae	...	...	I	...	...	...
Tiliaceae	...	...	I	...	...	...
Malvaceae	...	...	8	...	2	...
Hypericaceae	I	...	I	...	...	...
Violaceae	...	...	3	...	...	...
Lythraceae	...	...	I	...	...	...
Onagraceae	I	...	...	...	...	...
Araliaceae	I	...	...	...	I	...
Umbelliferae	...	...	10	...	...	...
Primulaceae	...	...	3	I	...	...
Oleaceae	...	...	3	...	...	...
Apocynaceae	...	...	I	...	...	...
Asclepiadaceae	...	...	I	...	...	...
Convolvulaceae	...	2	2	...	I	...
Polemoniaceae	4	...	...	...	...	...
Boraginaceae	...	...	10	...	...	...
Verbenaceae	2	...	...	...	...	...
Labiatae	6	...	25	...	I	...
Solanaceae	2	6	2	...	2	...
Scrophulariaceae	4	...	10	...	...	...
Bignoniaceae	2	...	...	...	...	...
Plantaginaceae	I	...	I	...	...	...

	Temperature.					
	North America.	Tropical America.	Europe.	Eurasia.	Asia.	Unknown.
Rubiaceae	...	...	4	...	...	...
Caprifoliaceae	2	...	1	...	3	...
Valerianaceae	...	...	1	...	...	...
Dipsacaceae	...	...	1	...	...	...
Campanulaceae	...	...	1	1	...	...
Compositae	20	3	53	...	3	...

SPECIES, VARIETIES AND NAMED FORMS IN SOME OF THE PRINCIPAL
GENERA.

	Species.		Varieties and Named Forms.		Total.
	Native.	Introd.	Native.	Introd.	
Potamogeton	27	...	10	...	37
Panicum	40	1	2	...	43
Bromus	5	8	...	...	13
Cyperus	12	...	4	...	16
Eleocharis	14	...	2	...	16
Scirpus	23	...	9	...	32
Carex	111	...	53	...	164
Juncus	18	...	6	...	24
Habenaria	13	...	...	...	13
Salix	13	5	5	...	23
Quercus	12	...	...	...	12
Rumex	3	7	...	...	10
Polygonum	18	7	8	...	33
Chenopodium	4	6	...	2	12
Ranunculus	16	2	2	1	21
Ribes	6	4	...	...	10
Crataegus	18	1	11	...	30
Potentilla	9	2	2	...	13
Rosa	5	7	...	1	13
Rubus	16	3	4	...	23
Prunus	9	6	...	...	15
Desmodium	13	...	...	...	13
Euphorbia	5	6	...	...	11
Hypericum	11	2	...	...	13
Viola	25	3	1	...	29
Mentha	1	9	1	...	11
Veronica	6	5	...	...	11
Galium	11	3	1	...	15
Solidago	27	...	4	...	31
Aster	32	1	19	...	52
Helianthus	6	5	1	...	12
Bidens	10	...	1	...	11

BOTANICAL AUTHORS CITED.

The following list is not entirely complete, but is intended to summarize such information as the Committee were able to gather in the time, and with the resources, at their disposal.

A. A. Eaton. Alvah Augustus Eaton, 1865-1908. United States. Student particularly of the *Isoëtaceae* and *Equisetaceae* of North America.

A. Br. See Braun.

Adans. Michel Adanson, 1727-1806. Author of a work on the families of plants.

A. DC. Alphonse Louis Pierre Pyramus De Candolle, 1806-1893. Switzerland. Editor of the *Prodromus* after his father's death, and contributor to it; author of works on botanical geography, etc.

Ait. William Aiton, 1731-1793. England. Author of *Hortus Kewensis*.

Ait. f. William Townsend Aiton, 1766-1849. England. Director of the Royal Gardens at Kew.

A. J. Eames. Arthur Johnson Eames. United States.

A. J. Grout. Abel Joel Grout. United States. Student of North American mosses.

All. Carlo Allioni, 1725-1804. Italy. Prof. of Botany at Turin.

Ames. Oakes Ames. United States. Director of the Botanic Garden, Harvard University. Student of *Orchidaceae*.

Anders. Nils Johan Andersson, 1821-1880. Sweden. Prof. of Botany at Stockholm. Author of a monograph of the genus *Salix*, etc.

Andr. Henry C. Andrews. England. Botanical artist and engraver; conducted the Botanists' Repository, 1799-1811.

Andrz. Anton Lukianowicz Andrzejowski, 1784-1868. Russia. Prof. of Botany at Wilna.

A. Nelson. Aven Nelson. United States. Prof. of Botany at the State University of Wyoming. Author of articles on Rocky Mountain botany.

Ångstr. Johan Angstroem. Sweden. Author of a work on mosses of Scandinavia, published 1842.

Ard. Pietro Arduino, 1728-1805. Italy.

Arn. George Arnold Walker Arnott, 1799-1868. Scotland.

Aschers., Ascherson. Paul Friedrich August Ascherson. Germany. Prof. of Botany at the University of Berlin.

- Ashe.** William Willard Ashe. United States. Botanist, North Carolina Geological Survey.
- Aust.** Coe Finch Austin, 1831-1880. United States. Curator of the Herbarium at Columbia University. Student especially of North American mosses.
- Avé-Lallemant.** See Lall.
- Bab.** Charles Cardale Babington. England. Prof. of Botany at Cambridge University. Author of a manual of British botany, published 1843, etc.
- Bailey.** Liberty Hyde Bailey. United States. Director of the College of Agriculture at Cornell University. Author of studies of the genus *Carex* and of many works relating to horticulture.
- Baker.** John Gilbert Baker. England. Formerly Keeper of the Herbarium of the Royal Gardens, Kew.
- Balbis.** Giovanni Battista Balbis, 1765-1831. Italy. Prof. at Turin.
- Ball.** Carleton Roy Ball. United States. Agronomist in the Department of Agriculture.
- Banks.** Joseph Banks, 1743-1820. England. President of the Royal Society. Explorer, and generous patron of science.
- Barneoud.** F. Marius Barneoud. France. Author of a monograph of the *Plantaginaceae*, published 1845.
- Barnh.** John Hendley Barnhart. United States. Librarian, New York Botanical Garden.
- Barratt.** Joseph Barratt, 1707-1882. United States. Student chiefly of willows and sedges.
- Bart., Barton.** William Paul Crillon Barton, 1787-1856. United States. Prof. at the University of Pennsylvania. Author of *Compendium Florae Philadelphicae*, and of a flora of North America.
- Bartlett.** Harley Harris Bartlett. United States.
- B. D. Greene.** Benjamin D. Greene, 1793-1863. United States.
- Beauv.** Ambroise Marie François Joseph Palisot de Beauvois, 1755-1820. France. Author of a great work on grasses.
- Beck.** Lewis Caleb Beck, 1798-1853. United States. Prof. at various colleges. Author of *Botany of the Northern and Middle States*.
- Beeby.** William Hadden Beeby. England.
- Benn.** Arthur Bennett. England.

- Benth.** George Bentham, 1800-1884. England. Author or joint author of many important botanical works.
- Berchtold.** Friedrich, Graf von Berchtold, b. 1780. Bohemia.
- Bergius.** Peter Jonas Bergius, 1730-1790. Sweden.
- Bernh.** Johann Jacob Bernhardt, 1774-1850. Germany. Prof. of Botany at Erfurt.
- Bess.** Wilhelm S. J. G. von Besser, 1784-1842. Austria.
- Betcke.** Ernst Friedrich Betcke. Germany. Author of a work on the genus *Valerianella*, published 1826.
- Beyrich.** Karl Beyrich, d. 1834. Germany.
- Bicknell.** Eugene Pintard Bicknell. United States. Author of many articles on North American plants.
- Bieb.** Friedrich August Marschall von Bieberstein, 1768-1826. Germany and Russia. Author of works on the flora of Southern Russia.
- Bigel.** Jacob Bigelow, 1787-1879. United States. Author of *Florula Bostoniensis*, and of a *Medical Botany*.
- Bisch., Bischoff.** Gottlieb Wilhelm Bischoff, 1797-1854. Germany. Prof. of Botany at Heidelberg.
- Bissell.** Charles Humphrey Bissell. United States.
- Blanchard.** William Henry Blanchard. United States.
- Blume.** Karl Ludwig Blume, 1796-1862. Holland. Director of the Royal Herbarium at Leyden. Author of a great flora of Java.
- Blytt.** Matthias Numsen Blytt, 1789-1862. Norway. Prof. of Botany at Christiania. Author of a flora of Norway.
- Boeckl.** Johann Otto Boeckeler, 1803-1899. Germany. Writer on *Cyperaceae*.
- Boehm.** Georg Rudolf Boehmer, 1723-1803. Germany. Prof. at Wittenberg. (*Boehmeria* Jacq.)
- Boenn.** Clemens Maria Friedrich von Boenninghausen, 1785-1864. Germany.
- Boiss.** Edmond Boissier, 1810-1885. Switzerland. Author of a *Flora Orientalis*, various studies of the genus *Euphorbia*, etc.
- Bonpland.** See HBK.
- Boott.** Francis Boott, 1792-1863. United States and England. Author of a great work on the genus *Carex*. See also W. Boott.
- Borkh.** Moritz Balthasar Borkhausen, 1760-1806. Germany.
- Bosc.** Louis Augustin Guillaume Bosc, 1750-1828. France.
- Bosch.** Roelof Benjamin van den Bosch, 1810-1862. Holland.

- Braun.** Alexander Carl Heinrich Braun, 1805-1877. Germany. Professor at the University of Berlin. Writer on Cryptogams.
- Bray.** See U. & B.
- Briquet.** John Isaac Briquet. Switzerland. Director of the Geneva Botanic Garden.
- Britten.** James Britten. England. Senior Assistant, Department of Botany, British Museum. Editor, *Journal of Botany*.
- Britton.** Nathaniel Lord Britton. United States. Director, New York Botanical Garden. Author of *Illustrated Flora of the Northern States and Canada* (with Addison Brown), *Manual of the Flora of the Northern States and Canada*, and numerous botanical papers.
- Brown.** Addison Brown. United States. See also R. Br.
- Browne.** See P. Br.
- BSP.** Nathaniel Lord Britton, E. E. Sterns and Justus Poggenburg. Authors of a Preliminary Catalogue of the Plants of the Vicinity of New York.
- Buchenau.** Franz Georg Philipp Buchenau, 1831-1906. Germany.
- Buckley.** Samuel Botsford Buckley, 1809-1884. United States.
- Burgess.** Edward Sanford Burgess. United States. Prof. of Natural Science, Normal College, New York. Author of studies of the genus *Aster*.
- Burm. f.** Nickolaus Laurens Burmann, 1734-1793. Holland.
- Bush.** B. F. Bush. United States.
- Candolle.** See A. DC., DC.
- C. & S.** A. von Chamisso and D. F. L. von Schlechtendal. See Cham. and Schlecht.
- Carey.** John Carey, 1797-1880. England and United States. Lived and collected in the United States, 1830 to 1852; wrote on willows and sedges.
- Carr.** Élie Abel Carrière, 1818-1896. France. Editor of *Révue Horticole*; author of a monograph of *Coniferae*.
- Casp.** Robert Caspary, 1818-1887. Germany. Prof. of Botany at Königsberg. Wrote on water plants.
- Cass.** Alexandre Henri Gabriel, Comte de Cassini, 1781-1832. France.

- Cav.** Antonio José Cavanilles, 1745-1804. Spain. Prof. of Botany at Madrid.
- C. C. Gmel.** Carl Christian Gmelin, 1762-1837. Germany.
- Čelak.** Ladislav Čelakovsky, 1834-1902. Bohemia. Prof. of Botany at Prague.
- Chaix.** Dominique Chaix, 1731-1800. France.
- Cham.** Adalbert von Chamisso, 1781-1838. Germany. Poet and naturalist.
- Chapm.** Alvan Wentworth Chapman, 1809-1899. United States. Author of a standard flora of the Southern States.
- Chase.** (Mrs.) Agnes Chase. United States. Assistant in systematic agrostology, U. S. Department of Agriculture.
- Chatelain.** Jean Jacques Chatelain. Author of a work on the genus *Corallorrhiza*, published 1760.
- Clarke.** Charles Baron Clarke, 1832-1906. England. Student principally of the *Cyperaceae*.
- Clayt.** John Clayton, 1685-1773. Physician and collector in Virginia, and correspondent of Gronovius, whose *Flora Virginica* was based on Clayton's collections and notes. (*Claytonia* L.)
- Clute.** Willard Nelson Clute. United States. Student of North American ferns and fern-allies.
- Cosson.** Ernest Cosson, 1819-1889. France.
- Coulter.** John Merle Coulter. United States. Prof. of Botany at the University of Chicago. Author of a manual of Rocky Mountain Botany, botanical text-books, etc. See also T. Coulter.
- Courtois.** Richard Courtois, 1806-1835. Belgium. Prof. at Liège.
- Coville.** Frederick Vernon Coville. United States. Botanist, U. S. Department of Agriculture. Curator, U. S. National Herbarium. Author of many botanical papers.
- Crantz.** Heinrich Johann Nepomuk Crantz, 1722-1799. Austria. Prof. at Vienna.
- Curtis.** William Curtis, 1746-1799. England. Founder of Curtis's Botanical Magazine. See also M. A. Curtis.
- C. Wright.** Charles Wright, 1811-1886. United States. Made important collections in the southwestern U. S. and in Cuba.
- Cyrrill.** Domenico Cyrillo, 1730-1799. Italy. Prof. at Naples.
- Darby.** John Darby, 1804-1877. United States. Author of a Botany of the Southern States.

- Darl.** William Darlington, 1782-1863. United States. Author of *Flora Cestrica*, a local flora of the vicinity of West Chester, Penn.
- Davenp.** George Edward Davenport, 1833-1907. United States. Student of American ferns.
- DC.** Augustin Pyramus De Candolle, 1778-1841. France and Switzerland. Projector of the *Prodromus*, writer of its earlier volumes and of other important botanical work. See also A. DC.
- D. C. Eaton.** Daniel Cady Eaton, 1834-1895. United States. Prof. of Botany at Yale University. Author of *Ferns of North America*, etc.
- Dcne.** Joseph Decaisne, 1809-1882. France. Prof. at the Jardin des Plantes, Paris.
- D. Don.** David Don, 1800-1841. England. Prof. at King's College, London.
- De Candolle.** See A. DC., DC.
- Desf.** René Louiche Desfontaines, 1750-1833. France. Prof. at the Jardin des Plantes, Paris.
- Desr.** Desrousseaux.
- Desv.** Augustin Nicaise Desvaux, 1784-1856. France. Prof. of Botany at Angers.
- Dewey.** Chester Dewey, 1784-1867. United States. Prof. at Rochester University. Student of American *Carices*.
- Dicks.** James Dickson, 1738-1822. Scotland. (*Dicksonia* L'Her.)
- Dietr.** Friedrich Gottlieb Dietrich, 1768-1850. Germany. Director of the Botanic Garden at Eisenach.
- Don.** See D. Don, G. Don.
- Donn.** James Donn, 1758-1813. England. Author of *Hortus Cantabrigiensis*.
- Dougl.** David Douglas, 1799-1834. Scotland. Collected much in northwestern North America.
- Druce.** George Claridge Druce. England. Author of various works on the British flora.
- Drude.** Oskar Drude. Germany. Prof. at Dresden. Author of works on plant geography, etc.
- Duby.** Jean Étienne Duby, b. 1798. Switzerland. Author of studies in the *Primulaceae*.
- Duchesne.** Antoine Nicolas Duchesne, 1747-1827. France.
- Dudley.** William Russell Dudley. United States. Prof. of Botany at Leland Stanford, Jr., University.

- Dufr.** Pierre Dufresne, 1786-1836. France. Author of a work on the *Valerianaceae*.
- Dulac.** J. Dulac. France. Author of a Flora du Département des Hautes Pyrénées, 1867.
- Dumont.** Jules Sébastien César Dumont d'Urville, 1790-1842. France.
- Dumort.** Barthélemy Charles Dumortier, 1797-1878. Belgium.
- Dunal.** Michel Félix Dunal, 1789-1856. France. Prof. of Botany at Montpellier. Author of a monograph of *Solanum* and allied genera, etc.
- Dur.** Michel Charles Durieu de Maisonneuve, 1796-1878. France. Director of the Botanic Garden at Bordeaux.
- Durand.** Elias Durand, 1794-1873. United States. Collector of North American plants. See also Th. Durand.
- DuRoi.** Johann Philipp DuRoi, 1741-1785. Germany. Author of a work on the trees of North America.
- Eames.** Edwin Hubert Eames. United States. See also A. J. Eames.
- Eaton.** See A. A. Eaton, D. C. Eaton, H. H. Eaton.
- Ebermaier.** Karl Heinrich Ebermaier, 1802-1870. Germany.
- Eddy.** Caspar Wistar Eddy. United States. Author of a local flora, *Plantae Plandomenses*, published 1808.
- Eggleston.** Willard Webster Eggleston. United States. Collector; student of *Crataegus*.
- E. Hitchc.** Edward Hitchcock, 1793-1864. United States. Prof. at Amherst College. Author of a Catalogue of Plants in the Vicinity of Amherst College, etc.
- Ehrh.** Friedrich Ehrhart, 1742-1795. Germany.
- Ell.** Stephen Elliott, 1771-1830. United States. Author of Sketch of the Botany of South Carolina and Georgia.
- Ellis.** John Ellis, 1711-1776. England. (*Ellisia* L.)
- Endlicher.** Stephan Friedrich Ladislaus Endlicher, 1804-1849. Prof. at Vienna and Director of the Botanic Garden. Author of a *Genera Plantarum*.
- Engelm.** George Engelmann, 1809-1884. United States. Studied and monographed more or less completely several difficult genera of North American plants.
- E. S. Miller.** Elihu Sandford Miller. United States.
- Fabric.** Philipp Konrad Fabricius, 1714-1774. Germany. Prof. at Helmstadt.
- Farwell.** Oliver Atkins Farwell. United States.

- Fée.** Antoine Laurent Apollinaire Fée, 1789-1874. France. Prof. of Botany at Strassburg. Writer on ferns.
- Fenzl.** Eduard Fenzl, 1808-1879. Austria. Curator of the Botanical Museum at Vienna.
- Fernald.** Merritt Lyndon Fernald. United States. Assistant Prof. of Botany, Harvard University. Author of many papers and monographs dealing with the North American and Mexican floras.
- Fisch.** Friedrich Ernst Ludwig von Fischer, 1782-1854. Russia. Director of the Botanic Garden at St. Petersburg.
- Flügge.** Johann Flügge, 1775-1816. Germany.
- Focke.** Wilhelm Olbers Focke. Germany.
- Forbes.** John Forbes, 1773-1861. England. Gardener at Woburn Abbey. Author of *Hortus Woburnensis*.
- Forskål.** Pehr Forskål, 1736-1768. Sweden. Collected in Egypt and Arabia.
- Foucaud.** Julien Foucaud, 1847-1904. France.
- Fourn.** Pierre Nicolas Eugène Fournier, 1834-1884. France. Author of works on Mexican ferns and grasses.
- Fourr.** Jules Fourreau. France.
- Fries.** Elias Magnus Fries, 1794-1878. Sweden. Prof. at Upsala. Author of many works on systematic botany, chiefly of the lower Cryptogams.
- Fritsch.** Karl Fritsch. Austria. Prof. of Botany at the University of Graz.
- Froel.** Joseph Aloys Froelich, 1766-1841. Germany. Author of a monograph of the genus *Gentiana*, etc.
- F. Schultz.** Friedrich Wilhelm Schultz, b. 1804. Germany.
- Gaertn.** Joseph Gaertner, 1732-1791. Germany.
- Garcke.** Friedrich August Garcke, 1819-1904. Germany. Prof. at Berlin. Author of a standard manual of the German flora.
- Gaud.** Charles Gaudichaud-Beaupré, 1789-1864. France.
- Gaudin.** Jean François Gottlieb Philippe Gaudin, 1766-1833. Switzerland. Author of a *Flora Helvetica*.
- Gay.** See J. Gay.
- G. Don.** George Don, 1798-1856. England.
- Germain.** Ernest Germain de Saint-Pierre. France.
- Gilbert.** Benjamin Davis Gilbert, 1835-1907. United States. Student of American ferns.
- Gilib.** Jean Emmanuel Gilibert, 1741-1814. Prof. at Wilna, Russia, and at Lyons, France.

- Gill.** John Gillies, d. before 1837. Lived and collected in South America.
- Gloxin.** Benjamin Peter Gloxin. France. Published *Observationes Botanicae*, 1785.
- Gmel.** Samuel Gottlieb Gmelin, 1743-1774. Russia. See also C. C. Gmel., J. F. Gmel.
- Godr.** Dominique Alexandre Godron, 1807-1880. France. Prof. at Nancy. Joint author of a flora of France.
- Goldie.** John Goldie, 1793-1886. Scotland and Canada. Traveled and collected in eastern North America in the early 19th century.
- Good.** Samuel Goodenough, 1743-1827. England.
- Grab.** Heinrich Emmanuel Grabowski, 1792-1842. Germany.
- Graebner.** Paul Graebner. Germany. Curator of the Royal Botanic Garden at Dahlem.
- Graves.** Charles Burr Graves. United States.
- Gray.** Asa Gray, 1810-1888. United States. The most distinguished of American botanists; for many years Prof. of Natural History at Harvard University. Author of the well-known *Manual of the Botany of the Northeastern States*, *Synoptical Flora of North America*, etc. See also S. F. Gray.
- Greene.** Edward Lee Greene. United States. Former Prof. of Botany at the University of California and at the Catholic University of America, Georgetown. Author of many articles and monographs dealing with North American plants. See also B. D. Greene.
- Greenman.** Jesse More Greenman. United States. Field Museum of Natural History, Chicago.
- Gren.** Charles Grenier, 1808-1875. France. Prof. at Besançon. Joint author (with Godron) of a flora of France.
- Grev.** Robert Kaye Greville, 1794-1866. Scotland. Prof. at Edinburgh. Author or joint author of several works, mostly on cryptogamic plants.
- Griseb.** Heinrich Rudolf August Grisebach, 1814-1879. Germany. Prof. of Botany at Göttingen. Author of a monograph of the *Gentianaceae*, *Flora of the British West Indies*, etc.
- Gronov.** Jan Fredrik Gronovius, 1690-1762. Holland. Author of a *Flora Virginica*; a distinguished botanist in his time.
- Grout.** See A. J. Grout.

- G. S. Miller.** Gerrit Smith Miller, Jr. United States. Assistant Curator, U. S. National Museum.
- Guss.** Giovanni Gussone, 1787-1866. Italy. Prof. of Botany at Naples.
- Haberer.** Joseph V. Haberer. United States.
- Hack.** Eduard Hackel. Austria. Author of works on grasses.
- Haller f.** Gottlieb Emmanuel von Haller, 1730-1786. Switzerland.
- Harper.** Roland MacMillan Harper. United States.
- Haussk.** Carl Haussknecht.
- Haw.** Adrian Hardy Haworth, 1772-1833. England. Author of *Synopsis Plantarum Succulentarum*.
- Hayne.** Friedrich Gottlieb Hayne, 1763-1832. Germany. Prof. at Berlin.
- HBK.** Friedrich Wilhelm Heinrich Alexander von Humboldt, 1796-1859. Germany. Aimé Jacques Alexandre Bonpland, 1773-1858. France. Karl Sigismund Kunth, q. v. Joint authors of a great work on plants of the New World.
- Hegelm.** Christoph Friedrich Hegelmaier, 1833-1906. Germany. Prof. at Tübingen. Author of a monograph of the genus *Callitriche*, etc.
- Heller.** Amos Arthur Heller. United States. Collector; author of a *Catalogue of North American Plants*, etc.
- H. H. Eaton.** Hezekiah Hulbert Eaton, 1809-1832. United States.
- Hill.** John Hill, 1716-1775. England.
- Hitchc.** Albert Spear Hitchcock. United States. Systematic Agrostologist, U. S. Department of Agriculture. See also E. Hitchc.
- Hochst.** Christian Friedrich Hochstetter, 1787-1860. Germany.
- Hoffm.** Georg Franz Hoffman, 1761-1826. Germany and Russia. Prof. of Botany at Göttingen and Moscow.
- Hoffmg.** Johann Centurius, Graf von Hoffmansegg, 1766-1849. Germany.
- Hollick.** Charles Arthur Hollick. United States. Author of papers on the botany and geology of the vicinity of New York.
- Hook.** William Jackson Hooker, 1785-1865. England. Director of the Royal Garden at Kew. Author of *Species Filicum*, and of much important botanical work.

- Hook. f.** Joseph Dalton Hooker. England. Former Director of the Royal Garden and Museum at Kew. Joint author (with Bentham) of an authoritative work on the genera of plants. Author of *Flora of British India*, etc.
- Horkel.** Johann Horkel, 1769-1846. Germany. Prof. at the University of Berlin.
- Hornem.** Jens Wilken Hornemann, 1770-1841. Denmark. Prof. of Botany at Copenhagen.
- Host.** Nicolaus Thomas Host, 1761-1834. Austria. Wrote on Austrian grasses.
- Houba.** J. Houba. Belgium(?). Author of a work on oaks, published 1887.
- House.** Homer Doliver House. United States.
- Howell.** Thomas Howell. United States. Author of a flora of the Northwestern States.
- Huds.** William Hudson, 1730-1793. England. Author of a *Flora Anglica*. (*Hudsonia* L.)
- Hull.** John Hull, 1761-1843. England. Author of a British Flora.
- Humboldt.** See HBK.
- Ives.** Eli Ives, 1779-1861. United States. Prof. at Yale College.
- Jackson.** Benjamin Daydon Jackson. England. Curator of the Herbarium of the Linnean Society, London. Joint author of the *Index Kewensis*.
- Jacq.** Nicolaus Joseph Jacquin, 1727-1817. Austria. Collected in tropical America. Author of several important botanical works.
- J. E. Smith.** See Sm.
- J. F. Gmel.** Johann Friedrich Gmelin, 1748-1804. Germany. Prof. at Tübingen and Göttingen.
- J. Gay.** Jacques Gay, 1786-1864. France.
- J. G. Smith.** Jared Gage Smith. United States. In charge of U. S. Agricultural Experiment Station, Hawaii.
- Jord.** Alexis Jordan. France. Joint author (with Fourreau) of *Breviarium Plantarum Novarum*, 1866.
- Juss.** Antoine Laurent Jussieu, 1748-1836. France. Prof. at the Jardin des Plantes, Paris. The first to attempt to define the natural families of plants, in his *Genera Plantarum*, 1774.
- Kalm.** Pehr Kalm, 1715-1779. Finland. Traveled and collected in America. (*Kalmia* L.)

- Karst.** Hermann Gustav Karl Wilhelm Karsten, 1817-1908. Austria and Germany. Prof. at Vienna.
- Ker.** John Bellenden Ker, 1765(?) - 1871. England.
- Kitaibel.** See W. & K.
- K. Koch.** See Koch.
- Knight.** Ora Willis Knight. United States.
- Koch.** Karl Heinrich Emil Koch, 1809-1879. Germany. Prof. at Berlin.
- Koehne.** Bernhard Adalbert Emil Koehne. Germany. Prof. at Berlin. Dendrologist; author of a monograph of the *Lythraceae* of the United States.
- Koeler.** Georg Ludwig Koeler, d. 1807. Germany. Prof. at Mainz.
- Kuhn.** Friedrich Adalbert Maximilian Kuhn, 1842-1894. Germany. Writer on ferns.
- Kunth.** Karl Sigismund Kunth, 1788-1850. Germany. Prof. at Berlin. Author of *Enumeratio Plantarum*, a work designed to supplement the *Prodromus*, *Revisio Graminum*, etc. See also HBK.
- Kuntze.** Karl Ernst Otto Kuntze, 1843-1907. Germany. Author of *Revisio Generum Plantarum*, a work chiefly nomenclatorial.
- L.** Carolus Linnaeus (Carl von Linné), 1707-1778. Sweden. Prof. of Botany at Upsala. The "Father of Botany." Inventor of the binomial system of nomenclature. His *Species Plantarum* is accepted as the basis of modern descriptive botany. (*Linnaea* Gronov.)
- Laestad.** Lars Levi Laestadius, b. 1800. Lapland.
- Lag.** Mariano Lagasca, 1776-1839. Spain. Wrote on Mexican and Spanish plants.
- Lall.** Julius Leopold Eduard Avé-Lallemant, 1803-1867. Germany.
- Lam.** Jean Baptiste Antoine Pierre Monnet de Lamarck, 1744-1829. France. Distinguished naturalist and philosopher; author of a theory of organic evolution which anticipated Darwin's.
- Lamotte.** Martial Lamotte. France.
- Lamson-Scribner.** See Scribn.
- Lange.** Johan Martin Christian Lange, 1818-1898. Denmark. Prof. of Botany at Copenhagen.
- Le Conte.** John Eaton Le Conte, 1784-1860. United States. Author of papers on various genera of North American plants.

- Lecoq.** Henri Lecoq, 1802-1871. France. Prof. at Clermont-Ferrand.
- Ledeb.** Karl Friedrich von Ledebour, 1785-1851. Russia. Prof. at Dorpat. Author of *Flora Altaica*, *Flora Rossica*.
- Leers.** Johann Daniel Leers, 1727-1774. Germany. (*Leersia* Sw.)
- Leggett.** William Henry Leggett, 1816-1882. United States. Founder of the Bulletin of the Torrey Botanical Club. Studied the genus *Lechea*.
- Lehm.** Johann Georg Christian Lehmann, 1792-1860. Germany. Prof. and Director of the Botanic Garden at Hamburg.
- Lejeune.** Alexander Ludwig Simon Lejeune, 1779-1858. Belgium. Joint author (with Courtois) of *Compendium Florae Belgicae*.
- Lestib.** François Joseph Lestiboudois, d. 1815. France. Prof. of Botany at Lille.
- Leyss.** Friedrich Wilhelm von Leysser, 1731-1815. Germany.
- L. f.** Carl von Linné, the son, 1741-1783. Sweden. Prof. at Upsala.
- L'Her.** Charles Louis L'Heritier de Brutelle, 1746-1800. France.
- Lightf.** John Lightfoot, 1735-1788. England. Author of a flora of Scotland.
- Lindl.** John Lindley, 1799-1865. England. Prof. of Botany at London. Distinguished as a horticulturist and author of many botanical works.
- Link.** Heinrich Friedrich Link, 1767-1851. Germany. Prof. of Botany at Berlin.
- Linnaeus, Linné.** See L., L. f.
- Lodd.** Conrad Loddiges. England. Nurseryman near London; conducted Loddiges' Botanical Cabinet, 1817-1833.
- Loisel.** Jean Louis Auguste Loiseleur-Deslongchamps, 1774-1849. France.
- Loud.** John Claudius Loudon, 1783-1843. England. Author of an encyclopedia of plants native and cultivated in Great Britain, *Arboretum et Fruticetum Britannicum*, etc.
- Ludwig.** Christian Gottlieb Ludwig, 1709-1773. Germany. (*Ludvigia* L.)
- Mackenzie.** Kenneth Kent Mackenzie. United States.
- MacMill.** Conway MacMillan. United States. Author of works on Minnesota plants.

- M. A. Curtis.** Moses Ashley Curtis, 1808-1873. United States. Author of a flora of North Carolina and of important studies of North American fungi.
- Magnus.** Paul Magnus.
- Marchal.** Élie Marchal. Belgium.
- Marsh.** Humphrey Marshall, 1722-1801. United States. Author of a work on American trees and shrubs.
- Martens.** Martin Martens, 1797-1863. Belgium. Prof. of Botany at Louvain.
- Martius.** Karl Friedrich Philipp von Martius, 1794-1868. Germany. Prof. at Munich.
- Maxim.** Karl Johann Maximowicz, 1827-1891. Russia. Wrote much on Asiatic plants.
- Maxon.** William Ralph Maxon. United States. Assistant Curator, U. S. National Museum. Writer on ferns.
- Medic.** Friedrich Casimir Medicus, 1736-1808. Germany. Director of the Botanic Garden at Mannheim.
- Meisn.** Karl Friedrich Meisner, 1800-1874. Switzerland. Prof. of Botany at Basle.
- Mérat.** François Victor Méral, 1780-1851. France.
- Merr.** Elmer Drew Merrill. United States. Government Botanist in the Philippine Islands.
- Mert.** Karl Heinrich Mertens, 1796-1830. Russia.
- Mey.** Ernst Heinrich Friedrich Meyer, 1791-1858. Germany. Prof. of Botany at Königsberg.
- Micheli.** See M. Micheli.
- Michx.** André Michaux, 1746-1802. France, but carried on much botanical work in North America.
- Michx. f.** François André Michaux, 1770-1855. France and United States. Son of the preceding. Author of a work on the trees of North America.
- Milde.** Julius Milde, 1824-1871. Germany. Author of works on mosses and pteridophytes.
- Mill.** Philip Miller, 1691-1771. England. Author of a celebrated Dictionary of Gardening.
- Miller.** See E. S. Miller, G. S. Miller, Mill.
- Millsp.** Charles Frederic Millspaugh. Curator, Department of Botany, Field Museum of Natural History, Chicago. Author of a flora of West Virginia and of numerous articles dealing chiefly with the plants of Mexico and the West Indies.
- M. Micheli.** Marco Micheli, 1844-1902. Switzerland.

