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ON THE
FAUNA AND FLORA
OF THE
WEST OF SCOTLAND.

MEETING AT GLASGOW,
SEPTEMBER, 1875.

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THE FAUNA AND FLORA OF THE
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NOTES

THE FAUNA AND FLORA

OF THE MOUNTAIN DISTRICT

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GLASGOW:

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NOTES.

I.

ON THE MAMMALIA OF THE WEST OF
SCOTLAND.

THE mammalian fauna of the south-west of Scotland hardly differs from that of the rest of Britain. Several southern forms are rare or absent, some of which are to be met with even further north in the eastern counties, and the coasts are not so much frequented by seals and cetaceans as are those of the north and east. Many species have been almost extirpated by the agriculturist and the game-preserver, but some of these have found shelter in the southern ranges of the Highlands which extend fairly within our limits. On the other hand, some of the smaller animals, as their persecutors have been decimated, and as cultivation and plantation have gained ground, have greatly extended their range.

In Bats Scotland is strikingly poor, for while eleven species are natives of England (besides two or three others which seem to occur only as accidental visitors), only three, each belonging to a different genus, are positively known to be found in North Britain.¹ Of these the Common and Long-eared species are both plentiful, and Daubenton's Bat (*Vespertilio daubentoni*) occurs, but appears to be rarer than in the eastern counties. A specimen of this last, caught in Glasgow Green, is preserved in the University Museum.²

Of the Insectivores, on the other hand, all the five British species are found. The Hedgehog is abundant in the Lowlands, and rapidly spreading in the Highlands, where it was formerly almost unknown; and the same remark applies to the Mole. The Common Shrew is everywhere plentiful, but the Small Shrew (*Sorex minutus*) appears to be rare, or at least local. I have, however, taken several specimens in the south of Lanarkshire. The Water Shrew was noticed many

¹ Besides these the late Sir W. Jardine believed that he had seen the Great Bat near the river Annan (*Statistical Account of Dumfriesshire*, p. 175), and Dr. A. R. Young has recorded the Lesser Horse-shoe Bat as having been taken at Crookston Castle (*Stat. Ac. Renfrewsh.* p. 162), but I have been unable to obtain any confirmation of either occurrence.

² *Proc. Nat. Hist. Soc. Glasg.* i. p. 203.

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years ago near Glasgow by the late Dr. Scoular,¹ and in Ayrshire by Mr. W. Thomson;² it is not uncommon in suitable places, and has been observed in the Island of Arran.³ Scotch specimens of the Water Shrew usually belong to the dark race formerly separated as *S. remifer*, but intermediate examples are also common.

All the land Carnivores now existing in Britain are found within our limits, though some of them have been greatly reduced in numbers and restricted in range. The Wild Cat is now nowhere to be met with in the Lowlands, and indeed is becoming very rare in the Highlands; it lingered long in the mountain recesses of the wild country around Loch Lomond, from whence there are specimens in the University Museum; but Mr. James Lumsden informs me that it is now quite extinct in that district.⁴ The Fox, on the contrary, remains abundant in most districts; even where he is not preserved for purposes of sport his fleetness and cunning enable him to hold his own, and the increase in number of rabbits provides him with abundance of food. The Badger and the Yellow-throated Marten (*Martes abietum*) are still found near Loch Lomond—of the former Mr. Colquhoun observes that “every rocky cairn capping the Glenfalloch range of the Grampians has its family of Badgers.” Both are now almost exterminated in the Lowlands, but a badger was taken near Wishaw in Lanarkshire in May, 1870, and a marten, as I am informed by Mr. J. Lumsden, was killed near Maybole in Ayrshire in the spring of the present year. Pale-throated examples of this marten have often been confused with the white-throated *M. foina*, and have hence led to the belief expressed by the late Mr. Macgillivray,⁵ and others that the two species are identical; they are really quite distinct, but I have never been able to meet with any authentic evidence of the existence of *M. foina* in Britain, although it is usually stated to be the commonest species. Of our three native Weasels the Stoat is the most abundant; in severe winters, and especially in exposed situations, it often assumes the “ermine,” or white fur, in greater purity than is usually the case in England. The Polecat is nearly extinct in most Lowland districts, but the Common Weasel is plentiful, and the Otter is not uncommon in many of the lochs and rivers. Of the marine Carnivores, only the Common Seal is known to enter the Firth of Clyde, and that but rarely, although the Gray species is common in the Hebrides, where the Greenland and Ringed species (*Phoca grænlandica* and *Ph. hispida*) are said also to occur.⁶

¹ *Mag. Nat. Hist.* vi. (1833), p. 512.

² *Op. cit.* 2d Ser. iii. (1839), p. 585.

³ For notes on the Mammals of this island, see Bryce's *Arran* (Glasgow and London: W. Collins, Sons, & Co., 1872), pp. 313–315.

⁴ Concerning the animals of this district, Mr. R. Gray's notes, published in Keddie's *Guide-book to Loch Lomond* (Glasgow: Maclure and Macdonald, 1864), and Mr. J. Colquhoun's *Lecture on the Fauna Nature of the British Islands* (Edinburgh: W. Blackwood and Son, 1873) may be referred to.

⁵ *Naturalist's Library*, xvii., “British Quadrupeds,” p. 168; *Nat. Hist. of Deeside and Braemar*, p. 386.

⁶ Cf. Bell's *British Quadrupeds*, 2d ed. pp. 249, 252.

As already remarked, few Cetaceans have been recorded from the coasts of South-western Scotland, most of the species which have been taken on our shores having occurred on the north and east coasts. In 1866 a Rorqual was cast ashore on the island of Islay; part of its skeleton is preserved in the Museum of the University of Cambridge, and it was referred by MM. Gervais and Van Beneden to the rare species *Balenoptera laticeps*,¹ but I believe that Professor Flower considers it to have been the common Lesser Rorqual (*B. rostrata*). In May, 1829, a Sperm Whale (*Physeter macrocephalus*) was killed near Oban, and its jaw-bones are still preserved at Dunstaffnage Castle, as recorded by Professor Turner.² A common Beaked Whale (*Hyperoodon rostratus*) was taken in the Gareloch in 1863, and was identified by Dr. Scouler.³ The Porpoise, which constantly enters the Firth in pursuit of herrings, and which is said to have come up as far as Glasgow in old days when the Clyde was still pure, ends our brief list of four out of the twenty-one species of Cetaceans which have been recorded in British waters.

Of the Ungulates, or hoofed animals, the Red Deer has long ago been exterminated in the Lowlands, but it is sedulously protected in the Highlands; it is sometimes seen on the Loch Lomond hills, and is abundant in Arran, where a judicious admixture of fresh blood has renewed the vigour of the native breed, once nearly extinct. The Roe Deer, on the other hand, has become more numerous of late years in many parts of the Lowlands, owing doubtless to better protection, and to the increase of woods; an albino roe, killed some years ago near Loch Lomond, is preserved in the collection of the late Sir James Colquhoun, Bart., of Luss. At Cadzow, the original seat of the Dukes of Hamilton, still exists one of the few remaining herds of wild white cattle. These are believed by some zoologists to be the direct descendants of the mighty *Bos primigenius*, while others consider them to have been derived from domestic animals which had resumed a feral life, and reverted to some extent to the characters of their remote ancestors. Be this as it may there can be no doubt as to the great antiquity and interest of the breed, though little authentic can now be ascertained as to its early history. Such cattle were formerly kept at Cumbernauld, near Glasgow, Drumlanrig in Dumfriesshire, and other parks in Scotland and the north of England; but they now exist only at Cadzow, at Chillingham in Northumberland, Syme Park in Cheshire, and Chartley in Staffordshire.

All the British species of Rodents occur in the west of Scotland excepting the Dormouse and the little Harvest Mouse; the former of these does not appear to cross the Tweed, and I have never met with the latter in the west, although it is sparingly distributed throughout

¹ *Ostéographie des Cétacés*, i. p. 200.

² *Proc. Roy. Soc. Edinb.* 1871, pp. 365-366.

³ *Proc. Nat. Hist. Soc. Glasg.* i. p. 82.

the eastern counties as far north as Aberdeenshire.¹ The Squirrel, formerly unknown in many districts, especially in the Highlands, has increased and spread of late years in a surprising manner. The first of the species seen near Loch Lomond was killed, Mr. Colquhoun tells us, in 1830—it is now so abundant there as to prove very destructive to the young plantations. It is a very singular fact, however, that the squirrel is still perfectly unknown in the south of Ayrshire, a country which in many places seems admirably adapted to its habits. Of rats and mice, the old Black Rat is almost, if not quite, extinct. I have never been able to authenticate a single instance of its occurrence of late years, the supposed specimens invariably proving to belong to the black variety of the Water Vole. The Brown Rat, House Mouse, and Wood Mouse are of course abundant, as are the three British species of Vole. Of the Water Vole the black variety, which Macgillivray separated as *Arvicola ater*,² occurs, though not abundantly, in several districts. The Common Field Vole is very plentiful, though it has not been recorded as occurring in the west in such vast swarms as those which have this year devastated the eastern Border counties. The Red Field Vole (*A. glareolus*), first detected in Scotland by Macgillivray³ and W. Thomson,⁴ is hardly less common in many places, and seems to be equally widely distributed. Of the Hare family the common species is plentiful in the low country and the Mountain or Blue Hare in the Highlands. The latter has increased rapidly, as its numerous enemies have been reduced in numbers by the game-keeper—none were seen by Mr. Colquhoun on the Loch Lomond hills before 1822, whereas they now swarm as low down as Glen Luss and Glen Fruin. It has also been recently introduced in the southern hill-country, and appears to be spreading among the hills of Peeblesshire, and south Lanarkshire, and Ayrshire, where its winter change of colour is observed to be much less regular and complete than is the case in the north. Lastly, the Rabbit is another animal which has increased to an astonishing extent of late years, being now a perfect pest in many districts to which it was formerly an absolute stranger.

— EDWARD R. ALSTON.

¹ *Macgillivray, Nat. Lib. xvii. p. 257.*

³ *Nat. Lib. xvii. p. 272.*

² *Trans. Wern. Soc. vi. p. 424.*

⁴ *Mag. Nat. Hist. 2d Ser. iii. p. 585.*

II.

ON THE BIRDS OF GLASGOW AND ITS VICINITY.

THE Ornithology of a large city and its suburbs is a theme suggestive of many changes, and becomes invested with a peculiar interest when we trace the persistence with which many birds cling to places whose natural features—once an attraction to the species—are now almost entirely obliterated. In the city of Glasgow the changes are perhaps even more marked than those which the rise and progress of other cities have produced. The Plover and Dunlin, which still swarm at certain seasons on the muddy shores of the Clyde, and bring up their young on patches of moorland which overlook the homes of half a million of people, are the representatives of generations that coursed along the silent marshes of the estuary when Glasgow had no existence, and when the canoe of the ancient Briton floated upon broad waters which time has dwindled; the wild geese, ducks, and other water-fowl that return year after year to the environs of the city; the birds of prey that follow in their wake, and the misguided waders that occasionally settle in the polluted suburban water-courses, all speak of a time when the vale of Clutha was a barren waste, and the birds had it nearly all to themselves.

Among the conspicuous birds of prey, both species of Eagle—the Golden and White-tailed—have occurred within easy reach of the city. In autumn especially, when raptorial birds as a rule are found wandering over the country, they are occasionally met with in the Firth of Clyde; and as Arran is now believed to be a safe retreat for eagles, visitors to the west coast need not despair of seeing them in some of the wilder parts of that most interesting island.

During the last five years the GOLDEN EAGLE has nested in a district about two hours' journey from Glasgow, and I have seen the eggs taken for three successive seasons, and exhibited unblown on the lining of the nest at a meeting of the Natural History Society of that city, held in one of the class-rooms of the University, with the remark that the eyrie had been robbed but a few hours previously within sight of the great tower.

The OSPREY is not an uncommon autumn visitant to localities also within the same line of view, and the PEREGRINE occasionally ventures near the precincts of the city. The MERLIN may be said to be a winter resident, as it takes up its quarters for the season among the pigeons and sparrows on the house-tops, where it remains until

spring; and the KESTREL is a well-known permanent resident in the suburbs, coming frequently into the heart of the town. The same remark applies to the SPARROW-HAWK. The COMMON and ROUGH-LEGGED BUZZARDS have both occurred within a few miles of the city, and an occasional HEN HARRIER makes its appearance on moors within full view of the church spires and higher buildings. I recently examined a male Hen Harrier in perfect condition, which had been shot a short distance north of Buchanan Street about the beginning of the present century. At that time the locality was a wild heath, though it is now the centre of a densely-populated district.

Many Owls are still found in the immediate neighbourhood of the city, and even within its boundaries. The BARN OWL, TAWNY OWL, and SHORT-EARED OWL are all regularly obtained in the outskirts. Two specimens of the SNOWY OWL were shot in December, 1863: one at Pollokshields, the other at Port-Glasgow. These had probably reached this country by the aid of ships bound for the Clyde. In the same year and month a beautiful specimen of the AMERICAN HAWK OWL (*Surnia funerea*) was shot at Maryhill, near Glasgow; a second occurred near Greenock in November, 1868; and a third was taken in the flesh to the same town in December, 1871. All these had probably been aided in their flight by Clyde-bound vessels, as in the case of the SNOWY OWLS. This owl has been proved to be a distinct species from the European Hawk Owl (*Surnia ulula*) by Mr. Sharpe, who has given a full description of both in *B. of Eur.* part xii.

The GREAT GRAY SHRIKE has repeatedly been taken in the vicinity, and the SPOTTED FLY-CATCHER is known as a regular summer visitant to gardens and fields around the city. The impurity of the streams near large towns naturally deters such birds as the DIPPER and KING-FISHER, yet both are frequently seen on the Kelvin, even where the contaminated waters must prove poisonous to their natural prey. Both have been seen of late years within the parliamentary boundaries, especially in hard winters, during which these birds are compelled to stray considerable distances in search of open water.

The MISSEL THRUSH is abundant, and seems to have increased very considerably in numbers during the last thirty years. Its bulky nest is everywhere noticeable, and is found every year in the Kelvingrove Park. The FIELDFARE and REDWING occur in large flocks every winter in the same locality, and the SONG-THRUSH and BLACKBIRD both enliven the spring-time in all the parks and gardens. The RING OUZEL is a well-marked object in the bird-life of the Kilpatrick Hills within the ten miles' radius; the HEDGE ACCENTOR is abundant in all the surroundings of the city, and the REDBREAST finds its way into the busiest streets. The REDSTART, STONECHAT, WHINCHAT, WHEATEAR, and SEDGE WARBLER all make their appear-

ance in early summer, coming as near the town as their habits will permit. Many, if not the whole, of these birds are seen in Kelvingrove Park at the time of their arrival; but though in years gone past this locality may have been their regular haunt, they are soon undeceived, and disappear to look for less frequented places. The **BLACK-CAP WARBLER** I have seen perched on a lamp in the public streets, and singing with apparent unconcern: it is a yearly visitant to the Botanic Garden, where the **GARDEN WARBLER** is likewise found. The **COMMON WHITETHROAT** is another of the summer warblers which still comes to the begrimed hedges in the outskirts. Experience seems to have taught this bird that it is unsafe to build so near the base of hedges or bushes as is its wont in rural places; and it is a remarkable fact that in all the lanes and hedgerows near the town, such as at the Great Western Road, the Whitethroat almost invariably places its nest at a considerable height from the ground. Three nests with four eggs in each were found by myself three years ago in a hedgerow near the Botanic Garden: these were built in the topmost twigs at a height of 6 feet in two of the cases, and 8 feet in the other. The **LESSER WHITETHROAT** is also a regular summer visitant, and the **WOOD WARBLER** is still found in the older belts of plantation skirting the fields now being built upon. The **WILLOW WARBLER** is abundant, and the **CHIFF-CHAFF** is moderately common in hedges a short distance westwards from the Botanic Garden. The **GOLDCREST**, **GREAT TIT**, **BLUE TIT**, **COLE TIT**, and **LONG-TAILED TIT** are all found in the autumn months in hedgerows and trees surrounding the city. The **BOHEMIAN WAXWING** has occasionally been obtained. The **PIED WAGTAIL** and **GRAY WAGTAIL** both frequent the Kelvin in considerable numbers. I have seen a mixed group of twenty-three of these birds on the gravelled walks at the Museum door in Kelvingrove Park. **RAY'S WAGTAIL** is abundant on the banks of the Clyde on its arrival, and a pair may be seen nesting in almost every park inclosure, even if surrounded by houses or streets. The **TREE PIPIT** is very common in all the road-side groups of trees within a few minutes' walk of some of the busiest streets, and the **MEADOW PIPIT** is abundant at certain seasons. The **SKYLARK** finds protection in one or two places, and its nest may yet be found in fields verging upon the Great Western Road. The **SNOW BUNTING** sometimes comes in very large flocks to Glasgow Green in winter, and the **COMMON BUNTING** and **BLACK-HEADED BUNTING** are both found close to the city. I have seen the nest of the last-named bird on the banks of an old curling-pond behind the University. The **YELLOW BUNTING**, **CHAFFINCH**, and **GREENFINCH**, which occasionally visit the grain-stores in the centre of the town, nest within its boundaries; and even the **GOLDFINCH** has of late years been noticed frequenting low bushes on the banks of the Kelvin at the Great Western Road. The **SISKIN**, **COMMON LINNET**, and **LESSER REDPOLE** are all well known to the city bird-catchers. The **COMMON CROSSBILL**

is seen passing in flocks during the winter season, and the STARLING is abundant even in the heart of the town. The ROSE-COLOURED PASTOR has occurred in three instances within two miles of Glasgow, a pair having been shot in 1853, and a single bird in August, 1860.

The CHOUGH, formerly found at Campsie, and also in the island of Arran up till 1863, is not now met with nearer than the south of Ayrshire. It is still moderately common in some of the western islands; but even in Islay, where it was quite abundant five years ago, there is a sensible diminution of its numbers, caused, it is said, by the inroads of dealers in natural history objects. The RAVEN still nests within sight of the city, and the HOODED CROW and CARRION CROW are found on the banks of the Clyde at low water, chiefly in winter. ROOKERIES are not quite rooted out in the city. The best-known is that in the Kelvingrove Park, the birds of which are carefully fed by the park-keepers in hard weather. The JACKDAW is plentiful in all the streets and squares, and the MAGPIE is common in the immediate neighbourhood, where it is, as may be supposed, safer than in the country.

The COMMON CREEPER and WREN are well-known residents in old dikes and blackened plantations. The HOPOE has been met with near Port-Glasgow. The CUCKOO, from old associations, comes to the South-side Park and private gardens in the neighbourhood. The BEE-EATER has been seen on one occasion haunting the banks of the river Cart, near Paisley. The KING-FISHER, as has been remarked, has frequently been obtained within the civic boundaries, and the SWALLOW, MARTIN, SAND-MARTIN, and SWIFT are all equally well known. The NIGHTJAR has on various occasions been seen in the evening flying above the grass in the South-side Park; the RINGDOVE is an autumn visitant to the fields just outside the city.

Wandering examples of the CAPERCAILLIE have been shot in pine plantations at a sufficient altitude above the sea-level to be within full view of Glasgow. The same may be said of the BLACK GROUSE. The RED GROUSE is well known on the moors a few miles from the city, but the PTARMIGAN is not found nearer than thirty miles. The PARTRIDGE, in autumn, comes at times into the public streets in a bewildered state, and the PHEASANT has been taken in like circumstances.

Among the grallatorial birds the GOLDEN PLOVER is found every winter in grass-fields close to the town, and it nests in some numbers on the Renfrewshire hills, about eight miles distant. The Eaglesham moors, where a few pairs breed, partly overlook the city. The DOTTEREL (*Charadrius morinellus*) has on two or three occasions occurred near Govan and at Possil Marsh within the last fifteen years, both localities being now surrounded by densely-populated streets. The RINGED PLOVER has been taken of late years also on the Eaglesham moors. The LAPWING still visits the blackened fields within a few minutes' walk of the streets, and one or two pairs may

be found nesting at Dowanhill, not far from the University. I took lapwings' eggs there three years ago.

The TURNSTONE frequents the Firth of Clyde in small flocks during winter. The OYSTER-CATCHER is likewise found on all the sandy shores of the Clyde estuary, and frequently follows the course of the river as far as Bothwell. It breeds in various localities within easy reach of Glasgow. The HERON is very common in the district, and there are several heronries sufficiently near the city to keep up a never-failing supply of birds on the different properties where the heron is protected as an ornament. Passing birds sometimes pitch down in open places quite close to the streets. I remember seeing one two years ago arrested in its flight as it passed high above the College tower, and after a few rapid turns in the air allow its own weight to carry it down to an old quarry situated behind the University buildings at Gilmorehill. The COMMON BITTERN has even of recent years been shot in several instances at Possil Marsh, a district now almost surrounded by factories; also at Hogganfield Loch, within a few miles of Glasgow. Quite recently an AMERICAN BITTERN was shot in Islay. The CURLEW breeds on all the hills which command a view of the city, some of the haunts of this bird being at a distance of only a few miles. The WHIMBREL is occasionally seen in May on the muddy shores of the Clyde estuary. The REDSHANK breeds in some numbers within sight of Glasgow, and the GREEN SANDPIPER has on two or three occasions been shot on streams quite near its southern limits. The WOOD SANDPIPER has occurred once on the Clyde, and I have elsewhere recorded the occurrence of a single example of the GREEN-RUMP TATLER near Airdrie. This specimen is now, I believe, in the Hunterian Museum. The COMMON SANDPIPER is abundant on all the streams, rain-pools, and old quarries quite close to the town. The GREENSHANK has been shot on several occasions on Mearns Moor, where I have reason to think a pair or two may nest annually. The BLACK-WINGED STILT was killed in 1850 on the banks of the Clyde, and in 1867 another was seen and carefully stalked, but without effect, on Possil Marsh, near the city. The BLACK-TAILED GODWIT has occurred in two instances in the district: once near Dumbarton in November, 1867, and again at Castle Semple in August, 1869. The BAR-TAILED GODWIT is not common in the estuary, and the RUFF is rare. The WOODCOCK comes regularly to the outskirts, where I have seen several shot of late years. House-building, however, is driving the bird year by year from its old haunts. The COMMON SNIPE and JACK SNIPE are both well known on the shootings in the immediate neighbourhood, the former breeding in some numbers at Possil Marsh. I have observed, in hard winters, frozen-out snipes in a grass-field at the west end of the university buildings.

The KNOT is a scarce bird in the Clyde estuary. The DUNLIN is found in hundreds on the river-banks near Dumbarton and on the

opposite shores. This bird breeds in small numbers on the moors above Barrhead, from which a full view of Glasgow can be obtained. The PURPLE SANDPIPER is a regular visitant to the Clyde estuary, and the GRAY PHALAROPE has several times occurred. The LAND-RAIL or CORNCRAKE is very numerous. Three years ago a nest with seven eggs was found in Kelvingrove Park. The WATER-RAIL is a constant resident near the city, and has bred regularly for many years past in Possil Marsh, the nest and eggs having been obtained every season. The SPOTTED CRAKE has only rarely been met with. The MOORHEN or GALLINULE is still very common on all the small lochs and water-courses near the city. Within the last six or seven years it frequented the Kelvin near the University. The Coot is also found in some numbers at Possil Marsh, where its nest is frequently obtained.