- Moench.** Konrad Moench, 1744-1805. Germany. Prof. at Marburg.
- Mohr.** Carl Theodor Mohr, 1824-1901. United States. Botanist, Geological Survey of Alabama. Author of *Plant Life of Alabama*, etc.
- Moore.** Thomas Moore, 1821-1887. England. Curator of the Chelsea Botanic Garden. Author of an *Index Filicum*, etc. See also Pease & Moore.
- Moq.** Christian Horace Bénédict Alfred Moquin-Tandon, 1804-1863. France.
- Morong.** Thomas Morong, 1827-1894. United States. Curator of the Herbarium at Columbia University. Collected in Paraguay. Published much on *Najadaceae*.
- Muell. Arg.** Johann Mueller of Aargau, 1829-1896. Switzerland. Director of the Geneva Botanic Garden and Curator of the Delessert Herbarium.
- Muench.** Otto, Freiherr von Muenchhausen, 1716-1774. Germany.
- Muhl.** Gotthilf Henry Ernest Muhlenberg, 1756-1817. United States. Correspondent of many European botanists. Author of a *Catalogue of North American Plants*, *Description of North American Grasses*, etc. (*Muhlenbergia* Schreb.)
- Müller.** See Muell. Arg., O. F. Müller.
- Murr.** Johann Andreas Murray, 1740-1791. Germany. Prof. at Göttingen.
- Mutis.** José Celestino Mutis, 1732-1808. Spain.
- Nash.** George Valentine Nash. United States. Curator of Plantations, New York Botanical Garden. Writer on North American grasses.
- Neck.** Noel Joseph de Necker, 1729-1793. Germany.
- Nees.** Christian Gottfried Daniel Nees von Esenbeck, 1776-1858. Germany. Prof. of Botany at Breslau.
- Nelson.** See A. Nelson.
- Nutt.** Thomas Nuttall, 1786-1859. United States and England. Explorer, botanist and ornithologist. Director of the Harvard Botanic Garden. Author of *Genera of North American Plants*, *Forest Trees of the United States*.
- Nym.** Carl Fredrik Nyman, 1820-1893. Sweden.
- Oakes.** William Oakes, 1799-1848. United States. Collector and student of the New England flora. (*Oakesia* Wats.)
- Oeder.** Georg Christian Oeder, 1728-1791. Germany. Author of works on the plants of Denmark and Norway.

- O. F. Müller.** Otto Friedrich Müller, 1730-1784. Denmark.
- Olney.** Stephen T. Olney, 1812-1878. United States. Author of a Catalogue of Rhode Island Plants; student of *Carices*.
- Otto.** Friedrich Otto, 1782-1856. Germany.
- Paine.** John Alsop Paine. United States. Author of Plants of Oneida County [New York] and Vicinity.
- Parl.** Filippo Parlatore, 1816-1877. Italy. Prof. of Botany at Florence.
- Pavon.** José Pavon, fl. about 1800. Spain.
- Pax.** Ferdinand Pax. Germany. Prof. of Botany at the University of Breslau.
- P. Br.** Patrick Browne, 1720-1790. Ireland. Author of Civil and Natural History of Jamaica.
- Pease & Moore.** Arthur Stanley Pease and Albert Hanford Moore. United States.
- Peck.** Charles Horton Peck. United States. State Botanist of New York. Author of many botanical reports, dealing chiefly with fungi.
- Pers.** Christiaan Hendrik Persoon, 1755-1837. Germany, etc. Author of Synopsis Plantarum and several works on fungi.
- Peter.** Robert Peter, b. 1805. United States. Geologist and botanist.
- Philippi.** Rudolph Amandus Philippi, 1808-1904. Chile. Director of the Museum at Santiago.
- Piper.** Charles Vancouver Piper. United States. Agrostologist, U. S. Department of Agriculture. Author of a flora of the State of Washington.
- Planch.** Jules Émile Planchon, 1823-1888. France. Prof. at Montpellier.
- Poggenburg.** See BSP.
- Poir.** Jean Louis Marie Poiret, 1755-1834. France.
- Poll.** Johann Adam Pollich, 1740-1780. Germany.
- Pollard.** Charles Louis Pollard. United States. Author of many botanical articles, especially on the genus *Viola*.
- Pomel.** Nicola-Auguste Pomel, 1821-1898. France.
- Porter.** Thomas Conrad Porter, 1822-1901. United States. Prof. of Natural Sciences at Lafayette College. Author of Botany of Pennsylvania, etc.
- Prantl.** Karl Anton Eugen Prantl, 1849-1893. Germany. Prof. at Breslau.
- Presl.** Karel Boriwog Presl, 1794-1852. Bohemia. Prof. at Prague.

- Prince.** William Robert Prince, 1795-1869. United States. Horticulturist.
- Pursh.** Frederick Traugott Pursh, 1774-1820. Traveled for 12 years in the United States. Author of *Flora Americae Septentrionalis*.
- Raf.** Constantino Samuel Rafinesque-Schmaltz, 1784-1842. Prof. of Natural History at Transylvania University, Kentucky. A keen, but erratic botanist.
- Raimann.** Rudolf Raimann. Austria. Prof. at Vienna.
- Rand.** Edward Lothrop Rand. United States.
- R. Br.** Robert Brown, 1773-1858. England. A distinguished botanist, author of many important works.
- Redfield.** John Howard Redfield, 1815-1895. United States. Joint author (with Rand) of a flora of Mt. Desert.
- Regel.** Eduard August von Regel, 1815-1892. Russia. Director of the Botanic Garden at St. Petersburg.
- Rehder.** Alfred Rehder. United States. Assistant at the Arnold Arboretum, Harvard University.
- Reichard.** Johann Jakob Reichard, 1743-1782. Germany.
- Reichenb.** Heinrich Gottlieb Ludwig Reichenbach, 1793-1879. Germany. Prof. at Dresden.
- Rendle.** Alfred Barton Rendle. England. Keeper, Department of Botany, British Museum.
- Retz.** Anders Johan Retzius, 1742-1821. Sweden. Prof. at Lund.
- Richard.** Louis Claude Marie Richard, 1754-1821. France.
- Richards.** John Richardson, 1787-1865. England. Surgeon and naturalist with Sir John Franklin's earlier expeditions. Wrote a botanical appendix to Franklin's narrative.
- Ricker.** Percy Leroy Ricker. United States. Scientific Assistant in Taxonomy, U. S. Dept. of Agriculture.
- Riddell.** John Leonard Riddell, 1807-1867. United States. Prof. at the University of Louisiana. Author of *Synopsis of the Flora of the Western States*, *Plants of Ohio*, etc.
- Ries.** Heinrich Ries. United States. Prof. at Cornell University.
- Robbins.** James Watson Robbins, 1801-1879. United States. Collected in New England, the Lake region, Virginia and Maryland. Student of *Potamogeton*.
- Robinson.** Benjamin Lincoln Robinson. United States. Prof. of Systematic Botany and Curator of the Gray Herbarium, Harvard University. Author of many papers on the plants of North America and Mexico, a flora of the Galapagos Islands, etc.

- Robson.** Stephen Robson. England. Author of a British flora, published 1777.
- Roem.** Johann Jacob Roemer, 1763-1819. Switzerland. Prof. at Zürich.
- Rostk.** Friedrich Wilhelm Gottlieb Rostkovius, 1770-1848. Germany.
- Roth.** Albrecht Wilhelm Roth, 1757-1834. Germany.
- Rottb.** Christian Fries Rottboell, 1727-1797. Denmark. Prof. of Botany at Copenhagen.
- Rouy.** Georges-C-Ch. Rouy. France.
- Roxb.** William Roxburgh, 1759-1815. India. Director of the Botanic Garden at Calcutta. Wrote on plants of India.
- Rudge.** Edward Rudge, 1763-1846. England.
- Ruiz.** Hipolito Ruiz, 1754-1815. Spain. Joint author (with Pavon) of a flora of Peru and Chile.
- Rupr., Ruprecht.** Franz J. Ruprecht, 1814-1870. Russia. Curator of the Herbarium of the Imperial Academy of Sciences, St. Petersburg.
- Rusby.** Henry Hurd Rusby. United States. Prof., Department of Pharmacy, Columbia University.
- Rydb.** Per Axel Rydberg. United States. Curator, New York Botanical Garden. Author of several monographs, floras of Montana and Colorado, etc.
- Salisb.** Richard Anthony Salisbury, 1761-1829. England.
- Sarg.** Charles Sprague Sargent. United States. Prof. of Arboriculture and Director of the Arnold Arboretum, Harvard University. Author of *Silva* of North America, etc.
- Sartwell.** Henry Parker Sartwell, 1792-1867. United States. Student of *Carices*.
- Schk.** Christian Schkuhr, 1741-1811. Germany. Author of a work on sedges.
- Schlecht.** Diedrich Franz Leonhard von Schlechtendal, 1794-1866. Germany. Prof. at Halle.
- Schleich.** J. C. Schleicher. Author of a flora of Switzerland, 1800.
- Schleid.** Matthias Jacob Schleiden, 1804-1881. Germany.
- Schmidt.** Wilhelm Ludwig Ewald Schmidt, 1804-1843. Germany.
- Schneider.** Camillo Karl Schneider. Austria.
- Schott.** Heinrich Wilhelm Schott, 1794-1865. Austria. Director of the Imperial Garden at Schönbrunn. Author of a monograph of the *Araceae*, etc.

- Schrad.** Heinrich Adolph Schrader, 1767-1836. Germany. Prof. of Botany at Göttingen.
- Schrank.** Franz von Paula Schrank, 1747-1835. Germany. Prof. of Botany at Munich.
- Schreb.** Johann Daniel Christian von Schreber, 1739-1810. Germany.
- Schult., Schultes.** Joseph August Schultes, 1773-1831. Germany. Prof. at Landeshut.
- Schultz.** See F. Schultz.
- Schum.** Christian Friedrich Schumacher, 1757-1830. Denmark.
- Schur.** Philipp Johann Ferdinand Schur, b. 1799. Austria.
- Schwein.** Lewis David von Schweinitz, 1780-1834. United States. Student of fungi, in which department his work is of much importance, and author of monographs of *Viola* and the North American species of *Carex*.
- Scop.** Johann Anton Scopoli, 1723-1788. Italy. Prof. at Pavia.
- Scribn.** Frank Lamson-Scribner. United States. Author of many articles on grasses.
- Ser.** Nicolas Charles Seringe, 1776-1858. France. Prof. at Lyons.
- S. F. Gray.** Samuel Frederick Gray, fl. 1780-1836. England.
- Shear.** Cornelius Lott Shear. United States. Pathologist, U. S. Department of Agriculture.
- Short.** Charles Wilkins Short, 1794-1863. United States. Joint author (with Peter) of Plants of Kentucky.
- Shuttlw.** Robert Shuttleworth, d. 1874. England and Switzerland.
- Sibth.** John Sibthorp, 1758-1796. England. Author of a flora of Greece.
- Sieb.** Philipp Franz von Siebold, 1796-1866. Germany.
- Sims.** John Sims, 1792-1838. England. For many years editor of Curtis' Botanical Magazine.
- Sm., Smith.** James Edward Smith, 1759-1828. England. See also J. G. Smith.
- Small.** John Kunkel Small. United States. Curator of the Museums, New York Botanical Garden. Author of a flora of the southeastern United States, etc.
- Solms.** Herman, Graf zu Solms-Läubach. Germany. Former Prof. at the University of Strassburg.
- Sonder.** Otto Wilhelm Sonder, 1812-1888. Germany.
- Spach.** Eduard Spach, 1801-1879. France.

- Spreng.** Kurt Polycarp Joachim Sprengel, 1766-1833. Germany. Prof. of Botany at Halle.
- Spring.** Anton François Spring, 1814-1872. Belgium. Prof. at Liège. Author of a monograph of the *Lycopodiaceae*.
- Sterns.** See BSP.
- Steud.** Ernst Gottlieb Steudel, 1783-1856. Germany.
- Stokes.** Jonathan Stokes, 1755-1831. England.
- Sudworth.** George Bishop Sudworth. United States. Chief of Dendrology, Forest Service, U. S. Dept. of Agriculture.
- Sw.** Olaf Swartz, 1760-1818. Sweden. Prof. at Stockholm. Author of a flora of the West Indies, Synopsis Filicum, etc.
- Sweet.** Robert Sweet, 1783-1835. England.
- Taubert.** Paul Hermann Wilhelm Taubert, 1862-1897. Germany.
- Tausch.** Ignaz Friedrich Tausch, b. 1848. Bohemia.
- T. Coulter.** Thomas Coulter, d. 1843. Ireland. Published a monograph of *Dipsacaceae*.
- Tenney.** Sanborn Tenney, 1827-1877. United States. Prof. at Vassar and Williams Colleges.
- Tenore.** Michele Tenore, 1780-1861. Italy. Prof. of Botany at Naples.
- Th. Durand.** Théophile Durand. Belgium. Director of the Brussels Botanic Garden.
- Thuill., Thuillier.** Jean Louis Thuillier, 1757-1822. France.
- Thunb.** Carl Peter Thunberg, 1743-1822. Sweden. Prof. of Botany at Upsala. Author of a Flora Japonica, etc.
- Thurb.** George Thurber, 1821-1890. United States. Botanist of the Mexican Boundary Commission. Student of Grasses.
- Todaro.** Agostino Todaro, 1818-1892. Italy. Director of the Botanic Garden at Palermo.
- Torr.** John Torrey, 1796-1873. United States. Botanist and chemist. Author of a flora of New York, a monograph of the North American *Cyperaceae*, etc. Joint author (with Gray) of a flora of North America.
- Tratt.** Leopold Trattinick, 1764-1849. Austria. Curator at the Herbarium in Vienna.
- Trev.** Christian Ludolf Treviranus, 1779-1864. Germany. Prof. of Botany at Bonn.
- Trevisan.** Vittore, Conte Trevisan, b. 1818. Italy.
- Trin.** Karl Bernhard Trinius, 1778-1844. Russia. Writer on grasses.

- Tuckerm.** Edward Tuckerman, 1817-1886. United States. Prof. of Botany at Amherst College. Author of papers on *Carex* and *Potamogeton*, a catalogue of plants of the vicinity of Amherst College, works on lichens, etc.
- U. & B.** Edwin B. Uline and William L. Bray. United States. Authors of a monograph of North American *Amaranthaceae*.
- Underw.** Lucien Marcus Underwood, 1853-1907. United States. Prof. at Columbia University. Author of *Our Native Ferns*, and articles on ferns and *Hepaticae*.
- Vahl.** Martin Vahl, 1749-1804. Denmark. Prof. of Botany at Copenhagen.
- Vail.** (Miss) Anna Murray Vail. United States.
- Vasey.** George Vasey, 1822-1893. United States. Botanist, U. S. Dept. of Agriculture. Wrote on grasses.
- Vent.** Étienne Pierre Ventenat, 1757-1808. France.
- Vill.** Dominique Villars, 1745-1814. France.
- Wahlenb.** Georg Wahlenberg, 1781-1851. Sweden. Prof. at Upsala.
- Wallr.** Karl Friedrich Wilhelm Wallroth, 1792-1857. Germany.
- Walp.** Wilhelm Gerhard Walpers, 1816-1853. Germany.
- Walt.** Thomas Walter, d. 1788. United States. Author of *Flora Caroliniana*.
- W. & K.** Franz Adam, Graf von Waldstein, 1759-1823, and Paul Kitaibel, 1757-1817. Austria. Authors of a work on the plants of Hungary.
- Wang.** Friedrich Adam Julius von Wangenheim, 1747-1800. Germany. Author of works on North American trees and shrubs.
- Wats.** Sereno Watson, 1826-1892. United States. Prof. and Curator of the Gray Herbarium at Harvard University. Author of a Bibliographical Index to North American Botany, and of many articles dealing mostly with the flora of the western United States and Mexico.
- Watt.** David Allan Poe Watt. Canada.
- W. Boott.** William Boott, 1805-1887. United States. Collector; student of grasses and sedges.
- W. Curtis.** See Curtis.
- Weber.** Georg Heinrich Weber, 1752-1828. Germany. Prof. of Botany at Kiel.
- Weinm.** J. A. Weinmann, 1782-1858. Russia.

- Wenderoth.** Georg Wilhelm Franz Wenderoth, 1774-1861. Germany. Prof. of Botany at Marburg.
- Wendl., Wendland.** Johann Christoph Wendland, 1755-1828. Germany.
- Wettst.** Richard Wettstein. Austria. Prof. and Director of the Botanic Garden at Vienna.
- Wibel.** August Wilhelm Eberhard Christoph Wibel, 1775-1814. Germany.
- Wiegand.** Karl McKay Wiegand. United States. Associate Prof. of Botany, Wellesley College.
- Wiggers.** Heinrich August Ludwig Wiggers, 1803-1880. Germany.
- Willd.** Karl Ludwig Willdenow, 1765-1812. Germany. Prof. of Botany at Berlin.
- Wimmer.** Friedrich Wimmer, 1803-1868. Germany.
- Witasek.** (Frl.) Johanna Witasek. Austria.
- With.** William Withering, 1741-1799. England.
- Wood.** Alphonso Wood, 1810-1881. United States. Author of botanical text-books, and of a flora of the Northeastern States.
- Woodv.** William Woodville, 1748(?) - 1805. England.
- Wright.** See C. Wright.
- Wulf.** Franz Xavier Wulfen, 1728-1805. Austria. Prof. at Klagenfurt.
- Zucc.** Joseph Gerhard Zuccarini, 1797-1848. Germany. Prof. of Botany at Munich.

Index.*

- Aaron's Beard 221
 Aaron's Rod 214
 Abele 141
 Abies 37
     balsamea 37
 Abutilon 278
     Abutilon 278
     pictum 278, 431
     striatum 278
     Theophrasti 278
     Avicennae 278
 Acacia
     False 251
     Rose 251
 Acalypha 265
     gracilens 265
     virginica 265
         var. *gracilens* 265
 Acanthopanax 295
     pentaphyllum 295
 Acer 272
     dasycarpum 273
     Negundo 273
     nigrum 273
     pennsylvanicum 272
     platanoides 273
     Pseudo-platanus 272
     rubrum 273
     saccharinum 272, 273
         var. *nigrum* 273
     saccharum 272
         var. *nigrum* 273
     spicatum 272
 Aceraceae 272, 437, 440
 Acerates 323
     viridiflora 323, 428
         var. *Ivesii* 323
         " *lanceolata* 323, 423
 Achillea 398
     lanulosa 398
     Millefolium 398
 Achroanthos
     monophylla 136
     unifolia 136
 Acnida 171
     cannabina 171
     tamariscina
         var. *prostrata* 171
         " *tuberculata* 171
     tuberculata 171, 433
         var. *prostrata* 171, 433
 Acorus 111
     Calamus 111
 Actaea 193
     alba 193
     rubra 193
     spicata
         var. *rubra* 193
 Adam-and-Eve 136
 Adam's Cup 213
 Adam's Needle 121
 Adder's Mouth 132
     Green 136
     White 136
 Adder's Tongue 27
     Yellow 121
 Adder's Tongue Family 27
 Adiantum 18
     pedatum 18
 Adicea
     pumila 156
 Adlumia 197
     cirrhusa 197
     fungosa 197
 Adopogon
     carolinianum 408

* In this index, synonyms and names of species previously reported from Connecticut but excluded from the present catalogue, are printed in italics.

- Adopogon*
virginicum 408
 Aegopodium 299
   Podagraria 299
 Aesculus 274
   Hippocastanum 274
 Aethusa 302
   Cynapium 302
 African Rose 197
 Agastache 334
   anethiodora 334
   Foeniculum 334, 434
   nepetoides 334
   scrophulariaefolia 334
     var. *mollis* 334
 Agrimonia 240
   Brittoniana 240
   Eupatoria 240
   gryposepala 240
   hirsuta 240
   mollis 241
   parviflora 241
   pubescens 241
   rostellata 241
   striata 240, 241
 Agrimony 240
   Hairy 240
   Many-flowered 241
   Small 241
   Soft 241
   Woodland 241
 Agropyron 79
   caninum 79
   repens 79
   tenerum 79, 433
 Agrostemma 177
   Githago 177
 Agrostis 64
   alba 64
     var. *aristata* 64
     " *maritima* 64
     " *vulgaris* 64
   canina 64
   coarctata 64
   hyemalis 64
   intermedia 64
   perennans 64
   Agrostis
     scabra 64
     var. *montana* 64
     vulgaris 64
 Ague Tree 195
 Ague-weed 376
 Ailanthus 263
   glandulosa 263
 Aizoaceae 173, 437, 440
 Ajuga 332
   genevensis 332, 428
   reptans 428
 Albany Hemp 155
 Alder 148
   Black 270
   Dwarf 275
   Hoary 148
   Smooth 148
   Snapping 148, 219
   Speckled 148
   Spotted 219
   Tag 148
   White 306
   Witch 219
 Alecost 400
 Aletris 125
   farinosa 125
 Alexanders
   Golden 300
 Alfalfa 250
 Alisma 47
   Plantago-aquatica 47
 Alismaceae 45, 436
 Alkali Grass 72
 Alkanet 329
 All-bone 176
 Alleghany Plum 244
   Vine 197
 Alliaria 205
   Alliaria 205
   officinalis 205, 433
 Allionia
   hirsuta 172
   linearis 172
   nyctaginea 172
 Allison
   Sweet 199

- Allium* 119
  canadense 119
  sativum 425
  tricoccum 119
  vineale 119
Allspice
  Wild 196
Alnus 148
  incana 148
  rugosa 148
  serrulata 148
  viridis 426
Alopecurus 62
  geniculatus 62
    var. *aristulatus* 63
  pratensis 62
Alsike Clover 249
Alsine
  borealis 175
  graminea 176
  Holostea 176
  longifolia 175
  media 176
Althaea 278
  officinalis 278
  rosea 278
Althaea
  Shrubby 279
Alum Root 215
  Common 215
Alyssum 200
  alyssoides 200, 421
  calycinum 200
  maritimum 199
  saxatile 200
Alyssum
  Hoary 199
  Small 200
  Sweet 199
Amaranth 169, 170
  Green 169
  Prostrate 170
  Purple 170
  Spiny 170
  Thorny 170
  White 170
Amaranth Family 169
Amaranthaceae 169, 437, 439
Amaranthus 169
  albus 170
  blitoides 170
  caudatus 170
  graecizans 170
  hybridus 169
    forma *hypochondriacus* 169
    var. *paniculatus* 170
  hypochondriacus 169
  paniculatus 170
  retroflexus 169
  spinosus 170
Amaryllidaceae 126, 436, 439
Amaryllis Family 126
Ambrose 165
Ambrosia 165, 391
  artemisiifolia 391
  bidentata 391, 435
  trifida 391
    var. *integrifolia* 391
Amelanchier 224
  Botryapium 224
  canadensis 224
    var. *Botryapium* 224
    " *oblongifolia* 224
    " *tomentula* 224
  oblongifolia 224
    var. *micropetala* 225
  spicata 224
American Aspen 141
  Beech 148
  Bladder Nut 272
  Brooklime 353
  Cranberry 314
  Elm 152
  Featherfoil 315
  Fly Honeysuckle 365
  Germander 332
  Globeflower 191
  Hemp 321
  Holly 269
  Hornbeam 146
  Ivy 276
  Larch 35
  Laurel 309
  Linden 277
  Lotus 184
  Mountain Ash 223

- American
 Nelumbo 184
 Nettle Tree 153
 Nightshade 171
 Pennyroyal 339
 Sanicle 215
 Sarsaparilla 296
 Senna 247
 Spikenard 296
 Sycamore 220
 Valerian 129
 White Hellebore 118
 Wood Strawberry 232
 Yew 34
- Ammodenia*
peploides 175
- Ammophila* 65
arenaria 65
arundinacea 65
- Amorpha* 251
fruticosa 251
- Ampelopsis*
quinquefolia 276
trifolia 430
- Amphicarpa* 259
monoica 259
Pitcheri 259
- Amsinckia* 328
lycopsoides 328, 434
- Amygdalus*
Persica 246
- Anacardiaceae 268, 437
- Anagallis* 317
arvensis 317
 var. *caerulea* 317
- Anaphalis* 389
margaritacea 389
- Anchusa* 329
officinalis 329
- Andromeda* 310
glaucophylla 310
ligustrina 310
mariana 310
Polifolia 310
- Andropogon* 48
furcatus 48
littoralis 48
scoparius 48
- Andropogon*
 var. *littoralis* 48
virginicus 48
- Anemone* 189
canadensis 190
cylindrica 189
nemorosa 190
pennsylvanica 190
quinquefolia 190
riparia 190
virginiana 190
- Anemone* 189
 Long-fruited 189
 Round-headed 190
 Round-leaved 190
 Rue 189
 Spring 190
 Summer 190
 Tall 190
 Wood 190
- Anemonella* 189
thalictroides 189
- Anethum* 302
graveolens 302, 431
- Angelica* 303
atropurpurea 303
hirsuta 303
villosa 303
- Angelica* 303
 High 303
 Purple 303
- Angelica* Tree 296
- Anise-root 298
- Ankle Brier 238
- Annual Candytuft 201
 Pearlwort 174
- Antennaria* 388
ambigens 389
arnoglossa 388
canadensis 389
fallax 389
neglecta 389
neodioica 389
Parlinii 388
plantaginea 389
plantaginifolia 389
- Anthemis* 398
arvensis 398

- Anthemis
     var. *agrestis* 399
 Cotula 398
     nobilis 399, 432
     tinctoria 399
 Anthoxanthum 59
     odoratum 59
 Antirrhinum 351
     majus 428
     Orontium 351, 434
 Anychia 172
     canadensis 172
     capillacea 172
     dichotoma 172
     polygonoides 172, 433
 Aphyllon
     uniflorum 359
 Apios 258
     Apios 258
     tuberosa 258
 Apium
     Petroselinum 300
 Aplectrum 136
     hyemale 136
     spicatum 136
 Apocynaceae 321, 438, 440
 Apocynum 321
     album 321
     androsaemifolium 321
     cannabinum 321
         var. *hypericifolium* 428
         " *pubescens* 321
     medium 321
     Milleri 321
     pubescens 321
     urceolifer 321
 Apple 222
     Crab 222
     Devil's 194
     Hog 194
     Indian 194
     Large Crab 222
     May 194, 308
     Mock 154
     Osage 154
     Purple Thorn 348
     Apple
         Small Crab 222
         Thorn 347
         Wild 222
 Apple of Peru 347
 Aquifoliaceae 269, 437
 Aquilegia 192
     canadensis 192
         var. *flaviflora* 192
     vulgaris 192
 Arabis 210
     canadensis 211
     confinis 211
     Drummondii 211
     glabra 210
     hirsuta 211
     laevigata 211
     lyrata 210
     perfoliata 210
 Araceae 109, 436
 Aralia 296
     hispida 296
     nudicaulis 296
     quinquefolia 296
     racemosa 296
     spinosa 296
     trifolia 296
 Araliaceae 295, 438, 440
 Arbor Vitae 37
 Arbutus
     Trailing 311
 Arceuthobium 156
     pusillum 156
 Arctium 404
     Lappa 404
         var. *majus* 404
         " *minus* 405
         " *tomentosum* 405
     minus 405
     tomentosum 405
 Arctostaphylos 311
     Uva-ursi 311
 Arenaria 174
     groenlandica 175
     lateriflora 174
     macrophylla 174

Arenaria

- Michauxii* 175
- peploides* 175
- serpyllifolia* 175
- stricta* 175

Arethusa 133

- bulbosa* 133

Argemone 197

- alba* 197, 431
- mexicana* 197, 431

Argentina 234

Anserina

- var. *grandis* 234

Arisaema 109

- Dracontium* 110

pusillum 109*triphyllum* 109

- var. *pusillum* 109

Aristida 60

- dichotoma* 60

gracilis 60

- var. *depauperata* 60

purpurascens 60*tuberculosa* 60

Aristolochia 157

- Serpentaria* 157

Aristolochiaceae 157, 437

Arnica 409

Aromatic Wintergreen 311

Aronia

- arbutifolia* 222

atropurpurea 223*nigra* 223

Arrhenatherum 67

- avenaceum* 67

elatius 67

Arrow Arum 110

- Grass 45

- Grass Family 45

Arrow-head 45

Arrow-leaved Tear-thumb 163

Arrow-wood 368

- Downy 368

- Indian 271

Art Pumpkin 371

Artemisia 400

- Abrotanum* 401, 432

Artemisia

- Absinthium* 402

- annua* 401, 435

- biennis* 401

- campestris*

- var. *pubescens* 401, 435

- caudata* 400

- Dracunculus* 401, 435

- frigida* 402, 435

- pontica* 402

- Stelleriana* 401

- vulgaris* 401

Artichoke

- Jerusalem* 395

Arum

- Arrow 110

- Dragon 109

- Water 110

Arum Family 109

Asarabacca 157

Asarum 157

- acuminatum* 157

- canadense* 157

- var. *acuminatum* 157

- " *reflexum* 157

- reflexum* 157

Asclepiadaceae 322, 438, 440

Asclepias 322

- amplexicaulis* 323

- Cornuti* 322

- decumbens* 322

- exaltata* 323

- incarnata* 322

- var. *pulchra* 322

- lanceolata* 428

- obtusifolia* 323

- ovalifolia* 428

- parviflora* 428

- paupercula* 428

- perennis* 428

- phytolaccoides* 323

- pulchra* 322

- purpurascens* 322

- quadrifolia* 323

- syriaca* 322

- tuberosa* 322

- var. *decumbens* 322

Asclepias

- variegata 323
- verticillata 323

Asclepiodora

- viridis* 428

Ash 317

- American Mountain 223
- Basket 318
- Black 318
- Brown 318
- European Mountain 223
- Green 318
- Hoop 153, 318
- Northern Prickly 262
- Prickly 262
- Red 318
- River 318
- Swamp 318
- White 317

Ash-leaved Maple 273

- Spiraea* 221

Asparagus 122

- officinalis* 122

Asparagus 122

- Garden 122
- Wild 125

Aspen 141

- American 141
- Large-toothed 142
- Quaking 141

Asperula 361

- galioides* 361
- glauca* 361

Aspidium 22

- acrostichoides* 21
  - var. *incisum* 21
- Boottii* 23
- cristatum* 23
  - var. *Clintonianum* 23
- Goldianum* 22
- marginale* 22
  - var. *elegans* 416
- noveboracense* 22
- simulatum* 22
- spinulosum* 23
  - var. *dilatatum* 24
  - forma *anadenium* 24

Aspidium

- var. *intermedium* 23

Thelypteris 22**Asplenium 19**

- acrostichoides* 21
- angustifolium* 20
- ebeneum* 20
- ebenoides* 19
- Filix-femina* 21
- montanum* 20
- pinnatifidum* 19
- platyneuron* 20
  - var. *serratum* 20
- Ruta-muraria* 20
- thelypteroides* 21
- Trichomanes* 20
- viride* 424

Asprella

- Hystrix* 81

Aster 382, 441

- acuminatus* 387
- amethystinus* 384
- carmesinus* 382
- Claytoni* 382
  - var. *crispicans* 382
- concinus* 384
- concolor* 429
- cordifolius* 383
  - var. *lanceolatus* 383
  - “ *polycephalus* 383
- corymbosus* 382
- curvescens* 382
  - var. *oviformis* 382
  - “ *umbelliformis* 382
- diffusus* 385
  - var. *hirsuticaulis* 385
  - “ *thyrsoides* 385
- divaricatus* 382
- dumosus* 384
  - var. *coridifolius* 384
  - “ *strictior* 384
- ericoides* 384
  - var. *pilosus* 384
  - “ *villosus* 384
- Gravesii* 384
- Herveyi* 382
- hirsuticaulis* 385