The various Wild Geese, as may be supposed, are only straggling winter visitants to the district. The GRAY LAG, BEAN, PINK-FOOTED, and WHITE-FRONTED GEESE have all occurred on the Clyde at rare intervals. The BERNICLE GOOSE is a regular winter visitant in large flocks to the grass-banks of the estuary between Dumbarton and Helensburgh, where nearly 300 years ago the assemblage of Bernicle Geese attracted the attention of John Monipennie, who has left a quaint account of the bird's habits. The BRENT GOOSE is very scarce. The EGYPTIAN GOOSE has been met with repeatedly as a wanderer from private ponds, a remark which applies also to the CANADA GOOSE, which has been shot on the Clyde on several occasions. The WILD SWAN is occasionally seen in the firth, and BEWICK'S SWAN has repeatedly been killed. The SHELLDRAKE is not found within the ten-mile radius except as a rare straggler. The SHOVELER has been shot on Possil Marsh, but I have not been able to detect the GAD-WALL as coming within the limits named. The PINTAIL DUCK is met with at occasional intervals on the river Cart, and the COMMON MALLARD is still plentiful in Possil Marsh and other marshy ground close to the city, where it bred abundantly thirty years ago. The TEAL and WIDGEON are also found in some numbers in the same localities as winter visitants. The EIDER DUCK occurs but rarely in the Clyde. It is an abundant species in Islay and Jura. The VELVET SCOTER and COMMON SCOTER are also very rare. The POCHARD and SCAUP DUCK are taken in small numbers, and the TUFTED DUCK is also met with in their company. In hard winters the last-named bird sometimes follows the course of the river till it reaches the centre of the city. It is plentiful during some winters on the Clyde near Dumbarton. The same remark applies to the GOLDEN-EYE.

The RED-BREASTED MERGANSER and GOOSANDER are both obtained in some numbers every winter on the Cart near Renfrew.

Among the Grebes the GREAT-CRESTED, RED-NECKED, SCLAVONIAN, and LITTLE GREBE or DABCHICK have all occurred. The last-men-

tioned species breeds regularly in some numbers in Possil Marsh, which is only two miles from the centre of the town.

Although the GREAT NORTHERN and BLACK-THROATED DIVERS have both occurred frequently in the Firth of Clyde and on Loch Lomond, they have not, so far as I am aware, been seen at any time within our limits. The RED-THROATED DIVER, however, has been taken on Possil Marsh and other similar sheets of water within two or three miles of the city. The COMMON GUILLEMOT, PUFFIN, and RAZORBILL are all well known, and are seen occasionally in great numbers in the firth. In the autumn of 1859 a mysterious epidemic broke out among the sea-fowl of the Clyde, and thousands of birds fell victims to it. On that occasion many Guillemots and Razorbills were met with in the river near Renfrew. The COMMON CORMORANT and GREEN CORMORANT are very numerous in the firth as far up the estuary as Dumbarton, chiefly in autumn. The SOLAN GOOSE is often seen in the firth near Greenock. Terns are also very numerous in spring, the two most frequently met with being the COMMON and ARCTIC TERNS. The SANDWICH TERN is not found nearer than Loch Lomond. The BLACK TERN has occurred in the same district. The ROSEATE TERN, a large colony of which formerly existed in the Cumbrae Islands, has entirely left that locality. A small colony on Inchmoin, Loch Lomond, has also disappeared. BONAPARTE'S GULL has occurred once in Loch Lomond, and the LITTLE GULL has also been seen there and on the Clyde. The BLACK-HEADED GULL is abundant even in the heart of the city, where hundreds at a time may occasionally be seen hovering above the waters of the Clyde between the bridges. There is a large breeding colony yearly in Hairlaw Dam, near Barrhead, within six or eight miles of Glasgow, and another very large colony on Inchmoin, Loch Lomond. Many Black-headed Gulls frequent the river Kelvin between the Park Museum and the University grounds. The KITTIWAKE is frequently observed on brackish water near Dumbarton, and comes regularly to the shores of the Gareloch in winter. The IVORY GULL has at various times been shot on the Clyde, the nearest to our district being a specimen shot near Greenock in the winter of 1858. The COMMON GULL flies up the river as far as Renfrew, where I have seen it repeatedly; and the LESSER BLACK-BACKED GULL is seen in some numbers nearly all the year round on the river among the shipping at the Broomielaw. The HERRING GULL is scarce in the firth. The GREAT BLACK-BACKED GULL breeds on Inchmoin, Loch Lomond, and the GLAUCOUS GULL has occurred near Gourrock. The ICELAND GULL has been met with in Arran. The POMERINE SKUA and RICHARDSON'S SKUA have both occurred on the Clyde, and the MANX SHEARWATER has also been observed frequently. The FORK-TAILED PETREL has been obtained from various localities on the Clyde in winter, and the STORM PETREL has been taken as far up the firth as Port-Glasgow.

From some of the remarks in the foregoing list it will be observed that notwithstanding the extraordinary extension of the city and its suburbs, many birds still refuse, so to speak, to be scared by the inroads that have been made upon their haunts during the last thirty years. Of these the Magpie, Dipper, King-fisher, Plover, Dunlin, Greenshank, Bittern, Redshank, Lapwing, and Water-rail are familiar examples. With the exception of the Bittern, indeed, all are found nesting within full view of the murky clouds that hang over the city, and in most instances within hearing of noisy hammers. No one need doubt, however, that in other thirty years these haunts will be for ever deserted; and while for the present this list may be of interest to Ornithologists as showing the strong attachment of some birds to certain localities, it will prove not a less curious record in after-years when all traces of such bird-nurseries have been swept away.

ROBERT GRAY.

III.

ON THE ENTOMOLOGY OF CLYDESDALE.

FROM the large extent and diversified nature of the country drained by the Clyde,—possessing as that country does the well-cultivated fields of the Lowlands as well as the heathy moors and the rugged mountains of the Highlands, not to speak of its large tract of sea-coast and the interesting islands in the Firth,—it might be reasonably conjectured that the Insect fauna of Clydesdale should be both rich and varied; nor does the knowledge we have of its insects belie this conjecture. Unfortunately, however, the Clyde Valley has entomologically been but very imperfectly investigated; there have indeed been some very zealous workers who have collected for many years, but their number has never been great enough for the tract of country to be explored, and their collecting has been almost wholly confined to the lower portions of the country, while also their attention has been mainly directed to the Lepidoptera and Coleoptera. Neither have they busied themselves hitherto in preparing local catalogues of such orders of insects that have been to any considerable extent worked out; but it is to be hoped that the very desirable work of cataloguing the Clydesdale insects will now be proceeded with vigorously.

Of *Coleoptera* we have probably more than half the British species. Possil Marsh is a very good locality for Hydradeephaga; the Tollcross sand-pits yield (or did yield) many good species; the Ayrshire coast between Irvine and Ayr is very rich in sand-loving and littoral Geodephaga; while Cadzow forest and Cadder Wilderness abound with wood-frequenting beetles. Ben Lomond also produces a number of more or less rare mountain species. The following are the names of a few of the more noteworthy Clydesdale Coleoptera:¹—*Carabus clathratus* (Ayrshire coast); *Pterostichus lepidus* (Tollcross); *Steropus aethiops* (Ben Lomond); *Æpys fulvescens* (shores of Gareloch); *Cillerrum laterale* (shore near Dumbarton); *Acilius sulcatus*, var. *Scoticus* (common at Possil Marsh); *Hydroporus novemlineatus* (Gareloch); *Colon latus* (Paisley); *Leptinus testaceus* (Paisley); *Amphicyllis globus* (banks of Kelvin); *Melolontha hippocastani* (Hamilton); *Ceuthorhynchus viduatus* (Tollcross); *Strangalia quadrifasciata* (Arran); *Creophilus maxillosus*, var. *ciliaris* (shores of Arran); *Staphylinus fulvipes* (Paisley Moss); *Ciryphium angusticolle* (Glasgow,

¹ I am indebted to Drs. Sharp and White for information regarding the Coleoptera and Lepidoptera respectively.

Paisley); *Omalium septentrionis* (Gareloch); *Micropeplus tessera* (Paisley).

As might be expected, the *Lepidoptera* have had most attention paid to them. Of Butterflies we have 33. The Micros have not had the same attention paid to them as the Macros, and this is to be regretted as many interesting species might be discovered among the Tineæ and Tortrices. More regard, however, is now being paid to these. Among the Clydesdale species which are either local or rare in Britain, or at least in Scotland, are:—*Colias edusa* (Largs); *Melitea artemis*, var. *merope* (Dunoon); *Vanessa antiopa*; *Erebia cassiope* (Ben Lomond); *Dasydia obfuscata*; *Larentia ruficinctata*; *L. Salicata*; *Emmelesia ericetata*; *E. blandiata* (Loch Long); *Eupithecia pygmæata* (Paisley); *Ypsipetes ruberata*; *Melanippe hastata*; *Coremia munitata*; *Phibalapteryx lapidata* (Arran); *Carsia imbutata*; *Chesias obliquaria* (Ayrshire); *Notodonta carmelita*; *N. dictæoides*; *N. tritophus* (Paisley); *N. trepida*; *Acronycta leporina*—*A. menyanthis*; *A. myricæ*; *Hydrocia petasitis* (Paisley); *Leucania littoralis* (Ayrshire); *Agrotis ravidæ*; *Noctua conflua*; *N. Dahlii*; *Orthosia suspecta* (Paisley); *Dianthocia conspersa* (Paisley); *Aplecta occulta*; *A. herbida* (Paisley); *Hadena rectilinea*; *Crymodes exulis* (Arran); *Plusia bractea*; *P. festuæ*; *P. interrogationis* (Paisley); *Stilbia anomala*; *Scopula alpinalis*; *S. decrepitalis*; *Penthina prælongana*, *Mixodia Bouchardana* (Paisley); *Sciaphila Colquhounana*.

The *Hymenoptera* are well represented, at least with some families. The *Aculeata* do not appear to be numerous, a fact no doubt owing to the great prevalence of clayey and the comparative scarcity of the sandy soils so favourable to the habits of these burying insects. In the immediate vicinity of Glasgow the only locality where *Aculeata* are at all common is the Tollcross sand-pits, and here about 50 species nidificate. The Humble Bees number 11 with 3 *Apathi*. All the Social Wasps occur within 7 miles of Glasgow, with the exception of *Vespa crabro*. Of Ants I am only aware of 9 Clydesdale species.

The only *Chrysididæ* that I have taken are *Chrysis ignita* and *Omalus cæruleus*.

The district is very rich in Terebrant Hymenoptera, and some new and interesting species have been discovered in it. Among the *Ichneumonidæ* the *Ichneumones* do not seem to be so numerous as in more southern localities; but in *Tryphonides* we appear to be exceptionally rich, as indeed might be imagined, considering how rich Sweden is in this tribe. So also are we rich in *Ophionides*, and the same remark applies to the *Braconidæ* and the Micro Hymenoptera. Of *Cynipidæ* we have more than three-fourths of the British species. The *Tenthredinidæ* are tolerably abundant, as may be judged when it is stated that 120 species are met with in Cadder Wilderness alone. Among some of the more uncommon Hymenoptera found in Clydesdale are:—*Nomada xanthosticta*; *N. mistura*; *Osmia bicolor*; *Vespa arborea*; *Bassus peronatus*; *B. flavolineatus*; *Ichneutes reunitor*, var.

brevis; *Belyta depressa* (Kenmuir Bank); *Diapria oogaster*; *Galesus clypeatus* (Paisley); *Triognus furcifer*; *Proctotrypes buccatus* (Possil); *Aphilothrix solitaria*; *A. corticis* (Kenmuir); *Spathogaster albipes* (Milngavie); *Aulax graminis* (Partick); *A. hieracii* (Baldernock); *Clidotoma albipennis* (Paisley); *Psychotrichia urticarum* (Possil); *Eucoila minuta* (Bishopton); *Cladius Brullæi* (Cadder); *Nematus imperfectus*; *N. punctulatus*; *N. quercus*; *Coenoneura Dahlbomi* (Cadder); *Phaenusa albipes* (Cadder); *Strongylogaster femoralis* (Cadder); *Perineura rubi* (Cadder); *Taxonus glottianus* (Kenmuir).

The *Diptera* have been in the past completely neglected, but it is a hopeful sign for the future that this order is now being attended to by two workers.

No one has paid as yet any attention to the local *Hemiptera*, but about 150 species exist in an unnamed condition in collections. Nothing is known about the *Orthoptera* beyond the occurrence of 3 or 4 common species of general distribution.

With the *Neuroptera* the *Trichoptera* is the only family which is known to any extent; and of the Caddis-flies we have close upon 60 species. The other Neuropterous families are now being looked after.

To sum up: the Hymenoptera, Lepidoptera, Coleoptera, and Trichoptera are the only orders of which our knowledge borders upon anything like completeness; and even with these we are only acquainted to any extent with the species occurring more or less near to the city; the Upper Ward of Lanarkshire, many places along the shores of the Firth, with the islands therein, being to a great degree unworked; and with regard to the general nature of our Insect fauna it may be briefly stated that it has the greatest resemblance to that of Sweden: thus of the *Tenthredinidæ* (exclusive of certain new species discovered here, and which may be ultimately found in Sweden) all our species occur in Sweden, with one exception.

P. CAMERON.

IV.

ON THE VASCULAR FLORA OF THE WEST OF SCOTLAND.

IF we limit the term "West of Scotland" to Argyleshire, Buteshire, Dumbartonshire, part of Stirlingshire and Perthshire, the lower ward of Lanarkshire, Renfrewshire, Ayrshire, Wigtonshire, and the Stewartry of Kirkcudbright, we include a large tract of country presenting very varied natural features, as well as great diversity of soil. The Phanerogamic Flora of this district is naturally as varied as its features, but is by no means remarkable for the presence of species that can properly be called peculiar to the district. In the immediate neighbourhood of Glasgow the soil is very stiff and clayey, so much so indeed as to have given rise to the industry of brick-making on an extensive scale; and here the variety of weeds that infest the cultivated fields is very limited when compared with what we find in the eastern counties of Scotland, or on the lighter soil along the coast of Ayrshire. For several miles round Glasgow little else is to be seen in the way of field-weeds except *Sinapis arvensis*, and of it there is enough and to spare. Such plants as *Centaurea Cyanus* and *Papaver Rhæas*, so abundant in the eastern counties, are rarely seen in the neighbourhood of Glasgow, or even in Ayrshire, their place there being apparently occupied by *Chrysanthemum segetum* and *Papaver dubium*. *Cynoglossum officinale*, *Hyoscyamus niger*, *Malva sylvestris*, *Knautia arvensis*, *Scandix Pecten-Veneris*, *Silene inflata*, *S. noctiflora*, all of frequent occurrence in the east, are seldom seen in the west, only stray plants being found sporadically scattered here and there over the country, the perennial species never extending themselves, and the annuals never taking a permanent hold, but always disappearing after the first or second year. We make no attempt to account for the fact of such a common English plant as *Scandix Pecten-Veneris* penetrating so far north into Scotland on the east coast, and not at all on the west. Latitude, it would appear, has nothing to do with the matter. Any difference of latitude between Fife and Ayrshire is altogether in favour of the latter. The soil of both counties is in many places sufficiently similar, and the Gulf-stream—if it has any effect at all—must also tell in favour of Ayrshire. All these taken into consideration would, on a *prima facie* view, lead us naturally to expect that denizens of the south would proceed farther north on the west than on the east side of our island. That such is not the case might be proved by numerous other

instances besides *Scandix Pecten-Veneris*. It is just possible that the Solway Firth and the Galloway hills may deflect southern plants in their northward migration towards the east, but this suggestion is all but nullified by the fact that such stray plants as do find their way to the western counties invariably fail to establish themselves permanently. Such apparent anomalies impress us with the idea that we have much to learn before we can understand the laws that regulate the distribution of plants over even such a limited portion of the earth's surface as is comprised within the bounds of Britain.

But although the immediate neighbourhood of Glasgow is so poor in species that are chiefly confined to cultivated ground, it is by no means devoid of interest to the botanist. There are within a radius of a few miles round the city, several small lochs and marshes, chief among the number being Possil Marsh, in which every Glasgow botanist may be said to have been baptized. Here we find *Ranunculus Lingua*, *Hippuris vulgaris*, *Stellaria glauca*, *Lysimachia thyrsiflora*, *Sagittaria sagittifolia*, all of which may be regarded as rather rare, not only in this district but in Scotland generally. *Sagittaria sagittifolia* has got no place assigned to it in Hooker's *Flora Scotica*, published in 1821, as it was then unknown in Scotland. It was first observed about twenty years ago in the river Cart at Inchinnan, but whether its introduction was accidental or intentional has not been ascertained. It made its way from the Cart into the Forth and Clyde Canal, from thence into the Possil Marsh, and appears now to be perfectly naturalized in the district. All the four British species of the curious genus *Lemna* may be found also in this marsh and in the neighbouring Forth and Clyde Canal.

Benlomond, Benvoirlich, Goatfell, and other mountains of the west—some of them exceeding 3000 feet in altitude—furnish us with most of the alpine plants common to the mountains of Scotland, with the exception of a few of the Arctic type confined to the loftier Ben Nevis and Ben Lawers, such as *Saxifraga rivularis*, *S. cernua*, *S. nivalis*, &c.

Along the sandy coast of Ayrshire, extending from Portincross to the Heads of Ayr, ammophilous plants abound. There we find *Brassica monensis*, *Cakile maritima*, *Salsola Kali*, *Calystegia Soldanella*, *Eryngium maritimum*, *Jasione montana*, *Trifolium arvense*; and wherever the soil will repay cultivation *Agrostemma Githago*, *Lycopsis arvensis*, with several species of *Euphorbia*, *Fumaria*, &c. Hundreds of acres of the muddy flats near the confluence of the rivers Garnock and Irvine with the sea, left dry at low tide, are literally covered with *Salicornia herbacea*.

In Cumbrae, Bute, Arran, and the Western Isles in general, *Carum verticillatum*, *Oenanthe Lachenalii*, *Veronica Anagallis*, *Samolus Valerandi*, *Pinguicula lusitanica*, *Anagallis tenella*, *Cotyledon Umbilicus*, *Mertensia maritima*, are of frequent occurrence, while they are rare, and in some cases altogether wanting, in the eastern counties.

Carum verticillatum is very abundant on both sides of the Firth of Clyde, and may perhaps be regarded as the plant of all others most peculiar to the west of Scotland. It is scarcely to be found in England south of the Cheviots. The rare and local *Vicia Orobus* is also to be noted as not uncommon in the Upper Clyde valley.

The island of Arran furnishes us with the only recorded station in Britain for *Pyrus Aria*, var. *fennica*, and with one of the very few in Scotland for *Crambe maritima*, and Skye and Coll for the curious *Eriocaulon septangulare*, a very rare species of a decidedly American genus. In Skye is also to be noted *Pinguicula alpina*.

The island of the greater Cumbrae, not more than four miles in length by less than two in breadth, contains perhaps a greater variety of species than will be found in any district of like extent within the bounds of Scotland.

Neottia Nidus-Avis is the only species of the order Orchidaceæ occurring in the district that may with propriety be called rare. It is found, but sparingly, in more than one locality in Lanarkshire. *Lathræa squamaria*, differing widely from the last-named species in class as well as order, but exhibiting a certain affinity with it in the absence of chlorophyll, makes its appearance sometimes on the north bank of the Clyde a few miles above Glasgow.

The genus *Carex* abounds in all the marshes near the city, but no species occur that may not be found anywhere in the country where similar conditions exist. The Gramineæ offer no features calling for any particular remark; the species are similar to those found all over Scotland; about forty may be gathered within a few miles of Glasgow.

The district produces most of the commoner ferns in abundance wherever the conditions are suitable for their development. *Ophioglossum vulgatum* and *Botrychium Lunaria* grow here and there all over the country. *Asplenium marinum* was common a few years ago in Cumbrae, Bute, &c.; but the fern-cultivating mania has made sad havoc with it of late, and in the localities most accessible to the inhabitants of Glasgow it has all but disappeared, and is being fast followed by *Osmunda regalis*, which likewise used to be by no means rare. *Lycopodium clavatum* may be met with frequently on all the upland moors, and *L. Selago*, *L. alpinum*, and *L. selaginoides* on all the mountains. *L. selago* grows also in Cumbrae not more than six feet above the sea-level. With the exception of *Equisetum variegatum*, all the undoubted species of the genus are found in the west. *Equisetum umbrosum*, generally looked upon as rare, grows in several stations near Glasgow, as also does *E. hyemale*, although more sparingly. *E. Telmateia* is common near Kildonan in the south of Arran, on the banks of the Fruin near Lochlomond, and several other places. *Isoetes lacustris* and *Pilularia globulifera* occur in more than one of the lochs within the prescribed bounds.

Here as elsewhere all over the kingdom, we always find within the precincts and neighbourhood of ruined castles and monastic

institutions a number of plants of rather dubious nativity. On and about the walls of Bothwell Castle are found *Parietaria officinalis*,—an undoubted native, but very rare in the west; *Allium Scorodoprasum*, *Ruscus aculeatus*, *Daphne Laureola*, *Scrophularia Ehrharti*, *S. vernalis*, *Chelidonium majus*, and on the opposite bank of the Clyde, about the ruins of Blantyre Priory, *Aquilegia vulgaris*, *Tulipa sylvestris*, *Geranium phæum*, and a good many more very doubtful natives. At Craignethan Castle we get *Nepeta Cataria*,—certainly a native, but one of the rarest plants to be met with in the west of Scotland.

The above remarks might be greatly extended by the addition of farther examples, but perhaps enough has been done in that direction already to afford a general idea of the Vascular Flora of the West of Scotland.

JAMES RAMSAY.

V.

ON THE CRYPTOGAMIC BOTANY OF THE
WEST OF SCOTLAND.

OWING to the prevailing moisture throughout the year the climate of the West of Scotland is peculiarly favourable to the growth and development of cryptogamic plants, and as heat, and it may be added sunshine, do not play so important a part in this respect as in phanerogams, nay rather tend towards the arrestment of such growth, these favourable conditions are rather enhanced than otherwise.

The diversity of the surface into mountain and dale, as well as the encroachment of the sea in the shape of long arms, stretching often far inland, together with the numerous lochs and bogs sprinkled pretty thickly throughout, also afford favourable conditions that scarcely find a parallel in any other part of Europe except the coast of Norway, whose cryptogamic flora approaches closely that of the West of Scotland.

The geological formations of this part of the country do not present peculiarities of sufficient importance to entitle us to arrogate to them a large share in the disposition of such plants, yet the somewhat greater prevalence in the West and Western Islands of the schistose rocks generally, and especially of the micaceo-schistose (properly so called), affords a presumption that the luxuriance and diversity of the species are owing in part at least to them as a nidus of growth, and this opinion is strengthened when account is taken of the cryptogamic flora of Ben Lawers, to be spoken of hereafter. As the greater part of the given district is Highland, embracing, besides, on its outskirts Ben Lawers in the east and Ben Nevis in the north, two of the highest mountains in Great Britain, and such that their geological features could scarcely present greater contrasts, it will readily be believed that the cryptogamic botany is diversified to a greater extent than that of any other district of Great Britain. While the low sandy flats of Ayrshire, and especially those in the neighbourhood of Stevenston, almost complete all the known peculiarities of soil to be found in these islands.

While the field of research is extensive as well as diversified the workers in this section of botany have been few, but their paucity has been more than compensated by the amount of enthusiasm on the part of one or two, and notably that of the late Mr. A. M'Kinlay, whose untimely end all true lovers of botany must deplore. In the section of Mosses he did more than any one of his time, and much as

he had done he gave abundant promise of more. As it was, his exertions, seconded by those of one or two other fellow-workers, had served to call the attention not merely of British botanists to this district, but of several on the Continent of Europe as well as of America. The section of Mosses has, accordingly, been much more thoroughly investigated and determined than the others, and in the following remarks on the peculiarities of plant distribution special reference is made to this class.

The altitudinal zones are tolerably well marked, but except on Ben Lawers, and to a less extent on Ben Nevis, there can scarcely be said to be a higher zone than the subalpine. On the former we have, indeed, numerous plants belonging to the two highest zones, viz. alpine and supra-alpine, crowded almost indiscriminately. The causes at work likely to have produced such a congeries of plants on one and the same mountain have often engaged the attention of West of Scotland botanists. Many theories have been propounded, to be as often dismissed. One or two circumstances have, however, rivetted my attention, and as they still cling to me in spite of adverse opinions I think it right to state them fairly and candidly.

In the first place no cryptogamic botanist who has repeatedly ascended any of the more prominent of our western mountains can fail to be impressed with the remarkable fact, that there are special spots on each mountain, and these generally within very restricted limits, where almost all the rarer alpine plants (the word *alpine* being used in a general sense) may be seen that are likely to be got in each individual case, and that, having once alighted upon such spots, it is almost useless to investigate any others.