Aster

- ianthinus* 382
- infirmus* 386
- laevis* 383
  - var. *amplifolius* 384
- lateriflorus* 385
  - var. *hirsuticaulis* 385
  - " *pendulus* 385
  - " *thyrsoides* 385
- linariifolius* 386
- longifolius* 385
- Lowrieanus* 383
  - var. *lanceolatus* 383
  - " *lancifolius* 383
- macrophyllus* 382
  - var. *ianthinus* 382
  - " *pinguifolius* 382
- multiflorus* 384
  - var. *exiguus* 384
- multiformis* 382
- nobilis* 382
- novae-angliae* 383
  - var. *roseus* 383
- novi-belgii* 385
- paniculatus* 385
  - var. *acutidens* 385
  - " *simplex* 385
- patens* 383
- prenanthoides* 386
- puniceus* 386
  - var. *compactus* 386
  - " *demissus* 386
  - " *firmus* 386
  - " *lacvicaulis* 386
  - " *lucidulus* 386
- radula* 383
- roscidus* 382
- sagittifolius* 429
- salicifolius* 429
- Schreberi* 382
- spectabilis* 382
- subulatus* 387
- tardiflorus* 386
- tataricus* 386
- tenebrosus* 382
- tenuifolius* 387
- Tradescanti* 385

Aster

- umbellatus* 386
  - var. *latifolius* 429
- undulatus* 383
- vimineus* 385
  - var. *foliolosus* 385
- violaris* 382
- Aster 382
  - Golden 377
  - New England 383
  - Red-stalked 386
  - Siberian 386
  - White-topped 388
- Atheropogon*
  - curtipendulus* 69
- Atragene*
  - americana* 190
- Atriplex* 167
  - arenaria* 168
  - hastata* 167
  - laciniata* 167
  - patula* 167
    - var. *hastata* 167, 426
  - tatarica* 167, 433
- Autumn Willow 138
- Avena* 67
  - fatua* 425
  - sativa* 67, 431
  - striata* 72
- Avens* 235
  - Cream-colored 235
  - Drooping 235
  - Field 235
  - Purple 235
  - Rough 235
  - Water 235
  - White 235
  - Yellow 235
- Awned Wheat Grass 79
- Axwort 252
- Azalea*
  - arborescens* 427
  - canescens* 308
  - nudiflora* 308
  - viscosa* 307
- Azalea*
  - Clammy 307

- Azalea
   Pink 308
   Purple 308
   Wild 308
 Babies' Breath 121
 Baccharis 388
   halimifolia 388
 Bachelor's Button 407
 Bag-leaves 214
 Ball Mustard 202
 Balloon Vine 274
 Ballota 336
   nigra 336
 Balm 339
   Basil 338
   Bee 338
   Common 339
   Fragrant 338
   Horse 344
   Lemon 339
 Balm of Gilead 142
 Balm-of-Gilead Fir 37
 Balmony 352
 Balsam 274
 Balsam Fir 37
   Poplar 142
 Balsam-apple 371
   Wild 372
 Balsaminaceae 274, 438
 Baneberry 193
   Red 193
   White 193
 Bank Cress 205
 Baptisia 247
   australis 426
   tinctoria 247
 Barbarea 207
   Barbarea 207
   praecox 208
   stricta 208
   verna 208
   vulgaris 207
     var. *stricta* 208
 Barberry 195
   Common 195
   European 195
 Barberry Family 194
 Barley 80
   Common 80
 Barnyard Grass 56
 Barren Strawberry 232
 Bartonnia 320
   lanceolata 320
   paniculata 320
   tenella 320
   virginica 320
 Basil 339, 340
 Basil Balm 338
 Basket Ash 318
 Basswood 277
 Bastard Cress 200, 201
   Indigo 251
   Mustard 203
   Pennyroyal 332
   Toad-flax 156
Batrachium
   confervoides 185
   divaricatum 184
   Drouetii 185
   flaccidum 185
   longirostre 184
   trichophyllum 184
 Bay
   Rose 308
 Bayberry 143
 Bay-leaved Willow 138
 Beach Grass 65
   Orach 168
   Pea 257
   Pinweed 283
   Plum 244
   Wormwood 401
 Beak Rush 90
 Beaked Hazelnut 146
   Willow 140
 Bean
   Blue 248
   Bog 320
   Bush 258
   Common Pole 258
   European Garden 256
   Field 258
   Indian 359
   Kidney 258

- Bean
   Kidney Pole 258
   Sacred 184
   Trailing Wild 258
   Wild 258
 Bean Tree 359
 Bear Grass 121
   Oak 152
 Bearberry 311
 Beard Grass 48, 65
 Bearded Darnel 78
 Beard-tongue 351
 Beaver Poison 299
 Bedstraw 361
   Northern 362
   Rough 363
   Sweet-scented 363
   Yellow 362
 Bee Balm 338
 Beech 148
   American 148
   Blue 146
   Water 146
 Beech Family 148
   Fern 17
 Beech-drops 359
   False 307
 Beech-wheat 164
 Beet 167
   Common 167
 Beet-root 169
 Beggar's Lice 328
 Beggar-ticks 240, 396
   Common 396
   Swamp 396
 Beggar-weed 173
 Behen 180
 Belamcanda 128
   chinensis 128
 Belle Isle Cress 208
 Belleville Dock 159
 Bellflower 373
   Marsh 373
 Bells 192
 Bellwort 118, 119
 Benjamin Bush 196
 Bent
   Fine 64
   Rhode Island 64
   Rough 64
 Bent Grass 64
 Benzoin 196
   aestivale 196
   Benzoin 196
 Berberidaceae 194, 437, 440
 Berberis 195
   canadensis 426
   vulgaris 195, 426
 Bergamot
   Downy 338
   Wild 338
 Bergamot Mint 343
 Bermuda Grass 69
 Berteroa 199
   incana 199
 Beta 167
   vulgaris 167, 421, 431
 Betony
   Paul's 354
   Wood 357
 Betula 146
   alba
     var. *cordifolia* 148
     " *papyrifera* 147
   lenta 147
   lutea 147
   papyrifera 147
   populifolia 147
   pumila 148
 Betulaceae 146, 436
 Bibernel 241
Bicuculla
   canadensis 198
   Cucullaria 198
 Bidens 396, 441
   aristosa 397, 435
   Beckii 397
   bipinnata 397
   cernua 396
     var. *elliptica* 396
   chrysanthemoides 396
   comosa 396
   connata 422

- Bidens
     var. *comosa* 396
     "   *petiolata* 396
     discoidea 396
     frondosa 396
     laevis 396
     leucantha 397, 435
     melanocarpa 396
     trichosperma 397, 423
     vulgata 396
 Big Blue-stem 48
 Bignonia Family 359
 Bignoniaceae 359, 438, 440
 Bilberry
     Common 313
     Swamp 313
 Billion-dollar Grass 56
 Bilsted 220
 Bindweed 324
     Black 163
     Blackbird 163
     Bush 163
     Corn 163
     Field 325
     Fringed Black 163
     Hedge 163, 325
     Sow 163
     Thicket 163
 Birch 146
     Black 147
     Canoe 147, 148
     Cherry 147
     Gray 147
     Low 148
     Old Field 147
     Paper 147, 148
     Swamp 148
     Sweet 147
     White 147, 148
     Yellow 147
 Birch Family 146
 Bird Cherry 244, 245
 Bird-foot Violet 284
 Bird-in-the-Bush 197
 Bird's Pepper 200
 Bird's-eye 174, 354
     White 176
 Bird's-eye Maple 273
 Bird's-foot Trefoil 250
 Bird's-tongue 160
 Birthroot 124
 Birthwort 157
 Birthwort Family 157
 Bishop's Cap 216
 Bishop's-weed
     Mock 299
 Bite-tongue 162
 Biting Crowfoot 186
     Stonecrop 214
 Bitter Candytuft 201
     Cress 207, 209, 210
     Dock 159
     Nut Hickory 145
     Willow 141
 Bitter-sweet 345
     Climbing 271
     Shrubby 271
 Bitter-weed 391
 Black Alder 270
     Ash 318
     Bindweed 163
     Birch 147
     Centaury 407
     Cherry 245
     Chokeberry 223
     Cohosh 192
     Currant 218
     Grass 114
     Gum 305
     Haw 369
     Henbane 422
     High Blueberry 314
     Horehound 336
     Huckleberry 312
     Larch 35
     Locust 251
     Medick 250
     Mustard 203
     Nightshade 345
     Oak 152
     Poplar 143
     Raspberry 237
     Scrub Oak 152
     Snakeroot 192, 297

Black

- Spruce 36
- Sumach 268
- Swallow-wort 323
- Walnut 144
- Willow 137

Black-berried Elder 369

Blackberry

- Cut-leaved 238
- Evergreen 238
- High-bush 237, 239
- Knee-high 238
- Low 239
- Mulberry 237
- Running 239
- “ Swamp 239

Sand 238

Blackberry Lily 128

Blackbird Bindweed 163

Black-cap 237

Black-eyed Susan 393

Bladder Campion 180

Fern 24

Ketmia 280

Nut 272

Nut Family 272

Bladderwort 357

Greater 358

Purple 358

Smaller 358

Bladderwort Family 357

Blazing Star 118, 377

*Blephariglottis**blephariglottis* 131*ciliaris* 131*grandiflora* 131*lacera* 131*psycodes* 131

Blephilia 338

ciliata 338*hirsuta* 339

Blister Flowers 188

Blisterwort 186

Blite

Coast 166

Low Sea 168

Blite

Red 166

Sea 168

Strawberry 166

Tall Sea 169

*Blitum**capitatum* 166

Bloodroot 196

Bloodwort 241

Bloodwort Family 126

Bloom-fell 250

Bloomy-down 181

Blue Bean 248

Beech 146

Bells 192

Cohosh 195

Curls 332

Devil 330

Flag 127

Grape 277

Huckleberry 312

Myrtle 321

Sailors 408

Tangle 312

Toad-flax 350

Vervain 331

Vetch 256

Bluebell 373

Bluebell Family 372

Blueberry 195, 313

Black High 314

Common 313

Dwarf 313

Early Sweet 313

High-bush 313

Late Low 313

Low Black 313

“ Sweet 313

Sour-top 313

Swamp 313

Tall 313

Velvet-leaf 313

Blueberry Root 195

Bluebottle 407

Blue-eyed Grass 128

Blue-joint Grass 65

- Blue-stem 48, 65
   Big 48
 Bluets 364
 Blue-weed 330
 Blunt Woodsia 24
 Blunt-leaved Dock 159
   Sandwort 174
 Boehmeria 156
   cylindrica 156
     var. *scabra* 156
 Bog Bean 320
   Myrtle 143
   Rosemary 310
   Rush 114, 115
   Spruce 36
   Strawberry 233
   Willow 139
 Bois d'Arc 154
 Bokhara Clover 249
 Boltonia 381
   asteroides 381
 Boneset 376
   Climbing 377
   Purple 375
   Rough 376
   Upland 376
 Borage 329
 Borage Family 327
 Boraginaceae 327, 438, 440
 Borago 329
   officinalis 329, 434
 Botrychium 27
   dissectum 28
   lanceolatum 27
     var. *angustisegmentum* 27
   Lunaria 424
   matricariaefolium 28
   neglectum 28
   obliquum 28
     var. *dissectum* 28
     " *elongatum* 28
     " *intermedium* 28
     " *oneidense* 28
   ramosum 28
   simplex 27, 424
   tenebrosum 27
   ternatum
   Botrychium
     forma obliquum 28
     var. *australe* 28
     " *intermedium* 28
     virginianum 28
 Bottle-brush Grass 81
 Bouncing Bet 180
 Bouteloua 69
   curtipendula 69
   racemosa 69
 Bow-wood 154
 Box Elder 273
 Boxberry 311
 Boxwood 304
 Boys-and-Girls 198
 Brachyelytrum 62
   aristatum 62
   erectum 62
 Bracken 18
 Brake 18
   Cliff 18
   Common 18
   Purple Cliff 18
   Rock 19
   Slender Rock 19
 Bramble 236
 Brandy Bottle 183
 Brasenia 184
   peltata 184
   purpurea 184
   Schreberi 184
 Brassica 202
   alba 202, 422
   arvensis 203
   campestris 203
   japonica 203, 433
   junceae 203
   Napus 204, 431
   nigra 203
   oleracea 204, 431
   Rapa 204, 431
   Sinapis 203
 Brauneria 393
   pallida 393
 Break-stone 174

- Bridal Wreath 221
 Bridewort 221, 235
 Brier
   Ankle 238
   Bull 125
   Cat 125
   Common Green 125
   Green 125
   Horse 125
   Running 239
   Sand 345
   Saw 125
   Squirrel 125
 Brier Rose 242
 Bristly Buttercup 187
   Crowfoot 187
   Locust 251
   Sarsaparilla 296
 Brittle Willow 138
 Briza 72
   media 72, 417
 Broad Dock 159
 Broad-leaved Spring Beauty 182
 Brome Grass 76
 Bromus 76, 441
   altissimus 77, 417
   brizaeformis 77
   ciliatus 77
     var. purgans 77
   commutatus 77, 417
   erectus 78
   hordeaceus 77
   incanus 417
   inermis 78
   Kalmii 78
   mollis 77
   purgans 77
   racemosus 77
   secalinus 76
   squarrosus 77, 433
   sterilis 417
   tectorum 77
 Brook Cress 210
 Brooklime 206
   American 353
 Brook-weed 315
 Broom 248
   Scotch 248
 Broom Corn 49
   Corn Millet 51
   Hickory 145
 Broom-rape 359
 Broom-rape Family 359
 Broussonetia 154
   papyrifera 154
 Brown Ash 318
Brunella
   vulgaris 335
 Buckbean 320
 Buckberry 313
 Buckeye 274
 Buckthorn 275
   Common 275
 Buckthorn Family 275
 Buckwheat 164
   Bush 163
   Climbing False 163
   Climbing Wild 163
   Thicket 163
   Wild 163
 Buckwheat Family 157
Buda
   borealis 173
   marina 173
   rubra 173
 Buffalo Bur 346
   Currant 219
 Bugbane 192
 Bugle
   Erect 332
 Bugle Weed 332, 341
 Bugloss
   Viper's 330
 Bulbous Buttercup 188
   Crowfoot 188
 Bull Brier 125
   Grass 68
   Nettle 345
   Thistle 405, 406
 Bullace Plum 244
 Bull-head Lily 183
 Bull-rattle 178
 Bulrush 85, 115

- Bulrush
  - Great 86
  - River 87
- Bunch Grape 276
  - Grass 48
  - Pink 181
- Bunchberry 304
- Bunch-flower
  - Crisped 118
- Bupleurum*
  - rotundifolium* 427
- Bur Clover 250
  - Grass 58
  - Marigold 396
  - Oak 150
- Burdock 404
  - Common 405
  - Great 404
- Burnet 241
  - Canadian 241
  - Garden 241
  - Great American 241
  - Salad 241
  - Wild 241
- Burnet Rose 242
- Burning Bush 271
- Bur-reed 39
- Bur-reed Family 39
- Bursa*
  - Bursa-pastoris* 201
- Bush Bean 258
  - Bindweed 163
  - Buckwheat 163
  - Clover 254
  - Honeysuckle 365
- Bushy Knotweed 160
  - Pigweed 170
- Butter and Eggs 350
- Butter Flowers 188
- Butterbur 402
- Buttercup 184
  - Bristly 187
  - Bulbous 188
  - Creeping 187
  - Early 187
  - Marsh 187
  - Meadow 188
- Buttercup
  - Running 234
  - Spotted-leaf 187
  - Swamp 187
  - Tall 188
  - Tufted 187
  - Wood 187
- Buttercups 188
- Butterfly-weed 322
- Butternut 144
- Butter-weed 387
- Button Snakeroot 297, 377
- Buttonball 220
- Buttonbush 364
- Buttonweed 363
- Buttonwood 220
- Cabbage 204
  - Skunk 110
- Cabinet Cherry 243
- Cacalia 403
  - suaveolens* 403
- Cactaceae 289, 438
- Cactus Family 289
- Cadlock 203
- Cakile 202
  - americana* 202
  - edentula* 202
- Calamagrostis 65
  - canadensis* 65
  - cinnoides* 65
  - Nuttalliana* 65
- Calamint 339
- Calamintha*
  - Clinopodium* 339
- Calamus 111
- Calendula 403
  - officinalis* 403, 432
- Calico Bush 309
- California Peppergrass 203
  - Poppy 196
  - Rose 324
- Calla 110
  - palustris* 110
- Calla
  - Marsh 110
  - Wild 110
- Callitrichaceae 267, 437

- Callitriche* 267
  Austini 267
  deflexa
    var. *Austini* 267
  heterophylla 267
  palustris 267
  verna 267
Calopogon 133
  pulchellus 133
Caltha 191
  palustris 191
Camelina 201
  microcarpa 202, 433
  sativa 201, 433
  silvestris 202
Campanula 373
  americana 429
  aparinoides 373
  carpatica 373, 435
  intercedens 373
  patula 373, 435
  rapunculoides 373
    var. *ucranica* 373
  rotundifolia 373
Campanulaceae 372, 439, 441
Campion 177, 179
  Bladder 180
  Day-blooming 178
  Four-leaved 180
  Meadow 178
  Morning 178
  Red 178
  Rose 177
  Starry 180
  White 178
Camptosorus 21
  rhizophyllus 21
Canada Blue Grass 73
  Coltsfoot 157
  Fleabane 387
  Hawkweed 415
  Lily 120
  Nettle 155
  Plum 246
  Squash 372
  Thistle 406
  Violet 288
  Canadian Burnet 241
    Hemp 321
  Canary Grass 58
    Vine 197
  Cancer-root 191, 359
    One-flowered 359
  Candle Rush 115
    Tree 359
  Candlewood 143
  Candytuft 201
    Annual 201
    Bitter 201
  Canker Rose 197, 242
  Canker-root 314
  Cannabis 153
    indica 153
    sativa 153
  Canoe Birch 147, 148
  Canoe-wood 194
  Cantaloupe 371
  Caper Family 211
    Spurge 267
  Capillaire 312
  Capnoides
    sempervirens 198
  Capparidaceae 211, 437, 440
  Caprifoliaceae 365, 438, 441
  Capriola
    Dactylon 69
  Capsella 201
    Bursa-pastoris 201
  Capsicum 344
    annuum 344, 432
  Caraway 300
  Cardamine 209
    arenicola 210
    bulbosa 209
      var. *purpurea* 210
    Douglassii 209
    hirsuta 210
      var. *sylvatica* 210
    parviflora 210
    pennsylvanica 210
    pratensis 210
    purpurea 189, 209
    rhomboidea 209
      var. *purpurea* 209

Cardinal-flower 374
 Cardiospermum 274
   Halicacabum 274, 434
 Carduus 405
   acanthoides 405, 435
   altissimus 406
   arvensis 406
   discolor 405
   lanceolatus 405
   muticus 406
   odoratus 406
   spinosissimus 405
 Careless 169
 Carex 91, 441
   adusta 425
   aenea 94
   aestivalis 100, 418
   alata 93
   albolutescens 92
   albursina 103
   aquatilis 98
   arctata 105
   Asa-Grayi 108
   atlantica 94
   aurea 98, 418
   Baileyi 107
   Bebbii 93
   Bicknellii 93
   bromoides 95
   brunnescens 95
   bullata 109
     var. *Greenii* 109
     " *Olneyi* 109
   canescens 95
     var. *alpicola* 95
     " *disjuncta* 95
     " *subloliacea* 95
     " *vulgaris* 95
   castanea 105, 419
   cephaloidea 97
   cephalophora 97
   communis 100
     var. *Wheeleri* 100
   comosa 107
   conoidea 104
   costellata 99
   Crawei 104

Carex
   Crawfordii 92
   crinita 97
     var. *gynandra* 97
   cristata 92
   cristatella 92
   Davisii 99, 418
   debilis
     var. *interjecta* 105
     " *Rudgei* 105
   Deweyana 96
   diandra 97
     var. *ramosa* 97
   digitalis 102
   eburnea 102
   echinata
     var. *angustata* 94
     " *cephalantha* 94
     " *conferta* 94
     " *microstachys* 94
   exilis 425
   festucacea 93
     var. *brevior* 93
   filiformis 106
     var. *latifolia* 106
   flava 104, 419
     var. *elatior* 105
     " *graminis* 105
     " *rectirostra* 105
     " *viridula* 105
   foenea 94
     var. *perplexa* 94, 418
   folliculata 108
   formosa 99
   fusca 99
   glaucodea 104
   Goodenowii 425
   gracillima 99
   granularis 104
     var. *Haleana* 104
     " *Schriveri* 104
   Grayii 108
     var. *hispidula* 108
   grisea 104
     var. *angustifolia* 104
     " *rigida* 104
   gynandra 98

Carex

- Haydeni* 98
Hitchcockiana 104
hormathodes 93
     var. *invisa* 93
     " *Richii* 93
hystericina 107
     var. *Cooleyi* 107
     " *Dudleyi* 107
interior 94
     var. *capillacea* 95
intumescens 108
     var. *Fernaldii* 108, 419
lanuginosa 106
laxiculmis 102
laxiflora 103
     var. *blanda* 103
     " *gracillima* 103
     " *latifolia* 103
     " *leptonervia* 103
     " *patulifolia* 103
     " *striatula* 103
     " *styloflexa* 103
     " *varians* 103
leptalea 99
limosa 101
littoralis 101
livida 101, 423
longirostris 105
lupuliformis 108
lupulina 108
     var. *pedunculata* 108
     " *polystachya* 108
lurida 107
     var. *exundans* 107
     " *flaccida* 107
     " *gracilis* 107
     " *parvula* 107
magellanica 101
mirabilis 92
     var. *perlonga* 92
     " *tincta* 92
monile 108
Muhlenbergii 96
     var. *enervis* 96
     " *xalapensis* 96
nigro-marginata 100

Carex

- Oederi*
     var. *pumila* 105
oligocarpa 104
oligosperma 106
pallescens 101
panicea 101
pauciflora 99
paupercula
     var. *pallens* 101
pedicellata 100
     var. *Wheeleri* 100
pedunculata 102
pennsylvanica 100
     var. *lucorum* 100
plantaginea 102
platyphylla 102
polygama 99
polymorpha 101, 419
polytrichoides 99
prasina 102
Pseudo-Cyperus 107
     var. *americana* 107
ptychocarpa 103
pubescens 101
retroflexa 96
retrorsa 107, 419
riparia 106
rosea 96
     var. *minor* 96
     " *radiata* 96
     " *retroflexa* 96
rostrata 109
     var. *utriculata* 109
scabrata 106
Schweinitzii 107
scirpoides 94
     var. *capillacea* 95
scoparia 91
     var. *condensa* 91
     " *moniliformis* 91
seorsa 95
setacea
     var. *ambigua* 97
setifolia 102
Shriveri 104
siccata 92

Carex

- silicea* 93
- sparganioides* 97
- squarrosa* 106
- stellulata* 94
  - var. *angustata* 94
  - " *cephalantha* 94
  - " *excelsior* 94
  - " *ormantha* 94

sterilis 94

- var. *cephalantha* 94
- " *excelsior* 94

stipata 97*straminea* 93, 418

- var. *alata* 93
- " *aperta* 93
- " *brevior* 93
- " *cumulata* 92
- " *focnea* 92
- " *invisa* 93
- " *mirabilis* 92

stricta 98

- var. *angustata* 98
- " *curtissima* 98
- " *decora* 98
- " *xerocarpa* 98

styloflexa 103*tenella* 96*tenera* 93*tenuis* 105*teretiuscula* 97

- var. *prairea* 97
- " *ramosa* 97

tetanica 101

- var. *Woodii* 101

torta 98*tribuloides* 92

- var. *cristata* 92
- " *moniliformis* 92
- " *reducta* 92, 418
- " *turbata* 92

triceps 99

- var. *hirsuta* 99

trichocarpa 106, 419*trisperma* 96

- var. *Billingsii* 418

Tuckermani 109*Carex**typhina* 106*typhinoides* 106*umbellata* 100

- var. *brevirostris* 418

- " *tonsa* 100

utriculata 109

- var. *minor* 109

varia 100

- var. *colorata* 100

vesicaria 108

- var. *distenta* 108

- " *jejuna* 108

- " *monile* 108

vestita 106*virescens* 99

- var. *costata* 99

- " *Swanii* 99

viridula 105*vulpinoidea* 97*Willdenowii* 100*xanthocarpa* 97

- var. *annectens* 97

Carnation 181*Carpenter-weed* 335*Carpet Weed* 173*Carpet Weed Family* 173*Carpinus* 146*caroliniana* 146*Carrion-flower* 125*Carrot* 303*Wild* 303*Carum* 300*Carvi* 300*Petroselinum* 300*Carya* 144*alba* 144, 145*amara* 145*cordiformis* 145*glabra* 145*microcarpa* 145*ovata* 144*porcina* 145*tomentosa* 145*Caryophyllaceae* 173, 437, 440*Cashew Family* 268*Cassandra* 310

- Cassandra*
calyculata 310
 Cassia 247
     Chamaecrista 247
     marilandica 247
     nictitans 247
 Castalia 183
     odorata 183
     tuberosa 184
 Castanea 149
     dentata 149
     sativa
         var. *americana* 149
 Castilleja 356
     coccinea 356
 Castor-oil Plant 265
 Cat Brier 125
     Mint 334
     Spruce 36
 Catalpa 359
     bignonioides 359
     Catalpa 359
 Catchfly 179
     Forked 179
     Garden 179
     Lobel's 179
     Night-flowering 179
     Sleepy 179
     Snapdragon 179
     Sweet William 179
 Catgut 251
 Catnip 334
 Cat's-ear 409
 Cat-tail 39
     Common 39
 Cat-tail Family 39
     Flag 39
     Grass 62
 Caulophyllum 195
     thalictroides 195
 Cayenne Pepper 344
 Ceanothus 275
     americanus 275
 Cedar
     Red 38
     White 37
 Celandine 196
 Celastraceae 271, 437, 440
 Celastrus 271
     scandens 271
 Celery
     Water 186
     Wild 47
 Celtis 153
     occidentalis 153
         var. *pumila* 153
 Cenchrus 58
     carolinianus 58
     tribuloides 58
 Centaurea 407
     arvense 430
     Cyanus 407
     Jacea 407
         var. *lacera* 407
     maculosa 408
     nigra 407
         var. *radiata* 407, 435
     vochinensis 408
 Centaury
     Black 407
     Meadow 407
 Cephalanthus 364
     occidentalis 364
 Cerastium 176
     arvense 176
     longipedunculatum 177
     nutans 177
     semidecandrum 177
     viscosum 426
     vulgatum 176
 Ceratophyllaceae 182, 437
 Ceratophyllum 182
     demersum 182
         var. *echinatum* 182
 Cercis 247
     canadensis 247, 434
 Chadlock 202, 203
     Jointed 202
     White 202
 Chaenorrhinum
     minus 350
 Chaetochloa
     glauca 57
     italica 57

- Chaetochloa*
versicolor 57
verticillata 57
viridis 57
 Chaff-seed 357
 Chain Fern 19
 Chair-maker's Rush 86
 Chamaecyparis 37
   sphaeroidea 37
   thyoides 37
 Chamaedaphne 310
   calyculata 310
 Chamaelirium 118
   carolinianum 118
   luteum 118
 Chamaenerion
   angustifolium 291
 Chamomile 398
   Corn 398
   Fetid 398
   Garden 399
   German 399
   Wild 399
   Yellow 399
 Champion Oak 151
 Charlock 202, 203
   Jointed 202
   White 202
 Cheat 76, 201, 202
 Checkerberry 311, 364
 Cheeses 279
 Cheilanthes 18
   lanosa 18
   vestita 18
 Chelidonium 196
   majus 196
 Chelone 352
   glabra 352
 Chenopodiaceae 165, 437, 439
 Chenopodium 165, 441
   album 166
     var. *viride* 166
   ambrosioides 165
     var. *anthelminticum* 165
   anthelminticum 165
   Bonus-Henricus 426
   Boscianum 167
   Chenopodium
     Botrys 165
     capitatum 166, 433
     glaucum 166
     hybridum 166
     leptophyllum 167
     murale 167
     rubrum 166
     urbicum 167
 Cherry 243, 245
   Bird 244, 245
   Black 245
   Cabinet 243
   Choke 244
   Dwarf 245
   Fire 244
   Ground 346
   Mahaleb 245
   Mazzard 245
   Morello 245
   Old-fashioned 245
   Perfumed 245
   Pie 245
   Pin 244
   Red 245
   Rum 243
   Saint Lucie 245
   Sand 245
   Sour 245
   Sweet 245
   Whiskey 243
   Wild 243
     " Black 243
     " Red 244
   Winter 346
 Cherry Birch 147
 Chervil
   Sweet 298
 Chess 76
   Soft 77
   Wild 78
   Wood 77
 Chestnut 149, 151
 Chestnut Oak 150
 Chick Pea 255
 Chicken-toes 135, 168
 Chickweed 175

- Chickweed
     Common 176
     " Mouse-ear 176
     Field 176
     Forked 172
     Gravel 172
     Indian 173
     Larger Mouse-ear 176
     Meadow 176
     Mouse-ear 176
     Nodding 177
     Sea 175
     Small Mouse-ear 177
     Winter 176
 Chickweed Wintergreen 316
 Chicory 408
     Common 408
 Chili Pepper 344
 Chimaphila 306
     maculata 306
     umbellata 306
 China Squash 372
 Chinese Mustard 203
 Chinquapin
     Water 184
 Chinquapin Oak 151
 Chiogenes 312
     hispidula 312
     serpyllifolia 312
 Chocolate-root 235
     Indian 235
 Choke Cherry 244
     Pear 222
 Chokeberry 223
     Black 223
     Purple 223
     Red 223
 Christmas Fern 21
     " Green 31
 Chrysanthemum 400
     Balsamita
         var. *tanacetoides* 400
     Leucanthemum 400
         var. *pinnatifidum* 400
     Parthenium 400
Chrysopogon
     avenaceus 49
Chrysopogon
     nutans 49
 Chrysopsis 377
     falcata 377
     mariana 429
 Chrysosplenium 216
     americanum 216
 Cicely
     Sweet 298
 Cicer 255
     arietinum 255, 430
 Cichorium 408
     Intybus 408
         var. *divaricatum* 408
 Cicuta 299
     bulbifera 299
     maculata 299
 Cimicifuga 192
     racemosa 192
         var. *dissecta* 193
 Cinna 65
     arundinacea 65
     latifolia 65
     pendula 65
 Cinnamon Fern 27
     Rose 242
 Cinnamon-wood 195
 Cinquefoil 232, 234
     Downy 233
     Hoary 233
     Marsh 233
     Mountain 233
     Purple 233
     Rough 232
     Shrubby 233
     Silvery 233
     Tall 232
     Three-toothed 233
 Circaea 294
     alpina 294
     lutetiana 294
 Cirsium 405
     altissimum 406, 432
     arvense 406
         var. *integrifolium* 406
         " *vestitum* 406
     discolor 405

- Cirsium*
   lanceolatum 405
   muticum 406
   pumilum 406
   spinosissimum 405
Cissus
   Ampelopsis 427
   arborea 427
 Cistaceae 282, 438
 Citron 371
 Citrullus 371
   Citrullus 371
   vulgaris 371, 432
 City Goosefoot 167
 Cladium 91
   mariscoides 91
 Clammy Azalea 307
   Cuphea 290
   Locust 251
 Clammy-weed 211
 Claytonia 182
   caroliniana 182, 189
   virginica 182
 Clearweed 156
 Cleavers 361
 Clematis 190
   verticillaris 190
   virginiana 190
 Clematis
   Mountain 190
   Purple 190
   Wild 190
 Cleome 212
   spinosa 212, 431
 Cleome
   Prickly 212
 Clethra 306
   alnifolia 306
 Cliff Brake 18
 Climbing Bitter-sweet 271
   Boneset 377
   False Buckwheat 163
   Fern 26
   Fumitory 197
   Hemp-weed 377
   Rose 242
   Clinopodium
     vulgare 339
 Clintonia 122
   borealis 122
 Clintonia 122
   Yellow 122
 Clitoria
   mariana 426
 Closed Gentian 320
 Clotbur 391
   Prickly 391
   Spiny 391
 Clove Currant 219
 Clover 248
   Alsike 249
   Bokhara 249
   Bur 250
   Bush 254
   Common Red 248
   Crimson 248
   Honeysuckle 249
   Hop 249
   Italian 248
   Low Hop 249
   Meadow 248
   Pea-vine 248
   Rabbit-foot 248
   Red 248
   Russian 252
   Stone 248
   Swedish 249
   Sweet 249
   White 249
     " *Sweet* 249
   Yellow 249
     " *Sweet* 249
 Clover Dodder 325
 Clown's Mustard 201
 Club Moss 30
   Moss Family 30
   Rush 85
 Cnicus
   altissimus 406
   var. discolor 405
   arvensis 406
   horridulus 405