2d. A little experience will further enable the botanist to satisfy himself that such prolific spots are very generally in the form of ravines, or at least hollows, including the sides of such ravines.

3d. That such hollows have very generally a southern, or more strictly, a south-eastern exposure.

4th. That these slope upwards in a north-western direction, and terminate in a saddle-back which is almost always of a lower elevation than the rest of the general ridge bounding this hollow on the north. Such hollows are well seen on Ben Lawers, Craig Chailleach, Ben Lomond, Ben Nevis, &c.

5th. That the parts of the mountain on the other side of this saddle-back, *i.e.* on its northern aspect, are singularly barren of such alpine rarities.

Now taking Ben Lawers as our type, it can easily be ascertained by any one even after a cursory survey that the northern shoulder of the mountain, including that of Craig-na-Gour, is worthless as a field of research; indeed, I cannot recall having ever detected there any moss of any consequence except *Dissodon splachnoides*, and as this was found well up, near the head of the so-called Corrie of Craig-na-Gour, which, in turn, is protected on its north-western aspect by

high precipitous rocks, this spot cannot be reckoned as forming an exception to the fact stated above.

6th. When it is stated, besides, that there are distinct evidences, in the majority of cases, of glacial action high up on the sides of such ravines, but few or none near their base, the conclusion to which the reader's attention is called becomes evident, viz. that such hollows were protected during the period of the glacial drift by solid masses of ice or glaciers, and that such plants (or their spores) as flourished previous to this epoch were not destroyed, but allowed to remain *in statu quo*.

Still referring to Ben Lawers, all the rare alpine mosses without exception are found in the ravine, or on its lower slopes, which is situated between the mountain and Craig-na-Gour on the west. It is notable also that the truly alpine forms found in this ravine bear a close resemblance to those corresponding to them from the Dovrefeldt Mountains in Norway, so much so indeed that it is scarcely possible to distinguish at sight whether any particular specimen is Norwegian or Scottish. This fact surprised me more particularly with reference to samples of *Dicranum arcticum*, *Timmia Norvegica*, and the alpine states of *Didymodon rubellus* and *Grimmia apocarpa*. I leave the reader's imagination to weave a theory, slender, yet I think tenable, as to the disposition of the surface of the earth in Northern Europe previous to the glacial epoch. My present limits will not permit me to enlarge further in this direction, although much more might be said on certain curious yet close affinities between the vegetation of distant regions of Northern Europe.

Peculiarities of Plant Distribution in the West of Scotland.

What strikes a stranger most on our western mountains is the unusual prevalence, and, accordingly, luxuriance of species of the genus *Campylopus*. Within a circle of a radius of 5 or 6 miles from Ben Voirlich by Loch Lomond all the Scotch *Campylopi*, with one or two exceptions, may be found, and much the larger proportion of species of the nearly allied genera *Dicranum* and *Dicranodontium*. These mosses give, indeed, a peculiar aspect to the vegetation of these mountains, and they were, besides, the first to give a stimulus to the study of Bryology in the West. In a short period no fewer than six additions in these genera were made to the British Lichen Flora. Now reckoning Ben Voirlich as the centre of spread, it is noticeable that in a western direction the prevalence and luxuriance are increased, while the number of species is diminished, until on or near the sea-board the eye is attracted and ultimately wearied by extended patches consisting almost entirely of *C. longipilus*. In the Western Islands *C. densus* is the prevailing species, where it is found in extended masses fruiting freely, while in the Outer Hebrides is found the largest and most luxurious species of all, *C. Shawii*. In an easterly

direction, on the other hand, the *Campylopi* degenerate and thin off, while the number of species is varied by the occasional intrusion of *C. brevipilus*, as near Tyndrum, a moss which, according to my experience, may be said to have its centre of spread in Rosshire in the neighbourhood of Auchnault and Loch Maree. On Ben Lawers, still further east, there is scarcely a *Campylopus* to be seen, with the exception of *C. torfaceus* sparingly on the sides of drains near the base, while *C. compactus* is confined to one or two spots in the western ravine already alluded to. Near the east coast these mosses again appear in somewhat greater profusion, but not nearly to the same extent as on the west.

2d. *Sphagna*, although common everywhere in uncultivated, and more especially boggy or marshy ground, whether Highland or Lowland, are to be met with in greater profusion in our western glens and on the sides of the mountains than anywhere else, and not only so, but the diversity of species and even of forms is more manifest so far as my experience goes.

3d. Near Bowling on the Clyde is a prominent rock called Dumbuck, partly basaltic, partly amorphous, and bordered at no great distance by the Old Red Sandstone, on which is found a crowd of mosses of the genus *Grimmia*. No fewer than eleven species have been detected within an area of a dozen yards, and amongst these are the rare and beautiful *Gr. leucophæa*, *Gr. subsquarrosa*, *Gr. Hartmanni*, &c. Now it is remarkable that on the chain of detached rocks of similar geological formation that stretch at intervals across Scotland from Dumbarton Rock to Arthur's Seat through Stirling Castle Rock, are found members of the same group of mosses, and nowhere else. This group includes also the rare *Tortula Müllerii*. On the same rock have been detected minute patches of *Glyphomitrium Daviesii* (Schwaeg.) in a barren state. The indefatigable researches of Mr. W. Galt and Mr. G. Thomson have shown that the area of growth of this curious and interesting moss is much more extended than was previously thought. It has been found on almost all the basaltic trap-rocks that crop up at Dumbuck, hills behind Bowling, Kilpatrick, round near Milngavie, thence backward towards Killearn as the Whangie. This constitutes what may be termed a somewhat elevated table-land having a diameter of about 8 miles. More recently this moss has been detected on rocks of a corresponding formation in the islands of Mull and Skye.

4th. Here and there throughout this district of Scotland are to be found as elsewhere certain isolated plants that do not betray close affinities to any others, and for whose intrusion it is difficult to give any feasible explanation. The thought is apt to strike one that they are the remains of a former flora that has nearly passed away, having served its turn in the grand order of things. As these anomalies in the case of this district are unusually interesting I propose to enumerate several; and first amongst these is *Orthodontium gracile*.

As every bryologist is aware this moss, at the time of the publication of Wilson's work on British mosses, had been found in three spots in England and in one in Abyssinia, and nowhere else; a fourth was found in 1862 on sandstone in Lennoxtown Woods, where it fruits freely in March and April. The area of growth is very restricted, not embracing more than 3 or 4 square yards; but it keeps its hold notwithstanding adverse circumstances, for rocks of this formation are perhaps the least favourable to the growth and development of mosses and lichens of almost every kind.

Didymodon recurvifolius (Tayl.), on grassy slopes midway up Ben Voirlich from Loch Lomond, is due to the late Mr. A. M'Kinlay. This is now believed to be the only station in existence for this moss, as that on Knockavohila in Ireland is extinct. Apart from the statement of Mr. M'Kinlay himself to the effect that he had no fear of the plant becoming extinct on Ben Voirlich, I feel inclined to maintain that this habitat has shared the fate of the Irish one, for on every occasion of a visit to the mountain, I have devoted a share of my time to the rediscovery of the moss, but hitherto without success. This is to be deplored, inasmuch as the death of the discoverer precludes the possibility of any more definite information being arrived at as to the exact place of growth.

Myurium Hebridarum (Sch.), detected for the first time in North Uist by the late Dr. C. Smith of Inverary, has again been found in great luxuriance in the original station. A second station has been revealed by the Rev. Dr. H. Macmillan on the shores of Loch Coruisk in Skye. The only other stations for it are in the Canary Islands and Azores, from the latter of which I have it in fruit gathered by Mr. Moseley of the Challenger Expedition.

A slender clue is given in this instance, as well as in another already stated, as to the former disposition of the land along the great Mid Atlantic ridge; but I forbear to follow it up, although there are other botanical examples which go to strengthen the theory of a continuous land-surface along this ridge or bank.

4th. Other instances of restricted areas of growth might be mentioned; but as such are common to other districts I refrain from multiplying examples. Three others may, however, be adduced as indicating what may be termed initiatory stages of specific development, in marked contrast to those previously given, viz., *Orthotrichum Shawii* on an old ash-tree near Dailly and *Campylopus Shawii* from North Uist, both due to Dr. J. Shaw, now of Cape Town, South Africa. There is little doubt that these are offshoots from *O. cupulatum* on the one hand and *C. alpinus* on the other, and, accordingly, tend towards the Darwinian theory of development, more especially as their botanical characters are quite appreciable, &c. A third is *Didymodon Daldinianus*, clearly an offshoot from *D. cylindricus*, which, besides, is found sparingly throughout our Highland glens, and in fruit in two of these, viz. Campsie, the original

station of Dr. Taylor, and in Glen Roy, where it is comparatively abundant. *D. Daldinianus* is a luxuriant moss, and on the hills behind Dunoon and Kilmun has been gathered in huge tufts with stems 3 or 4 inches in length, in this respect at least quite a contrast to the other. Fruiting specimens of this moss have been found on Ben Ledi and near Crianlarich.

As comparatively little attention has been paid to the Hepaticæ, this part of the subject may be dismissed with a few remarks on the distribution of one or two of the more peculiar.

The magnificent *Physotium cochleariforme* is prevalent on all the more prominent of our western mountains, and obtrudes its beautiful purplish tufts especially on the grassy slopes facing the west. Two forms are apparent, one being much more slender and the colour less deeply marked, otherwise there is little difference observable, although hopes have been entertained by more than one continental botanist that a second species is admissible.

Adelanthus Carringtonii (Balfour) is seen occasionally in similar situations to the above, and nowhere in greater luxuriance than on Ben Voirlich; also on Ben Lawers much more sparingly.

Until within the last four or five years the study of Lichens in the western parts of Scotland has not engaged the attention of botanists. This is mainly owing to the field of research not being favourable. As in the case of other large manufacturing towns, the atmosphere of Glasgow and its neighbourhood is not suitable to the growth and development of lichens, indeed within a distance of 10 miles of the city scarcely a lichen in a state of fructification is to be seen. A few of the more common *Parmeliæ*, including *P. physodes*, may be seen covering the stems of the older trees in certain inclosures and secluded glens, along with the cosmopolitan *Lecanora subfusca* and several of its varieties in fruit, and perhaps *Lecidea parasema* and *Graphis scripta*, both in a sickly state; but with these exceptions scarcely any others can be said to be recognizable.

As is well known lichens are peculiarly susceptible to atmospheric changes, and may, indeed, be reckoned as a test of the purity of the air, and the least traces in it of the mineral acids, more especially, are sufficient to arrest their growth, and even destroy the more delicate. It is not until Kilsyth is reached on the east, and Upper Blantyre on the south, that any of the crustaceous lichens appear in a healthy active state of growth; and even although these adverse atmospheric conditions are in some respects changed, the extremely slow rate of growth of these vegetable organisms forms another barrier to their study.

It is only on the outskirts of our district, such as Ben Ledi, Calander, Killin and Ben Lawers, Western Isles, &c., that lichenologists have pursued their researches with continuous vigour, and as even these, with one or two exceptions, have been but partially investigated, generalizations on the distribution of this tribe are impossible.

There is, however, one lichen which cannot be overlooked in this respect, viz. *Pilophoron fibula* (Tuck.); and as it was first detected in North America, has only been recently added to the British lists, and is, besides, a very characteristic plant, any notice of its distribution is worth recording. It was first discovered on Ben Voirlich in 1871, sparingly; then more plentifully on the Cobbler and Ben Donagh at the head of Loch Goil; and lastly on the hills behind Ormidale on the Kyles of Bute, where, in a luxuriant state of fructification, it covered the perpendicular face of a wettish rock to the extent of many square yards. This lichen may fairly be expected in many similar situations on our west coast, more especially as the only other stations for it are in Wales.

Generally speaking, the rarer of the large foliaceous lichens manifest a preference for the western districts, especially the Western Islands, whose climate, as has been already stated, is moister than elsewhere in Scotland.

With this must be closed the record of the distribution of cryptogamic plants. Many important isolated facts might have been added, which might have been of use for subsequent research as well as served as bases for plausible theories of plant growth and spread, but, apart from the very restricted limits of the present introduction, it is very questionable how far it is advisable, in the transitionary stage through which Cryptogamic Botany is passing, to rush into vague generalities which may ultimately be upset. Better to wait patiently, in this as in other departments of pure science, until a surer and broader basis is arrived at, than to disturb the present current of thought by crude and undigested generalizations. In other words, better be a simple disciple of Faraday than a follower of any of our more recent iconoclasts.

J. STIRTON.

A
CONTRIBUTION TOWARDS A COMPLETE
LIST
OF
THE FAUNA AND FLORA
OF
CLYDESDALE AND THE WEST OF SCOTLAND.

COMPILED UNDER THE AUSPICES OF
THE SOCIETY OF FIELD NATURALISTS, GLASGOW.

GLASGOW:
PRINTED BY W. G. BLACKIE & CO., VILLAFIELD.
1876.

PREFACE.

THE following lists of the Fauna and Flora of the West of Scotland have been brought out under the auspices of the Glasgow Society of Field Naturalists as a guide to the district, for the 1876 meeting of the British Association, and it is hoped will be of some use in showing the character and distribution of the animals and plants. Owing, however, to the very short time at the disposal of the Society after resolving to carry out the work, it is necessarily incomplete, and may contain some errors; but every care has been taken to make it as complete as possible. It is with great regret that the important order Coleoptera has been omitted owing to the limited time, as this branch has been very thoroughly worked up in the West of Scotland, and the same remark applies to the absence of a portion of the Hymenoptera, and of several marine groups.

The lists are intended to show as far as possible what has been done in the various branches, and it is hoped that they may have the effect of stirring up workers to study those branches in which nothing has been done, and in inciting young men to the study of Natural History by showing how much independent investigation has yet to be made.

In the course of a few years the Society hopes to be able to publish a second edition, and by that time the investigation of the Natural History of the West of Scotland may be more complete.

Already several naturalists in the district are turning their attention to neglected branches, such as Spiders, but it is thought better not to publish these lists at present.

The Society has been indebted to several gentlemen who are not connected with it for assistance, and would tender them their thanks for the assistance so frankly and kindly given. Among these may be named Mr. David Robertson, F.G.S., F.L.S., who placed his valuable lists of Marine Mollusca, Foraminifera, &c., at their disposal; Mr. Roger Hennedy, who gave his list of Marine Algæ; Mr. H.

C. Young, who contributes the list of Breeding Birds; Mr. James King, the Lepidoptera; and Mr. Peter Cameron, jun. (formerly a vice-president of the Society), his valuable lists of Saw-flies and Gall-flies.

The thanks of the Society are also due to those members who have helped in the work, as the difficulties were so great that, without the zeal and energy displayed by them, it would have been impossible to have got the work done in time. These are as follows:—

Mr. THOS. KING, Mammalia.

Mr. J. M. CAMPBELL, Reptilia and Amphibia.

Mr. F. G. BINNIE, Caddis-flies, and Land and Fresh-water Mollusca.

Mr. R. M'KAY, Flowering Plants and Ferns.

Dr. JAMES STIRTON, F.L.S., Mosses, Lichens, and Jungermanniæ.

Mr. R. H. PATERSON, Fungi and Jungermanniæ.

Mr. J. A. MAHONEY, Marine Algæ.

It was found impossible to follow any one author in the classification, and each compiler has adopted the system of the most recent authority. The several lists are unavoidably unequal in the extent of ground covered, and in the amount of attention paid to each branch, so it was thought proper to place at the head of each group, when possible, the area included, authorities, and other necessary information. To a great extent the lists will speak for themselves, but considerable information as to the distribution and character of our Fauna and Flora will be derived from the general observations which will be found prefixed to this volume.

It is proper here to mention that the Society has been handsomely assisted in this work by a considerable pecuniary grant from the Local Committee of the British Association.

If this contribution towards a complete list for the district should stir up more general interest in the healthy and fascinating study of Natural History, the members of the Society will be more than repaid for any trouble they have taken.

THE FAUNA AND FLORA

OF

CLYDESDALE AND THE WEST OF SCOTLAND.

The frequency with which each species occurs is indicated by the letters C, F, and R, which mean Common, Frequent, or Rare.

A N I M A L I A.

Class MAMMALIA.

The area included is Clydesdale. No complete published lists exist, but various scattered notes have been consulted, and Mr. E. R. Alston, F.Z.S. has kindly revised the list.

Cheiroptera.

Vespertilio pipistrellus, Geoff.	Common Bat.	Common.
Daubentonii, Leisler.		R. Glasgow Green, 1864.
Plecotus auritus, L.	Long-eared Bat.	Common.

Insectivora.

Erinaceus Europæus, L.	Hedgehog.	F. Caldwell, Roseneath.
Talpa Europæa, L.	Mole.	Common.
Sorex vulgaris, L.	Common Shrew.	Common.
pygmæus, Pall.		R. Lesmahagow.
fodiens, Pall.	Water Shrew.	Rare.
var. remifer, Geoff.	Oared Shrew.	R. Banks of river Nethan.

Carnivora.

Meles taxus, Flem.	Badger.	R. Douglas Castle, Kirn.
Lutra vulgaris, Erx.	Otter.	R. Caldwell, Kilsyth, Kirn.
Mustela vulgaris, L.	Weasel.	Common.
erminea, L.	Stoat.	F. Caldwell, Cadder, Roseneath.
putorius, L.	Polecat.	R. Caldwell.
Martes abietum, Ray.	Pine Marten.	Rare.
Vulpes vulgaris, Briss.	Fox.	Common.
Phoca vitulina, L.	Common Seal.	F. Firth of Clyde.

	Rodentia.	
<i>Sciurus vulgaris</i> , L.	Squirrel.	F. Cadder, Lennox Woods, Roseneath, Lesmahagow.
<i>Mus sylvaticus</i> , L.	Field Mouse.	Common.
<i>musculus</i> , L.	Common Mouse.	Common.
<i>decumanus</i> , Pall.	Common Rat.	Common.
<i>Arvicola amphibius</i> , Desmar.	Water Vole.	Common.
<i>agrestis</i> , L.	Field Vole.	Common.
<i>glareolus</i> , Schr.	Bank Vole.	R. Lesmahagow.
<i>Lepus timidus</i> , L.	Common Hare.	Common.
<i>variabilis</i> , Pall.	Mountain Hare.	F. Roseneath, Kilpatrick Hills, &c.
<i>cuniculus</i> , L.	Rabbit.	Common.
	Ruminantia.	
<i>Cervus elaphus</i> , L.	Red Deer.	Frequent.
<i>capreolus</i> , L.	Roe Deer.	Frequent.
<i>dama</i> , L.	Fallow Deer.	F. Semi-domesticated.
<i>Bos Scoticus</i> , Swain.	Wild cattle.	Cadzow Forest.
	Cetacea.	
<i>Phocæna communis</i> , Lesson.	Porpoise.	F. Firth of Clyde.
<i>Hyperoodon rostrata</i> , Chem.	Whale.	R. Gareloch, 1863.

THOMAS KING.

LIST OF BIRDS WHICH BREED IN THE VICINITY OF GLASGOW.

In compiling this list of the birds which breed in the vicinity of Glasgow I have made free use of Mr. Gray's *Birds of the West of Scotland*, and have followed his arrangement. I have also made use of a paper by Mr. James S. Dixon on the birds frequenting Possil Marsh, which is published in the *Proceedings of the Natural History Society of Glasgow*, vol. ii. page 160.

To Mr. Robert Gray, F.R.S.E., and Mr. J. S. Dixon I am under great obligations for their very valuable assistance in making corrections and additions to the list. Mr. James Lumsden, Jun., F.Z.S., has also kindly assisted me in this.

Raptores.

Falco æsalon.
tinnunculus.
Accipiter nisus.

Merlin. F. Craigmaddie & Blantyre Moors, &c.
Kestrel. F. Cadzow Forest, Kilpatrick Hills, &c.
Sparrow-hawk. F. Cadzow Forest, &c.

Falconidæ.

Strigidæ.

Otus vulgaris.
brachyotus.

Long-eared Owl. R. Bothwell Castle, Hamilton Park, &c.
Short-eared Owl. R. Bothwell Castle, Hamilton Park, &c.

Strix flammea.
Syrnium stridula.

Barn Owl. F. Bothwell Castle, Mugdock, &c.
Tawny Owl. F. Bothwell Castle, Mugdock, &c.

INSESSORES.

Dentirostres.

Muscicapa grisola.

Spotted Flycatcher. F. Partick, Cambuslang, &c.

Muscicapidæ.

Merulidæ.

Cinclus aquaticus.
Turdus viscivorus.
musicus.
merula.
torquatus.

Dipper. By every stream.
Missel Thrush. Common.
Song Thrush. Common.
Blackbird. Common.
Ring Ouzel. R. Kilpatrick Hills.

Sylviadæ.

Accentor modularis.
Erythaca rubecula.
Phœnicura ruticilla.

Hedge Accentor. Common.
Redbreast. Common.
Redstart. R. "Breeds within city boundaries."¹

¹ *Birds of the West of Scotland*, p. 84.

<i>Saxicola rubicola.</i>	Stonechat.	F. Pollokshields, Kilpatrick Hills, &c.
<i>rubetra.</i>	Whinchat.	F. Near Cambuslang, &c.
<i>ænanthe.</i>	Wheatear.	F. Blantyre Moor, Kilpatrick Hills, &c.
<i>Salicaria locustella.</i>	Grasshopper Warbler.	R. Near Paisley.
<i>phragmitis.</i>	Sedge Warbler.	Common at Possil Marsh, &c.
<i>Curruca atricapilla.</i>	Blackcap Warbler.	R. Botanic Gardens, Hamilton.
<i>hortensis.</i>	Garden Warbler.	R. Botanic Gardens, Hamilton.
<i>cinerea.</i>	Common Whitethroat.	Common.
<i>Sylvia sylvicola.</i>	Wood Warbler.	F. Well distributed in district.
<i>trochilus.</i>	Willow Warbler.	Common in Wilderness Plantation, &c.
<i>rufa.</i>	Chiffchaff.	F. "Roadside Plantations near Glasgow." ¹
Paridæ.		
<i>Parus major.</i>	Great Tit.	Common.
<i>cœrulens.</i>	Blue Tit.	Common.
<i>ater.</i>	Cole Tit.	Common.
<i>palustris.</i>	Marsh Tit.	R. Near Paisley.
Motacillidæ.		
<i>Motacilla Yarellii.</i>	Pied Wagtail.	Common.
<i>boarula.</i>	Gray Wagtail.	R. Various rocky parts of the Clyde.
<i>Rayi.</i>	Ray's Wagtail.	Frequent.
Anthidæ.		
<i>Anthus arboreus.</i>	Tree Pipit.	F. "Common in neighbourhood of Possil." ²
<i>pratensis.</i>	Meadow Pipit.	Common.
Alaudidæ.		
<i>Alauda arvensis.</i>	Skylark.	Common.
Emberizidæ.		
<i>Emberiza miliaria.</i>	Common Bunting.	F. Various localities in dist.
<i>schoeniculus.</i>	Black-headed Bunting.	Common at Possil Marsh, Gilmorehill, &c.
<i>citrinella.</i>	Yellow Hammer.	Common.
Fringillidæ.		
<i>Fringilla coelebs.</i>	Chaffinch.	Common.
<i>Passer domesticus.</i>	House Sparrow.	Common.
<i>Coccythraustes chloris.</i>	Greenfinch.	Common.
<i>Carduelis elegans.</i>	Goldfinch.	R. Bothwell, Hamilton.
<i>spinus.</i>	Siskin.	R. "Its nest has been taken near Glasgow." ³

¹ *Birds of the West of Scotland*, p. 98.² *Birds of the West of Scotland*, p. 114.³ *Birds of the West of Scotland*, p. 146.

<i>Linota cannabina.</i>	Common Linnet.	F. Kilpatrick Hills, &c.
<i>linaria.</i>	Lesser Redpole.	F. Milngavie, Hamilton, &c.
<i>montium.</i>	Twite.	R. Kilpatrick Hills, Drumloch Moor.
<i>Pyrrhula vulgaris.</i>	Bullfinch.	R. Bothwell, Hamilton, &c.

Sturnidæ.

<i>Sturnus vulgaris.</i>	Starling.	Common.

Corvidæ.

<i>Corvus corone.</i>	Carriion Crow.	F. Kirkintilloch, Airdrie, &c.
<i>cornix.</i>	Hooded Crow.	F. Kirkintilloch, Airdrie, &c.
<i>frugilegus.</i>	Rook.	Common.
<i>monedula.</i>	Jackdaw.	Common in towers in city.
<i>Pica caudata.</i>	Magpie.	F. Various localities.

Scansores.

<i>Certhia familiaris.</i>	Common Creeper.	F. "Very common in woods near Glasgow." ¹
<i>Troglodytes vulgaris.</i>	Wren.	Common.

Certhiadæ.**Cuculidæ.**

<i>Cuculus canorus.</i>	Cuckoo.	F. Well distributed.

Halcyonidæ.

<i>Alcedo ispida.</i>	Kingfisher.	F. Various localities.

Hirundinidæ.

<i>Hirundo rustica.</i>	Swallow.	Common.
<i>urbica.</i>	Martin.	Common.
<i>riparia.</i>	Sand Martin.	Common in sand-pits at Cadder, Tollcross, &c.
<i>Cypselus apus.</i>	Swift.	Common in towers in city.

Caprimulgidæ.

<i>Caprimulgus Europæus.</i>	Nightjar.	R. Dougalston, East Kilbride, &c.

Rasores.

<i>Columba palumbus.</i>	Ringdove.	Common.

Columbidæ.**Phasianidæ.**

<i>Phasianus colchicus.</i>	Pheasant.	F. Plantations on Drymen Road, &c.
<i>Tetrao tetrix.</i>	Black Grouse.	F. Near Carluke, Neilston.
<i>Lagopus Scoticus.</i>	Red Grouse.	F. Kilpatrick Hills, Blantyre Moor.
<i>Perdix cinerea.</i>	Partridge.	Common.

Grallatores.

<i>Charadrius pluvialis.</i>	Golden Plover.	Common on Kilpatrick Hills, Eaglesham, &c.
<i>Vanellus cristatus.</i>	Lapwing.	Common.

Charadriidæ.¹ *Birds of the West of Scotland*, p. 193.

Ardeidæ.

<i>Ardea cinerea.</i>	Common Heron.	R. Hamilton, Inverkip.

Scolopacidæ.

<i>Numenius arquata.</i>	Common Curlew.	Common on the Kilpatrick Hills, &c.
<i>Totanus calidris.</i>	Common Redshank.	F. Neilston, Airdrie, &c.
<i>hypoleucos.</i>	Common Sandpiper.	Common by the Clyde, Lug-gie, &c.
<i>Scolopax gallinago.</i>	Common Snipe.	Common at Possil Marsh, &c.
<i>Tringa variabilis.</i>	Dunlin.	F. Neilston, Airdrie, &c.

Rallidæ.

<i>Crex pratensis.</i>	Land Rail.	c. Nest and seven eggs in University grounds, 1873.
<i>Rallus aquaticus.</i>	Water Rail.	R. Possil Marsh.
<i>Gallinula chloropus.</i>	Moor Hen.	Common at Possil Marsh, Gartcosh, &c.

Lobipedidæ.

<i>Fulica atra.</i>	Common Coot.	Common at Possil Marsh, Gartcosh, &c.

Natatores.

<i>Anas boschas.</i>	Wild Duck.
<i>crecca.</i>	Teal.

Anatidæ.

Common at Possil, Neilston, Gartcosh, &c.
F. Loch Humphrey, Drum-loch Moor, &c.

Colymbidæ.

<i>Podiceps minor.</i>	Little Grebe.	Common at Possil Marsh, &c.

Laridæ.

<i>Larus ridibundus.</i>	Black-headed Gull.	Hairlaw Dam.

HENRY C. YOUNG.

Class REPTILIA.

Sauria.

Zootoca vivipara, Wagl. Viviparous Lizard.

Saurophidia.

Anguis fragilis, L. Blindworm.

Ophidia.

Pelias Berus, Merrem. Adder.

Lacertinidæ.

f. Barrhead, Gourock, Kirn.

Anguidæ.

R. Balloch, Tarbet (Loch Lomond), Garelochhead.

Viperidæ.

Common.

Class AMPHIBIA.

Anoura.

Rana temporaria, L. Frog.

Urodela.

Triton cristatus, Laurent. Great Water-newt.

Lissotriton punctatus, Common Newt.

Bell.

palmipes, Banded Newt.

Bell.

Ranadæ.

Common.

Bufonidæ.

Common.

Salamandradæ.

f. Campsie, Possil.

Common.

R. Thornliebank.

J. M. CAMPBELL.

Class INSECTA.

Order Hymenoptera.

The short time allowed for the getting up of these lists has prevented my cataloguing the West of Scotland Hymenoptera other than the *Tenthredinidæ* and *Cynipidæ*; and even with these two families the list is not to be considered exhaustive, as, from the cause just mentioned, I have had to leave out numerous undetermined or doubtful species belonging to the genera *Nematus* and *Dolerus* among the *Tenthredinidæ*, and *Allotria*, *Eucoela*, and *Synergus* among the *Cynipidæ*. The list, however, may, I think, be regarded as tolerably complete for the immediate vicinity of Glasgow, embracing as it does close upon half the British species. The nomenclature adopted differs considerably from that given in the previous British catalogues, but as this is not the place to discuss questions regarding synonymy I must refer the reader for information on this point to my forthcoming catalogue of the British *Tenthredinidæ*, to be brought out under the auspices of the Entomological Society of London, and forming one of the series of catalogues of British insects now being published by that society.

Fam. TENTHREDINIDÆ, West.

Cimbex, Ol.	
sylvorum, Fab.	Common. Bishopton, Rannoch, Strath Glass.
femorata, Fab.	Rare. Rannoch.
Trichiosoma, Leach.	
lucorum, L.	Bishopton, Rannoch, Kintail.
vitellinæ, L.	Common. Bishopton, Cadder Wilderness, &c.
betuleti, Kl.	Rare. Canniesburn, Paisley.
sorbi, H.	Not common. Strath Glass, Rannoch.
Abia, Leach.	
nitens, L.	Common. Possil Marsh, Bishopton, &c., Rannoch.
Zaræa, Leach.	
fasciata, L.	Clober.
Hylotoma, Lat.	
enodis, L.	Cadder on <i>Rubus</i> .
ustulata, L.	Cadder, Rannoch, Strath Glass.
cærulea, Kl.	Not uncommon. Dalry, Rannoch, Strath Glass.
Lophyrus, Lat.	
pini, L.	Abundant on Scotch fir.
frutetorum, Kl.	Rannoch.
pallipes, Fall. ¹	Rannoch.
Cladius, Ill.	
difformis, L.	Common. Cadder, Canniesburn, &c.
viminalis, Fall.	Not common. Cadder.
eradiatus, H.	Rannoch.
padi, L.	Very common. Cadder, &c.
Brullæi, Dbm.	Rare. Cadder.

¹ *L. pallidus* is recorded from Oban by Stephens, but the specimen in his collection in the British Museum is *rufus* and not *pallidus*.

Hemichroa, Ste.	
alni, L.	Common. Cadder, Cambuslang.
rufa, Pz.	Rare. Bishopton.
Camponiscus, Newm.	
luridiventris, Fall.	Common on alder.
Dineura, Dbm.	
De Geeri, Kl.	Very common on birch.
verna, Kl.	Rare. Cadder, Strathblane.
stilata, Kl.	Not common. Cadder.
testaceipes, Kl.	Common. Cadder, Canniesburn.
var. <i>ventralis</i> , Zad.	Canniesburn.
Cresus, Leach.	
septentrionalis, L.	Bishopton, Cadder, Rannoch, Kintail.
varus, De Vil.	Common. Clober, Rannoch, Kintail.
Nematus, Jur.	
crassus, Fall.	Kingussie.
albipennis, H.	Rare. Dalry (Dr. Sharp).
fulvipes, Fall.	Not common. Possil.
alnivorus, H. = ? crassicornis, F.	Cadder, Kintail.
furvescens, Cam.	Strathblane.
interstitialis, Cam.	? Rannoch.
(Sharpi, Cam.	Locality doubtful.)
leucostigmus, Cam.	Rannoch.
appendiculatus, H.	Rare. Cadder, Rannoch.
fraxini, H.	Very common.
? puncticeps, Th.	Milngavie.
lucidus, Pz.	Touch Hills.
quercus, H.	Cadder, Kingussie.
pallidiventris, Fall.	Cadder, Kingussie.
pallipes, Fall.	Rannoch.
mollis, H.	Rannoch.
abietinus, Christ.	Rannoch.
obductus, H.	Common.
conductus, Ruthe.	Very common.
capræ, Pz.	Very common among carices.
imperfectus, Zad.	Cambuslang, Kingussie.
punctulatus, Dbm.	Not common. Cadder, Kintail.
rumicis, Fall.	Rannoch, Kingussie.
histrio, Lep.	Rare. Kenmuir, Glenelg.
fallax, Lep.	Common. Possil.
var. <i>humeralis</i> , Zett.	Cadder.
bilineatus, Kl.	Clober, Rannoch, Kintail.
luteus, Pz.	Very common.
dorsatus, Cam.	Bishopton, Rannoch, Kintail.
abdominalis, Pz.	Common.
ribesii, Scop.	Too common in gardens.
(consobrinus, v. Voll.	Locality doubtful.)
myosotidis, Fab.	Common among clover.
croceus, Fall.	Cadder.
Cadderensis, Cam.	Common. Cadder, Port-Glasgow, Kingussie.
pavidus, Lep.	Common. Cadder.

<i>Nematus</i> , Jur.	
<i>pallesens</i> , H.	Not common. Cadder.
<i>palliatu</i> s, Th.	Cadder.
<i>lacteu</i> s, Th.	Possil.
<i>miliaris</i> , Pz.	Very abundant.
<i>dubiu</i> s, Cam.	Clober.
<i>punctulatu</i> s, Dbm.	Possil, Rannoch.
<i>pedunculi</i> , H.	Cadder, Rannoch, Kintail.
<i>femorali</i> s, Zad.	Rannoch.
<i>viminali</i> s, L.	Common.
<i>gallicola</i> , West.	Very abundant.
<i>baccarum</i> , Cam.	Dunkeld.
<i>vesicator</i> , Bremi.	Rannoch.
<i>vacciniellu</i> s, Cam.	Rannoch.
<i>herbacæ</i> , Cam.	Benledi, Benlawers, Rannoch.
<i>Cryptocampus</i> , H.	
<i>pentandræ</i> , Retz.	Kilpatrick Hills.
<i>Saliceti</i> , Fall.	Common among willows.
<i>Athalia</i> , Leach.	
<i>rosæ</i> , L.	Very common.
<i>Phyllotoma</i> , Fall.	
<i>memorata</i> , Fall.	Very common on birch.
<i>vagans</i> , Fall.	Very common on alder.
<i>microcephala</i> , Kl.	Very common on willows.
<i>Coenoneura</i> , Thoms.	
<i>Dahlbomi</i> , Th.	Cadder, Cambuslang.
<i>Phænusa</i> , Leach.	
<i>melanopoda</i> , Cam.	Cadder.
<i>pumila</i> , Kl.	Common among birch.
<i>Ulmi</i> , Sund.	Not common. Kenmuir.
<i>pygmæa</i> , Kl.	Not common. Dalry.
<i>betulæ</i> , Zad.	Very common among birch.
<i>pumilio</i> , H.	Common. Cadder, &c.
<i>albipes</i> , Cam.	Very rare. Cadder.
<i>Emphytus</i> , Kl.	
<i>cinctu</i> s, L.	Common. Cadder, Strathblane.
<i>rufocinctu</i> s, Kl.	Common. Cadder, Kenmuir.
<i>calceatu</i> s, Kl.	Not common. Possil, Bishopton, Rannoch.
<i>serotinu</i> s, Kl.	Cadder, Paisley.
<i>carpini</i> , H.	Rare. Canniesburn.
<i>tener</i> , Fall.	Common. Possil, Kenmuir.
<i>perla</i> , Kl.	Rare. Rannoch.
<i>Hoplocampa</i> , H.	
<i>crategi</i> , Kl.	Not common. Cadder, Clober.
<i>rutilicornis</i> , Kl.	Rare. Dalry.
<i>Blennocampa</i> , H.	
<i>2-punctata</i> , Kl.	Rannoch, Kingussie.
<i>nigrita</i> , Fab.	Dalry.
<i>nana</i> , Kl.	St. Germains' Loch.
<i>fuscipennis</i> , Fall.	Not uncommon in marshes.
<i>fuliginosa</i> , Sch.	Paisley.

- Blennocampa*, H.
   assimilis, Fall.
   albipes, Gmel.
   geniculata, H.
   alchemillæ, Cam. MS.
   cinereipes, Kl.
   pusilla, Kl.
   agrestis, Cam. MS.
   parvula, Kl.
Eriocampa, H.
   ovata, Kl.
   annulipes, Kl.
   connixta, Cam. MS.
   testaceipes, Cam.
Poecilosoma, H.
   pulveratum, Retz.
   obtusum, Kl.
   submuticum, Thoms.
   excisum, Thoms.
Taxonus, H.
   equiseti, Fall.
   glabratus, Fall.
   glottianus, Cam.
Selandria, S. Str.
   serva, Fab.
   grandis, Zad.
   flavescens, Kl.
   strameneipes, Kl.
   morio, Kl.
Strongylogaster, H.
   cingulatus, Fab.
   mixtus, Kl.
   femoralis, Cam.
   delicatulus, Fall.
Pachyprotasis, H.
   rapæ, L.
   simulans, Kl.
   variegata, Kl.
Macrophya, H.
   albicincta, Kl.
   albipunctata, Fall.
Allantus, Jur.
   nothus, Kl.
Synairema, H.
   rubi, Pz.
Perineura, H.
   nassata, L.
   brevispina, Th.
   sordida, Kl.
   excisa, Th.
Tenthredo, Auct.
   lateralis, Fab.
- Canniesburn.
 Common. Possil, &c.
 Not uncommon. Possil, Paisley.
 Rare. Cadder, Paisley.
 Common. Kenmuir.
 Common on rose.
 Common. Possil, Paisley.
 Rare. Cadder.

 Occasionally common on alder.
 Very common. Possil, Cadder, Kenmuir.
 Rare. Bishopton.
 Strath Glass.

 Common. Clober.
 Rannoch.
 Common. Possil, Milngavie.
 Rannoch, Kintail.

 Common. Possil, Cadder.
 Common. Possil, Bishopton.
 Very rare. Kenmuir.

 Very common.
 Not common. Gleniffer Braes.
 Rare. Possil.
 Common. Kenmuir.
 Common. Cadder, Kenmuir.

 Common on *Pteris aquilina*.
 Not common. Cadder.
 Not common. Cadder.
 Very common on ferns.

 Common.
 Common. Cadder, Kintail.
 Kintail, Rannoch.

 Rare. Dalry.
 Rannoch.

 Very common.

 Rare. Cadder.

 Common. Cadder, &c.
 Common. Cadder, Bishopton.
 Common.
 Not common. Strathblane.

 Common. Kelvin, Milngavie, Cadder.

<i>Tenthredo</i> , Auct.	
<i>aucupariæ</i> , Kl.	Common. Kelvin, Cadder.
<i>atra</i> , L.	Not common. Bishopton, Kilsyth.
<i>dispar</i> , Kl.	Common.
<i>mesomela</i> , L.	Common. Cadder.
<i>zonata</i> , Pz.	Rare. Kenmuir.
<i>bicincta</i> , L.	Not rare. Kenmuir.
<i>olivacea</i> , Kl.	Common. Cadder, &c.
<i>punctulata</i> , Kl.	Common. Cadder, Clober.
<i>scalaris</i> , Kl.	Common.
<i>viridis</i> , L.	Not common. Possil Marsh.
<i>moniliata</i> , Kl.	Rannoch.
<i>velox</i> , Fab., var. <i>nigrolineata</i> , Cam.	Rare. Paisley.
<i>livida</i> , L.	Common. Cadder, &c.
<i>balteata</i> , Kl.	Common. Cadder, &c.
<i>rufiventris</i> , Fab.	Common. Cadder, &c.
<i>Dolerus</i> , Jur.	
<i>pratensis</i> , L.	Common. Possil Marsh.
<i>lateritius</i> , Kl.	Rare. Possil, Paisley.
<i>palustris</i> , Kl.	Common. Possil.
<i>fuliginosus</i> , Kl.	Not common. Possil.
<i>gonager</i> , Kl.	Common. Kenmuir, &c.
<i>vestigialis</i> , Kl.	Common. Cadder, &c.
<i>hæmatodis</i> , Kl.	Rare. Kenmuir.
<i>niger</i> , L.	Not common. Kenmuir.
<i>gibbosus</i> , H.	Very common.
<i>æneus</i> , H.	Common. St. Germain's, Cadder, &c.
<i>Lyda</i> , Fab.	
<i>nemoralis</i> , L.	Sometimes common. Paisley Moss.
<i>sylvatica</i> , L.	Rare. Cadder.
<i>depressa</i> , Sch.	Not common. Kilsyth.
<i>erythrocephala</i> , L.	Rare. Rannoch.

Fam. SIRICIDÆ.

Sirex gigas and *S. juvencus* have both occurred in the district, but in such situations that it is extremely doubtful if they can be regarded as native.

Fam. CYNIPIDÆ.

<i>Cynips</i> , Auct.	
<i>Kollari</i> , H.	Common on oaks everywhere.
<i>Dryophanta</i> , Foer.	
<i>longiventus</i> , H.	Not common. Cadder.
<i>divisa</i> , H.	Common. Cadder, Kenmuir, &c.
<i>scutellaris</i> , Ol.	Perthshire.
<i>Aphilothrix</i> , Foer.	
<i>fecundatrix</i> , H.	Common.
<i>radicis</i> , Fab.	Common. Cadder, Kenmuir.
<i>corticis</i> , L.	Rare. Kenmuir.
<i>albopunctata</i> , Schl.	Common. Milngavie, Strathblane.
<i>solitaria</i> , Fons.	Rare. Kenmuir, Cadder.
<i>autumnalis</i> , H.	Cadder.
<i>callidoma</i> , H.	Inver Moriston.

- Biorhiza, West.
   aptera, Fab. Rare. Dalreoch.
   renum, H. Common. Cadder.
- Andricus, H.
   curvator, H. Very common.
   inflator, H. Common. Cadder.
   noduli, H. Common. Cadder, Kenmuir.
   quadrilineatus, H. Common. Bishopton.
     var. *marginalis*, Schl. Cadder.
   amenti, Gir. Rannoch.
   æstivalis, Gir. Rare. Ardlui.
   ramuli, L. Strath Glass.
   glandium, H. Cadder, Ardlui.
- Dryoteras, Foer.
   terminale, Fab. Very common.
- Neuroterus, H.
   numismatis, Ol. Very common.
   lenticularis, Ol. Very common.
   ostreus, H. Not common. Cadder.
   ? *fumipennis*, H. Cadder.
- Spathogaster, H.
   baccarum, L. Very abundant.
   tricolor, H. Cadder, Clober, &c.
   vesicatrix, Schl. Cadder.
   albipes, Schl. Clober.
- Trigonaspis, H.
   megaptera, Pz. Common. Cadder, Kenmuir.
- Diastrophus, H.
   rubi, H. Common. Cadder, Kenmuir.
- Rhodites, H.
   rosæ, L. Possil, Cathkin Braes, Paisley.
   eglanteriæ, H. Common. Lambhill.
   spinosissimæ, Gir. Troon.
- Aulax, H.
   Glechomatis, H. Perthshire.
   Sabaudi, H. Paisley Canal Bank.
   hieracii, H. Baldernock.
   graminis, Cam. Partick.
- Xestophanes, Foer.
   potentillæ, D.V. Drymen Road, Cadder, Cambuslang.
- Periclistus, Foer.
   caninæ, H. Common in galls of *Rhodites eglanteriæ*.
- Ceroptres, H.
   arator, H. Cadder, Kenmuir.
- Synergus, H.
   Reinhardi, Mayr. Cadder.
   apicalis, H. Cadder, Kenmuir.
   incrassatus, H. Kenmuir, Cadder.
   pallicornis, H. Common. Cadder, &c.
   albipes, H. Common. Cadder, &c.
   nervosus, H. Cadder.

Synergus, H.	
vulgaris, H.	Cadder.
facialis, H.	Cadder.
Allotria, West.	
victrix, West.	Common.
minuta, H.	Cadder.
circumscripta, H.	Cadder.
aperta, H.	Cadder.
flavicornis, H.	Cadder.
melanogaster, H.	Rare. Cadder.
var. <i>halterata</i> , Th.	Kenmuir.
Clidotoma, W.	
brevicornis, Th.	Kenmuir.
Tetrrahaptra, Foer.	
tetratoma, Th.	Bishopton.
Pentacrita, Foer.	
pentatoma, Th.	Cadder, Paisley.
albipennis, Th.	Cadder.
geniculata, H.	Rannoch.
Eucoela, West.	
mandibularis, Zett.	Kelvin, Strathblane.
parvula, Th.	Bishopton.
insignis, Gir.	Cambuslang.
cubitalis, H.	Common.
trichopsila, H.	Common.
alpina, Cam.	Rannoch.
Trybliographa, Foer.	
diaphana, H.	Common.
scutellaris, H.	Very common.
Aglaotoma, Foer.	
picipes, Cam.	Glen Tromie.
Megapelmus, H.	
eucharoides, Dal.	Bishopton, Cadder.
typicus, Wlk.	Cadder.
ensifer, Wlk.	Bishopton.
immunis, Wlk.	Cadder.
Ægilips, Dal.	
nitidulus, Dal.	Strath Glass.
Dalmani, Rein.	Cadder, Bishopton.
armatus, Gir.	Cadder.
subillifera, Thoms.	Strath Glass.
Figites, Latr.	
scutellaris, Lat.	Kenmuir.
consobrinus, Gir.	Possil, Kenmuir.
nitens, H.	Bishopton.
Pycnotrichia, Foer.	
urticarum, Dbm.	Lambhill.
Sarothrus, H.	
canaliculatus, H.	Very common.
Melanips, H.	
opacus, H.	Very common.

Class INSECTA—continued.

Order Trichoptera.

The present can be considered only as a first or preliminary list for the Glasgow district. It is the result of little more than two seasons' collecting by the compiler; for one or two species, however, he is indebted to Mr. J. J. King, who captured them for him. Previous literature or workers in the district there are none. No attempt has been made to indicate the degree of rarity or frequency of each species in the district.

The arrangement of M'Lachlan's *Catalogue of British Neuroptera*, published by the Entomological Society of London in 1870, has been followed; and also the nomenclature, except in a few instances where more recent researches have necessitated changes; for such M'Lachlan's *Monographic Revision and Synopsis of the Trichoptera of the European Fauna* (now publishing), to the end of the Limnophilidæ, and various notes by the same gentleman in the *Ent. Mo. Mag.*, have been consulted.

Fam. PHRYGANEIDÆ.

<i>Phryganea striata</i> , L.	Possil Marsh, Milngavie, and the Lily Loch in the Kilpatrick Hills.
<i>varia</i> , Fab.	Possil Marsh.
<i>obsoleta</i> , M'L.	The Lily Loch in Kilpatrick Hills.

Fam. LIMNOPHILIDÆ.