*Cnicus**lanceolatus* 405*muticus* 406*pumilus* 406

Coast Blite 166

Germander 332

Goosefoot 166

Jointweed 164

Cock Sorrel 159

Cockle 177, 180

Corn 177

Cocklebur 240, 391

Cocksfoot 192

Cocksfoot Grass 56

Cockspur Grass 56

Thorn 225

*Coeloglossum**bracteatum* 130

Coffee

Wild 367

Cohosh 193

Black 192

Blue 195

Rattle 192

Red 193

White 193

Cole

Sea 202

Colic-root 125, 126

Coliseum Ivy 350

Collinsonia 344

canadensis 344

Coltsfoot 402

Canada 157

False 157

Sweet 157, 402

Columbine 192

European 192

Feathered 188

Garden 192

Red 192

Wild 192

Comandra 156

umbellata 156*Comarum**palustre* 233

Comfrey 328

Comfrey

Common 328

Rough 329

Wild 328

Commelina 113

communis 113*nudiflora* 113

Commelinaceae 113, 436, 439

Compositae 375, 439, 441

Composite Family 375

*Comptonia**peregrina* 143

Cone-flower 392, 393

Purple 393

Tall 393

Conioselinum 303

canadense 303*chinense* 303

Conium 298

maculatum 298

Conopholis 359

americana 359

Conringia 204

orientalis 204, 433

Convallaria 124

majalis 124

Convolvulaceae 324, 438, 440

Convolvulus 324

arvensis 325*japonicus* 324*repens* 325*sepium* 325var. *americanus* 325" *pubescens* 325" *repens* 325*spithameus* 324

Convolvulus Family 324

Coolweed 156

Coolwort 215

Coptis 191

trifolia 191

Coral Root 135

Early 135

Large 135

Coral-berry 193, 366

Corallorrhiza 135

Corallorrhiza 135

- Corallorrhiza
   innata 135
   maculata 135
   multiflora 135
     var. *flavida* 135
   odontorrhiza 135
   trifida 135
 Cord Grass 68
 Coreopsis 395
   aristosa 397
   discoidea 396
   lanceolata 396
   rosea 429
   tinctoria 395
   trichosperma 397
 Coriander 302
 Coriandrum 302
   sativum 302, 434
 Corn 48
   Broom 49
   Indian 48
   Kaffir 49
   Squirrel 198
   Turkey 198
   Wild Broom 70
 Corn Bindweed 163
   Chamomile 398
   Cockle 177
   Grass 55, 56
   Gromwell 329
   Kale 203
   Mustard 203
   Poppy 197
   Rose 197
   Salad 370
   Speedwell 354
   Spurrey 173
 Cornaceae 304, 438
 Cornel 304
   Dwarf 304
   Low 304
   Panicked 305
   Red-osier 305
   Round-leaved 304
   Silky 305
 Corn-flower 407
 Cornus 304
   alternifolia 305
   Amomum 305
   canadensis 304
   candidissima 305
   circinata 304
   florida 304
   paniculata 305
   Perpusi 305
   sericea 305
   stolonifera 305
 Coronilla 252
   varia 252
 Corpse Plant 307
 Corydalis 198
   glauca 198
   sempervirens 198
 Corydalis
   Pale 198
   Pink 198
 Corylus 146
   americana 146
   heterophylla 420, 433
   rostrata 146
 Costmary 400
 Cotton Grass 90
   Thistle 407
 Cottonwood 142
 Couch Grass 79
 Coughwort 402
 Cow Bells 180
   Cress 201
   Lily 183
   Parsnip 303
   Sorrel 159
   Vetch 256
   Wheat 356
 Cowbane
   Spotted 299
 Cow-herb 180
 Cow-quake 173
 Cow-rattle 180
 Cowslips 191
 Crab
   Siberian 222
 Crab Apple 222
   Grass 50, 61, 69, 160, 168

*Cracca**virginiana* 251

Crack Willow 138

Crambling Rocket 212

Cramp-bark 368

Cranberry 313, 314

American 314

High-bush 368

Large 314

Small 314

Cranberry Tree 368

Cranesbill 261

Cut-leaved 262

Dove's-foot 262

Meadow 261

Small-flowered 262

Wild 261

*Crantzia**lineata* 301

Crashes 206

Crassulaceae 214, 437, 440

Crataegus 225, 441

apposita 226var. *Bissellii* 226*Arnoldiana* 230*Baxteri* 226*Bissellii* 226*Brainerdi* 230var. *scabrida* 230*coccinea* 226var. *macracantha* 230" *rotundifolia* 227" *viridis* 226*cognata* 228*conjuncta* 229*cristata* 229*Crus-galli* 225var. *exigua* 226*demissa* 227*dissimilis* 228*dissona* 228*Dodgei* 227*Eamesii* 230*exigua* 226*ferentaria* 231*festiva* 229*flabellata* 227*Crataegus**foetida* 226*Forbesae* 228*fretalis* 230*fulgens* 231*genialis* 228*glaucophylla* 228*Gravesii* 227*Grayana* 227*Hargerii* 227*Holmesiana* 229*incisa* 229*intricata* 226*Jesupi* 229*latisepala* 228*levis* 229*littoralis* 229*lobulata* 229*macracantha* 230var. *rhombifolia* 230*macrosperma* 227var. *demissa* 227" *matura* 227" *pentandra* 227*matura* 227*modesta* 226*monogyna* 225*monstrata* 228*Napaea* 228*neo-londinensis* 230*Oxyacantha* 225*pedicellata* 230*pellucida* 231*pentandra* 227*Pequotorum* 229*polita* 230*Porteri* 229*premora* 226*Pringlei* 229var. *lobulata* 229*pruinosa* 228forma *dissona* 228var. *conjuncta* 228" *latisepala* 228" *Porteri* 229*punctata* 226*quinebaugensis* 229

Crataegus

- rhombifolia* 230
- rotundifolia* 227
- scabrida* 230
- sejuncta* 230
- spatiosa* 231
- Stonei 227
- stratfordensis* 231
- tenella* 227
- tomentosa* 426
- umbratilis* 226
- viridimontana* 228

Crawley Root 135

Crawling Spearwort 185

Cream-colored Avens 235

Creeping Buttercup 187

Crowfoot 187

Fern 26

Snowberry 312

Spearwort 185

Speedwell 354

Thyme 341

Crepis 412

capillaris 412*rigida* 413, 432*setosa* 413*taraxacifolia* 413, 432*tectorum* 412*virens* 412var. *dentata* 412

Cress

Bank 205

Bastard 200, 201

Belle Isle 208

Bitter 207, 209, 210

Brook 210

Common Winter 207

Cow 201

Creeping Yellow 207

Early Winter 208

Field 201

Field Penny 200

Garden 201

Hairy Rock 211

" Yellow 207

Hoary 421

Lamb's 210

Cress

Land 210

Low Rock 210

Marsh 207

Mouse-ear 206

Penny 200

Purple 210

Rock 210

Rocket 207

Small Bitter 210

Smooth Rock 211

Spring 209, 210

Thale 206

Tower 210

True Water 206

Wall 206, 210, 211

Water 206

Winter 207, 208

Yellow 207

" Water 207

Crimson Clover 248

Crinkle-root 208

Crisped Bunch-flower 118

Cross-wort 315

Crotalaria 248

sagittalis 248

Crotonopsis 265

linearis 265

Crowfoot 184

Biting 186

Bristly 187

Bulbous 188

Common White Water 185

Creeping 187

Cursed 186

Ditch 186

Early 187

Hooked 186

Kidney-leaved 186

Marsh 186, 187

Meadow 188

Mountain 186

Rock 186

Rough 186

Sanicle-leaved 186

Seaside 185

Small-flowered 186

- Crowfoot
   Smooth 186
   Spotted-leaf 187
   Stiff Water 184
   Swamp 187
   Tall 188
   Tufted 187
   White Water 184
   Wood 187
   Yellow Water 185
 Crowfoot Family 184
   Grass 50
 Crown Vetch 252
 Cruciferae 199, 437, 440
 Cryptogramma 19
   acrostichoides 424
   Stelleri 19, 424
 Cryptotaenia 300
   canadensis 300
 Cuckoo Flower 210
 Cucumber 371
   One-seeded Bur 372
   Star 372
   Wild 372
 Cucumber-root
   Indian 124
 Cucumis 371
   Melo 371, 432
   sativus 371, 432
 Cucurbita 372
   maxima 372, 432
   moschata 372, 432
   Pepo 372, 432
     var. *condensa* 372, 432
 Cucurbitaceae 371, 438
 Cudweed 389, 390
   Low 390
   Purplish 390
 Culver's Physic 353
 Culver's-root 353
 Cup Plant 390
 Cuphea 290
   petiolata 290
   viscosissima 290
 Cuphea 290
   Clammy 290
 Curled Dock 158
- Curled
   Mallow 279
   Mint 343
   Mustard 203
   Thistle 405
 Curly Dock 158
   Grass Family 26
 Currant 217
   Black 218
   Buffalo 219
   Clove 219
   European Black 218
   Fetid 219
   Flowering 218, 219
   Garden Black 218
     " Red 219
   Golden 219
   Indian 366
   Missouri 219
   Mountain 219
   Red 219
   Skunk 219
   Swamp Black 218
   Sweet 219
   Wild Black 218
   Wine 219
 Cursed Crowfoot 186
 Cuscuta 325
   arvensis 325
   cephalanthi 428
   compacta 326
   Coryli 325
   Epithymum 325
   Gronovii 326
   inflexa 325
   tenuiflora 428
 Cut Grass 58
 Cut-leaved Blackberry 238
   Cranesbill 262
   Geranium 262
   Pepper-root 200
   Toothwort 209
 Cycloloma 165
   atriplicifolium 165, 420, 433
   platyphyllum 165
 Cydonia 224
   japonica 224

- Cydonia
     vulgaris 224
 Cymbalaria
     Cymbalaria 350
 Cynanchum 323
     nigrum 323
 Cynodon 69
     Dactylon 69, 431
 Cynoglossum 327
     boreale 328
     officinale 327
     virginicum 328
 Cynosurus 72
     cristatus 72, 417
 Cynthia 408
 Cyperaceae 81, 436
 Cyperus 81, 441
     aristatus 82
     dentatus 82
     diandrus 81
         var. castaneus 81
     erythrorhizos 82
         var. pumilus 82
     esculentus 82
         var. angustispicatus 82
         " *leptostachyus* 82
     ferax 82
     filiculmis 83, 425
         var. macilentus 83
     fuscus 82, 431
     Grayii 83
     Houghtonii 425
     inflexus 82
     Nuttallii 82
     rivularis 81
     speciosus 82
     strigosus 83
         var. capitatus 83
         " *robustior* 83
 Cypress 37
     Mock 165
 Cypress Spurge 267
 Cyripedium 129
     acaule 129
     arietinum 425
     candidum 425
     hirsutum 129
     Cyripedium
         parviflorum 129
         var. pubescens 129
         pubescens 129
         reginae 129
         spectabile 129
 Cystopteris 24
     bulbifera 24
     fragilis 24
 Cytisus 248
     scoparius 248, 431
 Dactylis 72
     glomerata 72
 Daffodil 126
 Daisy
     Ox-eye 400
     White 400
     Yellow 393
 Daisy Fleabane 387
 Dalibarda 240
     repens 240
 Damask Violet 206
 Dame's Rocket 206
     " Violet 206
 Damson 244
 Dandelion 410
     Common 410
     Dwarf 408
     Fall 409
     Red-seeded 410
 Dangleberry 312
 Danthonia 67
     compressa 67
     sericea 425
     spicata 67
 Darnel 78
     Bearded 78
     Common 78
 Dasiphora
     fruticosa 233
 Dasystoma
     flava 355
     pedicularia 355
     virginica 355
 Datura 347
     Metel 348, 434
     meteloides 348, 432

- Datura*
     Stramonium 347
     Tatula 348
Daucus 303
     Carota 303
Day Lily 119, 120
Day-blooming Campion 178
     Lychnis 178
Day-flower 113
Dead Nettle 336
Decodon 289
     verticillatus 289
Deerberry 313
Deergrass 290
Deer-tongue Grass 55
Deerwood 146
Delphinium 192
     Ajaxis 192
     Consolida 192
Dennstaedtia
     punctilobula 25
Dentaria 208
     anomala 209
     diphylla 208
     incisa 209
     incisifolia 209
     laciniata 209
     maxima 209
Deptford Pink 181
Deringa
     canadensis 300
Deschampsia 67
     caespitosa 67
     flexuosa 67
Desmodium 252, 441
     acuminatum 252
     bracteosum 253
     canadense 253
     canescens 252
     ciliare 254
     cuspidatum 253
     Dillennii 253
     glabellum 252
     grandiflorum 252
     humifusum 252
     marilandicum 254
     nudiflorum 252
     Desmodium
         obtusum 254
         paniculatum 253
         rigidum 253
         roundifolium 252
         sessilifolium 253
         strictum 426
Deutzia 217
     scabra 217, 433
Devil's Apple 194
     Bit 118, 377
     Fig 197
     Hair 190
     Paint-brush 414
     Walking-stick 296
Dew Grass 64
Dewberry 239
Dew-plant 213
Dianthus 181
     Armeria 181
     barbatus 181
     deltoides 181
     plumarius 181
Dicentra 198
     canadensis 198
     Cucullaria 198
Dicksonia 25
     pilosiuscula 25
     punctilobula 25
         forma cristata 25
         " *schizophylla* 25
Diervilla 365
     Diervilla 365
     Lonicera 365
     trifida 365
Digitalis 353
     purpurea 353, 434
Digitaria 49
     filiformis 49
     humifusa 49
     sanguinalis 50
Dill 302
Diodia 363
     teres 363
Dioscorea 126
     villosa 126
Dioscoreaceae 126, 436

- Diospyros 317
     virginiana 317
Diplachne
     fascicularis 69
Diplopappus
     amygdalinus 429
Diplotaxis 204
     muralis 204, 433
     tenuifolia 204
 Dipsacaceae 370, 438, 441
Dipsacus 370
     sylvestris 370
Dirca 289
     palustris 289
Discopleura
     capillacea 299
 Dish Mustard 200
Distichlis 72
     maritima 72
     spicata 72
 Ditch Crowfoot 186
     Grass 44
     Moss 47
     Stonecrop 214
 Dock 157
     Belleville 159
     Bitter 159
     Blunt-leaved 159
     Broad 159
     Curled 158
     Curly 158
     Great Water 158
     Horse 158
     Narrow 158
     Pale 158
     Patience 157
     Peach-leaved 158
     Sorrel 159
     Spring 157
     Swamp 158
     Tall 158
     Velvet 349
     Yellow 158
 Dock-leaved Persicaria 160
 Dockmackie 368
 Dodder 325, 326
     Clover 325
     Dodder
         Field 325
         Hazel 325
Doellingeria
     infirmia 386
     umbellata 386
 Dog Fennel 398
     Grass 79
     Rose 242
     Violet 288
 Dogbane 321
     Spreading 321
 Dogbane Family 321
 Dogberry 217, 223, 305
 Dog's Couch Grass 79
 Dog's Wheat Grass 79
 Dog's-tail Grass 72
 Dog's-tooth Violet 121
 Dogwood 304
     Flowering 304
     Poison 268
     Red-osier 305
     Round-leaved 304
     Swamp 305
 Dogwood Family 304
 Dolphin Flower 192
Dondia
     americana 169
     maritima 168
 Doorweed 160
 Dove's-foot Cranesbill 262
     Geranium 262
 Downy Arrow-wood 368
     Bergamot 338
     Cinquefoil 233
     Poplar 142
     Yellow Foxglove 355
         " Violet 288
Draba 199
     caroliniana 199
     verna 199
Dracocephalum 335
     parviflorum 335
 Dragon
     Green 110
 Dragon Arum 109
     Head 335

- Dragon
   Root 110
 Dragon's Claw 135
 Drooping Avens 235
 Drop-seed 62, 63
 Drop-seed Grass 61
 Dropwort 235
 Drosera 213
   intermedia 213
     var. *americana* 213
   longifolia 213
   rotundifolia 213
 Droseraceae 213, 437
 Dry Strawberry 232
Drymocallis
   arguta 232
Dryopteris
   acrostichoides 21
     var. *Schweinitzii* 21
   aculeata Braunii 424
   Boottii 23
   cristata 23
     var. *Clintoniana* 23
   Goldiana 22
   marginalis 22
   noveboracensis 22
   simulata 22
   spinulosa 23
     var. *dilatata* 24
     " *intermedia* 23
   Thelypteris 22
 Duchesnea 232
   indica 232
 Duck Acorn 184
   Grass 73
 Duck's-foot 194
 Duck's-meat 111
 Duckweed 111
   Greater 111
   Lesser 112
 Duckweed Family 111
 Dulichium 83
   arundinaceum 83
   spathaceum 83
 Dumb Watches 213
 Durfee Grass 79
 Dusty Miller 177, 401
 Dutch Flax 201, 202
   Myrtle 143
 Dutchman's Breeches 198
 Dwarf Alder 275
   Blueberry 313
   Cherry 245
   Cornel 304
   Dandelion 408
   Ginseng 296
   Huckleberry 312
   Mallow 279
   Mistletoe 156
   Nettle 155
   Raspberry 237
   St. John's-wort 281
   Sumach 268
 Dyer's Rocket 212
   Weed 212
   Weld 212
 Early Buttercup 187
   Coral Root 135
   Crowfoot 187
   Meadow Rue 188
   Saxifrage 215
   Sweet Blueberry 313
   Yellow Violet 287
 Easter Bell 176
Eatonia
   Dudleyi 66
   nitida 66
   obtusata 66
   pennsylvanica 66
     var. *major* 66
 Ebenaceae 317, 438
 Ebony Family 317
   Spleenwort 20
Echinacea
   angustifolia 393
 Echinochloa 56
   crusgalli 56
   frumentacea 56, 433
   Walteri 56
 Echinocystis 372
   lobata 372
Echinosperrum
   Lappula 328
   virginicum 328

- Echium 330
     vulgare 330
 Eel Grass 45, 47
 Eglantine 242
 Eichhornia 114
     crassipes 114, 430
 Elatinaceae 282, 438
 Elatine 282
     americana 282
Elatinoides
     Elatine 350
 Elder 369
     Black-berried 369
     Box 273
     Common 369
     Marsh 391
     Poison 268
     Red-berried 369
     Wild 296
 Elecampane 390
 Eleocharis 83, 441
     acicularis 84
     diandra 84, 417
     Engelmanni 84
     intermedia 85, 418
     microcarpa 85
     mutata 83
     obtusata 84
     olivacea 83
     ovata 84, 418
     palustris 84
         var. *glaucescens* 84
         " *major* 84
         " *vigens* 84
     pygmaea 85
     quadrangulata 83
     Robbinsii 83
     rostellata 85
     tenuis 85
     Torreyana 85
     tuberculosa 84
 Eleusine 69
     indica 69
 Ellisia 327
     Nyctelea 327, 434
 Elm 152
- Elm
     American 152
     Common 152
     English 152
     European 152
     False 153
     Feathered 152
     Indian 152
     Moose 152
     Red 152
     Rock 152
     Shade 152
     Slippery 152
     Swamp 152
     Sweet 152
     Tawny 152
     Wahoo 153
     Water 152
     Weeping 152
     White 152
     Winged 153
     Witch 153
 Elodea 47
     campanulata 282
     canadensis 47
 Elymus 80
     australis 80, 423
     brachystachys 417, 433
     canadensis 80
         var. *glaucifolius* 81
     hirsutiglumis 80
     striatus 81
     virginicus 80
         var. *hirsutiglumis* 80
 Enchanter's Nightshade 294
 English Elm 152
     Hawthorn 225
     Meadow-sweet 235
     Plantain 361
     Violet 287
 Epifagus 359
     virginiana 359
 Epigaea 311
     repens 311
 Epilobium 291
     adenocaulon 292, 422, 427

Epilobium

- angustifolium 291
- coloratum 292
- densum 291
- Hornemanni* 427
- lineare 292
- molle 291
- palustre 292
- var. monticola 292
- strictum 291

Epipactis 134

- pubescens 135
- repens
- var. ophioides 134
- tesselata 134

Equisetaceae 29, 436

Equisetum 29

- arvense 29
- fluviatile 29
- hyemale 30
- var. affine 30
- “ intermedium 29
- limosum 29
- palustre 29
- pratense 29
- scirpoides 30
- sylvaticum 29
- variegatum 30
- var. Jesupi 30

Eragrostis 71

- capillaris 71
- Frankii 71
- hypnoides 71
- major 71
- megastachya 71
- minor 71
- pectinacea 71
- pilosa 71
- Purshii* 71
- reptans 71

Eragrostis

- Purple 71

Erechtites 403

- hieracifolia 403
- praealta* 403

Erect Bugle 332

Erect

- Goose Grass 160
- Knotweed 160

Ericaceae 306, 438

Erigeron 387

- annuus 387
- bellidifolius* 387
- canadensis 387
- philadelphicus 387
- pulchellus 387
- ramosus 387
- var. discoideus 387
- strigosus* 387

Eriocaulaceae 112, 436

Eriocaulon 112

- septangulare 112

Eriophorum 89

- alpinum* 86
- callitrix 89
- cyperinum* 88
- var. *laxum* 89
- gracile 89
- lineatum* 88
- paucinerium* 89
- polystachyon* 90
- var. *latifolium* 90
- tenellum 89
- vaginatum* 89
- virginicum 90
- var. album 90
- viridi-carinatum 90

Erodium 262

- cicutarium 262, 434
- moschatum 262, 434

Erodium

- Musk 262

Ervum

- Lens* 256

Eryngium 297

- aquaticum* 297
- planum 297, 434
- yuccifolium 297

Eryngo 297

Erysimum 206

- cheiranthoides 206

Erythronium 121

- Erythronium
   americanum 121
 Eschscholtzia 196
   californica 196, 421, 433
 Estragon 401
 Eupatorium 375
   ageratoides 376
   aromaticum 377
   hyssopifolium 375
   maculatum 375
     var. *amoenum* 375
   perfoliatum 376
     var. *truncatum* 376
   pubescens 376
   purpureum 375
     var. *amoenum* 375
     " *maculatum* 375
   rotundifolium
     var. *ovatum* 376
   sessilifolium 376
   teucrifolium 376
   urticaefolium 376
   verbenaefolium 376
 Euphorbia 265, 441
   corollata 266
   Cyparissias 267
   dentata 426
   Esula 266
   glyptosperma 426
   hirsuta 266
   Ipecacuanhae 266, 423
   Lathyrus 267
   maculata 266
   marginata 266
   nutans 265
   Peplus 267
   polygonifolia 265
   Preslii 265
 Euphorbiaceae 265, 437, 440
 European Barberry 195
   Columbine 192
   Elm 152
   Fly Honeysuckle 365
   Garden Bean 256
   Gooseberry 218
   Larch 35
   European
     Linden 277
     Mallow 279
     Millet 51
     Mountain Ash 223
     Spindle Tree 271
     Vervain 330
     Wood Strawberry 231
 Euthamia
   caroliniana 381
   graminifolia 381
   tenuifolia 381
 Evening Lychnis 178
   Primrose 292
   Primrose Family 291
 Ever-blooming Lychnis 178
 Evergreen Blackberry 238
 Everlasting 388, 389, 390
   Common 390
   Pearly 389
   Plantain-leaved 389
   Sweet 390
 Everlasting Pea 257
 Evonymus 271
   alatus 271
   atropurpureus 271
   europaeus 271
 Fagaceae 148, 436
 Fagopyrum 164
   esculentum 164, 431
   Fagopyrum 164
 Fagus 148
   americana 148
   ferruginea 148
   grandifolia 148
 Fairy Creeper 197
   Cup 216
 Faitour's Grass 266
Falcata
   comosa 259
   Pitcheri 259
 Fall Dandelion 409
 False Acacia 251
   Beech-drops 307
   Coltsfoot 157
   Dragon Head 335

False

- Elm 153
- Flax 201, 202
- Foxglove 355
- Gromwell 330
- Heather 283
- Hellebore 118
- Indigo 247, 251
- Loosestrife 291
- Mermaid 268
- “ Family 268

Miterwort 215

Mustard 211

Nettle 156

Pimpernel 352

Red Top 73

Rice 58

Sarsaparilla 296

Solomon's Seal 122

Spikenard 122

Sycamore 220

Unicorn-root 125

Feather Geranium 165

Grass 60

Hyacinth 121

Feathered Columbine 188

Elm 152

Featherfoil 315

American 315

Felon-herb 401

Fen Orchis 136

Fennel 301

Common 301

Dog 398

Garden 301

Fennel Flower 191

Fern

Beech 17

Bladder 24

Broad Beech 17

“ Shield 24

Chain 19

Christmas 21

Cinnamon 27

Climbing 26

Clinton's Shield 23

Fern

Creeping 26

Crested Shield 23

Flowering 26

Goldie's 22

Grape 27

Hairy Lip 18

Hartford 26

Hay-scented 25

Interrupted 26

Lady 21

Long Beech 17

Marginal Shield 22

Marsh 22

Massachusetts 22

Net-veined Chain 19

New York 22

Oak 17

Ostrich 25

Rattlesnake 28

Royal 26

Sensitive 25

Shield 22

Spinulose Shield 23

Sweet 144

Virginia Chain 19

Walking 21

Wood 22

Fern Family 17

Fescue

Meadow 76

Sheep's 76

Slender 76

Taller 76

Fescue Grass 76

Festuca 76

capillata 76

elatior 76

var. *pratensis* 76

nutans 76

octoflora 76

ovina 76

var. *capillata* 76

“ *duriuscula* 425

rubra 76, 425

tenella 76

Fetid Chamomile 398

Currant 219

Horehound 336

Fetter Bush 309

Fever Bush 196

Feverfew 400

Feverwort 367

Field Avens 235

Bean 258

Bindweed 325

Chickweed 176

Cress 201

Dodder 325

Garlic 119

Kale 203

Larkspur 192

Mint 343

Pansy 288

Pea 258

Poppy 197

Scabious 371

Soapwort 180

Sorrel 159

Spurrey 174

Strawberry 231

Thistle 405

Fig

Devil's 197

Indian 289

Figwort 351

Figwort Family 349

Filbert 146

Filipendula 234

hexapetala 235, 434

rubra 234

Ulmaria 234

*Filix**bulbifera* 24*fragilis* 24

Fimbristylis 85

autumnalis 85*capillaris* 85

Frankii 85

Fine Bent 64

Snakeroot 157

Finger Grass 49, 50

Fiorin 64

Fir 37

Balm-of-Gilead 37

Balsam 37

Scotch 35

Fire Cherry 244

Fire Plant

Mexican 165

Fire Pink 179

Fireweed 291, 403

Fit-root 307

Five-finger 232, 234

Marsh 233

Mountain 233

Purple 233

Three-toothed 233

Flag

Blue 127

Cat-tail 39

Larger Blue 127

Poison 127

Slender Blue 127

Sweet 111

Flannel-leaf 349

Flax 259

Common 259

Dutch 201, 202

False 201, 202

Wild Yellow 260

Flax Family 259

Fleabane 387

Canada 387

Daisy 387

Marsh 388

Salt Marsh 388

Fleur-de-lis 127

Flixweed 206

Floating Foxtail 62

Heart 320

Floerkea 268

proserpinacoides 268

Flowering Currant 218, 219

Dogwood 304

Fern 26

" Family 26

Locust 251

Maple 278

Spurge 266

- Flowering
   Thistle 197
   Wintergreen 263
 Flower-of-an-Hour 280
 Fly-away Grass 64
 Foam-flower 215
 Foeniculum 301
   Foeniculum 301
   officinale 301
   vulgare 301
 Fool's Parsley 302
 Forget-me-not 329
   True 329
   Wild 329
 Forked Catchfly 179
   Chickweed 172
 Forsythia 318
   viridissima 318, 434
 Four-leaved Campion 180
 Four-o'clock 171
 Four-o'clock Family 171
 Fowl Meadow Grass 73, 74
 Fox Grape 276
 Foxglove 353
   Common 353
   Downy False 355
   " Yellow 355
   Oak-leaved False 355
   Smooth False 355
 Foxtail 57
   Floating 62
   Green 57
   Marsh 62
   Meadow 62
   Water 62
 Foxtail Grass 62
 Fragaria 231
   americana 232
   canadensis 231
   indica 232
   terrae-novae 231
   vesca 231
   var. *alba* 232
   " *americana* 232
   virginiana 231
   var. *Grayana* 231
   " *illinoensis* 231
 Fragrant Balm 338
 Fraxinus 317
   americana 317
   Darlingtonii 317
   excelsior 318
   lanceolata 318
   nigra 318
   pennsylvanica 317
   var. *lanceolata* 318
   pubescens 317
   sambucifolia 318
   viridis 318
 French Pink 181
   Purslane 182
   Rose 243
 Fringe Cup 216
 Fringed Gentian 319
   Loosestrife 316
   Orchis 130
   Polygala 263
 Frog Grass 114, 168
   Lily 183
 Frog's Bit Family 47
 Frost Grape 277
 Frost-flower 382
 Frostweed 282
 Fumaria 198
   officinalis 198
 Fumariaceae 197, 437, 440
 Fumitory 198
   Climbing 197
   Common 198
   Hedge 198
 Fumitory Family 197
 Funkia
   lanceifolia 120
   ovata 119
 Galeopsis 335
   Ladanum 335, 434
   Tetrahit 335
 Galeorchis
   spectabilis 130
 Galingale 81
 Galinsoga 397
   parviflora 397
   var. *hispida* 397
 Galium 361, 441

Galium

Aparine 361
 asprellum 363
 boreale 362
 circaezans 362
 Claytoni 363
 erectum 363
 labradoricum 363
 lanceolatum 362
 Mollugo 362
 palustre 363
 pilosum 362

var. punctulosum 362

tinctorium 363

var. *labradoricum* 363

trifidum 363

var. *latifolium* 363

" *pusillum* 363

triflorum 363

verum 362

Wirtgenii 362, 435

Gall-of-the-Earth 413

Gama Grass 48

Garden Asparagus 122

Black Currant 218

Burnet 241

Catchfly 179

Chamomile 399

Columbine 192

Cress 201

Fennel 301

Gooseberry 218

Heliotrope 370

Huckleberry 345

Larkspur 192

Mignonette 212

Orpine 214

Parsley 300

Patience 157

Pea 257

Peppergrass 201

Phlox 326

Pink 181

Plum 246

Poppy 197

Portulaca 182

Purslane 182

Garden

Radish 202

Red Currant 219

Sage 337

Sorrel 159

Valerian 370

Garget 171

Garlic 119

Field 119

Hedge 205

Meadow 119

Wild 119

Garlic Mustard 205

Gaultheria 311

procumbens 311

Gaura 294

biennis 294

Gaylussacia 312

baccata 312

forma *glaucocarpa* 312

dumosa 312

frondosa 312

resinosa 312

Gemmungia

chinensis 128

Gentian 319

Bottle 320

Closed 320

Fringed 319

Horse 367

Gentian Family 319

Gentiana 319

Amarella 427

Andrewsii 320, 428

crinita 319

quinquefolia 319, 427

quinqueflora 319

Saponaria 428

Gentianaceae 319, 438

Geraniaceae 261, 437, 440

Geranium 261

carolinianum 261

dissectum 262, 431

maculatum 261

molle 262, 434

pratense 261, 434

pusillum 262

Geranium
Robertianum 261
Geranium
Cut-leaved 262
Dove's-foot 262
Feather 165
Meadow 261
Mint 400
Small-flowered 262
Geranium Family 261
Gerardia 355
    Besseyana 356
    flava 355
    Gattingeri 356
    linifolia 429
    maritima 356
    parvifolia 356
    paupercula 356
    pedicularia 355
    purpurea 355
        var. *paupercula* 356
    quercifolia 355
    Skinneriana 356
    tenuifolia 356
        var. *macrophylla* 356
    virginica 355
Gerardia 355, 356
    Purple 355
    Seaside 356
German Chamomile 399
    Millet 57
Germander 332
    American 332
    Coast 332
Geum 235
    album 235
    canadense 235
    flavum 235
    macrophyllum 426
    rivale 235
    strictum 235, 426
    virginianum 235
Ghost-flower 307
Giant Hyssop 334
    Solomon's Seal 123
Gill 334
Gill-over-the-Ground 334

Ginger
    Wild 157
Ginger-root
    Wild 157
Ginseng 296
    Dwarf 296
Ginseng Family 295
Gipsy Combs 370
Girls-and-Boys 198
Glasswort 168
    Woody 168
Glaucous Willow 139
Glecoma
    hederacea 334
Gleditsia 246
    triacanthos 246
Globeflower 191, 236
    American 191
    Spreading 191
    Swamp 191
    Wild 191
Glossy Willow 138
Glyceria 74
    acutiflora 75
    borealis 75
    canadensis 74
    elongata 74
    fluitans 75
    grandis 74
    nervata 74
    obtusa 74
    pallida 74
    septentrionalis 75
    Torreyana 74
Glycyrrhiza 252
    lepidota 252, 431
Gnaphalium 389
    decurrens 390
    obtusifolium 389
    polycephalum 389
    purpureum 390
    uliginosum 390
Goat's Beard 410
    Rue 251
Gold-cups 188
Golden Alexanders 300
    Aster 377

- Golden
   Bell 318
   Chain 214
   Club 111
   Currant 219
   Glow 393
   Loosestrife 315
   Marguerite 399
   Meadow Parsnip 300
   Moss 214
   Osier 143
   Peppergrass 201
   Ragweed 404
   Ragwort 404
   Saxifrage 216
   Seal 193
 Golden-rod 378, 380, 381
   Sweet 379
   White 378
 Golden-tuft 200
 Golden-Wonder Millet 57
 Goldie's Fern 22
 Gold-of-Pleasure 201, 202
 Goldthread 191
Goodyera
   pubescens 135
   repens 134
   tesselata 134
 Goose Grass 69, 72, 75, 160, 361
 Gooseberry 217
   Common 218
   European 218
   Garden 218
   Missouri 217
   Northern 218
   Prickly 217
   Smooth 218
   Swamp 218
   Wild 218
 Goosefoot 165
   City 167
   Coast 166
   Maple-leaved 166
   Nettle-leaved 167
   Oak-leaved 166
   Red 166
   Seaside 169
   Goosefoot
     Upright 167
     White 166
   Goosefoot Family 165
   Goshen Hardhack 233
   Go-to-Bed-Noon 121
   Gourd 372
   Gourd Family 371
   Goutweed 299
   Goutwort 299
   Gowan
     Meadow 191
   Gramineae 48, 436, 439
   Grape 276
     Blue 277
     Bunch 276
     Fox 276
     Frost 277
     Northern Fox 276
     Pigeon 276
     River-bank 277
     Skunk 276
     Summer 276, 277
     Wolf 345
   Grape Fern 27
     Hyacinth 121
   Grass
     Alkali 72
     Arrow 45
     Awned Wheat 79
     Barnyard 56
     Beach 65
     Bear 121
     Beard 48, 65
     Bent 64
     Bermuda 69
     Billion-Dollar 56
     Black 114
     Black Oat 60
     Blue-eyed 128
     Blue-joint 65
     Bottle 57
     Bottle-brush 81
     Bristly Foxtail 57
     Brome 76
     Broom Beard 48
     Brown Bent 64

Grass

Bull 68
 Bunch 48
 Bur 58
 Canada Blue 73
 Canary 58
 Cat-tail 62
 Coast Knot 164
 Cocksfoot 56
 Cockspur 56
 Common Hair 67
 Cord 68
 Corn 55, 56
 Cotton 90
 Couch 79
 Crab 50, 61, 69, 160, 168
 Creeping Spear 73
 Crowfoot 50
 Cut 58
 Deer-tongue 55
 Dew 64
 Ditch 44
 Dog 79
 Dog's Couch 79
 Dog's Wheat 79
 Dog's-tail 72
 Drop-seed 61
 Duck 73
 Durfee 79
 Eel 45, 47
 Erect Goose 160
 Faitour's 266
 Fall Witch 50
 Feather 60
 Fescue 76
 Finger 49, 50
 Flat-stemmed Blue 73
 Floating Manna 75
 Fly-away 64
 Forked Beard 48
 Fowl Meadow 73, 74
 Foxtail 62
 Frog 114, 168
 Gama 48
 German Knot 172
 Goose 69, 72, 75, 160, 361
 Green Eel 185

Grass

Hair 62, 64, 71
 Hairy Brome 77
 Hedgehog 58
 Herd's 62
 Holy 59
 Hungarian 57
     "   Brome 78
 Indian 49
 Italian Ray 78
     "   Rye 78
 Japanese Barnyard 56
 Johnson 49
 June 73
 Kentucky Blue 73
 Knot 79, 160
 Knot-root 61
 Large Crab 50
 Low Spear 72
 Lyme 80
 Manna 74
 Marsh 68
 Meadow 72
     "   Spear 74
 Melic 72
 Mesquite 69
 Needle 60
 Oat 67
 Old-witch 51
 Orange 282
 Orchard 72
 Pale Manna 74
 Panic 51
 Pearl 74
 Perennial Foxtail 57
     "   Ray 78
     "   Rye 78
 Pigeon 57
 Porcupine 60
 Poverty 283
 Quack 79
 Quaking 72
 Quitch 79
 Rattlesnake 74
 Reed Bent 65
     "   Canary 59
     "   Meadow 74

Grass

Rib 361
 Ribbon 59
 Rice Cut 58
 Ripple 361
 Rough Foxtail 57
     " Hair 64
 Rough-stalked Meadow 73
 Rush 63
 Salt Marsh 68
     " Meadow 68
     " Reed 68
 Sand 70
     " Knot 164
 Scorpion 329
 Scratch 58, 163
 Scurvy 208
 Scutch 69, 79
 Sea Spear 75
 Seaside Knot 164
 Seneca 59
 Sesame 48
 Shave 30
 Shear 79
 Sickie 163
 Silk 64
 Slough 68
 Small Crab 49
 Smooth Meadow 73
 Snake 71
 Sour 159
 Spear 72, 73
 Spike 72
 Spires 59
 Squirrel-tail 80
 Star 125, 127
 Stink 71
 Swamp Wire 73
 Sweet Vernal 59
 Switch 52
 Sword 59, 98
 Tall Manna 74
     " Marsh 68
     " Oat 67
     " Panic 52
     " Quaking 74
 Tape 47

Grass

Terrell 80
 Thatch 68
 Thin 64
 Tickle 51
 Toad 114
 Tongue 176, 200
 Triple-awned 60
 Tufted Hair 67
 Twitch 57
 Vanilla 59
 Velvet 66
 Vernal Whitlow 199
 Water Star 114
 Way 160
 White 58
     " Bent 64
 Whitlow 199
 Wild Oat 67
 Wire 48, 69, 73, 160
 Wood 49
     " Reed 65
 Wool 88
 Yard 69
 Yellow-eyed 112, 127
 Grass Family 48
 Grass of Parnassus 216
 Grass Pink 133, 181
     Wrack 45
 Gratiola 353
     aurea 353
     dubia 353
     virginiana 353
 Gravel Chickweed 172
 Gravel-root 375
 Gravel-weed 330
 Gray Birch 147
     Willow 141
 Greaseweed 357
 Great American Burnet 241
     Blue Lobelia 374
     Bulrush 86
     Burdock 404
     Laurel 308
     Nettle 155
     Ragweed 391
     St. John's-wort 280

- Great
 Solomon's Seal 123
 Water Dock 158
 Willow-herb 291
 Greater Bladderwort 358
 Duckweed 111
 Starwort 176
 Stitchwort 176
 Greek Valerian 327
 Green Adder's Mouth 136
 Amaranth 169
 Ash 318
 Brier 125
 Dragon 110
 Foxtail 57
 Hellebore 118
 Milkweed 323
 Grim the Collier 414
 Grindelia 377
 squarrosa 377, 435
 Griottes 245
 Gromwell 329
 Common 330
 Corn 329
 False 330
 Ground Cherry 346
 Hemlock 34
 Honeysuckle 250
 Ivy 334
 Laurel 311
 Pine 31
 Pink 326
 Groundnut 258, 296
 Groundsel 403
 Common 403
 Groundsel Tree 388
 Gum
 Black 305
 Red 220
 Sour 305
 Star-leaved 220
 Sweet 220
 Gum Tree
 Sweet 220
 Gumbo 280
 Gum-plant 377
Gymnadeniopsis
clavellata 131
Gypsophila 181
elegans 181, 433
muralis 181, 433
Gypsophyll 181
Gyrostachys
cernua 134
gracilis 133
linearis 133
ochroleuca 134
plantaginea 134
praecox 133
simplex 133
stricta 134
Gyrotheca
capitata 126
tinctoria 126
Habenaria 130, 441
blephariglottis 131
bracteata 130
ciliaris 131
clavellata 131
dilatata 130
fimbriata 132
flava 130
grandiflora 132
Hookeri 131
 var. *oblongifolia* 131
hyperborea 130
lacera 132
macrophylla 131
orbiculata 131, 419
peramoena 425
psycodes 132
rotundifolia 425
tridentata 131
virescens 130
 Hackberry 153
 Hackmatack 35
 Haemodoraceae 126, 436
 Hair Grass 62, 64, 71
 Hairy Agrimony 240
 Hawkweed 415
 Lip Fern 18
 Pinweed 283
 Solomon's Seal 123

- Hairy
   Tare 256
   Vetch 256
 Halberd-leaved Tear-thumb 163
 Haloragidaceae 294, 438
 Hamamelidaceae 219, 437
 Hamamelis 219
   virginiana 219
 Hardhack 221, 233, 365
   Goshen 233
   Purple 221
 Hardheads 407
 Harebell 373
 Hare's Tail 89
 Hare's-ear 204
 Hare's-ear Mustard 204
 Hartford Fern 26
 Haw
   Black 369
   Red 225
 Haw Bush 225
   Tree 225
 Hawkbit 409
 Hawk's-beard 412
 Hawkweed 414
   Canada 415
   Hairy 415
   Orange 414
 Hawthorn 225
   English 225
 Hay-scented Fern 25
 Hazel 146
 Hazel Dodder 325
 Hazelnut 146
   Beaked 146
   Wild 146
 Headache 197
 Headache Plant 356
 Heal-all
   Common 335
 Heart Snakeroot 157
 Heart-leaved Willow 139
 Heart's-ease 162, 284, 288
 Heart-seed 274
 Heartweed 162
 Heath Family 306
 Heather
   False 283
 Hedeoma 339
   hispidula 339
   pulegioides 339
 Hedge Bindweed 163, 325
   Fumitory 198
   Garlic 205
   Hyssop 353
   Mustard 205
   Nettle 337
   Pink 180
   Thorn 225
 Hedgehog Grass 58
 Helenium 398
   autumnale 398
   nudiflorum 398
   tenuifolium 398
 Helianthemum 282
   canadense 282
   corymbosum 427
   majus 282
 Helianthus 394, 441
   angustifolius 429
   annuus 394
   debilis 394, 435
     var. cucumerifolius 394, 435
   decapetalus 395
   divaricatus 395
   doronicoideus 429
   giganteus 394
     var. ambiguus 394
   grosseserratus 394
   laetiflorus 394
   Maximiliani 395, 435
   petiolaris 394
   rigidus 394
   scaberrimus 394
   scabra 429
   strumosus 395
     var. macrophyllus 395
     " mollis 395
   tracheliiifolius 395, 423
   tuberosus 395
 Heliopsis 392
   helianthoides 392
   laevis 392

- Heliopsis
   scabra 392, 430
 Heliotrope
   Garden 370
 Hellebore
   American White 118
   False 118
   Green 118
Helonias
   bullata 425
 Hemerocallis 120
   flava 120
   fulva 120
 Hemicarpha 90
   micrantha 90
   subsquarrosa 90
 Hemlock 37
   Ground 34
   Poison 298
   Water 299
 Hemlock Parsley 303
 Hemp 153
   Albany 155
   American 321
   Canadian 321
   Common 153
   Indian 321
   Salt Marsh Water 171
   Water 171
 Hemp Nettle 335
 Hemp-weed
   Climbing 377
 Hen-and-Chickens 215
 Henbane 422
   Black 422
 Henbit 336
 Hepatica 189
   acuta 189
   acutiloba 189
   Hepatica 189
   triloba 189
 Heracleum 303
   lanatum 303
 Herb Bennet 235
   Gerard 299
   Patience 157
   Robert 261
- Herb
   Sophia 206
 Hercules' Club 296
 Herd's Grass 62
 Heron's-bill 262
 Hesperis 206
   matronalis 206
 Heteranthera 113
   dubia 114
   graminea 114
   reniformis 113
 Heuchera 215
   americana 215
 Hibiscus 279
   esculentus 280, 431
   Moscheutos 280
   syriacus 279
   Trionum 280
 Hickory 144
   Bitter Nut 145
   Broom 145
   Little Pignut 145
   Pignut 145
   Shag-bark 145
   Shell-bark 145
   Small-fruited 145
   Swamp 145
   White-heart 145
 Hickory Poplar 194
Hicoria
   alba 145
   glabra 145
   microcarpa 145
   minima 145
   ovata 144
 Hieracium 414
   aurantiacum 414
   canadense 415
   floribundum 414
   Gronovii 415
   marianum 414
   paniculatum 414
   Pilosella 414
   pratense 414
   scabrum 415
   venosum 414
     var. *subcaulescens* 414

- Hierochloe 59
     borealis 59
     odorata 59
 High Angelica 303
     Mallow 279
 High-bush Blackberry 237, 239
     Blueberry 313
     Cranberry 368
 Highwater-shrub 391
 Hip Rose 242
Hippuris
     vulgaris 427
 Hoary Alder 148
     Alyssum 199
     Cinquefoil 233
     Cress 421
     Pea 251
     Vervain 331
     Willow 140
 Hobble-bush 368
 Hog Apple 194
     Lily 183
     Peanut 259
 Hog-weed 391
 Holcus 66
     lanatus 66
 Holly 269
     American 269
     Mountain 270, 271
 Holly Family 269
 Hollyhock 278
Holosteum
     umbellatum 426
 Holy Grass 59
Homalocenchrus
     oryzoides 58
     virginicus 58
 Honesty 208
 Honewort 300
 Honey Locust 246
 Honey-bloom 321
 Honeysuckle 192, 365
     American Fly 365
     Bush 365
     European Fly 365
     Ground 250
     Japanese 366
     Honeysuckle
         Mountain Fly 365
         Tartarian 365
         Trumpet 366
         White Swamp 307
         Wild 308, 366
 Honeysuckle Clover 249
 Honeysuckle Family 365
 Honey-sweet 235
 Hooked Crowfoot 186
 Hoop Ash 153, 318
 Hop 153
     Common 153
     Japanese 154
 Hop Clover 249
     Hornbeam 146
     Medick 250
     Tree 263
 Hordeum 80
     jubatum 80
     vulgare 80, 431
 Horehound 333
     Black 336
     Common 333
     Fetid 336
     Water 341
 Hornbeam 146
     American 146
         " Hop 146
     Hop 146
 Horned Pondweed 44
     Rush 90
 Hornwort 182
 Hornwort Family 182
 Horse Balm 344
     Brier 125
     Dock 158
     Gentian 367
     Lily 183
     Mint 338, 342
     Nettle 345
     Plum 246
 Horse-chestnut 274
     Common 274
 Horsefly-weed 247
 Horseradish 207
 Horsetail 29

- Horsetail
     Common 29
 Horsetail Family 29
 Horse-weed 387, 411
 Hosackia 250
     americana 250, 434
     Purshiana 250
 Hosta 119
     caerulea 119
     japonica 120
 Hottonia 315
     inflata 315
 Hound's Tongue 327
     Common 327
 House Sorrel 159
 Houseleek 215
 Houstonia 364
     caerulea 364
     lanceolata 364
     longifolia 364
     purpurea
         var. *calycosa* 364
         " *longifolia* 364
 Hubbard Squash 372
 Huckleberry 312
     Black 312
     Blue 312
     Common 312
     Dwarf 312
     Garden 345
     Squaw 313
 Hudsonia 283
     tomentosa 283
 Humulus 153
     japonicus 154
     Lupulus 153
 Hungarian Grass 57
 Hungry-root 296
 Huntsman's Cup 213
 Hyacinth
     Feather 121
     Grape 121
     Starch Grape 121
     Water 114
 Hydrastis 193
     canadensis 193
 Hydrocharitaceae 47, 436
 Hydrocotyle 297
     americana 298
     umbellata 297
 Hydrophyllaceae 327, 438
 Hydrophyllum 327
     virginianum 327
 Hyoscyamus 422
     niger 422, 434
 Hypericaceae 280, 438, 440
 Hypericum 280, 441
     adpressum 281
     Ascyron 280
     Bissellii 281
     boreale 281
     canadense 282
         var. *majus* 281
         " *minimum* 281
     corymbosum 281
     ellipticum 281
     gentianoides 282
     maculatum 281
         var. *subpetiolatum* 281
     majus 281
     mutilum 281
     nudicaule 282
     perforatum 280
     prolificum 281
     punctatum 281
     virginicum 282
 Hypochaeris 409
     radicata 409
 Hypopitys
     americana 307
     Hypopitys 307
     lanuginosa 307
 Hypoxis 127
     erecta 127
     hirsuta 127
 Hyssop 340
     Giant 334
     Hedge 353
 Hyssopus 340
     officinalis 340
 Hystrix 81
     Hystrix 81
     patula 81
 Iberis 201

Iberis

amara 201, 433

Ilex 269*bronxensis* 270*glabra* 270*laevigata* 270*opaca* 269*verticillata* 270var. *padifolia* 270" *tenuifolia* 270***Illicioides****mucronata* 271**Illecebraceae** 172, 437, 439***Ilysanthes*** 352*anagallidea* 353*attenuata* 352*dubia* 352, 353*gratioloides* 352*riparia* 352, 353***Impatiens*** 274*aurea* 274*biflora* 274*fulva* 274*pallida* 274**Indian Apple** 194

Arrow-wood 271

Bean 359

Chickweed 173

Chocolate-root 235

Corn 48

Cucumber-root 124

Cup 213

Currant 366

Elm 152

Fig 289

Grass 49

Hemp 321

Mallow 278

Mustard 203

Paint 193

Pear 224

Pipe 307

Pitcher 213

Plantain 403

Poke 118

Rice 58

Strawberry 232

Indian

Tobacco 374, 389

Turmeric 193

Turnip 109

Indigo

Bastard 251

False 247, 251

Wild 247

Ink Plant

Red 171

Inkberry 171, 270**Ink-root** 314**Innocence** 364**Interrupted Fern** 26**Inula** 390*Helenium* 390**Iodanthus** 208*pinnatifidus* 208, 433***Ionactis****linariifolius* 386**Ipecac**

Wild 266

Ipecac Spurge 266**Ipomoea** 324*coccinea* 324, 432*hederacea* 324*pandurata* 324*purpurea* 324**Iridaceae** 127, 436, 439**Iris** 127*germanica* 127*orientalis* 127*prismatica* 127*Pseudacorus* 127*versicolor* 127**Iris** 127

Yellow 127

Iris Family 127**Iron Oak** 150**Ironweed** 375**Ironwood** 146**Ironwort** 334***Isanthus****brachiatus* 428*caeruleus* 428***Isnardia****palustris* 291

- Isoëtaceae 32, 436
 Isoëtes 32
     canadensis 33
     Dodgei 33
         var. *Robbinsii* 416
     echinospora
         var. *Braunii* 32
         " *muricata* 32
     Engelmanni 33
         var. *gracilis* 33
     foveolata 32, 422
     Gravesii 32
     lacustris 424
     riparia
         var. *canadensis* 33
     saccharata
         var. *Amesii* 32
     Tuckermani 32, 424
 Isotria
     affinis 133
     verticillata 133
 Italian Clover 248
     Millet 57
     Ray Grass 78
     Rye Grass 78
 Iva 391
     frutescens 391
     oraria 391
     xanthifolia 391
 Ivory Plum 311
 Ivy
     American 276
     Coliseum 350
     Ground 334
     Kenilworth 350
     Poison 269
 Ivy-leaved Morning Glory 324
     Speedwell 355
 Ixophorus
     glaucus 57
     italicus 57
     verticillatus 57
     viridis 57
 Jack-in-the-Pulpit 109
 Jacob's Ladder 125
 Jamestown Weed 347
 Japan Quince 224
 Japanese Barnyard Millet 56
     Honeysuckle 366
     Hop 154
     Knotweed 164
     Rose 236, 242
 Jasione 373
     montana 373, 435
 Jerusalem Artichoke 395
     Cross 178
     Oak 165
 Jewelweed 274
 Jimson Weed 347, 348
 Job's Tears 113
     Wild 330
 Joe-Pye Weed 375
 Johnny-jump-up 288
 Johnson Grass 49
 Jointed Chadlock 202
     Charlock 202
 Jointweed 164
     Coast 164
     Sand 164
     Seaside 164
 Judas Tree 247
 Juglandaceae 144, 436
 Juglans 144
     cinerea 144
     nigra 144
 Juncaceae 114, 436
 Juncaginaceae 45, 436
 Juncoides
     campestre 117
     pilosum 117
 Juncus 114, 441
     acuminatus 117
         var. *debilis* 117
     articulatus 117
         var. *obtusatus* 117
     brachycarpus 116, 431
     brachycephalus 115, 419
     brevicaudatus 116
     bufonius 114
     canadensis 116
         var. *brachycephalus* 115
         " *brevicaudatus* 115
         " *coarctatus* 116
         " *longicaudatus* 116

- Juncus*
   var. *subcaudatus* 116
debilis 117
dichotomus 115
   var. *platyphyllus* 115
Dudleyi 115, 419
effusus 115
   var. *compactus* 115
Gerardi 114
Greenei 115
marginatus 117
militaris 116
nodosus 116
pelocarpus 116
scirpoides 425
secundus 115
tenuis 114
   var. *anthelatus* 114, 419
     " *secundus* 115
     " *Williamsii* 115
 June Grass 73
 Juneberry 224
 Juniper 38
   Common 38
Juniperus 38
   communis 38
     var. *alpina* 38
     " *canadensis* 38
     " *depressa* 38, 424
   horizontalis 424
   nana 38
   Sabina
     var. *procumbens* 424
   virginiana 38
 Kaffir Corn 49
 Kale
   Corn 203
   Field 203
Kalmia 309
   angustifolia 309
   glauca 309
   latifolia 309
   polifolia 309
 Kedlock 203
 Kenilworth Ivy 350
 Kentucky Blue Grass 73
 Kerlock 203
Kerria 236
   japonica 236
Ketmia
   Bladder 280
Kickxia
   Elatine 350
 Kidney Bean 258
 Kidney-leaved Crowfoot 186
 Kill-wart 196
 King Devil 414
 King-cups 188
 Kinnikinnik 305
 Kiss-me-over-the-Fence 162
 Kitchen Rose 242
 Kitten Breeches 198
 Knapweed 407
Knautia 371
   arvensis 371, 435
 Knawel 172
 Knee-high Blackberry 238
Kneiffia
   Alleni 293
   fruticosa 293
     var. *pilosella* 293
   linearis 293
   longipedicellata 293
   pratensis 293
   pumila 293
 Knight's Spur 192
 Knot Grass 79, 160
 Knot-root Grass 61
 Knotted Rush 116
 Knotweed 159, 172
   Bushy 160
   Erect 160
   Japanese 164
   Pink 161
   Shore 160
   Slender 160
 Knotwort Family 172
Kochia 165
   Scoparia 165, 421
Koellia
   clinopodioides 340
   flexuosa 340
   incana 341
   lanceolata 340

- Koellia*
    mutica 341
    pilosa 340
    verticillata 341
Koniga
    maritima 199
Krigia 408
    amplexicaulis 408
    virginica 408
Labiatae 332, 438, 440
Labrador Tea 307
Lachnanthes 126
    tinctoria 126
Lacinaria
    scariosa 377
Lactuca
    canadensis 411
        var. *integrifolia* 411
        "   *montana* 411
    hirsuta 412
    integrifolia 412
    leucophaea 412
    sagittifolia 412
    sativa 412, 432
    scariola 411
        var. *integrata* 411
    spicata 412
    virosa 411
Ladies' Smock 210
    Tobacco 388
    Tresses 133
Lady Fern 21
Lady's Slipper 129
    Large Yellow 129
    Pink 129
    Showy 129
    Smaller Yellow 129
    Stemless 129
    Wild 129
Lady's Sorrel 261
    "   *Thumb* 162
La-kwa 371
Lamb's Cress 210
    Lettuce 370
    Quarters 166
Lambkill 309
Lamium 336
    Lamium
        album 428
        amplexicaule 336
        hybridum 336
        maculatum 336, 428
        purpureum 336
Lance-leaved Violet 287
Land Cress 210
Laportea 155
    canadensis 155
Lappula 328
    echinata 328
    Lappula 328
    virginiana 328
Lapsana 408
    communis 408
Larch 35
    American 35
    Black 35
    European 35
Large Coral Root 135
    Cranberry 314
    Pepper-root 209
    Round-leaved Orchis 131
    Toothwort 209
    Twayblade 136
Large-flowered Syringa 217
Large-flowered White Trillium 124
Large-leaved Sandwort 174
Large-toothed Aspen 142
Larix 35
    americana 35
    decidua 35
    europaea 35
    laricina 35
Lark-heel 192
Larkspur 192
    Field 192
    Garden 192
    Rocket 192
Late Low Blueberry 313
Lathyrus 257
    latifolius 257
    maritimus 257
    palustris
        var. *linearifolius* 257
    pratensis 257

- Lauraceae 195, 437
 Laurel
   American 309
   Great 308
   Ground 311
   Mountain 309
   Pale 309
   Sheep 309
   Swamp 309
 Laurel Family 195
 Laurel-leaved Willow 138
 Laurestinus 368
 Lavender
   Sea 314
 Lavender Willow 141
 Leadwort Family 314
 Leafcup 390
 Leafy Spurge 266
 Leather Leaf 310
 Leatherwood 289
 Lechea 283
   intermedia 283
   Leggettii 284
   major 283
   maritima 283
     var. *interior* 283
   minor 283
     var. *maritima* 283
   moniliformis 284
   tenuifolia 283
   thymifolia 283
   villosa 283
 Ledum 307
   groenlandicum 307
   latifolium 307
 Leek
   Wild 119
 Leersia 58
   oryzoides 58
   virginica 58
 Legouzia
   perfoliata 372
 Leguminosae 246, 437, 440
 Lemna 111
   cyclostata 111
   minor 112
   perpusilla 425
   Lemna
     trisolca 111
     valdiviana 111
 Lemnaceae 111, 436
 Lemon
   Wild 194
 Lemon Balm 339
   Lily 120
 Lens 256
   esculenta 256, 434
 Lentibulariaceae 357, 438
 Lentil 256
 Leontodon 409
   autumnalis 409
     var. *pratensis* 409
   hastilis 409, 432
   hirtus 409
   nudicaulis 409
 Leonurus 336
   Cardiaca 336
 Leopard Flower 128
 Lepachys 393
   pinnata 393, 435
 Lepidium 200
   apetalum 200
   campestre 201
   Draba 421, 433
   intermedium 200
   ruderales 200, 433
   sativum 201, 431
   virginicum 200
 Leptamnium
   virginianum 359
 Leptandra
   virginica 353
 Leptilon
   canadense 387
 Leptochloa 69
   fascicularis 69
 Leptoloma 50
   cognatum 50
 Leptorchis
   liliifolia 136
   Loeselii 136
 Lespedeza 254
   Bicknellii 255
   capitata 255

Lespedeza
     var. *velutina* 255
     frutescens 255
     hirta 255
     Nuttallii 254
     polystachya 255
     procumbens 254
     repens 254
     reticulata 254
     simulata 255
     Stuvei 254
         var. *intermedia* 255
     velutina 255
     violacea 254
     virginica 254
 Lesser Duckweed 111
     Starwort 176
     Stitchwort 176
 Lettuce 411, 412
     Lamb's 370
     Prickly 411
     White 413
     Wild 411
         " Blue 412
 Leucojum 126
     aestivum 126
 Leucothoë 309
     racemosa 309
 Leverwood 146
 Levisticum 302
     Levisticum 302
     officinale 302
 Liatris 377
     cylindracea 429
     scariosa 377, 429
     squarrosa 429
 Life-of-Man 214
 Life-root 404
 Ligusticum 301
     Levisticum 302
     scoticum 301
 Ligustrum 319
     vulgare 319
 Lilac 318
     Common 318
     Summer 206
 Lilaeopsis 301

Lilaeopsis
     lineata 301
 Liliaceae 118, 436, 439
 Lilium 120
     canadense 120
     Catesbaei 425
     philadelphicum 120
     superbum 120
     tigrinum 120
 Lily
     Blackberry 128
     Blue Day 119
     Bull-head 183
     Canada 120
     Common Day 120
     Cow 183
     Day 119, 120
     Frog 183
     Great Water 184
     Hog 183
     Horse 183
     Lemon 120
     Little Water 184
     Plantain 119
     Pond 183
     Red 120
     Rock 192
     Small Yellow Pond 183
     Spider 113
     Sweet-scented White Water 183
     Tiger 120
     Trout 121
     Turk's-cap 120
     Water 183
     White Pond 183
         " Water 183, 184
     Wild Orange-red 120
         " Tiger 120
         " Yellow 120
     Wood 120
     Yellow Day 120
         " Dog's-tooth 121
         " Pond 183
 Lily Family 118
 Lily of the Valley 124
     Wild 123
 Limnanthaceae 268, 437

- Limnanthemum*
lacunosum 320
Limnorchis
dilatata 130
huronensis 130
hyperborea 130
Limodorum
tuberosum 133
Limonium 314
carolinianum 314
Limosella 352
aquatica
     var. *tenuifolia* 352
tenuifolia 352
 Linaceae 259, 437, 440
Linaria 350
     canadensis 350
     Cymbalaria 350
     Elatine 350, 432
     genistifolia 428
     Linaria 350
     minor 350, 434
     vulgaris 350
 Linden 277
     American 277
     European 277
 Linden Family 277
Lindera
     Benzoin 196
Linnaea 367
     borealis 367
     var. *americana* 367
 Linseed 259
Linum 259
     medium 260
     striatum 259
     sulcatum 259
     usitatissimum 259
     virginianum 260
 Lion's Heart 335
     Tail 336
 Lion's-foot 413
Liparis 136
     liliifolia 136
     Loeselii 136
 Liquidambar 220
     Styraciflua 220
 Liquorice 252
     Wild 252, 362
 Liriodendron 194
     Tulipifera 194
Lithospermum 329
     arvense 329
     officinale 330
 Little Pignut Hickory 145
 Little-boy's Breeches 198
 Live-for-ever 214
 Live-long 214
 Liver Berry 123
 Liverleaf 189
 Liverwort 189
 Lizard's Tail 137
Lobelia 374
     cardinalis 374
     Dortmanna 374
     inflata 374
     Kalmii 374
     siphilitica 374
     spicata 374
Lobelia
     Great Blue 374
     Water 374
Lobelia Family 374
Lobeliaceae 374, 439
 Lobel's Catchfly 179
Lobularia 199
     maritima 199, 431
 Locust 251
     Black 251
     Bristly 251
     Clammy 251
     Common 251
     Flowering 251
     Honey 246
Lolium 78
     italicum 78
     multiflorum 78
     perenne 78
     temulentum 78
 Lombardy Poplar 143
 Long-bracted Orchis 130
 Long-fruited Anemone 189
 Long-leaved Starwort 175
     Stitchwort 175

- Long-leaved
  - Sundew 213
- Long-spurred Violet 288
- Lonicera 365
  - caerulea 365
  - var. villosa 365
  - canadensis 365
  - caprifolium 429
  - ciliata 365
  - dioica 366
  - glauca 366
  - japonica 366
  - orientalis 366
  - sempervirens 366
  - tatarica 365
  - Xylosteum 365
- Loosestrife 290, 315
  - False 291
  - Fringed 316
  - Golden 315
  - Purple 290
  - Spiked 290
  - Spotted 315
  - Swamp 289
  - Tufted 316
- Loosestrife Family 289
- Lophanthus
  - anisatus 334
  - nepetoides 334
  - scrophulariaefolius 334
- Lophotocarpus 47
  - spongiosus 47
- Lopseed 360
- Lopseed Family 360
- Loranthaceae 156, 436
- Lotus 250
  - americanus 250
  - corniculatus 250
- Lotus 184
  - American 184
  - Yellow 184
- Lousewort 355, 357
  - Common 357
  - Swamp 357
- Lovage 301, 302
  - Scotch 301
- Love Vine 190, 325, 326
- Love-in-a-Mist 421
- Love-lies-bleeding 170
- Low Birch 148
  - Black Blueberry 313
  - Blackberry 239
  - Cornel 304
  - Cudweed 390
  - Sweet Blueberry 313
- Lucerne 250
- Ludvigia 291
  - alternifolia 291
  - palustris 291
  - polycarpa 291
  - sphaerocarpa 291
- Lunaria 208
  - annua 208, 431
- Lupine 248
  - Wild 248
- Lupinus 248
  - perennis 248
- Luzula 117
  - campestris 117
  - var. multiflora 117
  - saltuensis 117
  - vernalis 117
- Lychnis 177
  - alba 178
  - chalconica 178
  - Coronaria 177
  - dioica 178
  - diurna 178
  - Flos-cuculi 178
  - Githago 177
  - vespertina 178
- Lychnis
  - Day-blooming 178
  - Evening 178
  - Ever-blooming 178
  - Morning 178
  - Mullein 177
  - Ragged 178
  - Red 178
- Lycium 347
  - halimifolium 347
  - vulgare 347
- Lycopersicum 344
  - esculentum 344