<i>Colpotaulius incisus</i> , Curt.	Possil Marsh.
<i>Glyphotælius pellucidus</i> , Oliv.	Cadder Wilderness.
<i>Limnophilus rhombicus</i> , L.	Bishopton (Mr. King).
<i>flavicornis</i> , Fab.	Possil Marsh and St. Germain's Loch.
<i>marmoratus</i> , Curt.	Possil Marsh, St. Germain's Loch, Cadder Wilderness, & Paisley Canal.
<i>lunatus</i> , Curt.	Possil Marsh, Cadder Wilderness, and Milngavie.
<i>xanthodes</i> , M'L.	Possil Marsh and Maryhill.
<i>vittatus</i> , Fab.	Possil Marsh, Strathblane, Paisley, and Bishopton.
<i>centralis</i> , Curt.	Cadder Wilderness, Milngavie, and Strathblane.
<i>extricatus</i> , M'L.	Paisley Canal.
<i>luridus</i> , Curt.	Cadder Wilderness, Milngavie, West Kilpatrick Hills, Caplaw Dam, and Bishopton.
<i>sparsus</i> , Curt.	Possil, Cadder Wilderness, Miln- gavie, and Bishopton.
<i>Anabolia nervosa</i> , Curt.	St. Germain's Loch and Milngavie.
<i>Stenophylax cœnosus</i> , Curt.	Bishopton.
<i>stellatus</i> , Curt.	River Clyde at Carmyle, &c.
<i>latipennis</i> , Curt.	River Allander near Milngavie.

<i>Micropterna lateralis</i> , Steph.	Near Milngavie (Mr. King).
<i>Halesus radiatus</i> , Curt.	Clyde at Carmyle, &c., Allander near Milngavie, and vicinity of the Cloch.
<i>digitatus</i> , Schr.	River Clyde at Carmyle, &c., and River Allander near Milngavie.
<i>Drusus annulatus</i> , Steph.	Spout of Ballagan.
<i>Ecclisopteryx guttulata</i> , Pict.	Milngavie.
<i>Apatania Wallengreni</i> , M'L.	Small burns in West Kilpatrick Hills.

Fam. SERICOSTOMATIDÆ.

<i>Silo pallipes</i> , Fab.	Clyde at Carmyle, &c., Milngavie.
<i>Mormonia hirta</i> , Fab.	River Clyde at Carmyle, &c.
<i>irrorata</i> , Curt.	Spout of Ballagan.
<i>Brachycentrus subnubilus</i> , Curt.	River Clyde above Cambuslang.

Fam. HYDROPTILIDÆ.

<i>Hydroptila tineoides</i> , Dalm.	River Clyde above Cambuslang.

Fam. LEPTOCERIDÆ.

<i>Odontocerum albicorne</i> , Scop.	River Allander near Milngavie.
<i>Leptocerus fulvus</i> , Ramb.	Possil Marsh and the Paisley Canal.
<i>cinereus</i> , Curt.	River Clyde at Carmyle, &c., Balla- gan Burn, and Paisley.
<i>aterrimus</i> , Steph.	Possil Marsh, Maryhill, Milngavie, Frankfield Loch, Paisley Canal.
<i>dissimilis</i> , Steph.	Possil Marsh, and River Clyde at Carmyle.
<i>bifasciatus</i> , Oliv.	River Allander near Milngavie.
<i>albifrons</i> , L.	River Clyde above Cambuslang.
<i>Trienodes bicolor</i> , Curt.	Possil Marsh.
<i>Mystacides nigra</i> , L. (<i>atra</i> , Pict.).	Forth and Clyde Canal at Lambhill, &c., the Paisley Canal, and River Clyde above Carmyle.
<i>azurea</i> , L. (<i>nigra</i> , Pict.).	River Clyde at Carmyle.
<i>longicornis</i> , L. (<i>quadrifas-</i> <i>ciatus</i> , Fab.).	Paisley (Mr. King).
<i>Setodes testacea</i> , Curt.	River Allander near Milngavie (Mr. Cameron).

Fam. HYDROPSYCHIDÆ.

<i>Hydropsyche pellucidula</i> , Curt.	Milngavie and the Lily Loch.
<i>instabilis</i> , Curt.	Milngavie, and River Clyde above Cambuslang.
<i>angustipennis</i> , Curt. (?).	Loch Humphrey Burn in the Kil- patrick Hills.
<i>Tinodes Wænerii</i> , L. (<i>lurida</i> , Curt.).	Paisley Canal and the Ballagan Burn.
<i>aureola</i> , Zett. (<i>pusilla</i> , M'L.).	Spout of Ballagan.
<i>Psychomyia gracilipes</i> , Curt.	River Clyde above Cambuslang and River Allander.

<i>Philopotamus scopulorum</i> , Steph.	West Kilpatrick Hills, Milngavie, and the Ballagan Burn.
<i>Plectrocnemia conspersa</i> , Curt.	Milngavie, Ballagan Burn, and Bishopton.
<i>Polycentropus flavomaculatus</i> , Pict.	Milngavie, the Lily Loch, and River Clyde above Cambuslang.
<i>pivicornis</i> , Steph.	Possil Marsh.
<i>Cyrnus trimaculatus</i> , Curt.	Lambhill, Lily Loch, Paisley Canal, and River Clyde above Cambuslang.

Fam. RHYACOPHILIDÆ.

<i>Rhyacophila dorsalis</i> , Curt.	Common by all burns and streams in the district.
<i>Glossosoma Boltoni</i> , Curt.	River Clyde above Cambuslang.
<i>fimbriatum</i> , Steph.	River Clyde above Cambuslang.
<i>Agapetus fuscipes</i> , Curt.	Milngavie, Strathblane, and the Ballagan Burn.
<i>comatus</i> , Pict.	River Clyde at Carmyle.
<i>Beræa pullata</i> , Curt.	Possil Marsh and the Paisley Canal.

FRANCIS G. BINNIE.

Class INSECTA—continued.

Order Lepidoptera.

In this list the arrangement of Mr. H. Doubleday has been followed. The district to which it chiefly refers is that of 10 miles round Glasgow on the north side of the Clyde, with a few outlying localities that have been visited occasionally by myself and others.

I am greatly indebted to the following gentlemen for their kind assistance:—Mr. T. Chapman, who placed his MS. list in my hands with localities indicated by himself; Dr. H. Colquhoun; Messrs. J. Scott, J. P. Duncan, R. F. Logan, Morris Young, and others; to Mr. Duncan, who has sent me lists from his district; and to Messrs. F. G. Binnie, J. Lochhead, A. M'Gregor, J. M'Gregor, and J. W. Peebles, for localities.

I have also consulted Stainton's *Manual* and the *Scottish Naturalist*.

Diurni.

<i>Pieris brassicæ</i> , L.	Common.
<i>rapæ</i> , L.	Common.
<i>napi</i> , L.	Common.
<i>Anthocharis cardamines</i> , L.	R. Renfrew, Greenock, Lanarkshire, Troon.
<i>Colias edusa</i> , Fab.	R. One male taken near Largs on September 12th, 1852, Troon.
<i>Argynnis paphia</i> , L.	R. One specimen near Arrochar.
<i>aglaia</i> , L.	F. Irvine Sands and Arran.
<i>euphrosyne</i> , L.	F. Dundonald.
<i>selene</i> , Fab.	F. Mugdock Woods and Dundonald.
<i>Melitæa artemis</i> , Fab.	R. Dunoon and Dundonald.
<i>Vanessa urticæ</i> , L.	Common.
<i>antiopa</i> , L.	R. Two specimens taken near Paisley about 1822 by Mr. Strang of Edinburgh.
<i>Io</i> , L.	R. Arran and Ayrshire.
<i>atalanta</i> , L.	F. Cadder Wilderness, Duntocher, & Troon.
<i>cardui</i> , L.	F. Campsie, Renfrew, Arran, and Monkton.
<i>Erebia cassiope</i> , Fab.	R. Ben Lomond.
<i>blandina</i> , Fab.	R. Arran and Loch Doon.
<i>Satyrus egeria</i> , L.	F. Cadzow Castle and Ballochmyle Bridge.
<i>megæra</i> , L.	F. Ardrossan, Arran, and Monkton.
<i>semele</i> , L.	F. Erskine, Ardrossan, Arran, and Bute.
<i>janira</i> , L.	F. Cathcart and Milngavie.
<i>tithonus</i> , L.	R. Ayrshire.
<i>hyperanthus</i> , L.	F. East Kilbride, Bothwell, & Lochgoilhead.
<i>Chortobius davus</i> , Fab.	F. Bishopton Moss and Arran.
<i>pamphilus</i> , L.	F. Milngavie.
<i>Thecla rubi</i> , L.	F. Dumbartonshire and Bute.
<i>quercus</i> , L.	F. Luss, Helensburgh, and Monkton.
<i>Polyommatus phlæas</i> , L.	Common.

Lycæna agestis, W. V.
     alexis, Hub.
     alsus, Fab.
Syrichthus alveolus, Hub.
Thanaos tages, L.

Ayrshire.
 F. Possil and Duntocher.
 F. Ardrossan, Arran, and Troon.
 R. Heathy places.
 R. Near Glasgow and Troon.

Nocturni.

Smerinthus populi, L.
     tiliæ, L.
Acherontia atropos, L.
Sphinx convolvuli, L.
     ligustri, L.
Deilephila lineata, L.
     galii, W. V.
Chærocampa celerio, L.
     porcellus, L.
     elpenor, L.
Macroglossa stellatarum, L.
     fuciformis, L.
     bombylifomis, E.
Sesia culiciformis, L.
     bembeciformis, Hub.
     apiformis, L.
Cossus ligniperda, Fab.
Hepialus hectus, L.
     lupulinus, L.
     sylvinus, L.
     velleda, E.
     humuli, L.
Zygæna trifolii, E.
     filipendulæ, L.
Nola cristulalis, Hub.
Nudaria mundana, L.

Setina irrorella, L.
Lithosia mesomella, L.
     complanula, Bdv.
Euchelia Jacobææ, L.
Euthemonia Russula, L.
Chelonia plantaginis, L.
     caja, L.
Arctia fuliginosa, L.
     lubricipeda, L.
     menthastri, W. V.
     urticæ, E.
Liparis salicis, L.

F. Kelvinside, Langside, Ruchill, & Dunoon.
 R. Near Hamilton, 1859.
 R. "Cross of Renfrew" and Monkton.
 R. Near Paisley and Ayrshire.
 R. One specimen in the district.
 R. One specimen in the district.
 R. Larva at Monkton.
 R. One taken in a greenhouse at Hamilton, and in Ayrshire.
 R. Ayrshire.
     Clydesdale (*Scot. Nat.*).
 F. Ardentinnay and Troon.
 R. Near Paisley (?).
 R. Dunoon and Ayrshire.
 R. Near Garelochhead.
 F. St. Germains, Possil, and Ayrshire.
 R. Ayrshire.
 R. Near Troon.
 F. Cadder Wilderness, Langside, Mugdock Woods, and Ruchill.
 F. Cambuslang, Langside, Ruchill, and Cadder Wilderness.
 F. Near Glasgow, Gourrock, Dunoon, and in Ayrshire.
 F. Ruchill, Langside, & Cadder Wilderness.
 Common.
 R. Ayrshire.
 F. Troon.
 Ayrshire.
 F. Renfrew, Dunoon, Garelochhead, and Ardrossan.
     Clydesdale.
     Clydesdale.
     Clydesdale.
 R. Bute.
 R. Troon and Clober.
 F. Milngavie and Dundonald.
 Common.
 F. Eaglesham and Bute.
 F. Bute and Ayrshire.
 Common.
 R. One specimen on Kelvin near Glasgow.
 R. Ayrshire.

Orgyia fascelina, L.

antiqua, L.

Demas coryli, L.

Trichiura cratægi, L.

Pœcilocampa populi, L.

Eriogaster lanestris, L.

Bombyx rubi, L.

quercus, L.

Odonestis potatoria, L.

Saturnia carpinii, Bork.

F. Loch Long, Port Glasgow, Barrassie, and Barrachan Moss.

F. Cambuslang, Kirklee, East Kilbride, and Eaglesham.

F. In district and Rosemount.

R. Ayrshire.

F. Dunoon and Troon.

F. Various places on the Firth.

F. Kirkintilloch, Port-Glasgow, and Troon.

F. Port-Glasgow and Troon.

F. Bute and Dumbartonshire.

F. Balmore and Port-Glasgow.

Geometræ.

Epione apiciaria, W. V.

Rumia cratægata, L.

Venilia maculata, L.

Metrocampa margaritata, L.

Ellopiia fasciaria, L.

Selenia illunaria, Hub.

lunaria, W. V.

Odontopera bidentata, L.

Crocallis elinguaris, L.

Ennomos tiliaria, Hub.

angularis, W. V.

Himera pennaria, L.

Phigalia pilosaria, W. V.

Biston hirtaria, L.

Amphidasis betularia, L.

Cleora lichenaria, W. V.

Boarmia repandata, L.

rhomboidaria, W. V.

abietaria, W. V.

Gnophos obscurata, W. V.

Dasydia obfuscata, W. V.

Pseudopteryx cytisaria, W. V.

Geometra papilionaria, L.

Iodis lactearia, L.

Ephyra porata, L.

punctaria, L.

orbicularis, Hub.

pendularis, L.

Asthenia luteata, W. V.

candidata, W. V.

Acidalia scutulata, W. V.

bisetata, Bork.

trigeminata, Haw.

incanaria, Hub.

immutata, L.

F. Renfrew and Dunoon.

Common.

R. Yoker.

F. Possil and Kelvinside.

F. Cadder Wilderness, near Lanark, Ardentinn, and Bishopton.

F. Lanarkshire, &c.

R. Ayrshire.

F. Milngavie.

F. Possil, Langside, Ruchill, and Arran.

F. Near Ayr and Ardentinn.

R. Dunoon.

F. Dunoon, Ayrshire, and Glasgow.

F. Kenmuir and Renfrew.

In the district.

F. Possil and in Ayrshire.

F. Near Glasgow.

F. Cadder Wilderness and Dunoon.

F. Cumbrae.

R. Near Dumbarton.

F. Ardrossan.

F. Arran, Dunoon, and Dumbarton.

F. Luss and in Ayrshire.

F. Arran.

Near Glasgow (*Stn. Man.*).

F. Kilmun and Milngavie.

F. Dunoon, Renfrew, and Luss.

Blackston Wood.

F. Innellan, Luss, and in Ayrshire.

R. Ardentinn.

F. Milngavie and Lochgoilhead.

F. Milngavie and Kelvinside.

F. Renfrew and Milngavie.

Renfrew (*Stn. Man.*).

Ardrossan (*Stn. Man.*).

F. Ardrossan.

- Acidalia remutata*, Hub.
fumata, Steph.
aversata, L.
Cabera pusaria, L.
exanthemaria, Scop.
Macaria liturata, L.
Halia wavaria, L.
Panagra petraria, Hub.
Numeria pulveraria, L.
Scodonia belgiaria, Hub.
Fidonia atomaria, L.
pinaria, L.
Aspilates strigilaria, Hub.
Abraxas grossulariata, L.
ulmata, Fab.
Lomaspilis marginata, L.
Hybernia rupicapraria, W. V.
leucophearia, W. V.
aurantiaria, Hub.
progemmaria, Hub.
defoliaria, L.
Anisopteryx æscularia, W. V.
Cheimatobia brumata, L.
Oporabia dilutata, W. V.
Larentia didymata, L.
multistrigaria, Haw.
cæsiata, W. V.
salicata, Hub.
olivata, W. V.
pectinitaria, Fuess.
Emmelesia affinitata, Steph.
alchemillata, L.
albulata, W. V.
decolorata, Hub.
unifasciata, Haw.
blandiata, W. V.
Eupithecia pulchellata, Steph.
centaureata, W. V.
succenturiata, L.
plumbeolata, Haw.
pygmæata, Hub.
satyrata, Hub.
lariciata, Fab.
distinctata, Herr-Sch.
- Near Glasgow (*Stn. Man.*).
 F. Milngavie.
 F. Milngavie, Cambuslang, and Uddingston.
 F. Milngavie and Cadder Wilderness.
 F. Milngavie and Kenmuir.
 F. Ardentinnny and Ayrshire.
 F. Kirklee and West-end Park.
 F. Portincaple and Ardentinnny.
 F. Dunoon, Ardentinnny, and Gareloch.
 Near Glasgow (*Stn. Man.*).
 Common at Gleniffer Hills, Kilpatrick Hills, and Craigmaddie Moor.
 F. Possil, Cadder Wilderness, and Bishop-ton.
 F. Bishopton.
 Common.
 Ayrshire.
 Ayrshire and Mugdock Woods.
 F. In the district.
 F. In the district.
 F. Near Glasgow.
 F. Langside, Kelvinbanks at Botanic Gardens, and Cadder Wilderness.
 F. Near Glasgow and Ayrshire.
 F. Renfrew and Gourrock.
 Common.
 Common at Garscadden and Cadder Wilderness.
 Common.
 F. Cadder Wilderness.
 F. In the district.
 Dumbarton.
 Near Glasgow (*Stn. Man.*).
 Common at Cadder Wilderness and Milngavie.
 F. Cadder Wilderness and Milngavie.
 F. Cadder Wilderness, Milngavie, and Langside.
 F. Near Paisley.
 F. Kenmuir Bank, Renfrew, and Kelvin.
 Ardrossan (*Stn. Man.*).
 F. Dumbartonshire and Lochgoilhead.
 F. Dunoon and Ardentinnny.
 F. Barrachan Moss and Ardrossan.
 R. Ardrossan.
 R. Ayrshire.
 F. Possil Marsh and near Paisley.
 F. Cadder Wilderness.
 F. Cadder Wilderness.
 Ardrossan (*Stn. Man.*).

Eupithecia nanata, Hub.

vulgata, Haw.
absynthiata, L.
minutata, Hub.
assimilata, Dbl.
exiguata, Hub.
sobrinata, Hub.
togata, Hub.
pumilata, Hub.
rectangulata, L.

Lobophora lobulata, Hub.

Thera juniperata, L.
simulata, Hub.
variata, W. V.

firmata, Hub.

Ypsipetes ruberata, Frey.
impluviata, W. V.
elutata, W. V.

Melanthia rubiginata, W. V.

occellata, L.
Melanippe hastata, L.
tristata, L.
subtristata, Haw.
montanata, W. V.
galiata, W. V.
fluctuata, L.

Anticlea badiata, W. V.
derivata, W. V.

Coremia munitata, Hub.
propugnata, W. V.
ferrugata, L.
unidentaria, Haw.

Camptogramma bilineata, L.

Plibalapteryx lapidata, Hub.
lignata, Hub.

Cidaria psittacata, W. V.
miata, L.
corylata, Thunb.
russata, W. V.
immanata, Haw.

suffumata, W. V.

silacea, W. V.
prunata, L.
testata, L.
populata, Bork.
fulvata, Forst.

F. Gleniffer Hills, Kilpatrick Hills, and Craigmaddie.

Near Glasgow (*Stn. Man.*).

F. Kirklee.

F. Kirklee.

F. Kirklee.

F. Bothwell.

F. Clober.

R. One specimen at Possil.

F. Near Glasgow and Ardentinnny.

F. Ayrshire.

F. Gourock, Dunoon, and Ardentinnny.

Near Glasgow (*Stn. Man.*).

In the district.

Common at Cadder Wilderness and Bishop-ton.

F. Paisley Moss.

F. Eaglesham.

F. Carmyle, Port-Glasgow, East Kilbride.
 Common.

F. Cambuslang, Milngavie, Banks of Kelvin.

F. Gourock.

F. Luss, Ben Lomond, Arran, and Dunoon.

F. Cadder Wilderness and Cochno.

Common.

Common.

F. Cumbræ.

F. Cadder Wilderness and Milngavie.

F. Ayrshire.

F. Ardentinnny and in Ayrshire.

F. Spout of Ballagan, Luss, and Arran.

F. Renfrew and Port-Glasgow.

F. Renfrew, Clober, and Port-Glasgow.

F. Clober, Dougalston, and in Ayrshire.

Common.

One female near Dunoon, Sept. 19, 1857.
 Renfrewshire.

F. Innellan and Dunoon.

F. Dunoon and near Glasgow.

F. Port-Glasgow.

R. Langside.

Common at Cadder Wilderness, Langside, Milngavie, and Arran.

F. Kilpatrick Hills, Strathblane, Ardentinnny, and Gleniffer Glen.

F. Dunoon and Renfrew.

F. Dunoon and Bothwell.

Common.

F. Cadder Wilderness and Clober.

F. Possil, Strathblane, and Cathkin Hills.

Cidaria pyraliata, Bork.

dotata, L.

Pelurga comitata, L.

Eubolia cervinaria, W. V.

mensuraria, W. V.

palumbaria, W. V.

Carsia imbutata, Hub.

Anaitis plagiata, L.

Chesias spartiata, Fab.

obliquaria, W. V.

Tanagra chærophyllata, L.

F. Cadder Wilderness.

Near Paisley (*Stn. Man.*).

Monkton (*Stn. Man.*) and Barrachan Moss.

R. Ardrossan.

F. Possil and Cathkin Hills.

F. Clober and Gourock.

F. Dunoon.

Common in Bute, Gourock, Arran, and Ardrossan.

F. Kilmalcolm and near Glasgow.

F. Ayrshire.

Common at Mugdock, Bute, and Gourock.

Drepanulæ.

Platypteryx lacertula, Hub.

falcula, W. V.

Cilix spinula, W. V.

F. Mugdock Woods, Dunoon, and Ardentinn.

R. Dunoon and in Ayrshire.

F. Arran, Renfrew, and in Ayrshire.

Pseudo-Bombyces.

Dicranura furcula, L.

vinula, L.

Pygæa bucephala, L.

Clostera reclusa, W. V.

Ptilodontis palpina, L.

Notodonta camelina, L.

carmelita, E.

dictæa, L.

dictæiodes, E.

dromedarius, L.

tritophus, W. V.

ziczac, L.

trepida, Fab.

dodonæa, W. V.

Diloba cæruleocephala, L.

F. Near Glasgow, Paisley, and in Ayrshire.

F. Milngavie, West-end Park, Bothwell, Ardrossan, and Dunoon.

Common in the district.

F. Dunoon.

F. Ayrshire.

F. Possil and Sheepmont.

F. Ardentinn.

F. Dunoon, Ardentinn, and Gareloch.

F. Dunoon, Ardentinn, and Gareloch.

F. Port-Glasgow and in Ayrshire.

R. Renfrewshire — the second specimen taken in Britain.

F. East Kilbride.

R. Arrochar.

F. Gareloch, Luss, and Ardentinn.

F. Queen's Park and in Ayrshire.

Noctuæ.

Thyatira derasa, L.

batis, L.

Cymatophora duplaris, L.

diluta, W. V.

or, W. V.

flavicornis, L.

Bryophila perla, W. V.

Acronycta psi, L.

F. Gourock.

F. Langside, Dunoon, Renfrew, and Bute.

F. Kilmun and Lanark.

In the district.

F. Near Glasgow, and Gareloch.

F. Dunoon, near Glasgow, and Renfrew.

F. In the district and Ayrshire.

Common at Possil, Milngavie, and Carmyle.

- Acronycta leporina*, L. F. Dunoon, Kilmun, Ardentinnny, and in Ayrshire.
     rumicis, L. F. Gourrock and Port-Glasgow.
     menyanthidis, E. F. Dunoon.
     myricæ, Gn. R. Dunoon and in Ayrshire.
Leucania conigera, W. V. F. Ayrshire.
     turca, L. F. Newfield.
     lithargyria, Esp. Common at Dundonald.
     littoralis, Curt. F. Ayrshire.
     impura, Hub. F. Possil Marsh, Ardrossan, and Ardentinnny.
     pallens, L. F. Possil Marsh, Ardrossan, and Troon.
Nonagria fulva, Hub. F. Possil Marsh, Milngavie, and Langside.
Hydræcia nictitans, L. F. Dunoon and Ardrossan.
     petasitis, Dbl. F. Paw-Burn.
     micacea, E. F. Possil Marsh, Gourrock, Dunoon, and Ardrossan.
Axylia putris, L. F. Renfrew and Ayrshire.
Xylophasia rurea, Fab. Common.
     lithoxylea, W. V. F. Gourrock, Cadder Wilderness, and Arran.
     polyodon, L. Common.
Charæas graminis, L. F. Possil Marsh and Strathblane.
Luperina testacea, W. V. F. Ayrshire.
     dumerili, Dup. R. Arran.
Crymodes exulis, Lef. Clydesdale (*Scot. Nat.*).
Mamestra anceps, Hub. Clydesdale (*Scot. Nat.*).
     albicolon, Hub. Clydesdale (*Scot. Nat.*).
     furva, W. V. F. Ardrossan and in Ayrshire.
     brassicæ, L. Common.
     persicariæ, L. Clydesdale (*Scot. Nat.*).
Apamea basilinea, W. V. F. Lanarkshire and Ayrshire.
     gemina, Hub. F. Mugdock Woods, Renfrew, Cadder Wilderness, and Dunoon.
     unanimis, Hub. F. Dundonald.
     fibrosa, Hub. Clydesdale (*Scot. Nat.*).
     oculea, L. F. Possil Marsh, Langside, and in Ayrshire.
Miana strigilis, L. F. Renfrew, Gourrock, Dunoon, and Monkton.
     fasciuncula, Haw. Common.
     literosa, Haw. F. Cambuslang.
     furuncula, W. V. Renfrew and in Ayrshire.
     arcuosa, Haw. F. Ruchill and in Ayrshire.
Celæna Haworthii, Curt. F. Stepps and Craigmaddie.
Caradrina morpheus, Naturf. F. Ardrossan, Troon.
     blanda, W. V. Clydesdale (*Scot. Nat.*).
     cubicularis, W. V. Common.
Rusina tenebrosa, Hub. F. Ardentinnny, Dunoon, and in Ayrshire.
Agrotis vallisgera, W. V. F. Ardrossan and in Ayrshire.
     saucia, Hub. R. Troon.
     segetum, W. V. F. Dunoon and in Ayrshire.
     exclamationis, L. F. Dunoon, Gourrock, and in Ayrshire.

- Agrotis corticea*, W. V.
     ripæ, Hb.
     nigricans, L.
     tritici, L.
     aquilina, W. V.
     porphyrea, W. V.
     præcox, L.
     ravida, W. V.
     pyrophila, W. V.
     lucernea, L.
Triphæna janthina, W. V.
     fimbria, L.
         subsequa, Hb.
         orbona, Fab.
         pronuba, L.
Noctua glareosa, E.
     augur, Fab.
     pecta, L.
     c-nigrum, L.
     triangulum, Och.
     rhomboidea, Tr.
     brunnea, W. V.
     festiva, W. V.
     confua, Tr.
     dahlîi, Hub.
     rubi, Vieweg.
     umbrosa, Hub.
     baja, W. V.
     xanthographa, W. V.
Trachea piniperda, E.
Tæniocampa gothica, L.
     rubricosa, W. V.
     instabilis, W. V.
     stabilis, W. V.
     cruda, W. V.
Orthosia suspecta, Hub.
     lota, L.
         macilenta, Hub.
Anchocelis rufina, L.
     lunosa, Haw.
     litura, L.
Cerastis vacinii, L.
Scopelosoma satellitia, L.
Xanthia cerago, W. V.
     silago, Hub.
     ferruginea, W. V.
- F. Ayrshire.
 R. Troon.
 Common in Ayrshire.
 F. Ardrossan and in Ayrshire.
     Clydesdale (*Scot. Nat.*).
 F. Kilpatrick Hills and Clober.
 F. Monkton and Ardrossan.
 R. Monkton.
     Ayrshire.
     Clydesdale (*Scot. Nat.*).
 F. Renfrew, Ardrossan, Dunoon, and Monkton.
     F. Spout of Ballagan, Langside, and Ayrshire.
     F. Ayrshire.
     F. Clober, Possil Marsh, and Ardrossan.
     Common.
     F. Dunoon.
     F. Dunoon and in Ayrshire.
     Common.
     F. Cadder Wilderness.
     F. Lochgoil and Monkton.
     Clydesdale (*Scot. Nat.*).
     F. Possil Marsh and in Ayrshire.
     F. Ayrshire.
     Clydesdale (*Scot. Nat.*).
     Frequent in the district.
     Near Glasgow.
     Ardrossan.
     F. Dunoon and in Ayrshire.
     F. Possil, Ardrossan, and Dunoon.
     F. Paisley and Ayrshire.
     F. Possil.
     F. Tarbert, Clober, and Dundonald.
     Common.
     Common.
     Clydesdale (*Scot. Nat.*).
     Clydesdale (*Scot. Nat.*).
     F. Possil, Dunoon, Monkton, and Paisley Moss.
     F. Paisley, Dunoon, and in Ayrshire.
     F. Clober and Dunoon.
     Frequent in district, Troon.
     F. Langside, Clober, and in Ayrshire.
     F. Near Glasgow, Ardentinny, and Gareloch.
     F. Gareloch and in Ayrshire.
     F. Clober, Stepps, Bothwell, Dunoon, and Ayrshire.
     F. Cadder Wilderness, Clober, and St. Germains.
     F. Cadder Wilderness and Gourock.

- Cirrhoëdia xerampelina*, Hub.
Cosmia trapezina, L.
Dianthæcia carpophaga, Bork.
     capsincola, W. V.
     cucubali, W. V.
     conspersa, W. V.
Polia chi, L.
Epunda nigra, Haw.
     viminalis, Fab.
     lichenæa, Hb.
Miselia oxyacanthæ, L.
Agriopis aprilina, L.
Phlogophora meticulosa, L.
Euplexia lucipara, L.
Aplecta herbida, W. V.
     occulta, L.
     nebulosa, Tr.
     tincta, Bork.
     advena, W. V.
Hadena adusta, E.
     protea, W. V.
     glauca, Kleem.
     dentina, W. V.
     suasa, W. V.
     oleracea, L.
     genistæ, Bork.
     pisi, L.
     thalassina, Naturf.
     contigua, W. V.
     rectilinea, Esp.
Xylocampa lithoriza, Bork.
Cloantha solidaginis, Hub.
Calocampa vetusta, Hub.
     exoleta, L.
Cucullia chamomillæ, W. V.
     umbratica, L.
Heliothis peltigera, W. V.
Anarta melanopa, Thunb.
     myrtilli, L.
Micra ostrina, Hub.
Abrostola urticæ, Hub.
     triplasia, L.
Plusia chrysitis, L.
     bractea, W. V.
     festuæ, L.
     iota, L.
- R. Garelochhead.
 Common at Cadder Wilderness, Clober,
     Langside, and Fullarton.
 Clydesdale (*Scot. Nat.*).
 Lanarkshire, Ayrshire.
 F. Renfrew and Dundonald.
 F. Ardrossan and Dunoon.
 F. Dunoon and Monkton.
 Clydesdale (*Scot. Nat.*).
 Dunoon.
 R. Fullarton.
 F. Near Glasgow, Dunoon, Gareloch, and
     in Ayrshire.
 F. Gareloch, Dunoon, Lanark, and in Ayrshire.
 Common at Ruchill and in Ayrshire.
 F. Renfrew, Dunoon, Bute, and in Ayrshire.
 F. Ardentinn, Kilmun, and in Ayrshire.
 F. Near Paisley and in Ayrshire.
 F. Dunoon and Ardentinn.
 F. Dumbartonshire and Ardentinn.
 R. Ayrshire.
 F. Cadder, Gourrock, and Monkton.
 F. Adomton Wood.
 F. Dunoon and Ardentinn.
 F. Renfrew, Dunoon, and Ardrossan.
 Ayrshire.
 Common in Ayrshire.
 "One near Paisley," and at Troon.
 F. Ruchill and in Ayrshire.
 F. Glasgow and Ardrossan.
 F. Bute.
 F. Ardentinn.
 F. Ayrshire.
 R. Near Dunoon.
 F. Near Glasgow and Gourrock.
 F. Near Glasgow and Gourrock.
 F. Ayrshire.
 F. Near Glasgow, Dunoon, and in Ayrshire.
 Ayrshire.
 Clydesdale (*Scot. Nat.*).
 F. Eaglesham Moor, Barrachan Moss, and
     Ayrshire.
 One specimen taken near Monkton by
     Mrs. Duncan, June, 1858.
 F. Dunoon, Ayrshire, and Arran.
 Ayrshire.
 F. Kirklee, Ruchill, and Cambuslang Glen.
 R. Dunoon, Lanarkshire, and Troon.
 F. Ruchill and Paisley.
 F. Ruchill, Gourrock, Cambuslang Glen,
     and in Ayrshire.

Plusia v-aureum, Gn.

gamma, L.

interrogationis, Hub.

Gonoptera libatrix, L.

Amphipyra tragopogonis, L.

Mania typica, L.

maura, L.

Stilbia anomala, Haw.

Euclidia mi, L.

glyphica, L.

Phytometra ænea, W. V.

F. St. Germain's, Cambuslang Glen, Uddingston, and Monkton.

Common.

"Not uncommon."

F. Gourock and in Ayrshire.

F. Near Glasgow and in Ayrshire.

F. Possil, Dunoon, Ardrossan, and Arran.

F. Langside, Paisley, and in Ayrshire.

F. Rothesay, Arran, and Dundonald.

F. Dunoon, Ardentinn, Dundonald, and Dungoyne.

F. Ardentinn, Lanark, and in Ayrshire.

F. Clober.

Deltoides.

Hypena proboscidalis, L.

Rivula sericealis, W. V.

Hypenodes costætrigalis, Steph.

Herminia tarsipennalis, Tr.

Common.

F. Lochgoil and Arran.

Lochgoilhead.

Ayrshire.

Pyralides.

Pyralis farinalis, L.

Aglossa pingualis, L.

Pyrausta purpuralis, L.

ostrinalis, Hub.

Rhodaria sanguinalis, L.

Herbula cespitalis, W. V.

Ennychia cingulalis, L.

Cataclysta lemnalis, L.

Hydrocampa nymphaealis, L.

stagnalis, Don.

Botys fuscalis, W. V.

terrealis, Tr.

urticalis, L.

Ebulea crocealis, Tr.

Pionea forficalis, L.

Scopula alpinalis, W. V.

lutealis, Haw.

olivialis, W. V.

prunalis, W. V.

ferrugalis, Hub.

decepcitalis, H. S.

Stenopteryx hybridalis, Hub.

Scoparia ambigualis, Tr.

cembraealis, Gn.

dubitalis, Hb.

muralis, Gn.

sp.

lineolalis, Curt.

Common near grain stores in Glasgow.

F. Glasgow and Arran.

F. Arran.

"Hills Banks of the Clyde."

F. Troon.

F. Ardrossan and Arran.

"Grassy slopes in Dumbartonshire."

Common at Possil Marsh.

Common at Possil Marsh and near Paisley.

Common at Possil Marsh and near Paisley.

F. Near Paisley, Ardrossan, and Clober.

R. Dunoon.

R. Monkton.

Rothesay.

F. Kirklee, Ardrossan, and Dunoon.

F. Luss, Ardentinn.

Common at Possilpark and Cathcart.

R. Kenmuir Bank.

F. Kenmuir Bank and Dunoon.

R. Ardrossan.

Ardentinn.

F. Dunoon, Ardrossan, and Luss.

Common.

One specimen in Dalhousie St., Glasgow.

Common.

F. Cadder Wilderness, Milngavie, and Langside.

One specimen near Milngavie.

Ardrossan.

Scoparia cratægalis, Hub.

angustealis, Curt.

atomalis, Dbl.

gracilalis, Dbl.

F. Cadder Wilderness, Milngavie, and Ardrossan.

F. Milngavie and Ardrossan.

R. Duntocher.

F. Milngavie.

Crambites.

Crambus pratellus, Clk.

ericellus, Hub.

pascuellus, L.

margaritellus, Hub.

pinitellus, Hub.

tristellus, W. V.

geniculeus, Haw.

culmellus, L.

hortuellus, Hub.

Ephestia ficella, Dougl.

Melia sociella, L.

Common.

R. Milngavie.

Common.

F. Bishopton Moss and Dunoon.

F. Possil, Cadder Wilderness, and Dumbartonshire.

Common.

Ardrossan.

Common.

F. Kirklee and Ardrossan.

Fruit shops, Glasgow.

Near Lamlash.

Tortrices.

Halias prasinana, L.

Sarrothripa revayana, W. V.

Tortrix pyrastrana, Hub.

xylosteara, L.

rosana, L.

heparana, W. V.

ribeana, Hub.

corylana, Fab.

semialbana, Gn.

costana, W. V.

viburnana, W. V.

icterana, Frol.

viridana, L.

ministrana, L.

adjunctana, Tr.

Amphysa gerningana, W. V.

Leptogramma literana, L.

Peronea favillaceana, Hub.

mixtana, Hub.

comariana, Z.

schalleriana, L.

Caledoniana, Bent.

variégana, W. V.

hastiana, L.

ferrugana, W. V.

tristana, Hub.

aspersana, Hub.

Not uncommon.

F. Ben Lomond, Dunoon, and Ardentinnny. Ardrossan.

F. Possil, Langside, and Milngavie.

F. Possil and Langside.

F. Possil, Langside, and Milngavie.

F. Possil, Langside, and Milngavie.

Near Glasgow.

F. Ardrossan, Lochgoilhead.

F. Langside.

F. Clober.

F. Langside, Kirklee, and Ardrossan.

Common.

F. Cadder Wilderness and Clober.

Ardrossan and Cumbræes.

F. Milngavie.

Renfrewshire.

Common at Cadder Wilderness.

F. Milngavie and Garelochhead.

F. Milngavie, Cadder Wilderness.

F. Milngavie, Cadder Wilderness, and Langside.

F. Milngavie and Dunoon.

Common.

F. Milngavie.

F. Langside, Cadder Wilderness, and Milngavie.

F. Milngavie.

F. Milngavie, Dunoon, and Carmichael, near Lanark.

- Teras caudana*, Fab. Common.
contaminana, Hub. Common.
Dictyopteryx lœflingiana, L. F. Milngavie, Dunoon, and Monkton.
holmiana, L. F. Milngavie and Cadder Wilderness.
bergmanniana, L. F. Possil and Langside.
Argyrotoza conwayana, Fab. F. Milngavie, Dunoon, and Cadder Wilderness.
Ptycholoma lecheana, L. F. Langside and Bothwell.
Penthina betulætana, Haw. Near Glasgow.
prælongana, Gn. F. Milngavie.
cynosbana, L. F. Near Glasgow and Dunoon.
marginana, Haw. F. Near Glasgow, near Dunoon.
Spilonota neglectana, Dup. Hillhead.
suffusana, Kollar. F. Near Glasgow and Luss.
rosæcolana, Dbl. Botanic Gardens.
roborana, W. V. Ardrossan.
Pardia tripunctana, W. V. F. Possil and Langside.
Aspis udmanniana, L. F. Ardrossan.
Sericoris cespitana, Hub. Near Glasgow.
conchana, Hub. Luss.
lacunana, W. V. F. Possil Marsh.
urticana, Hub. Luss.
micana, Hub. Carmichael and Clober.
Mixodia schulziana, Fab. F. Milngavie and Kilpatrick Hills.
palustrana, Lienic. R. Milngavie.
Orthotænia antiquana, Hub. F. Near Glasgow, Dunoon, and Ardrossan.
striana, W. V. Near Glasgow.
Cnephasia lepidana, Curt. F. Craigmaddie and Garelochhead.
musculana, Hub. F. Near Cadder House.
Sciaphila subjectana, Gn. F. Cadder Wilderness, Langside, and Ardrossan.
virgaureana, Tr. F. Possil and Langside.
hybridana, Hub. Ardrossan.
octomaculana, Haw. F. Cadder Wilderness, Langside, and Ardrossan.
Capua ochraceana, Steph. F. Ardentinnay and near Milngavie.
Clepsis rusticana, Tr. Common in Marshes.
Bactra lanceolana, Hub. Common at Possil Marsh and Milngavie.
furfurana, Haw. Kilmun.
Phoxopteryx unguicana, L. F. Near Milngavie.
biarcuana, Steph. One at Kilmun by Mr. Somerville.
myrtillana, Tr. On the hills near Bishopton.
lundana, Fab. F. Possil.
derasana, Hub. In bogs.
mitterbacheriana. R. Near Glasgow.
Grapholitha paykulliana, Fab. F. Cadder Wilderness.
nisana, L. F. Dunoon.
nigromaculana, Haw. F. Cadder Wilderness, Ardrossan, and Arran.
campoliliana, W. V. F. Possil, Bishopton, and Dunoon.
trimaculana, Don. Common.

- Grapholitha penkleriana*, W. V. f. Possil and Milngavie.
                   nævana, Hub. f. Near Glasgow and Luss.
                   geminana, Steph. f. Near Glasgow.
Phlæodes tetraquetana, Haw. f. Cadder Wilderness and near Milngavie.
                   immundana, Fisch. Paisley Canal on Alders.
Hypermecia angustana, Hub. f. Near Paisley, Milngavie, Dunoon, and Luss.
Batodes angustiorana, Haw. Near Glasgow.
Pœdisca bilunana, Haw. Near Glasgow.
                   corticana, W. V. Common at Cadder Wilderness and Langside.
                   ophthalmicana, Hub. f. Near Milngavie and Paisley.
                   occultana, Dougl. f. Cadder Wilderness, Langside.
                   solandriana, L. Common.
                   semifuscana, Haw. f. Langside and Cadder Wilderness.
Ephippiphora bimaculana, Don. Common at Milngavie, Cadder Wilderness, Gourock.
                   scutulana, W. V. f. Dunoon and Ardrrossan.
                   brunnichiana, W. V. f. Possil, Sighthill, and Dunoon.
                   trigeminana, Steph. f. Near Glasgow.
Olindia ulmana, Hub. Gleniffer Glen and Ardentinnny.
Semasia wœberana, W. V. Bothwell.
Coccyx strobilana, L. Ardrrossan.
                   splendidulana, Gn. Luss.
                   argyrana, Hub. f. Kenmuir Bank, Milngavie, and Cadder Wilderness.
                   hyrciniana, Uslar. f. Cadder Wilderness.
Heusimene fimbriana, Steph. "Near Glasgow" (J. Gray).
Pamplusia monticolona, Mann. f. Milngavie, Dunoon, Tintock Hill, and Luss.
Carpocapsa pomonana, L. In Glasgow.
Opadia funebrana, Tr. In Glasgow.
Endopisa pisana, Gn. Paisley Moss.
Stigmonota coniferana, Ratz. f. Bishopton Moss.
                   perlepidana, Haw. f. Near Glasgow and near Paisley.
                   redimitana, Gn. Near Haggs Castle.
                   germarana, Hub. Dunoon.
Dicrorampha petverella, L. f. Possil Marsh.
                   plumbana, Scop. f. Possil Marsh and Milngavie.
                   plumbagana, Tr. Near Glasgow.
                   herbosana, Barrett. f. Possil Marsh.
                   acuminatana, Zell. Ardrrossan.
Pyrodes rheediana, L. Near Glasgow and Paisley.
Catoptria ulicetana, Haw. Common.
                   scopoliana, Haw. f. Kirklee.
                   hohenwarthiana, S. V. f. Kirklee, Ardrrossan, and Dunoon.
                   modestana, H. S. Luss.
Trycheris mediana, W. V. f. Possil Marsh, Milngavie, Renfrewshire.
Choreutes scintillulana, Hub. f. Milngavie and Luss.
Xylopoda fabricana, L. Common.
Lobesia reliquana, Hub. Dunoon and Ardentinnny.

- Eupoecilia nana*, Haw. F. Luss and Arran.
dubitana, Hub. F. Paisley and Possil.
altricapitana, Steph. R. Ardrossan and Possil.
angustana, Hub. Common at Possil Marsh and Milngavie.
ciliella, Hb. F. Near Milngavie.
Xanthosetia hamana, L. F. Dunoon, Ardrossan, and near Glasgow.
Chrosis tesserana, W. V. Dunoon.
Argyrolepis baumanniana, W. V. Dunoon.
badiana, Hub. F. Near Glasgow and Dunoon.
cnicana, Dbl. F. Near Milngavie.
Cochylis Smeathmanniana, Fab. R. Possil Marsh and Ardrossan.
stramineana, Haw. F. Ruchill, Dunoon, Possil Marsh, and
Ardrossan.
Aphelia pratana, Hub. Common at Milngavie, Barrachan Moss,
Dunoon, and Ardrossan.
Tortricodes hyemana, Hub. F. Cadder Wilderness.
- Tineinæ.**
- Diurna fagella*, W. V. Common.
Psyche roboricollella, Br. One specimen at St. Germain's Loch.
Ochsenheimeria bisontella, Lien. F. Near Milngavie and Cadder Wilderness.
Scardia cloacella, Haw. Common.
Tinea rusticella, Hub. F. Cadder Wilderness.
biselliella, Hemm. Common in houses in Glasgow.
bistrigella, Haw. F. Dargavel and Langside.
perochracella, Dbl. R. Ruchill.
Lampronia quadripunctella, Fab. Near Glasgow.
prælatella, W. V. R. Near Milngavie.
rubiella, Bj. F. Cadder Wilderness, Bishopton, and
Milngavie.
Incuvaria masculella, W. V. F. Kenmuir Bank and Cadder Wilderness.
Micropteryx calthella, L. F. Langside and Possil.
seppella, Fab. F. Langside.
allionella, Fab. F. Cadder Wilderness and Clober.
purpurella, Steph. Near Glasgow.
unimaculella, Zett. R. Langside.
subpurpurella, Haw. R. Langside.
Nemophora swammerdamella, L. F. Cadder Wilderness, Milngavie, Lang-
side.
schwarziella, Zell. F. Cadder Wilderness.
Adela rufimitrella, Scop. R. Possil Marsh.
Swammerdamia cæsiella, Hub. Near Glasgow.
griseocapitella, Stn. Common.
Pepilla curtisella, Don. F. Kirklee, Clyde Bank, and Rutherglen.
Plutella xylostella, L. Common.
annuletella, Curt. Near Glasgow.
dalella, Stn. F. Near Milngavie.
Cerostoma vittella, L. Near Glasgow.
radiatella, Don. Common at Cadder Wilderness, Milngavie,
and Langside.
costella, Fab. Near Glasgow.

- Harpiteryx harpella*, W. V. F. Cadder Wilderness and Mugdock Woods.
Depressaria costosella, Haw. F. Milngavie.
     applanella, Fab. F. Cadder Wilderness and Langside.
     pimpinella, Zell. Possil.
     albipunctella, Hub. F. Cadder Wilderness.
     heraciella, De Geer. Common.
Gelechia ericetella, Hub. Common.
     terrella, W. V. F. Possil.
     expolitella, Dougl. F. Possil.
     proximella, Hub. F. Langside, Milngavie, and Cadder Wilderness.
     notatella, Hub. Near Glasgow.
     dodecella, L. F. Possil.
     tenebrella, Hub. R. Durrochston Dam.
     cerealella, Oliv. Near Glasgow (*Stn. Man.*).
Chelaria conscriptella, Hub. Common.
Dasycera sulphurella, Fab. F. West-end Park and Possil.
Æcophora pseudo-spretella, Stn. Common.
Endrosis fenestrella, Scop. Common.
Butalis torquatella, L. F. Durrochston Dam, Bishopton Moss,
     Milngavie, and Kilmun (*Stn. Man.*).
Glyphipteryx tharsonella, Scop. Common.
     haworthella, Steph. F. Craigmaddie.
     fischeriella, Zell. Langside.
Argyresthia semitestacella, Curt. Near Glasgow.
     spiniella, Zell. F. Langside and Cadder Wilderness.
     albistriella, Haw. Possil Marsh.
     retinella, Zell. Common.
     curvella, L. Common.
     gædartaella, L. Common.
     brockeella, Hub. Common.
Ocnerostoma pinariella, Zell. F. Possil and Kirklee.
Gracillaria swederella, Thunb. Common.
     elongella, L. F. Milngavie and Gourock.
     syringella, Fab. Langside.
Ornix betulævorella, Dbl. Milngavie.
     scoticella, Stn. F. Cadder Wilderness.
     loganella, Stn. Luss (*Stn. Man.*).
Coleophora albicostella, Haw. Cadder Wilderness.
     tengstromella, Dbl. Cadder Wilderness.
     nigricella, Steph. Near Glasgow.
     fuscedinella, Zell. Kirklee.
     gryphipennella, Bouche. Cadder Wilderness.
Laverna paludicolella, Dbl. Langside.
Chrysoclista flavicapitella, Haw. One specimen at Ruchill.
Chrysocoris festaliella, Hub. Frequent in Cadder Wilderness.
Elachista apicipunctella, Stn. F. Langside.
     albifrontella, Hub. F. Langside and Cadder Wilderness.
     flavicomella, Stn. R. Two specimens near Milngavie.
     kilmunella, Stn. Common.
     nigrella, Hub. F. Kenmuir Bank.