- Lycopersicum
   Lycopersicon 344
 Lycopodiaceae 30, 436
 Lycopodium 30
   adpressum 30
   annotinum 31
   clavatum 31
     var. *monostachyon* 31
   complanatum 31
     var. *chamaecyparissus* 31
     " *flabelliforme* 31
   inundatum 30
     var. *Bigelovii* 30
   lucidulum 30
   obscurum 31
     var. *dendroideum* 31
   Selago 30, 422
   tristachyum 31
 Lycopus 341
   americanus 342
   communis 341
   membranaceus 341
   rubellus 342
   sessilifolius 341
   sinuatus 342
   uniflorus 341
   virginicus 341
 Lygodium 26
   palmatum 26
 Lyme Grass 80
 Lyonia 310
   ligustrina 310
     var. *foliosiflora* 310
   mariana 310
 Lyre-leaved Sage 337
 Lysias
   Hookeriana 131
   orbiculata 131
 Lysimachia 315
   foliosa 315
   Nummularia 316
   producta 315
   punctata 315
   quadrifolia 315
   stricta 316
   terrestris 316
   thyrsiflora 316
 Lysimachia
   vulgaris 315, 432
 Lythraceae 289, 438, 440
 Lythrum 290
   alatum 290
   Salicaria 290
 Maclura 154
   aurantiaca 154
   pomifera 154, 420
 Macrocalyx
   Nyctelea 327
 Madder
   Wild 362
 Madder Family 361
 Mad-dog Skullcap 333
 Madwort 199
 Magnolia Family 194
 Magnoliaceae 194, 437
 Mahaleb Cherry 245
 Maianthemum 123
   canadense 123
 Maiden Pink 181
 Maidenhair 18
 Maidenhair Spleenwort 20
 Maize 48
 Male Berry 310
 Mallow 279
   Common 279
   Curled 279
   Dwarf 279
   European 279
   High 279
   Indian 278
   Marsh 278
   Musk 279
   Rose 279
   Swamp Rose 280
   Wild Rose 280
 Mallow Family 278
 Maltese Cross 178
 Malus
   Malus 222
 Malva 279
   Alcea 279
   crispa 279
   moschata 279
   rotundifolia 279

- Malva
   sylvestris 279
 Malvaceae 278, 438, 440
 Mandrake 194
 Manna Grass 74
 Man-of-the-Earth 324
 Many-flowered Agrimony 241
 Maple 272
   Ash-leaved 273
   Bird's-eye 273
   Black Sugar 273
   Flowering 278
   Mountain 272
   Norway 273
   Red 273
   Rock 272
   Silver 273
   Soft 273
   Striped 272
   Sugar 272
   Swamp 273
   Sycamore 272
   White 273
 Maple Family 272
 Maple-leaved Goosefoot 166
   Viburnum 368
 Mercury 269
 Marguerite 400
   Golden 399
 Marigold 403
   Bur 396
   Marsh 191
   Pot 403
   Water 397
 Marjoram
   Wild 340
 Marram 65
 Marrow Squash 372
 Marrubium 333
   vulgare 333
 Marsh Bellflower 373
   Buttercup 187
   Calla 110
   Cinquefoil 233
   Cress 207
   Crowfoot 186, 187
   Elder 391
 Marsh
   Fern 22
   Five-finger 233
   Fleabane 388
   Foxtail 62
   Grass 68
   Holy Rose 310
   Mallow 278
   Marigold 191
   Pea 257
   Pink 319
   Purslane 291
   Rosemary 310, 314
   St. John's-wort 282
   Skullcap 333
   Speedwell 354
   Trefoil 320
 Marsilea 28
   quadrifolia 28
 Marsileaceae 28, 436
 Martynia 360
   louisiana 360, 434
   proboscidea 360
 Martynia Family 360
 Martyniaceae 360
 Marvel of Peru 171
 Mary-bud 403
 Massachusetts Fern 22
 Masterwort 303
 Matricaria 399
   Chamomilla 399, 435
   discoidea 399
   inodora 399, 435
   matricarioides 399
   suaveolens 399, 435
 Matrimony Vine 347
   Common 347
 Matteuccia
   Struthiopteris 25
 May Apple 194, 308
   Bush 225
   Pear 224
   Tree 225
 May-blobs 191
 Mayflower 182, 189, 190, 215, 311,
   364
 May-weed 398

Mazzard Cherry 245
 Mead-sweet 235
 Meadow Beauty 290
   Buttercup 188
   Campion 178
   Centaury 407
   Chickweed 176
   Clover 248
   Cranesbill 261
   Crowfoot 188
   Fescue 76
   Foxtail 62
   Garlic 119
   Geranium 261
   Gowan 191
   Grass 72
   Pink 178, 181, 356
   Queen 235
   Rose 242
   Rue 188
   Sage 337
   Sorrel 159
 Meadow-sweet 221, 235
   English 235
 Mealy Tree 368
 Medeola 124
   virginiana 124
 Medicago 250
   arabica 250, 434
   denticulata 250
   hispida 250, 434
   lupulina 250
   maculata 250
   sativa 250
 Medick 250
   Black 250
   Hop 250
   Spotted 250
   Toothed 250
 Meeting-houses 192
 Meibomia
   bracteosa 253
   canadensis 253
   canescens 252
   Dillenii 253
   glabella 252
   grandiflora 252

Meibomia
   marylandica 254
   Michauxii 252
   nudiflora 252
   obtusata 254
   paniculata 253
   rigida 253
   sessilifolia 253
 Melampyrum 356
   americanum 356
   lineare 356
 Melanthium 118
   latifolium 118, 423
   racemosum 118
 Melastoma Family 290
 Melastomaceae 290, 438
 Melic Grass 72
 Melica 72
   striata 72
 Melilot
   White 249
   Yellow 249
 Melilotus 249
   alba 249
   officinalis 249
 Melissa 339
   officinalis 339
 Melon 371
 Menispermaceae 194, 437
 Menispermum 194
   canadense 194
 Mentha 342, 441
   alopecuroides 342
   aquatica 342
     var. *crispa* 343
   arvensis 343
     var. *canadensis* 344
   canadensis 344
   Cardiaca 343
   citrata 343
   crispa 343
   gentilis 343
   longifolia 342
   piperita 342
   rotundifolia 428
   sativa 343
   spicata 342

- Anthra*
sylvestris 342
var. alopecuroides 342
viridis 342
Menyanthes 320
trifoliata 320
Mercury 269
Three-seeded 265
Vegetable 127
Mermaid-weed 295
Mespilus
fabeolata 227
Mesquite Grass 69
Mexican Fire Plant 165
Poppy 197
Tea 165
Mezereum Family 280
Micranthelmis
lobata 372
Micranthemum
micranthemoides 429
Nuttallii 429
Microstylis 136
monophyllos 136, 429
ophioglossoides 136
unifolia 136
Mignonette 212
Common 212
Garden 212
Upright 212
White 212
Mignonette Family 212
Mikania 377
scandens 377
Mild Water Pepper 162
Milfoil 398
Water 185, 294, 295
Milk Purslane 266
Milkweed 322
Common 322
Green 323
Poke 323
Purple 322
Swamp 322
Whorled 323
Milkweed Family 322
Milkwort 263, 264
Purple 264
Milkwort Family 263
Millet
Broom Corn 51
Common 51, 57
European 51
German 57
Golden-Wonder 57
Italian 57
Japanese Barnyard 56
Sowna 56
True 51
Mimulus 352
alatus 352
glabratus
var. Jamesii 429
guttatus 352
Jamesii 429
Langsdorffii 352, 429
luteus 352
ringens 352
Mint 342
Bergamot 342
Cat 334
Curled 342
Field 343
Horse 338, 342
Mountain 340
Spotted 343
Water 342
Whorled 343
Wild 344
Wood 338, 339
Mint Family 332
Geranium 400
Mirabilis 171
Jalapa 171, 433
Missouri Currant 219
Gooseberry 217
Mist 181
Mistletoe
Dwarf 156
Mistletoe Family 156
Mitchella 364
repens 364
Mitella 216

- Mitelia*
   diphylla 216
   nuda 216
   prostrata 216
Miterwort 216
   False 215
Mithridate Mustard 200, 201
Moccasin Flower 129
   Yellow 129
Mock Apple 154
   Bishop's-weed 299
   Cypress 165
   Orange 154, 217
   Pennyroyal 339
   Strawberry 232
Mocker Nut 145
Modesty 198
Moehringia
   lateriflora 174
   macrophylla 174
Mole Plant 267
Molinia 70
   coerulea 70
Mollugo 173
   verticillata 173
Momordica 371
   Charantia 371, 435
Monarda 338
   didyma 338
   clinopodia 338
   fistulosa 338
     var. *mollis* 338
     " *rubra* 338
   media 338
   mollis 338
   punctata 428
Moneses 306
   grandiflora 306
   uniflora 306
Money-plant 208
Moneywort 316
Monkey Flower 352
   Yellow 352
Monotropa 307
   Hypopitys 307
   uniflora 307
Moonseed 194
Moonseed Family 194
Moonwort 27, 208
Moose Elm 152
Moosewood 272, 289, 368
Morello Cherry 245
Morning Campion 178
Morning Glory 324
   Common 324
   Ivy-leaved 324
   Small Red 324
   Wild 325
Morning Lychnis 178
Mortification Root 278
Morus 154
   alba 154
   rubra 154
Moss
   Club 30
   Common Club 31
   Ditch 47
   Golden 214
   Rose 182
   Tree Club 31
Moss Pink 326
Mossy Stonecrop 214
Mossy-cup Oak 150
Moth Mullein 349
Mother's Heart 201
Motherwort 336
   Common 336
Mountain Ash 223
   Cinquefoil 233
   Clematis 190
   Crowfoot 186
   Currant 219
   Five-finger 233
   Fly Honeysuckle 365
   Fringe 197
   Holly 270, 271
   Laurel 308
   Maple 272
   Mint 340
   Plum 244
   Rice 59
   Sandwort 175
   Spleenwort 20
   Starwort 175

- Mountain
     Sumach 223
     Virgin's Bower 190
 Mouse-ear 414
     Spring 177
 Mouse-ear Chickweed 176
     Cress 206
 Mouse-ears 189
 Mouth-root 191
 Moxie Plum 312
 Mud Plantain 113
     Purslane 282
 Mudwort 352
 Mugwort
     Common 401
 Muhlenbergia 61
     ambigua 61
     capillaris 62
     diffusa 62
     foliosa 61
     glomerata 61
     mexicana 61
     racemosa 61
     Schreberi 62
     sobolifera 61
     sylvatica 61
     tenuiflora 61
     Willdenowii 61
 Mulberry 154
     Paper 154
     Red 154
     Silkworm 154
     White 154
 Mulberry Blackberry 237
 Mullein 349
     Common 349
     Moth 349
 Mullein Lychnis 177
     Pink 177
 Muscari 121
     botryoides 121
     racemosum 121
 Musk Erodium 262
     Mallow 279
     Rose 279
     Storksbill 262
 Muskmelon 371
 Musquash Root 299
 Mustard 202
     Ball 202
     Bastard 203
     Black 203
     Chinese 203
     Clown's 201
     Corn 203
     Curled 203
     Dish 200
     False 211
     Garlic 205
     Hare's-ear 204
     Hedge 205
     Hoary Hedge 205
     Indian 203
     Mithridate 200, 201
     Pot-herb 203
     Sand 204
     Tansy 205
     Tower 210
     Treacle 200, 206
     Tumble 205
     Wall 204
     White 202
     Wild 203
     Wormseed 206
 Mustard Family 199
 Myagrum 201, 202
 Myosotis 329
     arvensis 329
     laxa 329
     palustris 329
     scorpioides 329
     verna 329
     virginica 329
 Myrica 143
     asplenifolia 143
     carolinensis 143
     cerifera 143
     Gale 143, 420
 Myricaceae 143, 436
 Myriophyllum 294
     ambiguum 295
         var. *capillaceum* 295
         " *limosum* 295
     humile 295

- Myriophyllum
     forma capillaceum 295
     "   natans 295
     pinnatum 295
     scabratum 295
     spicatum 294
     tenellum 295
     verticillatum
         var. pectinatum 294
 Myrtle
     Blue 321
     Bog 143
     Dutch 143
     Wax 143
     Yellow 316
 Myrtle Spurge 267
 Nabalus
     albus 413
     altissimus 413
     serpentarius 413
     trifoliolatus 413
 Naiad 45
 Najadaceae 40, 436
 Najas 45
     flexilis 45
     gracillima 45
     indica 45
         var. gracillima 45
 Nannyberry 369
 Narcissus 126
     poeticus 126
     Pseudo-Narcissus 126
 Narcissus
     Poet's 126
 Narrow Dock 158
 Narrow-leaved Spleenwort 20
 Nasturtium
     Armoracia 207
     officinale 206
     palustre 207
         var. hispidum 207
     sylvestre 207
 Naumbergia
     thyrsiflora 316
 Necklace Poplar 142
 Necklace-weed 193
 Neckweed 354
 Needle Grass 60
 Negundo
     aceroides 273
 Nelumbo 184
     lutea 184
 Nelumbo
     American 184
     Yellow 184
 Nemopanthus 270
     fascicularis 271
     mucronatus 270
 Nepeta 334
     Cataria 334
     Glechoma 334
     hederacea 334
 Neslia 202
     paniculata 202, 433
 Net-leaf Plantain 135
 Nettle 155
     Bull 345
     Canada 155
     Common Hemp 335
     Dead 336
     Dwarf 155
     False 156
     Great 155
     Hedge 337
     Hemp 335
     Horse 345
     Red Dead 336
         "   Hemp 335
     Slender 155
     Small 155
     Spotted Dead 336
     Stinging 155
     Stingless 156
     Tall Wild 155
     Wood 155
 Nettle Family 152
 Nettle Tree 153
     American 153
 Nettle-leaved Goosefoot 167
 Newcastle Thorn 225
 New England Aster 383
 New Jersey Tea 275
 New York Fern 22
 New Zealand Spinach 173

- Nicandra 347
     physalodes 347
 Nicotiana 348
     alata 348
     rustica 348, 432
     Tabacum 348, 432
 Nigella 191
     damascena 421, 433
     sativa 191, 433
 Nigger-head 393
 Nigger-heads 98
 Night-flowering Catchfly 179
 Nightshade 344
     American 171
     Black 345
     Common 345
     Enchanter's 294
     Woody 345
 Nightshade Family 344
 Nimble Will 62
 Nine-bark 220
 Nipple-wort 408
 Nodding Chickweed 177
     Pogonia 132
     Trillium 124
 None-so-pretty 179
 Nonesuch 78, 178, 250
 Northeastern Rose 243
 Northern Bedstraw 362
     Gooseberry 218
     Starwort 175
     Stitchwort 175
 Norway Maple 273
     Spruce 36
 Nosebleed 356
 Nuphar
     advena 183
         var. *minus* 183
     Kalmianum 183
 Nut Rush 91
 Nutmeg Flower 191
 Nyctaginaceae 171, 437, 439
 Nymphaea 183
     advena 183
         var. *variegata* 183
     Kalmiana 183
     microphylla 183
     Nymphaea
         odorata 183
         var. *minor* 183
         reniformis 184
         rubrodiscalis 183
 Nymphaeaceae 183, 437
 Nymphoides 320
     lacunosum 320
 Nyssa 305
     sylvatica 305
 Oak 149
     Bear 152
     Black 152
         " Scrub 152
     Bur 150
     Champion 151
     Chestnut 150, 151
     Chinquapin 151
     Iron 150
     Jerusalem 165
     Mossy-cup 150
     Over-cup 150
     Pin 151
     Poison 269
     Post 150
     Quercitron 152
     Red 151
     Rock Chestnut 151
     Scarlet 151
     Scrub Chestnut 151
     Swamp Spanish 151
         " White 150
     White 149
     Yellow 150
     Yellow-barked 152
 Oak Fern 17
 Oakesia 119
     sessilifolia 119
 Oak-leaved Goosefoot 166
 Oat 67
     Common 67
     Purple 72
 Oat Grass 67
 Oats
     Water 58
 Oenothera 292
     biennis 292

- Oenothera
   var. *cruciata* 292
   " *grandiflora* 293
   " *Oakesiana* 292
cruciata 292
fruticosa 293
   var. *hirsuta* 293
   " *humifusa* 293
   " *linearis* 293
grandiflora 293
laciniata 293, 434
linearis 293
   var. *Eamesii* 293
longipedicellata 294
Oakesiana 292
pratensis 294
pumila 293
sinuata 293
 Oil Nut 144
 Okra 280
 Old Field Birch 147
   Man 401
   Woman 401
 Old-fashioned Cherry 245
 Old-maid's Pink 180
 Old-witch Grass 51
 Oleaceae 317, 438, 440
 Olive Family 317
Onagra
   biennis 292
   var. *grandiflora* 293
   cruciata 292
   Oakesiana 292
 Onagraceae 291, 438, 440
 One-flowered Cancer-root 359
   Pyrola 306
   Wintergreen 306
 Onion 119
   Wild 119
 Onoclea 25
   sensibilis 25
   var. *obtusilobata* 25
   Struthiopteris 25
 Onopordum 407
   Acanthium 407
 Onosmodium 330
   virginianum 330
   Ophioglossaceae 27, 436
   Ophioglossum 27
     vulgatum 27
   Opium Poppy 197
Opulaster
   opulifolius 220
Opuntia 289
   Opuntia 289
   Rafinesquii 427
   vulgaris 289
 Orach 167
   Beach 168
   Spreading 167
 Orange
   Mock 154, 217
   Osage 154
 Orange Grass 282
   Hawkweed 414
 Orange-flower Tree 217
 Orange-root 193
 Orchard Grass 72
 Orchidaceae 129, 436
 Orchis 130
   rotundifolia 425
   spectabilis 130
 Orchis
   Fen 136
   Fringed 130
   Large Purple Fringed 132
   " Round-leaved 131
   Long-bracted 130
   Ragged 132
   " Fringed 132
   Rein 130
   Showy 130
   Small Green Wood 131
   " Pale Green 130
   Smaller Purple Fringed 132
   Tall Leafy Green 130
   " White Bog 130
   White Fringed 131
   Yellow Fringed 131
 Orchis Family 129
 Origanum 340
   vulgare 340
 Ornithogalum 121
   umbellatum 121

- Orobanchaceae 359, 438
 Orobanche 359
   uniflora 359
 Orontium 111
   aquaticum 111
 Orpine 214
   Garden 214
 Orpine Family 214
 Oryzopsis 59
   asperifolia 60
   canadensis 59
   juncea 59
   melanocarpa 60
   pungens 59
   racemosa 60
 Osage Apple 154
   Orange 154
 Osier 137
   Golden 143
 Osmorhiza 298
   brevistylis 298
   Claytoni 298
   longistylis 298
 Osmunda 26
   cinnamomea 27
     var. frondosa 27
     " incisa 27
   Claytoniana 26
     var. dubia 26
   regalis 26
 Osmundaceae 26, 435
 Ostrich Fern 25
 Ostrya 146
   virginiana 146
   virginica 146
 Oswego Tea 338
 Over-cup Oak 150
 Oxalidaceae 260, 437, 440
 Oxalis 260
   Acetosella 260
   Brittoniae 260
   Bushii 261
   corniculata 261
     var. stricta 260, 261
   cymosa 261
   filipes 260
   repens 261
   Oxalis
     rufa 261
     stricta 260, 261
     violacea 260
 Ox-eye 392
 Ox-eye Daisy 400
 Ox-tongue 410
 Oxybaphus 172
   angustifolius 172
   hirsutus 172
   linearis 172
   nyctagineus 172
 Oxycoccus
   macrocarpus 314
   Oxycoccus 314
 Oxygraphis
   Cymbalaria 185
 Oyster-plant 410
 Painted Cup 356
   Scarlet 356
 Painted Trillium 125
 Pale Corydalis 198
   Dock 158
   Laurel 309
   Persicaria 160
   St. John's-wort 281
   Touch-me-not 274
 Panax 296
   quinquefolium 296
   trifolium 296
 Panic Grass 51
 Panicked Cornel 305
 Panicularia
   acutiflora 75
   americana 74
   borealis 75
   canadensis 74
   elongata 74
   fluitans 75
   nervata 74
   obtusata 74
   pallida 74
 Panicum 51, 441
   Addisonii 55
   agrostoides 52
   albemarlense 54
   amaroides 51

Panicum

- amarum*
- var. *minor* 51
- Ashei* 55
- atlanticum* 54
- auburne* 54
- autumnale* 50
- barbulatum* 53
- Bicknellii* 52
- boreale* 53
- Boscii* 56
- var. *molle* 56
- Bushii* 52
- capillare* 51
- clandestinum* 55
- columbianum* 55
- Commonsianum* 55
- commutatum* 55
- crusgalli* 56
- var. *hispidum* 56
- depauperatum* 52
- dichotomiflorum* 51
- dichotomum* 52
- Eatoni* 53
- Enslini* 52
- fili culme* 54
- filiforme* 49
- glabrum* 49
- haemacarpum* 54
- huachucae* 53
- var. *silvicola* 53
- implicatum* 54
- latifolium* 56
- var. *molle* 56
- lanuginosum* 53
- Lindheimeri* 53
- linearifolium* 52
- longifolium* 52
- macrocarpum* 56
- meridionale* 54
- microcarpum* 53
- miliaceum* 51
- minimum* 51
- minus* 51
- nemopanthum* 52
- nitidum* 53
- oricola* 54

Panicum

- ovale* 54
- philadelphicum* 51, 416
- Porterianum* 56
- proliferum* 51
- psammophilum* 55
- pseudopubescens* 54
- pubescens* 53
- pubifolium* 56
- sanguinale* 50
- scoparioides* 54
- scoparium* 55
- Scribnerianum* 55
- sphaerocarpon* 55
- spretum* 53
- stipitatum* 52
- subvillosum* 54, 417
- tennesseense* 54
- tsugetorum* 55
- unciphyllum* 53
- var. *implicatum* 54
- “ *meridionale* 54
- verrucosum* 51
- villosissimum* 54, 417
- virgatum* 52
- Walteri* 56
- Werneri* 52, 416
- xanthophysum* 55
- xanthospermum* 54
- Pansy** 288
- Field 288
- Wild 288
- Papaver** 197
- dubium* 197
- Rhoeas* 197, 431
- somniferum* 197
- Papaveraceae** 196, 437, 440
- Paper Birch** 147, 148
- Mulberry* 154
- Pappoose Root** 195
- Parietaria** 156
- pennsylvanica* 156
- Parilla**
- Yellow* 194
- Parnassia** 216
- caroliniana* 216
- Parsley** 300

- Parsley
     Common 300
     Fool's 302
     Garden 300
     Hemlock 303
     Sea 301
     Spotted 298
 Parsley Family 297
 Parsnip 302
     Cow 303
     Golden Meadow 300
     Poison 302
     Water 300
     Wild 302
Parsonsia
     petiolata 290
Parthenocissus
     quinquefolia 276
 Partridge Berry 364
     Pea 247
 Paspalum 50
     circularis 50
     laeve 425
     Muhlenbergii 50
     plenipilum 50
     prostratum 50
     psammophilum 50
     setaceum 50
 Pastinaca 302
     sativa 302
 Pasture Thistle 406
 Patience
     Garden 157
 Patience Dock 157
 Paul's Betony 354
 Pea 257
     Beach 257
     Chick 255
     Everlasting 257
     Field 258
     Garden 257
     Hoary 251
     Marsh 257
     Partridge 247
     Perennial 257
     Sensitive 247
 Peach 246
 Peach-leaved Dock 158
 Peanut
     Hog 259
     Wild 259
 Pear 222
     Choke 222
     Indian 224
     May 224
     Prickly 289
     Sugar 224
     Wild 222
 Pearl Grass 74
 Pearl-plant 330
 Pearlwort 174
     Annual 174
     Small-flowered 174
     Spurrey 174
 Pearly Everlasting 389
 Pea-vine Clover 248
 Pedicularis 357
     canadensis 357
     lanceolata 357
 Pellaea 18
     atropurpurea 18
     gracilis 19
     Stelleri 19
 Pellitory 156
 Peltandra 110
     undulata 110
     virginica 110
 Pencil Tree 388
 Penny Cress 200
 Pennyroyal 339
     American 339
     Bastard 332
     Mock 339
 Pennywort
     Water 297
 Penthorum 214
     sedoides 214
 Pentstemon 351
     calycosus 351
     Digitalis 351
     grandiflorus 352, 432
     hirsutus 351
     laevigatus 351
         var. *Digitalis* 351

- Pentstemon
   Pentstemon 351
   pubescens 351
   tubiflorus 351
 Pepper 344
   Bird's 200
   Cayenne 344
   Chili 344
   Common Water 162
   Mild Water 162
   Poor Man's 201
   Red 344
 Pepper Family 137
 Pepperbush
   Sweet 306
 Peppergrass 200
   California 203
   Garden 201
   Golden 201
   Roadside 200
   Wild 200
 Pepperidge 305
 Pepperidge Bush 195
 Peppermint 342
 Pepper-root 208
   Cut-leaved 209
   Large 209
 Pepperwort 200
Peranium
   ophioides 134
   pubescens 135
   repens 134
   tesselatum 134
 Perennial Pea 257
 Perfumed Cherry 445
 Perilla 344
   frutescens 344
   ocymoides 344
Periploca
   graeca 428
 Periwinkle 321
   Common 321
 Persicaria
   Common 161
   Dock-leaved 160
   Pale 160
   Pink 161
   Persicaria
     Water 161
     Willow 160
   Persimmon 317
     Common 317
   Perularia
     flava 130
   Petasites 402
     palmatus 402
     Petasites 402
     vulgaris 402, 435
   Petroselinum 300
     hortense 300
     Petroselinum 300
   Petty Spurge 267
   Petunia 349
     axillaris 349
     violacea 349
   Petunia
     Purple 349
     White 349
   Phacelia 327
     Purshii 327, 434
     viscida 327, 434
   Phalaris 58
     arundinacea 59
     var. *picta* 59
     canariensis 58
   Phaseolus 258
     perennis 258
     polystachyus 258
     vulgaris 258, 430
     var. *nanus* 258, 430
   Pheasant's-eye Pink 181
   Phegopteris 17
     Dryopteris 17
     hexagonoptera 17
     Phegopteris 17
     polypodioides 17
   Philadelphus 217
     coronarius 217
     inodorus 217, 433
     pubescens 217
   Philotria
     canadensis 47
   Phleum 62
     pratense 62

- Phlox 326
    acuminata 326
    amplifolia 326
    glandulosa 326
    maculata 326
        var. *candida* 326
    paniculata 326
    pilosa 326
    subulata 326
Phlox
    Garden 326
Phragmites 70
    communis 70
    Phragmites 70
    vulgaris 70
Phryma 360
    Leptostachya 360
Phrymaceae 360, 438
Physalis 346
    Alkekengi 346
    angulata 346, 434
    heterophylla 346
        var. *ambigua* 346
        " *nyctaginea* 347
    lanceolata 347
    philadelphica 347
    pruinosa 346
    pubescens 428
    subglabrata 347
    virginiana 346, 347
Physalodes
    physalodes 347
Physocarpus 220
    opulifolius 220
Physostegia 335
    virginiana 335
Phytolacca 171
    decandra 171
Phytolaccaceae 171, 437
Picea 36
    Abies 36
    alba 36
    brevifolia 36
    canadensis 36
    excelsa 36
    mariana 36
    nigra 36
Picea
    var. *rubra* 36
    rubra 36
Pickerel-weed 113
Pickerel-weed Family 113
Pickle Plant 168
Picris 409
    echioides 410, 435
    hieracioides 409
Pie Cherry 245
Pieris
    mariana 310
Pigeon Berry 171
    Grape 276
    Grass 57
Pignut 145
Pignut Hickory 145
Pigweed 165, 166, 169
    Bushy 170
    Common 169
    Rough 169
    Slender 169
    Sweet 165
    White 170
    Winged 165
Pilea 156
    pumila 156
Pilewort 403
Pimbina 368
Pimpernel 241, 317
    Common 317
    False 352
    Water 315
    Yellow 301
Pimpinella
    integerrima 301
Pin Cherry 244
    Oak 150
Pinaceae 34, 436, 439
Pine 34
    Ground 31
    Pitch 34
    Prince's 306
    Red 35
    Running 31
    Scotch 35
    White 34

- Pine
   Yellow 34
 Pine Family 34
 Pineapple-weed 399
 Pinesap 307
 Pineweed 282
 Pink 181
   Bunch 181
   Deptford 181
   Fire 179
   French 181
   Garden 181
   Grass 133, 181
   Ground 326
   Hedge 180
   Large Marsh 319
   Maiden 181
   Marsh 319
   Meadow 178, 181, 356
   Moss 326
   Mullein 177
   Old-maid's 180
   Pheasant's-eye 181
   Rose 177
   Scotch 181
   Sea 319
   Wild 179
 Pink Azalea 308
   Corydalis 198
   Family 173
   Knotweed 161
   Lady's Slipper 129
   Persicaria 161
 Pinks
   Wax 182
 Pinkweed 162
 Pinnatifid Spleenwort 19
 Pinus 34
   inops 424
   resinosa 35
   rigida 34
   Strobus 34
   sylvestris 35, 416, 424
   virginiana 424
 Pinweed 283
   Beach 283
   Hairy 283
 Pinxter Flower 308
 Piperaceae 137, 436
 Pipes 29
 Pipewort 112
 Pipewort Family 112
 Pipsissewa 306
 Pisum 257
   sativum 257, 430
   var. *arvense* 258, 430
 Pitch Pine 34
 Pitcher-plant 213
 Pitcher-plant Family 213
 Plane Tree 220
 Plane Tree Family 220
 Plantaginaceae 360, 438, 440
 Plantago 360
   aristata 361
   decipiens 361
   elongata 361
   halophila 360
   lanceolata 361
   major 360
   var. *intermedia* 360
   maritima 361
   patagonica
   var. *aristata* 361
   pusilla 361
   Rugelii 360
   virginica 361
 Plantain 360
   Common 360
   Downy Rattlesnake 135
   English 361
   Indian 403
   Lesser Rattlesnake 134
   Mud 113
   Net-leaf 135
   Poor Robin's 414
   Rattlesnake 134
   Robin's 387
   Seaside 361
   Water 47
 Plantain Family 360
   Lily 119
 Plantain-leaved Everlasting 389
 Platanaceae 220, 437
 Platanus 220

- Platanus*
     occidentalis 220
Pleurisy-root 322
Pluchea 388
     camphorata 388
Plum 243
     Alleghany 244
     Beach 244, 245
     Bullace 244
     Canada 246
     Garden 246
     Horse 246
     Ivory 311
     Mountain 244
     Moxie 312
     Wild 246
         " Goose 246
         " Red 246
         " Yellow 246
Plumbaginaceae 314, 438
Plumed Thistle 405
Plumeless Thistle 405
Poa 72
     alsodes 73
     annua 72
     autumnalis 425
     compressa 73
     debilis 73
     flava 73
     flexuosa 425
     pratensis 73
     serotina 73
     triflora 73
     trivialis 73
Podophyllum 194
     peltatum 194, 421
Podostemaceae 213, 437
Podostemum 213
     ceratophyllum 213
Poet's Narcissus 126
Pogonia 132
     affinis 133, 420
     ophioglossoides 132
     pendula 132
     trianthophora 132
     verticillata 133
     Pogonia
         Nodding 132
         Rose 132
         Smaller Whorled 133
         Whorled 133
Poison Dogwood 268
     Elder 268
     Flag 127
     Hemlock 298
     Ivy 269
     Oak 269
     Parsnip 302
     Sumach 268
     Vine 269
Poke
     Common 171
     Indian 118
Poke Milkweed 323
     Root 171
Pokeweed 171
     Common 171
Pokeweed Family 171
Polanisia 211
     graveolens 211
     trachysperma 211
Polemoniaceae 326, 438, 440
Polemonium 327
     coeruleum 327
     Van-Bruntiae 327
Polemonium Family 326
Polycodium
     stamineum 313
Polygala 263
     ambigua 264
     cruciata 264
     Nuttallii 264
     paucifolia 263
     polygama 264
     sanguinea 264
     Senega 264
     verticillata 264
         var. *ambigua* 264
         viridescens 264
Polygala
     Fringed 263
     Whorled 264
Polygalaceae 263, 437