<i>Elachista subobscura</i> , Dbl.	Near Glasgow.
<i>zonariella</i> , Teng.	Near Glasgow, Renfrew (<i>Stn. Man.</i>).
<i>rhyncosporella</i> , Stn.	F. Bishopton.
<i>triatomella</i> , Haw.	Near Glasgow.
<i>cygnipennella</i> , Hub.	Common.
<i>Lithocolletis irradiella</i> .	Renfrew (<i>Stn. Man.</i>).
<i>vacciniella</i> , Scott.	F. Cadder Wilderness.
<i>pomifoliella</i> , Zell.	Common.
<i>faginella</i> , Mann.	Cadder Wilderness and Langside.
<i>ulmifoliella</i> , Hub.	Possil.
<i>spinoella</i> , Dup.	Common at Cadder Wilderness.
<i>quercifoliella</i> , Fisch.	Common at Cadder Wilderness, Langside, and Carmyle.
<i>alnifoliella</i> , Hub.	Near Glasgow.
<i>heegeriella</i> , Zell.	F. Cadder Wilderness.
<i>cramerella</i> , Fab.	Frequent at Cadder Wilderness and Lang- side.
<i>emberizæpennella</i> , Bouch.	Langside.
<i>Lyonetia clerckella</i> , L.	Gourock.
<i>Nepticula cryptella</i> , Frey.	Langside.
<i>flosactella</i> , Haw.	F. Langside and Kenmuir Bank.
<i>salicivorella</i> , Dbl.	Near Glasgow.
<i>argentipedella</i> , Zell.	Common at Cadder Wilderness, Langside, and Milngavie.
<i>angulifasciella</i> , Stn.	Bishopton.
<i>gratiosella</i> , Stn.	Near Glasgow.

Pterophori.

<i>Pterophori trigonodactylus</i> , Haw.	Common.
<i>punctidactylus</i> , Steph.	Dunoon.
<i>bipunctidactylus</i> , Haw.	Common at Possil Marsh and near Miln- gavie.
<i>pterodactylus</i> , L.	Near Glasgow, Ardrossan.
<i>tetradactylus</i> , L.	Renfrewshire.
<i>Alucita polydactyla</i> , Hub.	Near Glasgow, Dunoon, and Bothwell.

J. J. KING.

Class CRUSTACEA.

Ostracoda.

Potamocypris fulva, Brady.	R. Langbank, Cumbrae.
Paracypris polita, Sars.	R. Bute, Cumbrae, Loch Long.
Pontocypris mytiloides, Norman.	Frequent.
trigonella, Sars.	Frequent.
Argillœcea cylindrica, Sars.	R. Campbeltown, Inverary, Largs.
Bairdia inflata, Norman.	R. Lamash, Cumbrae.
Cythere lutea, Mull.	Common.
viridis, Mull.	Common.
pellucida, Baird.	Common.
castanea, Sars.	Frequent.
porcellanea, Brady.	Frequent.
Macallana, Brady & R.	R. Cumbrae, Roseneath.
tenera, Brady.	Common.
crispata.	Frequent.
badia, Norman.	R. Bute, Cumbrae.
rubida, Brady.	R. Cumbrae.
albo-maculata, Baird.	Frequent.
convexa, Baird.	Frequent.
cuneiformis, Brady.	Frequent.
limicola, Norman.	R. Girvan.
tuberculata, Sars.	Common.
concinna, Jones.	Frequent.
angulata, Sars.	Common.
emarginata, Sars.	R. Inverary.
finmarchica, Sars.	R. Inverary.
pulchella, Brady.	Frequent.
Robertsoni, Brady.	Frequent.
villosa, Sars.	Common.
laticarina, Brady.	R. Fintry Bay, Cumbrae.
quadridentata, Baird.	Frequent.
emaciata, Brady.	Frequent.
Dunelmensis, Norman.	Frequent.
Whiteii, Baird.	R. Bute, Campbeltown.
antiquata, Baird.	Common.
Jonesii, Baird.	Common.
gibbosa, B. & R.	R. Tarbert, Cumbrae, Greenock.
Cytheridea papillosa, Bosquet.	Common.
punctillata, Brady.	Common.
elongata, Brady.	Frequent.
subflavescens, Brady.	R. Rothesay, Cumbrae.
torosa, Jones.	R. Greenock, Port-Glasgow, Langbank.
Encythere declivis, Norman.	R. Ardrossan, Bute, Cumbrae, Roseneath.
argus, Sars.	Common.
Krithe Bartonensis, Jones.	Common.
Loxoconcha impressa, Baird.	Common.
granulata, Sars.	Frequent.

<i>Loxoconcha tamarindus</i> , Jones,	Common.
<i>guttata</i> , Norman.	Common.
<i>multiflora</i> , Norman.	Common.
<i>pusilla</i> , Brady & R.	R. Cumbræ, Greenock.
<i>fragilis</i> , Sars.	R. Greenock, Port-Glasgow.
<i>Xestoleberis aurantia</i> , Baird.	R. Kames Bay, Cumbræ.
<i>depressa</i> , Sars.	Common.
<i>Cytherura nigrescens</i> , Baird.	Common.
<i>angulata</i> , Brady.	Common.
<i>striata</i> , Sars.	Frequent.
<i>lineata</i> , Brady.	R. Ferryhouse, Cumbræ.
<i>cuneata</i> , Brady.	Frequent.
<i>Sarsii</i> , Brady.	Frequent.
<i>similis</i> , Sars.	R. Loch Ryan, Inverary, Bute, Cumbræ.
<i>undata</i> , Sars.	Common.
<i>producta</i> , Brady.	R. Girvan, Rothesay, Cumbræ.
<i>Robertsoni</i> , Brady.	R. Loch Ryan, Greenock, Port-Glasgow.
<i>gibba</i> , Mull.	Frequent.
<i>cornuta</i> , Brady.	Frequent.
<i>acuticostata</i> , Brady.	Frequent.
<i>clathrata</i> , Sars.	R. Callum's Bay, Bute.
<i>cellulosa</i> , Norman.	Common.
<i>flavescens</i> , Brady.	Common.
<i>Cytheropteron latissimum</i> , Norman.	Common.
<i>nodosum</i> , Brady.	Frequent.
<i>punctatum</i> , Brady.	R. Girvan, Loch Ridon, Cumbræ, Inverkip.
<i>alatum</i> , Sars.	Frequent.
<i>angulatum</i> , B. & R.	R. Bute, Cumbræ, Roseneath.
<i>Bythocythere simplex</i> , Norman.	Frequent.
<i>constricta</i> , Sars.	Frequent.
<i>turgida</i> , Sars.	Frequent.
<i>Pseudocythere caudata</i> , Sars.	Frequent.
<i>Cytherideis subulata</i> , Brady.	R. Ardrossan, Bute, Cumbræ.
<i>Sclerochilus contortus</i> , Norman.	Common.
<i>Xiphichilus tenuissima</i> , Norman.	Frequent.
<i>Paradoxostoma variabile</i> , Baird.	Common.
<i>abbreviatum</i> , Sars.	Common.
<i>ensiforme</i> , Brady.	Frequent.
<i>flexuosum</i> , Brady.	Frequent.
<i>hibernicum</i> , Brady.	R. Campbeltown, Arran, Bute, Cumbræ.
<i>Fischerii</i> , Sars.	Frequent.
<i>pulchellum</i> , Sars.	R. Loch Ryan, Arran, Ardrossan, Cumbræ, Lochgail.
<i>arcuatum</i> , B. C. & R.	R. Arran, Bute, Cumbræ.
<i>obliquum</i> , Sars.	R. Loch Ryan, Arran, Bute, Cumbræ.
<i>orcadense</i> , B. & R.	R. Glen Sannox Bay, Arran.
<i>Philomedes interpunctata</i> , Baird.	Frequent.
<i>Asterope Mariae</i> , Baird.	Frequent.
<i>teres</i> , Norman.	R. Arran, Bute, Cumbræ.
<i>Polycope orbicularis</i> .	Common.

MOLLUSCA—LAND AND FRESH WATER.

The arrangement and nomenclature of Jeffrey's *British Conchology* are followed. The area included is Lower Clydesdale. The following published district lists have been consulted:—A list of land and fresh water Mollusca in Landsborough's *Natural History of Arran, Ailsa Craig, and Cumbraes*, 1852; "On the Land and Fresh Water Mollusca found within Ten Miles round Glasgow," by John Dougall in *Proc. Nat. Hist. Soc. Glasgow*, vol. i.; "On the Distribution of the Helicidæ in Bute and in the Vicinity of Largs," by William Haddin in *Proc. Nat. Hist. Soc. Glasgow*, vol. i.

Order Lamellibranchiata.

<i>Sphærium corneum</i> , L.	Common.
lacustre, Müll.	Possil Marsh and the Forth and Clyde Canal at Firhill. Possibly introduced.
<i>Pisidium amnicum</i> , Müll.	River Clyde above Rutherglen Bridge.
fontinale, Drap.	Possil Marsh and a ditch between Frankfield and Hogganfield.
var. <i>cinerea</i> , Alder.	Possil Marsh, Pond near Bishopbriggs.
pusillum, Gmelin.	Possil Marsh, pool in the vicinity of the Cloch, and ditch near Mugdock Castle.
var. <i>obtusalis</i> , Pfeiff.	Arran.
nitidum, Jenyns.	Frankfield Loch.
<i>Unio margaritifera</i> , L.	River Clyde at Cambuslang.
<i>Anodonta cygnea</i> , L.	Paisley Canal; empty shells in Bardowie Loch, River Cart at Cardonald Mills, and River Clyde above Cambuslang.
<i>Dreissena polymorpha</i> , Pallas.	Forth and Clyde Canal, common; not native.

Order Pectinibranchiata.

<i>Bythinia tentaculata</i> , L.	F. Possil Marsh, St. Germain's Loch, Forth and Clyde Canal, Paisley Canal.
<i>Valvata piscinalis</i> , Müll.	F. Paisley Canal, Forth and Clyde Canal at Dalmuir, and Possil Marsh.
cristata, Müll.	Possil Marsh and Forth and Clyde Canal at Firhill.

Order Pulmonobranchiata.

<i>Planorbis nitidus</i> , Müll.	Forth and Clyde Canal at Firhill.
nautilus, L.	Arran.
albus, Müll.	Common.
<i>spirorbis</i> , Müll.	Small Marsh on Rutherglen Road, Bishop Loch, pool near Inverkip. Arran.
contortus, L.	Pond near Robroyston and Frankfield Loch. Arran.

- Physa fontinalis*, L. Common.
Limnæa peregra, Müll. Common.
     var. *ovata*, Drap. Common with type.
         auricularia, L. Monkland Canal. Introduced (?).
         stagnalis, L. Possil Marsh. Introduced.
         palustris, Müll. f. Possil Marsh, Bardowie Loch and Frankfield Loch. Arran.
             truncatula, Müll. Common.
             glabra, Müll. Frankfield Loch. Introduced (?).
Ancylus fluviatilis, Müll. Common in running streams.
     lacustris, L. Possil Marsh, Bishop Loch, Forth and Clyde Canal at Old Kilpatrick.
Arion ater, L. Common.
     hortensis, Fér. Common. The var. *flava* equally common.
Limax gagates, Drap. Said to have been found on the Cumbrae.
     agrestis, L. Common.
     lævis, Müll. f. Possil, Robroyston, Baldernock, Eaglesham, and Kilsyth. A variety of *L. agrestis* (?).
         arborum, Bouch-Ch. Common.
         maximus, L. Common.
Succinea putris, L. f. Possil Marsh, Gorbals Gravitation Waterworks, and old lade, Dalmuir. Bute and Arran.
     oblonga, Drap. "Mr. Kenyon is said to have found it near Glasgow" (Jeffreys).
Vitrina pellucida, Müll. Common.
Zonites cellarius, Müll. Common.
     allarius, Müll. Common.
     nitidulus, Drap. Common.
     purus, Alder. Common.
     var. *margaritacea*, Jeff. The Cloch.
         radiatulus, Alder. Common.
         nitidus, Müll. Bute.
         excavatus, Bean. Cumbernauld Glen. Bute.
         crystallinus, Müll. Common.
         fulvus, Müll. Common.
Helix lamellata, Jeff. Calderwood and Auchentorlie Glens. Bute.
     aculeata, Müll. Calderwood and Auchentorlie Glens. Bute.
     aspersa, Müll. Cathcart Castle; common all along coast line of Firth and Islands.
         nemoralis, L. Common.
     var. *hortensis*, Müll. Common.
         arbustorum, L. Common.
         rufescens, Penn. Bowling and Largs. Bute and Arran.
             hispidula, L. Introduced (?).
             f. Kenmuir Bank, quarries near Barrmill, lime-quarries East Kilbride, Busby, &c., and the Spout of Ballagan; Largs and Bute, "common everywhere."
             Quarries near Barrmill.
     var. *subrufa*, Jeff.

Helix sericea, Müll.
fusca, Mont.

caperata, Mont.

ericetorum, Müll.
rotundata, Müll.
pygmæa, Drap.
pulchella, Müll.

Bulimus acutus, Müll.
obscurus, Müll.

Pupa ringens, Jeff.
var. *pallida*, Jeff.
umbilicata, Drap.
marginata, Drap.

Vertigo antivertigo, Drap.
pygmæa, Drap.
edentula, Drap.

Balia perversa, L.

Clausilia rugosa, Drap.
Cochlicopa lubrica, Müll.
Carychium minimum, Müll.
Acme lineata, Drap.

Largs.

F. Kenmuir Bank, West Kilpatrick Hills,
Auchentorlie Glen, hills behind Green-
ock, near the Cloch and Largs. Bute
and Arran.

Lime-quarries, East Kilbride, and quarries
near Barrmill; coast, generally distri-
buted. Bute and Arran.

St. Ninian's Bay, Bute.

Common.

Near Baldernock and Loch Lomond.

Lime-quarries, North Hill, Campsie. Bute.

Very common on the sandhills at Troon.

Bothwell old Castle, Kenmuir Bank, and
Auchentorlie Glen.

The Cloch and Largs. Bute.

The Cloch.

Common.

Fairlie.

Bute and Arran.

Hairmyres, East Kilbride, Largs. Bute.

Near Milngavie. Bute.

F. Kilsyth Glen, Campsie Glen, Spout of
Ballagan, Auchentorlie Glen, Largs.
Bute and Arran.

Common.

Common.

Common.

Lanarkshire (Jeffreys).

FRANCIS G. BINNIE.

MOLLUSCA.—MARINE.

In the list of Mollusca the frequency is not stated. The Cumbræ is mentioned whenever the species occurs there, as it is the principal ground which the compiler has worked.

Class BRACHIOPODA.

<i>Terebratula caput-serpentis</i> , L.	Oban, Lochfyne.
<i>Crania anomala</i> , Mal.	Oban, Cumbræ.

Class CONCHIFERA.

<i>Anomia ephippium</i> , L.	Lochryan.
<i>Ostrea edulis</i> , L.	Cumbræ, Innellan.
<i>Pecten pusio</i> , Penn.	Oban, Cumbræ.
<i>varius</i> , L.	Cumbræ.
<i>var. niveus</i> .	Cumbræ.
<i>opercularis</i> , L.	Cumbræ.
<i>septemradiatus</i> , Mull.	Cumbræ.
<i>tigrinus</i> , Mull.	Cumbræ.
<i>maximus</i> , L.	Cumbræ.
<i>similis</i> , Lask.	Cumbræ.
<i>striatus</i> , Mull.	Cumbræ.
<i>Lima eliptica</i> , Jeff.	Cumbræ.
<i>subauriculata</i> , M.	Oban.
<i>Loscombii</i> , M.	Cumbræ.
<i>hians</i> , L.	Cumbræ, Innellan.
<i>Mytilus edulis</i> , L.	Cumbræ.
<i>modiolus</i> , L.	Cumbræ.
<i>Modiolaria nigra</i> , Gr.	Oban.
<i>marmorata</i> , Gr.	Oban.
<i>Nucula nucleus</i> , L., <i>var. radiatus</i> .	Cumbræ.
<i>niscata</i> , Br.	Kilchattan Bay.
<i>nitida</i> , Mont.	Cumbræ.
<i>tenuis</i> , Mont.	Cumbræ.
<i>Leda minuta</i> , Mont.	Oban.
<i>Pectunculus glycymeris</i> , L.	Oban.
<i>Axinus ferruginosa</i> .	Inverary.
<i>Montacuta substriata</i> , Mont.	Cumbræ.
<i>bidentata</i> , Mont.	Cumbræ.
<i>ferruginosa</i> , Mont.	Cumbræ.
<i>Killea suborbicularis</i> , Mont.	Cumbræ.
<i>Lucinia borealis</i> , L.	Cumbræ.
<i>spinifera</i> , L.	Oban.
<i>Axinus flexuosus</i> , Mont.	Cumbræ.
<i>Lasæa rubra</i> , Mont.	Cumbræ.

<i>Cardium echinatum</i> , L.	Cumbræ.
<i>exiguum</i> , G.	Cumbræ.
<i>nodosum</i> , Turt.	Cumbræ.
<i>fasciatum</i> , Mont.	Cumbræ.
<i>edule</i> , L.	Cumbræ.
<i>Norvegicum</i> , Speng.	Cumbræ.
<i>Isocardia cor</i> , L.	Mull of Galloway.
<i>Cyprina Islandica</i> , L.	Cumbræ.
<i>Astarte sulcata</i> , Du Costa.	Cumbræ.
var. <i>eliptica</i> .	Cumbræ.
<i>triangularis</i> , Mont.	Cumbræ.
<i>compressa</i> , Mont.	Cumbræ.
<i>Circe minima</i> , Mont.	Cumbræ.
<i>Venus exolata</i> , L.	Cumbræ.
<i>linctæ</i> , Pult.	Cumbræ.
<i>casina</i> , L.	Cumbræ.
<i>fasciata</i> , De.	Cumbræ.
<i>verrucosa</i> , L.	Cumbræ.
<i>ovata</i> , Penn.	Cumbræ.
<i>gallina</i> , L.	Cumbræ.
<i>Tapes aureus</i> , Gem.	Loch Ryan.
<i>virgineus</i> , L.	Cumbræ.
<i>pullastra</i> , Wood.	Cumbræ.
<i>decussata</i> , L.	Cumbræ.
<i>Lucinopsis undata</i> , Penn.	Cumbræ.
<i>Tellima crassa</i> , Penn.	Cumbræ.
<i>balthica</i> , L.	Langbank.
<i>tenuis</i> , Cost.	Cumbræ.
<i>fabula</i> , Gr.	Cumbræ.
<i>pusilla</i> , Phil.	Cumbræ.
<i>donacina</i> , L.	Cumbræ.
<i>squalida</i> , Pult.	Cumbræ.
<i>Psammobia tellenella</i> , Lans.	Cumbræ.
<i>ferroensis</i> , Ch.	Cumbræ.
<i>vespertina</i> , Ch.	Loch Ryan.
<i>Mactra solida</i> , L.	Cumbræ.
var. <i>truncata</i> .	Cumbræ.
var. <i>subtruncata</i> .	Cumbræ.
var. <i>eliptica</i> .	Cumbræ.
<i>stultorum</i> , L.	Cumbræ.
<i>Lutraria eliptica</i> , L.	Cumbræ.
<i>Scrobicularia alba</i> , Wood.	Cumbræ.
<i>prismatica</i> , Mont.	Cumbræ.
<i>Solecurtus antiquatus</i> , Pult.	Cumbræ.
<i>candidus</i> , Penn.	Cumbræ.
<i>Solen pellucida</i> , Penn.	Cumbræ.
<i>marginata</i> , L.	Cumbræ.
<i>ensis</i> , L.	Cumbræ.
<i>siliqua</i> , L.	Cumbræ.
<i>Pandora inequalis</i> , L.	Oban.
<i>Lyonsia Norvegica</i> , L.	Cumbræ.

<i>Thracia pratensis</i> , Pult.	Cumbræ.
<i>papyracia</i> , Poli.	Cumbræ.
<i>distorta</i> , Mont.	Cumbræ.
<i>Neaera cuspidata</i> , Olio.	Cumbræ.
<i>Corbula gibba</i> , Olio.	Cumbræ.
<i>Mya arenaria</i> , L.	Cumbræ.
<i>truncata</i> , L.	Cumbræ.
<i>Panopea plicata</i> , L.	Cumbræ.
<i>Saxicava rugosa</i> , L.	Cumbræ.
var. <i>artica</i> .	Cumbræ.
<i>Pholas crispata</i> , L.	Cumbræ.
<i>Teredo Norvegica</i> , L.	Cumbræ.

Class GASTEROPODA.

<i>Dentalium entalis</i> , L.	Cumbræ.
<i>Chiton fascicularis</i> , L.	Cumbræ.
<i>cinereus</i> , L.	Cumbræ.
<i>laevis</i> , Penn.	Cumbræ.
<i>ruber</i> , L.	Cumbræ.
<i>albus</i> , L.	Cumbræ.
<i>Patella vulgata</i> , L.	Cumbræ.
<i>elevata</i> , L.	Cumbræ.
<i>caerulea</i> , L.	Cumbræ.
<i>depressa</i> , L.	Oban.
<i>athletica</i> , L.	Cumbræ.
<i>Halcion pellucida</i> , L.	Cumbræ.
<i>Tecturia testudinalis</i> , Mull.	Cumbræ.
<i>fulva</i> , Mull.	Cumbræ.
<i>virginea</i> , Mull.	Cumbræ.
<i>Puncturella Noachina</i> ,	Cumbræ.
<i>Emarginula fissura</i> , L.	Cumbræ.
<i>rosea</i> , L.	Cumbræ.
<i>crassa</i> .	Lochfyne.
<i>Fisserella graeca</i> , L.	Oban.
<i>Pileopsis Hungaricus</i> , Ch.	Cumbræ.
<i>Trochus Grænländicus</i> , Ch.	Cumbræ.
<i>majus</i> , L.	Cumbræ.
<i>tumidus</i> , Mont.	Cumbræ.
<i>cinerarius</i> , Penn.	Cumbræ.
<i>umbilicatus</i> , L.	Cumbræ.
<i>millegranus</i> , L.	Cumbræ.
<i>zizyphinus</i> , L.	Cumbræ.
<i>Lyonsii</i> , L.	Cumbræ.
<i>Lacuna olivaricata</i> , Fab.	Cumbræ.
<i>divaricata</i> , Fab.	Cumbræ.
var. <i>canalis</i> .	Cumbræ.
<i>peteolus</i> , Fab.	Cumbræ.
<i>pallidula</i> , Du Costa.	Cumbræ.
<i>Littorina oblusata</i> , L.	Cumbræ.
<i>ornata</i> , L.	Cumbræ.