Polygonaceae 157, 437, 439

Polygonatum 123

biflorum 123

commutatum 123

giganteum 123

Polygonella 164

articulata 164

Polygonum 159, 441

acre 162

var. *leptostachyum* 162

amphibium 161

var. *Hartwrightii* 161

" *terrestre* 161

arifolium 163

aviculare 160

var. *littorale* 160

" *vegetum* 160

Careyi 161

cilinode 163

var. *breve* 163

" *erectum* 163

Convolvulus 163

cristatum 164

cuspidatum 164, 420

dumetorum 163

forma *cristatum* 164

var. *scandens* 163

emersum 161

erectum 160

exsertum 159

Hartwrightii 161

Hydropiper 162

hydropiperoides 162

incarnatum 160

lapathifolium 160

var. *incarnatum* 160

" *nodosum* 420

littorale 160

maritimum 426

Muhlenbergii 161

orientale 162

pennsylvanicum 161

Persicaria 162

prolificum 159

punctatum 162

var. *leptostachyum* 162

ramosissimum 160

Polygonum

forma *atlanticum* 160

var. *prolificum* 159

sachalinense 164

sagittatum 163

scandens 163

tenue 160

virginianum 163

Zuccarini 164

Polymnia 390

canadensis 390

Polypodiaceae 17, 435

Polypodium 17

vulgare 17

var. *cambricum* 17

Polypody 17

Polypogon 65

monspeiliensis 65, 431

Polystichum 21

acrostichoides 21

var. *incisum* 21

" *Schweinitzii* 21

Braunii 424

Pond Lily 183

Pondweed 40

Horned 44

Pondweed Family 40

Pontederia 113

cordata 113

var. *angustifolia* 113

Pontederiaceae 113, 436

Poor Annie 118

Poor Man's Pepper 201

Poor Man's Weather Glass 317

Poor Robin 178

Poor Robin's Plantain 414

Poplar 141

Balsam 142

Black 143

Downy 142

Hickory 194

Lombardy 143

Necklace 142

Silver-leaf 141

Swamp 142

Trembling 141

Tulip 194

Poplar

- White 141
- Yellow 194

Popple 141

Poppy 197

- California 196
- Common 197
- Corn 197
- Field 197
- Garden 197
- Mexican 197
- Opium 197
- Prickly 197
- Red 197
- Shirley 197
- Smooth-fruited 197
- White Prickly 197

Poppy Family 196

Populus 141

- alba 141
- balsamifera 142
  - var. *candicans* 142
- candicans 142
- deltoides 142
- dilatata 143
- grandidentata 142
- heterophylla 142
- monilifera 142
- nigra 143
  - var. *italica* 143
- tremuloides 141

Porcupine Grass 60

Portulaca 182

- grandiflora 182, 431
- oleracea 182

Portulaca 182

- Garden 182
- Showy 182

Portulacaceae 182, 437, 440

Post Oak 150

Pot Marigold 403

Potamogeton 40, 441

- alpinus 41
- americanus 41
  - var. *novaeboracensis* 41
- amplifolius 41
- angustifolius 42

Potamogeton

- var. *connecticutensis* 42
- bupleuroides 43, 416
- crispus* 425
- dimorphus 44
- diversifolius* 44
- epihydrus 41
  - var. *cayugensis* 41
- fluitans* 41
- foliosus 44
- Friesii 43
- gemmaiparus 44
- heterophyllus 42
  - forma *graminifolius* 42
  - " *longipedunculatus* 42
  - " *maximus* 42
  - " *myriophyllus* 42
  - " *terrestris* 42

Hillii 43

hybridus 44

- var. *multi-denticulatus* 44

lateralis 43, 423

lonchites 41

- var. *novaeboracensis* 41

lucens 42

- var. *connecticutensis* 42

mucronatus 43

natans 40

nitens 43

Nuttallii 41

- var. *cayugensis* 41

Oakesianus 41

obtusifolius 43

pauciflorus 44

pectinatus 44

pennsylvanicus 41

perfoliatus 43

- var. *lanceolatus* 42

- " *Richardsonii* 42

pinnatum 295

praelongus 42

pulcher 41

pusillus 43

- var. *Sturrockii* 43

Richardsonii 42

Robbinsii 44

rufescens 41

- Potamogeton
   Spirillus 44
   Vaseyi 43
   zosterifolius 43
 Potato 344
 Potato-vine
   Wild 324
 Potentilla 232, 441
   Anserina 234
   argentea 233
   arguta 232
   canadensis 234
     var. simplex 234
   fruticosa 233
   intermedia 233
   monspeliensis 232
     var. norvegica 232
   norvegica 232
   pacifica 234
   palustris 233
   pumila 234
   recta 233
   simplex 234
   sulphurea 233
   tridentata 233
 Poterium
   canadense 241
   Sanguisorba 241
 Pot-herb Mustard 203
 Poverty Grass 283
 Powder-horn 177
 Prairie Rose 242
   Willow 140
 Prenanthes 413
   alba 413
   altissima 413
     var. hispidula 413
   serpentaria 413
   trifoliolata 413
 Pretty Nancy 179
 Prickly Ash 262
   Cleome 212
   Clotbur 391
   Gooseberry 217
   Lettuce 411
   Pear 289
   Poppy 197
   Prickly
     Saltwort 169
 Pride of the Meadow 235
 Prim 319
 Primrose
   Common Evening 292
   Evening 292
 Primrose Family 315
 Primrose-leaved Violet 287
 Primulaceae 315, 438, 440
 Prince's Feather 162, 169, 170
   Pine 306
 Privet 319
 Proboscis Flower 360
 Proserpinaca 295
   palustris 295
 Prostrate Amaranth 170
 Provence Rose 243
 Prunella 335
   vulgaris 335
 Prunus 243, 441
   alleghaniensis 244
   americana 246
   avium 245
   Cerasus 245
   cuneata 245
   domestica 246
   Gravesii 245
   instititia 244
   Mahaleb 245
   maritima 244
   nigra 246
   pennsylvanica 244
   Persica 246
   pumila 245
   serotina 243
   spinosa
     var. instititia 244
   virginiana 244
 Psamma 65
 Psedera 276
   quinquefolia 276
     var. hirsuta 276
   vitacea 276
 Ptelea 263
   trifoliata 263

*Pteridium**aquilinum* 18*Pteris* 18*aquilina* 18*Ptilimnium* 299*capillaceum* 299*Puccinellia* 75*angustata* 75*Borreri* 75*distans* 75*maritima*var. *minor* 75*Puccoon* 329

Red 196

White 196

Yellow 193

Pulse Family 246*Pumpkin* 372

Art 371

Purple Amaranth 170*Angelica* 303*Avens* 235*Azalea* 308*Bladderwort* 358*Boneset* 375*Chokeberry* 223*Cinquefoil* 233*Clematis* 190*Cone-flower* 393*Cress* 210*Eragrostis* 71*Five-finger* 233*Flowering Raspberry* 237*Gerardia* 355*Hardhack* 221*Loosestrife* 290*Meadow Rue* 188*Milkweed* 322*Milkwort* 264*Oat* 72*Petunia* 349*Rocket* 208*Stramonium* 348*Trillium* 124*Virgin's Bower* 190*Wild Raspberry* 236*Willow* 141*Purple-wort* 233*Purplish Cudweed* 390*Purslane* 182

French 182

Garden 182

Marsh 291

Milk 266

Mud 282

Sea 175

Water 291

Purslane Family 182

Speedwell 354

Pusley 182*Pussy Willow* 139*Pussy's Toes* 388*Putty-root* 136*Pycnanthemum* 340*aristatum* 428*clinopodioides* 340*flexuosum* 340*incanum* 341*lanceolatum* 340*linifolium* 340*muticum* 341var. *pilosum* 340*pilosum* 340*verticillatum* 341*virginianum* 340*Pygmy Weed* 214*Pyrola* 306*americana* 307*chlorantha* 306*elliptica* 307*rotundifolia* 307*secunda* 306*Pyrola*

One-flowered 306

Pyrus 222*americana* 223*arbutifolia* 222var. *atropurpurea* 223" *melanocarpa* 223*Aucuparia* 223*baccata* 222*communis* 222*Cydonia* 224*Malus* 222

- Pyrus
   melanocarpa 223
   prunifolia 222
 Quack Grass 79
 Quaking Aspen 141
   Grass 72
Quamoclit
   coccinea 324
 Quassia Family 263
 Queen of the Meadow 221, 235, 375
 Queen of the Prairie 234
 Quercitron Oak 152
 Quercus 149, 441
   acuminata 150
   alba 149
   bicolor 150
   coccinea 151
     var. *tinctoria* 152
   ilicifolia 152
   macrocarpa 150
   minor 150
   Muhlenbergii 150
   nana 152
   palustris 151
   platanooides 150
   prinoides 151
   Prinus 151
   rubra 151
   stellata 150
   velutina 151, 152
 Quicksilver Weed 188
 Quillwort 32
 Quillwort Family 32
 Quince 224
   Common 224
   Japan 224
 Quinsy-berry 218
 Quitch Grass 79
 Quiver-leaf 141
 Rabbit-foot Clover 248
 Raccoon-berry 194
 Radicula 206
   Armoracia 207
   Nasturtium-aquaticum 206
   palustris 207
     var. *hispida* 207
   sylvestris 207
 Radish 202
   Garden 202
   Wild 202
 Ragged Jack 178
   Lychnis 178
   Orchis 132
   Robin 178
   Sailor 162
 Ragweed 391
   Golden 404
   Great 391
 Ragwort 403, 404
   Golden 404
 Raisin
   Wild 369
 Ramsted 350
 Ranunculaceae 184, 437, 440
 Ranunculus 184, 441
   abortivus 186
     var. *eucyclus* 186
     " *micranthus* 186
   acris 187
     var. *Steveni* 187
   allegheniensis 186, 421
   ambigens 185
   aquatilis
     var. *capillaceus* 184
     " *trichophyllus* 184
   bulbosus 187
   circinatus 184
   Cymbalaria 185
   delphinifolius 185
     var. *terrestris* 185
   divaricatus 184
   fascicularis 187
   Flammula 426
     var. *reptans* 185
   hispidus 187
   laxicaulis 185
   micranthus 186
   multifidus 185
   obtusiusculus 185
   pennsylvanicus 187
   recurvatus 186
   repens 187
   reptans 185

Ranunculus
  sceleratus 186, 421
  septentrionalis 187
Rape 204
Raphanus 202
  Raphanistrum 202
  sativus 202, 431
Raspberry
  Black 237
  Dwarf 237
  European Red 236
  Purple Flowering 237
    " Wild 236
  Red 236
  Running 237
  Wild Red 236
Ratibida
  pinnata 393
Rattle 357
  Yellow 357
Rattle Bags 180
  Cohosh 192
  Snakeroot 192
Rattle-box 248, 357
Rattlesnake Fern 28
  Grass 74
  Master 297
  Plantain 134
Rattlesnake-root 413
Rattlesnake-weed 414
Rattle-top 192
Razoumofskya
  pusilla 156
Red Ash 318
  Baneberry 193
  Benjamin 124
  Blite 166
  Campion 178
  Cedar 38
  Cherry 245
  Chokeberry 223
  Clover 248
  Cohosh 193
  Columbine 192
  Currant 219
  Elm 152
  Goosefoot 166

Red
  Gum 220
  Haw 225
  Indian Paint 196
  Ink Plant 171
  Lily 120
  Lychnis 178
  Maple 273
  Mulberry 154
  Oak 151
  Pepper 344
  Pine 35
  Poppy 197
  Puccoon 196
  Raspberry 236
  Robin 178, 261
  Rose 243
  Snakeroot 193
  Sorrel 159
  Spruce 36
  Top 64
  Trillium 124
Red-beads 193
Red-berried Elder 369
Redbud 247
Red-osier Cornel 305
  Dogwood 305
Red-root 126, 196, 275
Red-seeded Dandelion 410
Red-shank 162
Red-stalked Aster 386
Reed 70
  Sea Sand 65
Kein Orchis 130
Reseda 212
  alba 212, 431
  lutea 212
  Luteola 212, 433
  odorata 212, 433
Resedaceae 212, 437, 440
Rhamnaceae 275, 438, 440
Rhamnus 275
  alnifolia 275
  cathartica 275
Rheumatism-root 126
Rhexia 290
  virginica 290

- Rhinanthus 357
   Crista-galli 357
   minor 357
 Rhode Island Bent 64
 Rhododendron 307
   arborescens 427
   canadense 308
   canescens 308
   maximum 308
   nudiflorum 308
   Rhodora 308
   viscosum 307
     var. *glaucum* 308
     " *nitidum* 308
Rhodora
   canadensis 308
 Rhus 268
   aromatica 269
   canadensis 269
   copallina 268
   glabra 268
   hirta 268
   radicans 269
   Toxicodendron 269
     var. *radicans* 269
   typhina 268
   venenata 268
   Vernix 268
 Rib Grass 361
 Ribbon Grass 59
 Ribes 217, 441
   americanum 218
   aureum 219
   Cynosbati 217
   floridum 218
   gracile 217
   Grossularia 218
   lacustre 218
   missouriense 217
   nigrum 218, 434
   odoratum 219
   oxyacanthoides 218
   prostratum 219
   rotundifolium 218
   rubrum 219
   Uva-crispa 218
   vulgare 219
 Ribwort 360
 Rice
   False 58
   Indian 58
   Mountain 59
   Tuscarora 74
   Water 58
   Wild 58
 Richweed 156, 344
 Ricinus 265
   communis 265, 430
 Ring Willow 139
 Ripple Grass 361
 River Ash 318
   Bulrush 86
   Weed 213
     " Family 213
 River-bank Grape 277
   Willow 139
 Roadside Peppergrass 200
 Robin Runaway 334
 Robinia 251
   hispida 251
   Pseudo-Acacia 251
   viscosa 251
 Robin's Plantain 387
 Rock Brake 19
   Cress 210
   Crowfoot 186
   Elm 152
   Lily 192
   Maple 272
   Sandwort 175
   Woodsia 24
 Rockrose 282
 Rockrose Family 282
 Rocket 206
   American Sea 202
   Crambling 212
   Dame's 206
   Dyer's 212
   Purple 208
   Sand 204
   Sea 202
   Sweet 206
   Wall 204
   Yellow 207

- Rocket Cress 207
  Larkspur 192
Roman Wormwood 391, 402
Roripa
  Armoracia 207
  hispida 207
  Nasturtium 206
  palustris 207
  sylvestris 207
Rosa 242, 441
  blanda 242
  canina 242
  carolina 243
  cinnamomea 242
  gallica 243
  humilis 243
  lucida 243
  nitida 243
  rubiginosa 242
    var. *micrantha* 243
  rugosa 242
  setigera 242, 422
  spinosissima 242, 422
  virginiana 243
Rosaceae 220, 437, 440
Rose 242
  African 197
  Brier 242
  Burnet 242
  California 324
  Canker 197, 242
  Cinnamon 242
  Climbing 242
  Corn 197
  Dog 242
  Dwarf Wild 243
  Early Wild 242
  French 243
  Hip 242
  Japanese 236, 242
  Kitchen 242
  Large Wild 243
  Low Wild 243
  Marsh Holy 310
  Meadow 242
  Musk 279
  Northeastern 243
  Rose
    Pasture Wild 243
    Prairie 242
    Provence 243
    Red 243
    Scotch 242
    Shining 243
    Swamp Wild 243
    Thornless 242
    Wild 243
  Rose Acacia 251
    Bay 308
    Campion 177
    Family 220
    Mallow 279
    Moss 182
    Pink 177
    Pogonia 132
    Willow 141
  Rose of Sharon 279
  Rosemary
    Bog 310
    Marsh 310, 314
  Rosin-weed 390
  Rotala 289
    ramosior 289
  Rough Avens 235
    Bedstraw 362
    Bent 64
    Boneset 376
    Cinquefoil 232
    Comfrey 329
    Crowfoot 186
    Pigweed 169
  Round-headed Anemone 190
  Round-leaved Anemone 190
    Cornel 304
    Dogwood 304
    Shin Leaf 307
    Sundew 213
    Violet 287
  Rowan Tree 223
  Royal Fern 26
  Rubiaceae 361, 438, 441
  Rubus 236, 441
    allegheniensis 237
    var. *Gravesii* 238

Rubus

- americanus* 237
- amnicolus* 238
- Andrewsianus* 239
- argutus*
  - var. *Randii* 238
- arundelanus* 238
- Baileyanus* 240
- canadensis* 239
- cuneifolius* 238
- Enslenii* 240
- floricornis* 239
- frondosus* 238
- hispidus* 239
  - var. *suberectus* 239
- idaeus* 236
  - var. *aculeatissimus* 236
  - " *strigosus* 236
- invisus* 426
- laciniatus* 238
- neglectus* 236
- nigricans* 239
- nigrobaccus* 237
- occidentalis* 237
  - forma *pallidus* 237
- odoratus* 237
- orarius* 238
- pergratus* 238
- philadelphicus* 238
- phoenicolasius* 237
- procumbens* 239
- Randii* 238
- recurvans* 238
- recurvicaulis* 238
- semisetosus* 239
- setosus* 239
- strigosus* 236
- subuniflorus* 240
- triflorus* 237
- vermontanus* 239
- villosus* 237, 239, 426
  - var. *frondosus* 238
  - " *humifusus* 240

Rudbeckia

- hirta* 393
- laciniata* 393
- speciosa* 393

Rudbeckia

- subtomentosa* 393
- triloba* 392

Rue

- Common Meadow 188
- Early Meadow 188
- Goat's 251
- Meadow 188
- Purple Meadow 188
- Tall Meadow 188
- Wax-leaved Meadow 188

Rue Anemone 189

- Family 262
- Spleenwort 20

Rum Cherry 243

Rumex 157, 441

- Acetosa* 159
- Acetosella* 159
- altissimus* 158
- Britannica* 158
- crispus* 158
- elongatus* 158, 420
- maritimus* 426
- mexicanus* 158
- obtusifolius* 159
- Patientia* 157
- persicarioides* 426
- salicifolius* 158
- sanguineus* 426
- verticillatus* 158

Runaway Robin 343

Running Blackberry 239

- Brier 239
- Buttercup 234
- Pine 31
- Raspberry 237
- Swamp Blackberry 239

Ruppia 44

- maritima* 44

Rush 114

- Beak 90
- Bog 114, 115
- Candle 115
- Chair-maker's 86
- Club 85
- Common 115
- Hairy Wood 117

Rush

- Horned 90
- Knotted 116
- Nut 91
- Scouring 29
- Slender 114
- Soft 115
- Spike 83
- Three-square 86
- Toad 114
- Twig 91
- Wood 117
- Yard 114

Rush Family 114

- Grass 63

Russian Clover 252

- Thistle 169

Rusty Woodsia 24

Rutabaga 203

Rutaceae 262, 437, 440

Rye 79

- Nodding Wild 80
- Slender Wild 81
- Wild 80

Rynchospora 90

- alba 90

- var. *macra* 418

- capillacea* 425

- corniculata*

- var. *macrostachya* 90

- fusca* 90

- glomerata* 91

- macrostachya* 90

Sabatia 319

- campestris* 319, 434
- chloroides* 319
- dodecandra* 319
- stellaris* 319

Sacaline 164

Sacred Bean 184

Saddle Tree 194

Sage 337

- Garden 337
- Lyre-leaved 337
- Meadow 337
- Scarlet 338
- Wild 376

Sage

- Wood 332

Sage Willow 140

Sagina 174

- apetala* 174
- decumbens* 174
- procumbens* 174

Sagittaria 45

- arifolia* 46
- calycina* 47
- var. *spongiosa* 47

- cristata* 46

- cuneata* 46

- Eatoni* 46

- Engelmanniana* 46

- gracilis* 46

- graminea* 46

- hastata* 46

- heterophylla* 46

- var. *elliptica* 46

- " *rigida* 46

- latifolia* 46

- forma *diversifolia* 46

- " *gracilis* 46

- " *hastata* 46

- " *obtusa* 46

- longirostra* 45

- natans*

- var. *gracillima* 47

- " *lorata* 46

- obtusa* 46

- pusilla* 46

- rigida* 46

- subulata* 46

- var. *gracillima* 47

- variabilis* 46

- var. *diversifolia* 46

- " *gracilis* 46

Sailor's Tobacco 401

St. John's-wort 280

- Common 280

- Dwarf 281

- Great 280

- Marsh 282

- Pale 281

- Shrubby 281

St. John's-wort Family 280

- St. Lucie Cherry 245
 Salad Burnet 241
 Salicaceae 137, 436, 439
 Salicornia 168
   ambigua 168
   Bigelovii 168
   europaea 168
   herbacea 168
   mucronata 168
 Salix 137, 441
   acutidens 139
   alba
     var. *vitellina* 138
   babylonica 139
   Bebbiana 140
   candida 140
     var. *denudata* 141
   cordata 139
     var. *angustata* 139
     " *myricoides* 139
   discolor 139
     var. *eriocephala* 140, 420
     " *prinoides* 140, 420
   eriocephala 140
   fluvialis 139
   fragilis 138
   humilis 140
   incana 141, 433
   longifolia 139
   lucida 138
   myrtilloides 139
   nigra 137
     var. *falcata* 137
   pedicellaris 139
   pentandra 138
   petiolaris 426
   prinoides 140
   purpurea 141
   rostrata 140
   sericea 140
   serissima 138
   subsericea 420
   tristis 140
 Salomonina
   biflora 123
   commutata 123
 Salsify 410
 Salsola 169
   Kali 169
     var. *caroliniana* 421
     " *tenuifolia* 169
   salsa
     var. *americana* 169
   Tragus 169
 Salt Marsh Grass 68
   Meadow Grass 68
   Reed Grass 68
 Saltwort 169
   Common 169
   Prickly 169
 Salvia 337
   lyrata 337
   officinalis 337
   pratensis 337, 432
   splendens 338, 432
 Sambucus 369
   canadensis 369
   pubens 369
   racemosa 369
 Samolus 315
   floribundus 315, 427
   Valerandi 427
     var. *americanus* 315
 Samphire 168
   Woody 168
 Sand Bar Willow 139
   Blackberry 238
   Brier 345
   Bur 346
   Cherry 245
   Grass 70
   Jointweed 164
   Mustard 204
   Rocket 204
   Spurrey 173
 Sandalwood Family 156
 Sandbur 58
 Sand-weed 173
 Sandwort 173, 174
   Blunt-leaved 174
   Common 175
   Large-leaved 174
   Mountain 175
   Rock 175

- Sandwort
   Sea Beach 175
   Seaside 173
   Showy 174
   Thyme-leaved 175
 Sanguinaria 196
   canadensis 196
 Sanguisorba 241
   canadensis 241
   minor 241, 434
   Sanguisorba 241
 Sanicle 297
   American 215
 Sanicle-leaved Crowfoot 186
 Sanicula 297
   canadensis 297
   gregaria 297
   marilandica 297
     var. canadensis 297
   trifoliata 297
 Santalaceae 156, 436
 Sapindaceae 274, 438, 440
 Saponaria 180
   inflata 430
   officinalis 180
   Vaccaria 180
Sarothra
   gentianoides 282
 Sarracenia 213
   purpurea 213
 Sarraceniaceae 213, 437
 Sarsaparilla
   American 296
   Bristly 296
   False 296
   Wild 296
   Yellow 194
 Sassafras 195
   officinale 195
   Sassafras 195
   variifolium 195
 Satin-flower 208
 Satureja 339
   hortensis 428
   vulgaris 339
 Saururus 137
   cernuus 137
   Savastana
     Nashii 59
     odorata 59
 Savin 38
 Savory 339
 Saw Brier 125
 Saxifraga 215
   pennsylvanica 215
   virginiensis 215
 Saxifragaceae 215, 437, 440
 Saxifrage 215
   Early 215
   Golden 216
   Spring 215
   Swamp 215
 Saxifrage Family 215
 Saxifrax 195
 Scabiosa
   arvensis 371
 Scabious
   Field 371
   Sweet 387
 Scallop Squash 372
 Scarlet Oak 151
   Painted Cup 356
   Sage 338
 Scheuchzeria 45
   palustris 45
 Schizaeaceae 26, 435
 Schwalbea 357
   americana 357
 Scirpus 85, 441
   alpinus 86
   americanus 86
   atrocinctus 89
     var. brachypodus 89
   atrovirens 87, 88, 418
   campestris 87
     var. novae-angliae 87
     " *paludosus* 87
   cyperinus 88
     var. Andrewsii 88
     " *condensatus* 88
     " *Eriophorum* 88
     " *pelius* 88, 418
   debilis 86
   Eriophorum 88

- Scirpus
   fluviatilis 87
   georgianus 88
   Hallii 425
   hudsonianus 86
   lacustris 86
   lineatus 88
   maritimus 87
   nanus 85
   novae-angliae 87
   Olneyi 86
     var. *contortus* 86
   paludosus 87
   pedicellatus 88
     var. *pullus* 89
   planifolius 85
   polyphyllus 88
     var. *macrostachys* 88
   pungens 86
   robustus 87
   rubrotinctus 87, 418
   Smithii 86
   subterminalis 86
   supinus
     var. *Hallii* 425
   sylvaticus 87
     var. *Bissellii* 87
     " *digynus* 87
   Torreyi 86
   validus 86
 Scleranthus 172
   annuus 172
 Scleria 91
   pauciflora 91
     var. *caroliniana* 91
   reticularis
     var. *pubescens* 430
   triglomerata 91
   verticillata 91
 Scoke
   Common 171
 Scorpion Grass 329
 Scotch Broom 248
   Fir 35
   Lovage 301
   Pine 35
   Pink 181
   Rose 242
 Scotch
   Thistle 407
 Scott's Spleenwort 19
 Scouring Rush 29
 Scratch Grass 58, 163
 Scrofula Plant 351
 Scrophularia 351
   leporella 351
   marilandica 351
   nodosa
     var. *marilandica* 351
 Scrophulariaceae 349, 438, 440
 Scurvy Grass 208
 Scutch Grass 69, 79
 Scutellaria 333
   galericulata 333
   integrifolia 333
   lateriflora 333
   parvula 333
     var. *ambigua* 333
   saxatilis 428
 Sea Beach Sandwort 175
   Blite 168
   Chickweed 175
   Cole 202
   Lavender 314
   Parsley 301
   Pink 319
   Purslane 175
   Rocket 202
 Seaside Crowfoot 185
   Gerardia 356
   Goosefoot 169
   Jointweed 164
   Plantain 361
   Sandwort 173
   Spurge 265
   Spurrey 173
 Secale 79
   cereale 79, 431
 Sedge 91
 Sedge Family 81
 Sedum 214
   acre 214
   purpureum 214
   Telephium 214
   ternatum 214

- Sedum
   triphyllum 214
 Seedbox 291
 Selaginella 32
   apus 32
   rupestris 32
 Selaginellaceae 32, 436
 Self-heal 335
   Common 335
 Sempervivum 215
   tectorum 215
 Seneca Grass 59
   Snakeroot 264
 Senecio 403
   aureus 404
     var. *Balsamitae* 404
     " *obovatus* 404
   Balsamitae
     var. *praelongus* 404
   obovatus 404
   viscosus 404
   vulgaris 403
 Senega Snakeroot 264
 Senna 247
   American 247
   Wild 247
 Sensitive Fern 25
   Pea 247
   Plant
     Wild 247
 Sericocarpus 388
   asteroides 388
   conyzoides 388
   linifolius 388
   solidagineus 388
 Service Berry 224
   Tree 223
 Sesame Grass 48
 Setaria 57
   glauca 57
   imberbis 430
     var. *perennis* 57
   italica 57
     var. *germanica* 57
   verticillata 57
   viridis 57
 Shad Bush 224
   Shad-flower 199
   Shade Elm 152
   Shag-bark Hickory 145
   Shamrock
     Water 320
   Shave Grass 30
   Shear Grass 79
   Sheep Laurel 309
     Sorrel 159
   Sheepberry 369
   Sheep's Fescue 76
   Sheep's-bit 373
   Shell-bark Hickory 145
   Shepherd's Purse 201
     Sprouts 201
   Shield Fern 22
   Shin Leaf 306, 307
     Round-leaved 307
   Shining Rose 243
   Sumach 268
   Willow 138
   Shirley Poppy 197
   Shore Knotweed 160
   Showy Lady's Slipper 129
     Orchis 130
     Portulaca 182
     Sandwort 174
   Shrubby Althaea 279
     Bitter-sweet 271
     Cinquefoil 233
     St. John's-wort 281
     Trefoil 263
   Sibbaldiopsis
     tridentata 233
   Siberian Aster 386
     Crab 222
   Sickle Grass 163
   Sickle-pod 211
   Sicyos 372
     angulatus 372
   Sida 278
     spinosa 278, 434
   Side-saddle Flower 213
   Sideritis 334
     montana 334, 434
   Sieglingia
     purpurea 70

- Sieglingia*
seslerioides 70
Silene 179
antirrhina 179
     var. *divaricata* 179
Armeria 179
     caroliniana 179
Cucubalus 180
dichotoma 179
inflata 430
latifolia 180
nivea 426
noctiflora 179, 421
pennsylvanica 179
stellata 180
vulgaris 180
Silk Grass 64
Silkweed 322
     Common 322
Silkworm Mulberry 154
Silky Cornel 305
     Willow 140
Silphium 390
     perfoliatum 390
Silver Maple 273
     Weed 234, 274
Silver-leaf Poplar 141
Silvery Cinquefoil 233
     Spleenwort 21
Simarubaceae 263, 437, 440
Sinapis
     alba 202
Sisymbrium 205
     Alliaria 205
     altissimum 205
     canescens 205, 433
     Loeselii 205
     officinale 205
         var. *leiocarpum* 205
     Sophia 205, 433
     Thalianum 206
Sisyrinchium 128
     albidum 128, 431
     anceps 128
     angustifolium 128
     atlanticum 129
     gramineum 128
     Sisyrinchium
         graminoides 128
         intermedium 128
         mucronatum 128
Sium 300
     Carsonii 300
     cicutaefolium 300
     lineare 300
Skevisch 387
Skullcap 333
     Mad-dog 333
     Marsh 333
Skunk Cabbage 110
     Currant 219
     Grape 276
     Spruce 36
Sleepy Catchfly 179
Slender Fescue 76
     Knotweed 160
     Nettle 155
     Pigweed 169
     Rush 114
     Vetch 256
Slippery Elm 152
Sloe 244, 369
Slough Grass 68
Small Agrimony 241
     Alyssum 200
     Cranberry 314
     Green Wood Orchis 131
     Nettle 155
     Pale Green Orchis 130
     Red Morning Glory 324
     Snapdragon 351
     Solomon's Seal 123
Smaller Bladderwort 358
Small-flowered Cranesbill 262
     Crowfoot 186
     Geranium 262
     Pearlwort 174
     Sweetbrier 243
Small-fruited Hickory 145
Smartweed 162
     Common 162
     Water 162
Smilacina 122
     racemosa 122

- Smilacina
   stellata 122
   trifolia 123, 419
 Smilax 125
   glauca 125
   herbacea 125
   hispida 125
   rotundifolia 125
 Smooth Alder 148
   Crowfoot 186
   Gooseberry 218
   Solomon's Seal 123
   Sumach 268
   Winterberry 270
   Yellow Violet 288
 Smooth-fruited Poppy 197
 Snake Grass 71
   Mouth 132
 Snake-berry 193
 Snakehead 352
 Snake-leaf 121
 Snakeroot 157
   Black 192, 297
   Button 297, 377
   Fine 157
   Heart 157
   Rattle 192
   Red 193
   Seneca 264
   Senega 264
   Virginia 157
   White 193, 376, 377
 Snapdragon 351
   Small 351
 Snapdragon Catchfly 179
 Snapping Alder 219
 Snap-weed 274
 Snap-wood 196
 Sneezeweed 398
 Snowball 367, 368
 Snowberry 366, 367
   Creeping 312
 Snowdrift 199
 Snowdrop 190
 Snow-on-the-Mountain 266
 Soapberry Family 274
 Soapwort 180
 Soapwort
   Field 180
 Soft Agrimony 241
   Chess 77
   Maple 273
   Rush 115
 Solanaceae 344, 438, 440
 Solanum 344
   carolinense 345
   Dulcamara 345
   nigrum 345
   rostratum 346
   tuberosum 344, 432
 Soldier's Cap 198
 Soldiers on the Green 356
 Solidago 378, 441
   altissima 380
   arguta 379
   aspera 380
   asperula 380
   bicolor 378
     var. *concolor* 378
   caesia 378
     var. *axillaris* 378
     " *paniculata* 378
   canadensis 380
     var. *glabrata* 380
     " *scabra* 380
     " *scabriuscula* 380
   Elliottii 380
   flexicaulis 378
   graminifolia
     var. *Nuttallii* 381
   hispida 378
   juncea 379
     var. *ramosa* 379
   lanceolata 381
   latifolia 378
   neglecta 379
     var. *linoides* 379
   nemoralis 380
   odora 379
   patula 379
   puberula 378
   rigida 381
   rugosa 380
     var. *sphagnophila* 380

- Solidago*
   sempervirens 379
   serotina 381
     var. *gigantea* 381
   speciosa 379
   squarrosa 378
   stricta 429
   tenuifolia 381
   uliginosa 379
   ulmifolia 380
   uniligulata 379
Solomon's Seal 123
   False 122
   Giant 123
   Great 123
   Hairy 123
   Small 123
   Smooth 123
   Star-flowered 122
   Three-leaved 122
   Two-leaved 123
Sonchus 411
   arvensis 411
   asper 411
   oleraceus 411
Sophia
   pinnata 205
   Sophia 205
Sorbaria 221
   sorbifolia 221
Sorbus
   americana 223
   Aucuparia 223
Sorghastrum 49
   avenaceum 49
   nutans 49
Sorghum 49
   halepense 49, 416, 433
Sorrel 157
   Cock 159
   Common 159
     " Wood 260
   Cow 159
   Field 159
   Garden 159
   House 159
   Lady's 261
   Meadow 159
   Red 159
   Sheep 159
   Slender Yellow Wood 260
   Tall Yellow Wood 261
   Violet Wood 260
   White Wood 260
   Wood 260
   Yellow Wood 260
Sorrel Dock 159
Sour Cherry 245
   Grass 159
   Gum 305
Sour-top Blueberry 313
Southernwood 401
Sow Bindweed 163
   Thistle 411
Sowbane 166, 167
Sowna Millet 56
Spanish Bayonet 121
   Buttons 407
   Needles 397
Sparganiaceae 39, 436
Sparganium 39
   americanum 39
     var. *androcladum* 40
   androcladum 40
     var. *fluctuans* 40
   angustifolium 40, 422
   diversifolium 40
     var. *acaule* 40
   eurycarpum 39, 416
   fluctuans 40, 423
   lucidum 40
   minimum 40
   simplex 40
     var. *androcladum* 40
     " *angustifolium* 40
     " *fluitans* 40
     " *Nuttallii* 39
Spartina 68
   cynosuroides 68
   glabra 68
     var. *alterniflora* 68
     " *pilosa* 68
   junccea 68

- Spartina*
Michauxiana 68
patens
     var. *caespitosa* 69, 417
     var. *junceae* 68
polystachya 68
stricta
     var. *alterniflora* 68
     " *glabra* 68
Spathyema
     foetida 110
 Spatter-dock 183
 Spear Grass 72, 73
 Spearmint 342
 Spearwort 185
     Crawling 185
     Creeping 185
     Water Plantain 185
 Speckled Alder 148
 Specularia 372
     perfoliata 372
 Speedwell 353, 354
     Common 354
     Corn 354
     Creeping 354
     Ivy-leaved 355
     Marsh 354
     Purslane 354
     Swamp 354
     Thyme-leaved 354
 Spergula 173
     arvensis 173
     sativa 174
 Spergularia 173
     canadensis 421
     marina 173
     rubra 173
 Sphenopholis 66
     nitida 66
     obtusata 66
         var. *pubescens* 66
     pallens 66
         var. *major* 66
     palustris 66
 Spice Bush 196
 Spice-wood 196
 Spider Lily 113
 Spider-flower 212
 Spiderwort 113
 Spiderwort Family 113
 Spignet 296
 Spike Grass 72
     Rush 83
 Spiked Loosestrife 290
 Spikenard 296
     American 296
     False 122
     Wild 122
 Spinach
     New Zealand 173
     Strawberry 166
     Wild 166
 Spindle Tree 271
     European 271
 Spiny Amaranth 170
     Clotbur 391
 Spiraea 221
     chamaedrifolia 221
         var. *ulmifolia* 221
     Filipendula 235
         japonica 221
         latifolia 221
         lobata 234
         prunifolia 221
         salicifolia 221
         sorbifolia 221
         tomentosa 221
     Ulmaria 235
 Spiraea
     Ash-leaved 221
 Spiranthus 133
     Beckii 133
     cernua 134
         var. *ochroleuca* 134, 420
     gracilis 133
     latifolia 134
     lucida 134
     praecox 133
     Romanzoffiana 134
     simplex 133
     vernalis 133
 Spires Grass 59
 Spirodela 111
     polyrhiza 111

- Spleenwort 19
   Ebony 20
   Maidenhair 20
   Mountain 20
   Narrow-leaved 20
   Pinnatifid 19
   Rue 20
   Scott's 19
   Silvery 21
 Spoon-wood 309
 Sporobolus 63
   asper 63
   clandestinus 63
   cryptandrus 63
   heterolepis 63
   longifolius 63
   neglectus 63
   serotinus 63
   uniflorus 63
   vaginiflorus 63
 Spotted Alder 219
   Cowbane 299
   Loosestrife 315
   Medick 250
   Mint 343
   Parsley 298
   Touch-me-not 274
   Wintergreen 306
 Spotted-leaf Buttercup 187
   Crowfoot 187
 Spreading Dogbane 321
   Globeflower 191
   Orach 167
 Spring Anemone 190
   Beauty 182
   Cress 209, 210
   Dock 157
   Mouse-ear 177
   Saxifrage 215
   Vetch 255
 Spruce 36
   Black 36
   Bog 36
   Cat 36
   Norway 36
   Red 36
   Spruce
     Skunk 36
     White 36
 Spurge 265, 267
   Caper 267
   Cypress 267
   Flowering 266
   Ipecac 266
   Leafy 266
   Myrtle 267
   Petty 267
   Seaside 265
 Spurge Family 265
 Spurrey 173
   Common 173
   Corn 173
   Field 174
   Salt Marsh Sand 173
   Sand 173
   Seaside 173
 Spurrey Pearlwort 174
 Squash 372
   Canada 372
   China 372
   Hubbard 372
   Marrow 372
   Scallop 372
   Summer Crookneck 372
   Winter Crookneck 372
 Squaw Huckleberry 313
   Vine 364
 Squaw-root 192, 195, 359
 Squaw-weed 403, 404
   Swamp 404
 Squirrel Brier 125
   Corn 198
 Squirrel-ear 134
 Squirrel-tail Grass 80
 Stachys 337
   aspera 337
   cordata 428
   hyssopifolia 337
   palustris 337
     var. *cordata* 428
     var. *homotricha* 337
   tenuifolia
     var. *aspera* 337, 428

- Staff Tree 271
 Staff Tree Family 271
 Stag-bush 369
 Stagger-bush 310
 Staggerwort 398
 Staghorn Sumach 268
 Staphylea 272
     trifolia 272
 Staphyleaceae 272, 437
 Star Cucumber 372
     Flower 316
     Grass 125, 127
     Thistle 407
 Star of Bethlehem 121
 Star-flowered Solomon's Seal 122
 Star-leaved Gum 220
 Starry Campion 180
 Starwort 175, 382
     Greater 176
     Lesser 176
     Long-leaved 175
     Mountain 175
     Northern 175
     Water 267
Statice
     Limonium
         var. *caroliniana* 314
 Steeple Bush 221
 Steironema 316
     ciliatum 316
     lanceolatum 316
 Stellaria 175
     borealis 175
     graminea 176
         var. *lanceolata* 176
     Holostea 176
     longifolia 175
     media 176
     pubera 426
 Stemless Lady's Slipper 129
Stenophragma
     Thaliana 206
 Stenophyllus 85
     capillaris 85
 Stickseed 240, 328
 Stick-tight 396
 Stiff Water Crowfoot 184
 Stinging Nettle 155
 Stingless Nettle 156
 Stink Grass 71
 Stipa 60
     avenacea 60
 Stitchwort
     Greater 176
     Lesser 176
     Long-leaved 175
     Northern 175
 Stone Clover 248
 Stonecrop 214
     Biting 214
     Ditch 214
     Mossy 214
     Virginia 214
     Wild 214
 Stone-root 344
 Stone-seed 329
 Storksbill 262
     Musk 262
 Stramonium 347
     Purple 348
 Strawberry 231
     American Wood 232
     Barren 232
     Bog 233
     Dry 232
     European Wood 231
     Field 231
     Indian 232
     Mock 232
     Wild 231, 232
     Yellow 232, 234
     Yellow-flowered 232
 Strawberry Blite 166
     Spinach 166
     Tomato 346
 Streptopus 123
     amplexifolius 123
     roseus 123
 Striped Maple 272
 Strophostyles 258
     angulosa 258
     helvola 258
 Stubbleberry 345
 Suaeda 168

Suagda

- linearis 169
- maritima 168

Succory 408

Sugar Maple 272

- Pear 224

Sugarberry 153

Sumach 268

- Black 268
- Dwarf 268
- Mountain 223
- Poison 268
- Shining 268
- Smooth 268
- Staghorn 268
- Sweet-scented 269

Summer Anemone 190

- Grape 276, 277
- Lilac 206
- Snowflake 126

Sundew 213

- Long-leaved 213
- Round-leaved 213

Sundew Family 213

Sundial 248

Sunflower 394

- Common 394
- Tickseed 397
- Wild 395

Sun-plant 182

Swallow-wort 196

- Black 323

Swamp Ash 318

- Beggar-ticks 396
- Bilberry 313
- Birch 148
- Blueberry 313
- Buttercup 187
- Crowfoot 187
- Dock 158
- Dogwood 305
- Elm 152
- Globeflower 191
- Gooseberry 218
- Hickory 145
- Laurel 309
- Loosestrife 289

Swamp

- Lousewort 357
  - Maple 273
  - Milkweed 322
  - Poplar 142
  - Saxifrage 215
  - Spanish Oak 151
  - Speedwell 354
  - Squaw-weed 404
  - Thistle 406
  - White Oak 150
- Sweatweed 278
- Swedish Clover 249
- Sweet Allison 199
- Alyssum 199
  - Birch 147
  - Cherry 245
  - Chervil 298
  - Cicely 298
  - Clover 249
  - Coltsfoot 157, 402
  - Currant 219
  - Elm 152
  - Everlasting 390
  - Fern 144
  - Flag 111
  - Gale 143
  - “ Family 143
  - Golden-rod 379
  - Gum 220
  - “ Tree 220
  - Pepperbush 306
  - Pigweed 165
  - Rocket 206
  - Scabious 387
  - Susan 179
  - Vernal Grass 59
  - Viburnum 369
  - Violet 287
  - White Violet 287
  - William 181, 326
- Sweethrier 242
- Small-flowered 243
- Sweet-scented Bedstraw 363
- Sumach 269
- Switch Grass 52
- Sword Grass 59, 98

- Sycamore 220
   American 220
   False 220
 Sycamore Maple 272
 Symphoricarpos 366
   orbiculatus 366
   racemosus 367
     var. *laevigatus* 367
   Symphoricarpos 366
   vulgaris 366
 Symphytum 328
   asperrimum 329
   officinale 328
   tuberosum 328
 Symplocarpus 110
   foetidus 110
 Syndesmon
   thalictroides 189
 Synosma
   suaveolens 403
 Syntherisma
   filiformis 49
   fimbriata 50
   linearis 49
   sanguinalis 50
 Syringa 318
   vulgaris 318
 Syringa 217
   Large-flowered 217
 Tacamahac 142
 Taenidia 301
   integerrima 301
 Tag Alder 148
 Talinum
   teretifolium 426
 Tall Anemone 190
   Blueberry 313
   Buttercup 188
   Cinquefoil 232
   Cone-flower 393
   Crowfoot 188
   Dock 158
   Leafy Green Orchis 130
   Meadow Rue 188
   Red Top 70
   Thistle 406
   White Bog Orchis 130
 Tall
   Wild Nettle 155
 Taller Fescue 76
 Tamarack 35
 Tanacetum 400
   vulgare 400
     var. *crispum* 400
 Tansy 400
   Common 400
   Wild 234
 Tansy Mustard 205
 Tape Grass 47
 Taraxacum 410
   erythrospermum 410
   officinale 410
     var. *palustre* 410
   Taraxacum 410
 Tare 255
   Common 255
   Hairy 256
 Tares 173
 Tarragon 401
 Tartarian Honeysuckle 365
 Tar-weed 377
 Tassel Tree 278
 Tawny Elm 152
 Taxaceae 34, 436
 Taxus 34
   canadensis 34
   minor 34
 Tea
   Labrador 307
   Mexican 165
   New Jersey 275
   Oswego 338
 Teaberry 218, 311
   White 312
 Tear-thumb
   Arrow-leaved 163
   Halberd-leaved 163
 Teasel 370
   Wild 370
 Teasel Family 370
 Tecoma 359
   radicans 359
 Tephrosia 251
   virginiana 251

- Terrell Grass 80
 Tetragonia 173
     expansa 173, 433
 Tetter-wort 196
 Teucrium 332
     canadense 332
     var. *littorale* 332
     littorale 332
 Thale Cress 206
Thalesia
     uniflora 359
 Thalictrum 188
     clavatum 426
     dioicum 188
     polygamum 188
     purpurascens 188
     revolutum 188
Thaspium
     aureum 427
     barbinode 427
     trifoliatum 427
 Thatch Grass 68
Thelypodium
     pinnatifidum 208
 Thicket Bindweed 163
     Buckwheat 163
 Thimbleberry 237
 Thimbleweed 190, 393
 Thin Grass 64
 Thistle
     Bull 405, 406
     Canada 406
     Common 405
     " Sow 411
     Cotton 407
     Curled 405
     Field 405
     " Sow 411
     Flowering 197
     Pasture 406
     Plumed 405
     Plumeless 405
     Russian 169
     Scotch 407
     Sow 411
     Spiny-leaved Sow 411
     Star 407
     Thistle
         Swamp 406
         Tall 406
         Yellow 197, 405
 Thlaspi 200
     arvense 200
 Thorn
     Cockspur 225
     Hedge 225
     Newcastle 225
     White 225
 Thorn Apple 347
 Thornless Rose 242
 Thorny Amaranth 170
 Thoroughwort 375, 376
 Thread-and-Needle 121
 Thread-foot 213
 Three-leaved Solomon's Seal 123
 Three-seeded Mercury 265
 Three-square Rush 86
 Three-toothed Cinquefoil 233
     Five-finger 233
 Throw-wort 336
 Thuja 37
     occidentalis 37
 Thyme 341
     Creeping 341
     Wild 341
 Thymelaeaceae 289, 438
 Thyme-leaved Sandwort 175
     Speedwell 354
 Thymus 341
     Serpyllum 341
 Tiarella 215
     cordifolia 215
 Tick Trefoil 252
 Tickle Grass 51
 Tickseed 395
 Tickseed Sunflower 397
 Tiger Lily 120
 Tilia 277
     americana 277
     Michauxii 277
     pubescens 277
     vulgaris 277
 Tiliaceae 277, 438, 440
 Tillaea 214

- Tillaea
   aquatica 214
   simplex 214
 Timothy 62
 Tinker's Weed 367
 Tissa
   canadensis 173
   marina 173
   rubra 173
 Toad Grass 114
   Rush 114
 Toad-flax 350
   Bastard 156
   Blue 350
 Tobacco 348
   Indian 374, 389
   Ladies' 388
   Sailor's 401
   Wild 348
 Tomato 344
   Strawberry 346
 Tongue Grass 176, 200
 Toothache Tree 262
 Toothed Medick 250
 Tooth-root 208
 Toothwort 208
   Cut-leaved 209
   Large 209
 Toper's-plant 241
 Touch-me-not
   Pale 274
   Spotted 274
 Touch-me-not Family 274
 Tower Cress 210
   Mustard 210
 Toxylon
   pomiferum 154
 Trachynotia
   junceae 68
 Tradescantia 113
   virginiana 113
 Tragopogon 410
   porrifolius 410
   pratensis 410
 Trailing Arbutus 311
 Traveler's Joy 190
 Treacle Mustard 200, 206
 Tree of Heaven 263
 Trefoil 189, 248
   Bird's-foot 250
   Marsh 320
   Showy Tick 253
   Shrubby 263
   Tick 252
 Trembling Poplar 141
 Triadenum
   virginicum 282
 Trichostema 332
   dichotomum 332
   lineare 332, 423
 Tricuspis
   seslerioides 70
 Tridens 70
   flavus 70
 Trientalis 316
   americana 316
 Trifolium 248
   agrarium 249
   arvense 248
   aureum 249
   hybridum 249
   incarnatum 248, 431
   medium 426
   pratense 248
   procumbens 249
   repens 249
 Triglochin 45
   maritima 45
   palustris 425
 Trillium 124
   cernuum 124
   erectum 124
   erythrocarpum 125
   grandiflorum 124
   undulatum 125
 Trillium
   Large-flowered White 124
   Nodding 124
   Painted 125
   Purple 124
   Red 124
   White 124
 Trinity 113

- Triodia*
cuprea 70
purpurea 70
Triosteum 367
angustifolium 367
aurantiacum 367
perfoliatum 367
Triphora
trianthophora 132
Triplasis 70
purpurea 70
 Triple-awned Grass 60
Tripsacum 48
dactyloides 48
Trisetum 66
palustre 66
pennsylvanicum 66
spicatum 66, 417
subspicatum 66
     var. molle 66
Triticum 79
sativum 79, 431
vulgare 79
Trollius 191
laxus 191
 Trout Lily 121
 Trumpet Creeper 359
     Honeysuckle 366
     Weed 375
 Trumpet-flower 359
Tsuga 37
canadensis 37
 Tufted Buttercup 187
     Crowfoot 187
     Loosestrife 316
     Vetch 256
 Tulip Poplar 194
     Tree 194
 Tumble Mustard 205
     Weed 51, 170
 Tupelo 305
 Turkey Corn 198
 Turkey-foot 48
 Turkey-pod 211
 Turk's-cap Lily 120
 Turmeric
     Indian 193
     Turmeric-root 193
 Turnip 202, 204
     Indian 109
     Wild 109
 Turtlehead 352
 Tuscarora Rice 74
 Tussilago 402
     Farfara 402
 Twayblade 136
     Large 136
 Twig Rush 91
 Twin-flower 367
 Twisted-stalk 123
 Twitch Grass 57
 Two-leaved Solomon's Seal 123
 Typha 39
     angustifolia 39
     latifolia 39
 Typhaceae 39, 436
Ulmaria
palustris 234
rubra 234
Ulmaria 235
Ulmus 152
     alata 153
     americana 152
     campestris 152
     fulva 152
 Umbelliferae 297, 438, 440
 Umbrellawort 172
 Unicorn-plant 360
 Unicorn-root 118
     False 125
     True 118
Unifolium
canadense 123
 Upland Boneset 376
 Upright Goosefoot 167
     Mignonette 212
Urtica 155
     dioica 155
     gracilis 155
     Lyallii 155
     urens 155
 Urticaceae 152, 436, 439
Urticastrum
divaricatum 155

- Utricularia* 357
    biflora 358
    clandestina 357
    cornuta 358
    fibrosa 429
    gibba 358
    inflata 357
    intermedia 358
    minor 358
    purpurea 358
    resupinata 358
    striata 429
    vulgaris 358
        var. *americana* 358
Uva-ursi 311
Uvularia 118
    perfoliata 118
    sessilifolia 119
Vaccaria
    Vaccaria 180
Vaccinium 313
    arboreum 427
    atrococcum 314
    canadense 313
    corymbosum 313
        var. *amoenum* 313
        " *atrococcum* 314
        " *pallidum* 427
    macrocarpon 314
    nigrum 313
    Oxycoccus 314
        var. *intermedium* 314
    pennsylvanicum 313
        var. *angustifolium* 313
        " *nigrum* 313
    stamineum 313
    vacillans 313
Vagnera
    racemosa 122
    stellata 122
    trifolia 123 *
Valerian 370
    American 129
    Garden 370
    Greek 327
    Wild 129
Valerian Family 370
Valeriana 370
    edulis 429
    officinalis 370
Valerianaceae 370, 438, 441
Valerianella 370
    Locusta 370, 435
    olitoria 370
    radiata 370
Vallisneria 47
    spiralis 47
Vanilla Grass 59
Vegetable Mercury 127
Velvet Dock 349
    Grass 66
    Leaf 278
Velvet-leaf Blueberry 313
Venus' Looking-glass 372, 373
Veratrum 118
    viride 118
Verbascum 349
    Blattaria 349
        var. *albiflorum* 349
    phlomoides 349, 434
    Pseudo-Lychnitis 350, 434
    Thapsus 349
Verbena 330, 331
    angustifolia 331
    Aubletia 331
    bracteosa 331
    canadensis 331, 434
    Drummondi 331
    hastata 331
        var. *pinnatifida* 331
    officinalis 330, 432
    stricta 331
    urticaefolia 331
Verbenaceae 330, 438, 440
Vernonia 375
    noveboracensis 375
Veronica 353, 441
    agrestis 429
    americana 353, 429
    Anagallis 429
    arvensis 354
    Beccabunga 429
    Buxbaumii 355
    byzantina 355

- Veronica
   Chamaedrys 354
   hederaefolia 355, 434
   longifolia 353
   officinalis 354
   peregrina 354
   scutellata 354
   serpyllifolia 354
   Teucrium 354
   Tournefortii 355
   virginica 353
 Vervain 330
   Blue 331
   European 330
   Hoary 331
   White 331
 Vervain Family 330
 Vetch 255
   Blue 256
   Common 255
   Cow 256
   Crown 252
   Hairy 256
   Slender 256
   Spring 255
   Tufted 256
   Winter 256
 Vetchling 257
   Yellow 257
 Viburnum 368
   acerifolium 368
   alnifolium 368
   americanum 368
   cassinoides 369
   dentatum 368
   lantanoides 368
   Lentago 369
     var. sphaerocarpum 369
   nudum 369
   Opulus 368
     var. americanum 368
   prunifolium 369
     var. globosum 369
   pubescens 368
 Viburnum
   Maple-leaved 368
   Sweet 369
 Vicia 255
   angustifolia 255
     var. segetalis 255
   Cracca 256
   Faba 256, 430
   hirsuta 256, 434
   sativa 255
   tetrasperma 256
   villosa 256
 Vinca 321
   minor 321
 Vincetoxicum
   nigrum 323
 Vine Family 276
 Viola 284, 441
   affinis 285
   amoena 287
   arvensis 288
   atlantica 286
   blanda 287
     var. palustriformis 287
   Brittoniana 286
   canadensis 288
   canina 427
     var. Muhlenbergii 288
       " sylvestris 427
   conspersa 288, 427
   cucullata 284
   fimbriatula 286
   incognita 287
   labradorica 288
   lanceolata 287
   latiuscula 285
   Muhlenbergii 288
   nephrophylla 285
   obliqua 285
   odorata 287
   ovata 286
   pallens 287
   palmata 285
     var. cucullata 284, 285
       " dilatata 285
       " sororia 286
   papilionacea 285
   pectinata 286
   pedata 284
     var. bicolor 284

Viola

- var. *lineariloba* 284
- primulifolia* 287
- pubescens* 288
- var. *scabriuscula* 288
- rostrata* 288
- rotundifolia* 287
- sagittata* 286
- scabriuscula* 288
- septemloba* 286
- septrionalis* 286
- sororia* 286
- striata* 427
- subsagittata* 286
- tricolor* 288
- triloba* 285
- vagula* 285
- venustula* 285

Violaceae 284, 438, 440

Violet 284

- Bird-foot 284
- Canada 288
- Damask 206
- Dame's 206
- Dog 288
- Dog's-tooth 121
- Downy Yellow 288
- Early Yellow 287
- English 287
- Lance-leaved 287
- Long-spurred 288
- Marsh Blue 284
- Primrose-leaved 287
- Round-leaved 287
- Smooth Yellow 288
- Sweet 287
- " White 287
- Water 315
- Woolly Blue 286

Violet Bloom 345

Violet Family 284

Viper's Bugloss 330

Virginia Creeper 276

Snakeroot 157

Stonecrop 214

Virgin's Bower 190

Mountain 190

Virgin's Bower

Purple 190

Vitaceae 276, 438

Vitis 276

- aestivalis* 276
- bicolor* 277
- bipinnata* 427
- cordifolia* 427
- indivisa* 427
- labrusca* 276
- riparia* 277
- vulpina* 277, 427

Wahoo 271

Wahoo Elm 153

Wake Robin 124

Waldsteinia 232

fragarioides 232

Walking Fern 21

Leaf 21

Wall Cress 206, 210, 211

Mustard 204

Rocket 204

Wallweed 380

Walnut 144, 145

Black 144

White 144

Walnut Family 144

*Washingtonia**Claytoni* 298*longistylis* 298

Water Arum 110

Avens 235

Beech 146

Carpet 216

Celery 186

Chinquapin 184

Cress 206

Crowfoot 184, 185

Cup 213

Elm 152

Foxtail 62

Hemlock 299

Hemp 171

Horehound 341

Hyacinth 114

Lily 183

" Family 183

Water

Lobelia 374
 Marigold 397
 Milfoil 185, 294
     " Family 294
 Mint 342
 Nymph 183
 Oats 58
 Parsnip 300
 Pennywort 297
 Persicaria 161
 Pimpernel 315
 Plantain 47
     " Family 45
 Purslane 291
 Rice 58
 Shamrock 320
 Shield 184
 Smartweed 162
 Star Grass 114
 Starwort 267
     " Family 267
 Target 184
 Violet 315
 Willow 289
 Water-blobs 191
 Waterleaf 184, 327
 Waterleaf Family 327
 Watermelon 371
 Water-weed 47
 Waterwort 282
 Waterwort Family 282
 Wax Myrtle 143
     Pinks 182
 Waxberry 143
 Wax-leaved Meadow Rue 188
 Waxwork 271
 Way Grass 160
 Weeping Elm 152
     Willow 139
 Weld
     Dyer's 212
 Wheat 79
     Cow 356
 Whip-cord Willow 141
 Whip-poor-will's Shoe 129
 Whiskey Cherry 243

White Adder's Mouth 136

Alder 306
 Amaranth 170
 Ash 317
 Avens 235
 Baneberry 193
 Birch 147, 148
 Bird's-eye 176
 Campion 178
 Cedar 37
 Chadlock 202
 Charlock 202
 Clover 249
 Cohosh 193
 Daisy 400
 Ear-drops 198
 Elm 152
 Golden-rod 378
 Goosefoot 166
 Grass 58
 Hearts 198
 Hellebore 118
 Lettuce 413
 Maple 273
 Melilot 249
 Mignonette 212
 Mulberry 154
 Mustard 202
 Oak 149
 Petunia 349
 Pigweed 170
 Pine 34
 Poplar 141
 Puccoon 196
 Robin 178
 Snakeroot 193, 376, 377
 Spruce 36
 Swamp Honeysuckle 307
 Teaberry 312
 Thorn 225
 Trillium 124
 Vervain 331
 Walnut 144
 Water Crowfoot 184
 Willow 138
 White-bark 141
 White-beads 193

White-heart Hickory 145

White-topped Aster 388

White-weed 400

Whitewood 194, 277

Whitlow Grass 199

Whorled Milkweed 323

Mint 343

Pogonia 132

Polygala 264

Wicky 309

Wicopy 289

Wild Allspice 196

Apple 222

Asparagus 125

Azalea 308

Balsam-apple 372

Bean 258

Bergamot 338

Black Currant 218

Blue Lettuce 412

Broom Corn 70

Buckwheat 163

Burnet 241

Calla 110

Carrot 303

Celery 47

Chamomile 399

Cherry 243

Chess 78

Clematis 190

Coffee 367

Columbine 192

Comfrey 328

Cranesbill 261

Cucumber 372

Elder 296

Forget-me-not 329

Garlic 119

Ginger 157

Ginger-root 157

Globeflower 191

Goose Plum 246

Gooseberry 218

Hazelnut 146

Honeysuckle 308, 366

Indigo 247

Ipecac 266

Wild

Isaac 340

Job's Tears 330

Lady's Slipper 129

Leek 119

Lemon 194

Lettuce 411

Lily of the Valley 123

Liquorice 252, 362

Lupine 248

Madder 362

Marjoram 340

Mint 344

Morning Glory 325

Mustard 203

Onion 119

Orange-red Lily 120

Pansy 288

Parsnip 302

Peanut 259

Pear 222

Peppergrass 200

Pink 179

Plum 246

Potato-vine 324

Radish 202

Raisin 369

Rice 58

Rose 243

Rye 80

Sage 376

Sarsaparilla 296

Senna 247

Sensitive Plant 247

Spikenard 122

Spinach 166

Stonecrop 214

Strawberry 231, 232

Sunflower 395

Sweet William 326

Tansy 234

Teasel 370

Thyme 341

Tobacco 348

Turnip 109

Valerian 129

Yam 126

Wild

- Yam-root 126
- Yellow Flax 260
- “ Lily 120

Willoughbya

- scandens* 377

Willow 137

- Autumn 138
- Bay-leaved 138
- Beaked 140
- Bitter 141
- Black 137
- Bog 139
- Brittle 138
- Crack 138
- Dwarf Gray 140
- Glaucous 139
- Glossy 138
- Gray 141
- Heart-leaved 139
- Hoary 140
- Laurel-leaved 138
- Lavender 141
- Prairie 140
- Purple 141
- Pussy 139
- Ring 139
- River Bank 139
- Rose 141
- Sage 140
- Sand Bar 139
- Shining 138
- Silky 140
- Water 289
- Weeping 139
- Whip-cord 141
- White 138

Willow Family 137

- Persicaria* 160

Willow-herb 291

- Great 291

Wind-flower 189, 190

Wine Currant 219

Wineberry 237

Winged Elm 153

- Pigweed 165

Winter Cherry 346

Winter

- Chickweed 176
- Cress 207, 208
- Crookneck Squash 372
- Vetch 256

Winterberry 270

- Smooth 270

Wintergreen 306, 311

- Aromatic 311
- Chickweed 316
- Flowering 263
- One-flowered 306
- Spotted 306

Wire Grass 48, 69, 73, 160

Witch Alder 219

- Elm 153

- Hobble 368

Witches' Money-bags 214

Witches' Pouches 201

Witch-hazel 219

Witch-hazel Family 219

Withe-rod 369

Wolf Grape 345

Wolffia 112

- columbiana* 112, 419

Wood Anemone 190

- Betony 357

- Buttercup 187

- Chess 77

- Crowfoot 187

- Fern 22

- Fringe 197

- Grass 49

- Lily 120

- Mint 338, 339

- Nettle 155

- Reed Grass 65

- Rush 117

- Sage 332

- Sorrel 260

- “ Family 260

Woodbine 276

Woodland Agrimony 241

Woodruff 361

Woodsia 24

- ilvensis* 24

- obtusa* 24

- Woodsia
   Blunt 24
   Rock 24
   Rusty 24
 Woodwardia 19
   angustifolia 19
   areolata 19
   virginica 19, 416
 Woody Glasswort 168
   Nightshade 345
   Samphire 168
 Wool Grass 88
 Woolly Blue Violet 286
 Wormseed 165
 Wormseed Mustard 206
 Wormwood 400, 402
   Beach 401
   Roman 391, 402
 Woundwort 337
 Xanthium 391
   canadense 392
     var. *echinatum* 392
   commune 392
   echinatum 392
   glabratum 392
   pungens 392
   spinosum 391
   strumarium 392
 Xolisma
   foliosiflora 310
   ligustrina 310
 Xyridaceae 112, 436
 Xyris 112
   caroliniana 112
   Congdoni 113
   flexuosa 112
   montana 419
   Smalliana 113
 Yam 126
   Wild 126
 Yam Family 126
 Yam-root
   Wild 126
 Yard Grass 69
   Rush 114
 Yarrow 398
   Common 398
 Yellow Adder's Tongue 121
   Avens 235
   Bedstraw 362
   Birch 147
   Chamomile 399
   Clintonia 122
   Clover 249
   Cress 207
   Daisy 393
   Dock 158
   Dog's Tooth Lily 121
   Iris 127
   Lotus 184
   Melilot 249
   Moccasin Flower 129
   Monkey Flower 352
   Myrtle 316
   Nelumbo 184
   Oak 150
   Parilla 194
   Pimpernel 301
   Pine 34
   Poplar 194
   Puccoon 193
   Rattle 357
   Rocket 207
   Sarsaparilla 194
   Strawberry 232, 234
   Thistle 197, 405
   Vetchling 257
   Water Crowfoot 185
 Yellow-barked Oak 152
 Yellow-eyed Grass 113, 127
 Yellow-eyed Grass Family 113
 Yellow-flowered Strawberry 232
 Yellow-root 191, 193
 Yellow-weed 212
 Yew 34
   American 34
 Yew Family 34
 Yucca 121
   filamentosa 121
 Zannichellia 44
   palustris 44
 Zanthoxylum 262
   americanum 262
 Zea 48

Zea

Mays 48, 430

Zizania 58

aquatica 58*palustris* 58

Zizia 300

Zizia

aurea 300, 427var. *obtusifolia* 300*cordata* 301- *Zostera* 45*marina* 45

QK
151
C3

Catalogue of the flowering
plants

BioMed

PLEASE DO NOT REMOVE
CARDS OR SLIPS FROM THIS POCKET

UNIVERSITY OF TORONTO LIBRARY

STACK COPY
FOR USE IN LIBRARY ONLY