<i>Littorina rudes</i> , M.	Cumbræ.
<i>saxatilis</i> , L.	Cumbræ.
<i>littorea</i> , L.	Cumbræ.
<i>Rissoa striatula</i> , Mont.	Cumbræ.
<i>reticulata</i> , Mont.	Cumbræ.
<i>punctura</i> , Mont.	Cumbræ.
<i>membranacea</i> , Ach.	Cumbræ.
var. <i>elata</i> .	Cumbræ.
<i>parva</i> , Du Costa.	Cumbræ.
<i>interrupta</i> , L.	Cumbræ.
<i>violacea</i> , Derm.	Cumbræ.
<i>striata</i> , Mont.	Cumbræ.
<i>semistriata</i> , Mont.	Cumbræ.
<i>cingillen</i> , Mont.	Cumbræ.
<i>Hydrobia ulva</i> , Penn.	Cumbræ.
<i>Skenea planorbis</i> , Fab.	Cumbræ.
<i>Homologyra atomus</i> , Phil.	Cumbræ.
<i>rota</i> , F. & R.	Cumbræ.
<i>Caecum glabrum</i> , Mont.	Cumbræ.
<i>trachaea</i> , Mont.	Cumbræ.
<i>Turretella terebra</i> , L.	Cumbræ.
<i>Scalaria turtona</i> , L.	Cumbræ.
<i>Odostoma pallida</i> , Mont.	Bute.
<i>conoidea</i> , Br.	Bute.
<i>scalaris</i> , L.	Cumbræ.
<i>nitidissima</i> , Mont.	Cumbræ.
<i>Eulima pilineata</i> , L.	Cumbræ.
<i>polita</i> , L.	Bute.
<i>bilineata</i> , Ald.	Cumbræ.
<i>distorta</i> , De.	Cumbræ.
<i>Natica soldida</i> , L.	Cumbræ.
<i>alderi</i> , Lan.	Cumbræ.
<i>catina</i> , Costa.	Cumbræ.
<i>Montacuta</i> , Fab.	Cumbræ.
<i>Lamellaria perspicua</i> , L.	Cumbræ.
<i>Velutina laevigata</i> , Penn.	Cumbræ.
<i>Trichotropis borealis</i> , L.	Cumbræ.
<i>Aporrhais pes pelicani</i> , L.	Cumbræ.
<i>Cerithium reticulata</i> , Ha.	Cumbræ.
<i>perversum</i> , L.	Cumbræ.
<i>Purpura lapillus</i> , L.	Bute.
<i>Buccinum undatum</i> , L.	Cumbræ.
<i>Murex erinaceus</i> ,	Cumbræ.
<i>aceculatus</i> , Lan.	Cumbræ.
<i>Trophon barveinsis</i> , John.	Cumbræ.
<i>truncatus</i> , Gt.	Cumbræ.
<i>Fusus antiquatus</i> , L.	Clyde.
<i>Nassa reticulata</i> , L.	Cumbræ.
<i>incrassata</i> , Str.	Cumbræ.
<i>Defracia Leufroyi</i> , Mich.	Cumbræ.
<i>purpurea</i> , Mont.	Cumbræ.

<i>Defracia gracilis</i> , Mont.	Cumbræ.
<i>Pleurotoma nebula</i> , Mont.	Cumbræ.
<i>septangularis</i> , Mont.	Cumbræ.
<i>turricula</i> , Mont.	Cumbræ.
<i>Cypræa Europæa</i> , Mont.	Cumbræ.
<i>Cylichna nitidula</i> , Lov.	Cumbræ.
<i>acuminata</i> , Br.	Cumbræ.
<i>cylindracea</i> , Lov.	Cumbræ.
<i>Utriculus mamillatus</i> , Phil.	Cumbræ.
<i>umbilicata</i> , Mont.	Cumbræ.
<i>truncatula</i> , Br.	Cumbræ.
<i>obtusata</i> , Mont.	Cumbræ.
<i>Acera bullata</i> , Mull.	Cumbræ.
<i>Actæon tornatilis</i> , L.	Cumbræ.
<i>Scaphander lignarius</i> , L.	Cumbræ.
<i>Phyline scabra</i> , Müll.	Cumbræ.
<i>aperta</i> , L.	Loch Ryan.
<i>Melampus bidentata</i> , Mont.	Cumbræ.

SUB-CLASS NUDIBRANCHIATA.

<i>Doris tuberculata</i> , Cuvier.	Common. On stones between tide-marks.
<i>Johnstoni</i> , Alder & Hancock.	Moderately common. On stones between tide-mark.
<i>repanda</i> , A. & H.	R. At low water.
<i>planata</i> , A. & H.; <i>D. Tes-</i>	
<i>tudinaria</i> , Risso.	R. At extreme low water.
<i>aspera</i> , A. & H.	Common. On <i>Laminaria saccharina</i> and between tide-mark.
<i>bilamellata</i> , Linn.	Moderately common. On stones at low water.
<i>pilosa</i> , Müll.	Moderately common. On stones at low water.
<i>Goniodorio</i> , Forbes.	
<i>nodosa</i> , Mont.	Common. Dredged, and at low water.
<i>Triopa</i> , Johnston.	
<i>clavigeo</i> , Müll.	Common. Dredged, and between tide-mark.
<i>Ægirus</i> , Lovén.	
<i>punctiluccus</i> , D'Orb.	Moderately common. Under stones at very low water.
<i>Polycexa</i> , Cuvier.	
<i>quadrilineata</i> , Müll.	Common. On <i>Laminaria</i> .
<i>ocellata</i> , A. & H.	Moderately common. Under stones at low water.
<i>Ancula</i> , Lovén.	
<i>cristata</i> , Alder.	Moderately common. On stones at low water.
<i>Tritonia</i> , Cuvier.	
<i>Hombergii</i> , Cuv.	Dredged, and at low water.
<i>plebeia</i> , Johnston.	Common. On stones at low water.

- Dendronotus*, A. & H.
     arborescens, Müll. Locally common on stones at low water.
- Doto*, Owen.
     fragilis, Forbes. Moderately rare. Dredged on zoophytes.
     coronata, Müll. Dredged.
- Eolis*, Cuvier.
     papillosa, Linn. Moderately common between tide-marks.
     Peachii, A. & H. R. Dredged.
     coronata, Müll. Moderately common. Dredged.
     Drummondi, Thomp. Common. Dredged, and between tide-marks.
     lineata, Lov. R. Dredged on stones in 25 fathoms.
     gracilis, A. & H. Moderately rare. Under stones at low water.
     alba, A. & H. Common. Low water, and dredged.
     concinna, A. & H. Very rare. Under stones at low water.
     nana, A. & H. R. On shell of *Pagurus Benhardus*.
     olivacea, A. & H. Very rare. Under stones at low water.
     aurantiaca, A. & H. Moderately rare. Dredged, 25 fathoms.
     cingulata, A. & H. Very rare. Under stones at low water.
     Glottensis, A. & H. R. On zoophytes on gravelly bottom.
     amœna, A. & H. Moderately rare. In 10 fathoms, gravelly bottom, on *Sertularia polyzonias*.
     viridis, Forbes. Moderately common. On muddy stones at low water.
     picta, A. & H. R. Dredged on *Tubularia indivisa*, gravelly bottom.
     exigua, A. & H. Moderately rare at extreme low water, and dredged.
- Hermæa*, Lovén.
     bifida, Mont. Moderately common. Dredged on *Griffithsia corallina*.
- Hero*, Lovén.
     formosa, Lovén. Very rare. Dredged among *Melobesia* adhering to valve of a dead pecten.

DAVID ROBERTSON.

SUB-KINGDOM CŒLEENTERATA.

Class ACTINOZOA.

Fam. SAGARTIADÆ.

- Actinoloba dianthus*, Ellis. Common on shores of both Cumbræes, on the under sides of shelving rocks.
- Sagartia bellis*, Ellis & Solander. Not common. In tide-pools, Cumbræe.
miniata, Gosse. Common. In rock-pools.
venusta, Gosse. R. In holes and crevices in rock-pools near low water.
- nivea*, Gosse. Rather rare. In crevices in rock-pools near low water, Cumbræe.
- troglydites*, Johnston. Common in holes and crevices in rock-pools.
 var. *prasinopicta*. Very rare. Cumbræe.
viduata, Müller. Rare. On stones, Cumbræe.
parasitica, Couch. Very rare. Cumbræe.
- Adamsia palliata*, Bohadsch. Common on a muddy gravelly bottom and on scallop banks.
- Phelia picta*, Gosse. R. On shells, Cumbræe.

Fam. ANTHEADÆ.

- Anthea cereus*, Ellis & Solander. F. Cumbræe, attached to *Zostera*.

Fam. ACTINIADÆ.

- Actinia mesembryanthemum*, Ellis and Solander. Common from low to near high-water mark.

Fam. BUNODIDÆ.

- Bolocera media*, Johnston. R. West end of Cumbræe.
eques, Gosse. R. Cumbræe.
- Bunodes Thallia*, Gosse. R. In a tide-pool, Cumbræe.
- Gealia crassicornus*, Müller. Common. In crevices of rocks.
- Stomphia Churchiæ*, Gosse. Moderately common, adhering to stones, Cumbræe.

Fam. ILYANTHIDÆ.

- Peachia hastata*, Gosse. R. Between the Alands, Cumbræe.
triphylla, Gosse. R. In muddy sand at extreme low water, Cumbræe.
- Edwardsia callimorpha*, Gosse. Moderately common. In sandy and muddy gravel.

Edwardsia carnea, Gosse.

Locally common, under stones.

Cerianthus Loydii, Gosse.

Rather rare. Muddy sand beyond extreme low water, Cumbræ.

TRIBE CARYOPHYLLIACEA.

Fam. CAPNEADE.

Corynactis virdis, Allman.

Locally common in rock-pools, Cumbræ.

Fam. TURBINOLIADÆ.

Caryophyllia Smithii, Stokes.

R. Cumbræ. At low water attached to the under sides of stones.

SUB-KINGDOM PROTOZOA.

Order FORAMINIFERA.

Sub-order IMPERFORATA—Fam. MILIOLIDA.

<i>Cornuspira foliacea</i> , Phil.	Frequent.
<i>Biloculina ringens</i> , Lamk.	Common.
<i>depressa</i> , D'Orb.	Common.
<i>elongata</i> , D'Orb.	Common.
<i>Triloculina trigonula</i> , Lamk.	Common.
<i>tricarinata</i> , D'Orb.	Frequent.
<i>oblonga</i> , Mont.	Frequent.
<i>Brongniartii</i> , D'Orb.	R. Girvan, Cumbrae.
<i>Quinqueloculina seminulum</i> , Linn.	Common.
<i>subrotunda</i> , Mont.	Common.
<i>secans</i> , D'Orb.	Frequent.
<i>bicornis</i> , W. & J.	Common.
<i>Ferussacii</i> , D'Orb.	R. Girvan, Ardrossan, Bute, Cumbrae.
<i>agglutinans</i> , D'Orb.	Frequent.
<i>fusca</i> , Brady.	R. Port-Glasgow.
<i>Spiroloculina limbata</i> , D'Orb.	Common.
<i>planulata</i> , Lamk.	Frequent.
<i>canaliculata</i> , D'Orb.	Frequent.
<i>excavata</i> , D'Orb.	R. Arran, Ardrossan, Cumbrae.

Fam. LITUOLIDA.

<i>Trochammina squamata</i> , P. & J.	R. Ardrossan, Cumbrae.
<i>incerta</i> , D'Orb.	R. Girvan, Ardrossan, Bute, Cumbrae.
<i>inflata</i> , Mont.	R. Campbeltown, Inverary, Bute, Cumbrae.
<i>gordialis</i> , P. & J.	R. Callum's Bay, Bute.
<i>macrescens</i> , Brady.	R. Inverary.
<i>Lituola nautiloidea</i> , Lamk.	Frequent.
<i>scorpiurus</i> , Montf.	Common.
<i>canariensis</i> , D'Orb.	Common.
<i>Valvulina Austriaca</i> , D'Orb.	R. Inverary.

Sub-order PERFORATA—Fam. LAGENIDA.

<i>Lagera sulcata</i> , W. & J.	Common.
<i>striato-punctata</i> , P. & J.	R. Tan, Cumbrae.
<i>Lyellii</i> , Sagz.	R. Ardrossan, Bute, Kyles of Bute.
<i>lævis</i> , Mont.	Common.
<i>gracillima</i> , Sagz.	Common.
<i>globosa</i> , Mont.	Frequent.
<i>striata</i> , D'Orb.	Common.
<i>semistriata</i> , Will.	Frequent.

<i>Lagena distoma</i> , P. & J.	R. Campbeltown, Ardrossan, Largs, Bute.
<i>caudata</i> , D'Orb.	R. Cumbrae.
<i>marginata</i> , W. & J.	Frequent.
<i>pulchella</i> , Brady.	R. Fintry Bay, Cumbrae.
<i>lagenoides</i> , Will.	R. Girvan.
<i>melo</i> , D'Orb.	R. Loch Ryan, Ardrossan, Bute.
<i>squamosa</i> , Mont.	Frequent.
<i>hexagona</i> , Will.	Frequent.
<i>Jeffreysii</i> , Brady.	Frequent.
<i>Nodosaria scalaris</i> , Batsch.	Common.
<i>pyrula</i> , D'Orb.	R. Ardrossan, Bute.
<i>Dentalina communis</i> , D'Orb.	Kyles of Bute, Lochgoil, Ardrossan, Loch
	Ridon, Bute, Cumbrae.
<i>pauperata</i> , D'Orb.	R. Inverary, Loch Ridon, Cumbrae, Inver-
	kip, Lochgoil.
<i>Vaginulina legumen</i> , Linn.	R. Loch Striven, Cumbrae.
<i>Cristellaria rotulata</i> , Lamk.	Frequent.
<i>crepidula</i> , F. & M.	R. Girvan, Bute, Cumbrae.
<i>Polymorphina lactea</i> , W. & J.	Frequent.
<i>compressa</i> , D'Orb.	Common.
<i>gibba</i> , D'Orb.	Common.
<i>communis</i> , D'Orb.	R. Bute, The Tan, Cumbrae.
<i>tubulosa</i> , D'Orb.	Frequent.

Fam. GLOBIGERINIDA.

<i>Orbulina universa</i> , D'Orb.	Common.
<i>Globigerina bulloides</i> , D'Orb.	R. Cumbrae, Gareloch.
<i>Textularia sagittula</i> , DeFrance.	Common.
<i>variabilis</i> , Will.	R. Kyles of Bute, Loch Striven.
<i>Verneuilina polystropha</i> , Reuss.	Common.
<i>Bulimina pupoides</i> , D'Orb.	Frequent.
<i>marginata</i> , D'Orb.	Common.
<i>aculeata</i> , D'Orb.	R. Campbeltown, Arran.
<i>ovata</i> , D'Orb.	R. Loch Ryan, Loch Ridon, Bute, Loch-
	goil.
<i>Virgulina Schreibersii</i> , Czjzek.	Frequent.
<i>Bolivina punctata</i> , D'Orb.	R. Girvan, Inverary, Cumbrae, Kyles of
	Bute.
<i>plicata</i> , D'Orb.	R. Ardrossan, Kyles of Bute, Cumbrae,
	Lochgoil.
<i>Discorbina rosacea</i> , D'Orb.	Common.
<i>globularis</i> , D'Orb.	Common.
<i>ochracea</i> , Will.	R. Campbeltown, Ardrossan.
<i>Planorbulina Mediterraneensis</i> , D'Orb.	Frequent.
<i>Truncatulina lobatula</i> , Walker.	Common.
<i>Rotalia Beccarii</i> , Linn.	Common.
<i>nitida</i> , Will.	R. Girvan, Cumbrae, Inverkip.
<i>Tinoporos lucidus</i> , Brady.	R. Callum's Bay, Bute.
<i>Patellina corrugata</i> , Will.	R. Girvan, Ardrossan, Bute, Cumbrae.

Fam. NUMMULINIDA.

Polystomella	crispa, Linn.	Common.
	striato-punctata, F. & M.	Common.
	arctica, P. & J.	R. Ardrossan.
Nonionina	asterizans, F. & M.	Frequent.
	turgida, Will.	R. Lochgoil.
	scapha, F. & M.	R. Inverary, Loch Ridon, Kyles of Bute, Largs.
	depressula, W. & J.	Common.

DAVID ROBERTSON, F.G.S., F.L.S.

VEGETABILIA.

SUB-KINGDOM PHANEROGAMIA.

This list is compiled chiefly from Mr. Henneidy's *Clydesdale Flora*, with additions from the *Transactions* of the Society.

Ranunculaceæ.

<i>Clematis Vitalba</i> , L.	R. Stonelaw, Dunglass.
<i>Thalictrum alpinum</i> , L.	F. Arran, Ben Lomond, Ben Voirlich.
<i>minus</i> , L.	R. Arran.
<i>flavum</i> , L.	R. Clyde Ironworks, Dunoon.
<i>Anemone nemorosa</i> , L.	Common.
<i>Ranunculus fluitans</i> , Lam.	F. Clyde, Inchinnan.
<i>aquatilis</i> , L.	
var. <i>peltatus</i> , Fries.	F. St. Germans, Dougalston, Bardowie, Frankfield, Kelvin.
var. <i>confusus</i> , Godr.	R. Renfrew.
var. <i>Baudotii</i> , Godr.	R. Dumbarton.
var. <i>heterophyllus</i> , Fries.	R. Bute.
var. <i>trichophyllus</i> , Chaix.	F. Cumbræ, Bute, Arran.
<i>hederaceus</i> , L.	F. Paisley Canal, Cathcart, Possil, Cumbræ.
<i>Lenormandi</i> , F. Schultz.	F. Possil, Shettleston, Gourrock, Cumbræ.
<i>Lingua</i> , L.	R. Possil, Gourrock.
<i>Flammula</i> , L.	Common.
<i>Ficaria</i> , L.	Common.
var. <i>incumbens</i> , F.	Bute.
<i>auricomus</i> , L.	F. Carmyle, Kelvinside, Maryhill.
<i>acris</i> , L.	Common.
<i>repens</i> , L.	Common.
<i>arvensis</i> , L.	R. Bogle's Hole (?), Tollcross.
<i>hirsutus</i> , L.	R. Forth and Clyde Canal between Port-Dundas and Bowling.
<i>sceleratus</i> , L.	R. Forth and Clyde Canal, Clyde from Renfrew to Dumbarton.
<i>bulbosus</i> , L.	F. Glasgow Green, Clyde, Gourrock.
<i>Caltha palustris</i> , L.	Common.
<i>Trollius europæus</i> , L.	F. Kenmuir, Bothwell, Inverkip, Cathkin, Kilmalcolm, Falls of Clyde, Gourrock, Lochwinnoch.

Berberidaceæ.

- Berberis vulgaris*, L. F. Lambhill, Lanark, Hamilton, Bothwell,
Lenzie, Dougalston, Inverkip, Cumbrae.
Epimedium alpinum, L. R. Mugdock Castle (?).

Nymphæaceæ.

- Nymphæa alba*, L. F. St. Germans, Dougalston, Bardowie,
Hogganfield, Frankfield, Kelvin, Cart,
Loch Lomond.
Nuphar lutea, Sm. Common.
    pumila, D.C. R. Mugdock, Bardowie, St. Germans.

Papaveraceæ.

- Papaver Argemone*, L. R. Tollcross, Carmyle.
    dubium, L. Common.
    Rhœas, L. R. Carmyle, Uddingston.
Glaucium luteum, Scop. F. Lesser Cumbrae, Toward, Bute, Arran.

Fumariaceæ.

- Fumaria capreolata*, L. R. Rutherglen, Cambuslang, Cathcart, Kil-
malcolm.
Fumaria officinalis, L. Common.
Corydalis claviculata, D.C. F. Cadder Wilderness, Luss, Coilintraive,
Tigh-na-Bruaich, Bute, Arran.

Cruciferæ.

- Cakile maritima*, Scop. F. Largs, Bute, Cumbrae, Arran.
Crambe maritima, L. R. Arran at Imacher.
Raphanus Raphanistrum, L. Common.
    maritimus, Sm. F. Wemyss Bay, Innellan, Bute, Cumbrae,
Arran.
Brassica oleracea, L. R. Arran.
    campestris, L. Frequent.
    var. *Napus*, L. Frequent.
    var. *Rapa*, L. Frequent.
    monensis, Huds. F. Bute, Cumbrae, Arran.
Sinapis arvensis, L. Common.
Sisymbrium officinale, Scop. Common.
    thalianum, Hook. Common.
Alliaria officinalis, D.C. Common.
Cheiranthus Cheiri, L. R. Mains, Bothwell Castle, Dumbarton.
Cardamine amara, L. F. Kenmuir, Possil, Gairbraid, Balmore,
Cambuslang, Pollokshaws, Inverkip,
Gourock, Lochwinnoch.
    pratensis, L. Common.
    impatiens, L. R. Falls of Clyde.
    hirsuta, L. Common.
    var. *sylvatica*. Common.

<i>Arabis hirsuta</i> , Br.	R. Campsie Hills, Cumbræ, Bute, Arran.
<i>Barbarea vulgaris</i> , Br.	Common.
<i>stricta</i> , Andr.	R. Balmore.
<i>Nasturtium officinale</i> , Br.	Common.
<i>terrestre</i> , Br.	Common.
<i>Cochlearia officinalis</i> , L.	Common.
var. <i>alpina</i> .	R. Ben Voirlich.
<i>Cochlearia danica</i> , L.	Common.
<i>anglica</i> , L.	F. Bowling, Dumbarton.
<i>Draba verna</i> , L.	Common.
<i>Subularia aquatica</i> , L.	R. Loch Lomond.
<i>Teesdalia nudicaulis</i> , Br.	R. Tollcross, Fin Glen, Dumbarton.
<i>Capsella Bursa-pastoris</i> , Moench.	Common.
<i>Lepidium campestre</i> , Br.	R. Langside, Drumpeller, Baldernock.
<i>Smithii</i> , Hook.	R. Baldernock, Possil, Blantyre Priory, Largs, Arran, Milngavie.
<i>Senebiera Coronopus</i> , Poir.	R. Largs, Cumbræ, Ardrossan.

Resedaceæ.

<i>Reseda Luteola</i> , L.	F. Clyde Ironworks, Old Waterworks, Carmyle, Cathcart, Cambuslang, Gou- rock.

Cistaceæ.

<i>Helianthemum vulgare</i> , Gaert.	R. Cartlane Crag, Bonnington Linn, Air- drie, Arran.

Violaceæ.

<i>Viola palustris</i> , L.	Common.
<i>odorata</i> , L.	R. Cambuslang, Bothwell, Partick, Cum- bræ.
<i>sylvatica</i> , Fr.	Common.
<i>flavicornis</i> , Sm.	F. Cathkin, Campsie, Gourock to Arran.
<i>tricolor</i> , L.	Common.
var. <i>arvensis</i> .	Common.
<i>lutea</i> , Huds.	Common.
var. <i>Curtisii</i> , Forst.	R. Cumbræ, Kilchattan Bay, Brodick Bay.

Droseraceæ.

<i>Drosera rotundifolia</i> , L.	Common.
<i>anglica</i> , Huds.	R. Goatfell, Loch Ranza, Corriegills, Cru- therland.
<i>intermedia</i> , Hayne.	R. Inverarnan.

Polygalaceæ.

<i>Polygala vulgaris</i> , L.	Common.
var. <i>depressa</i> .	R. Campsie Hills, Cathkin, Bute, Arran.

Elatinaceæ.

Elatine hexandra, D.C.

R. Loch Ascog, Loch Fadd.

Caryophyllaceæ.

Dianthus deltoides, L.

Silene acaulis, L.
inflata, Sm.

var. *puberula*.

maritima, With.

Lychnis Flos-cuculi, L.
vespertina, Sibth.

diurna, Sibth.

Githago, Lam.

Sagina procumbens, L.

maritima, Don.

subulata, Wimm.

nodosa, Meyer.

Honkeneya peploides, Ehr.

Cherleria sedoides, L.

Arenaria serpyllifolia, L.
trinervis, L.

Alsine verna, Bartling.

Stellaria nemorum, L.

media, With.

Holostea, L.

glauca, With.

graminea, L.

uliginosa, Murr.

Cerastium vulgatum, L.

viscosum, L.

semidecandrum, L.

tetrandrum, Curt.

arvense, L.

latifolium, Sm.

alpinum, L.

Holosteuum umbellatum, L.

R. Thankerton.

R. Ben Lomond, Ben Voirlich.

F. Paisley Canal, Cambuslang, Hamilton,
Eastfield, Old Waterworks.

R. Opposite Daldowie, Eastfield, New
Kilpatrick.

Common.

Common.

F. Tollcross, Carmyle, Motherwell, Wishaw,
Torrance.

Common.

F. Opposite Dalbeth, Maryhill, Cathcart,
Paisley Road, Bute, Cumbrae, Arran.

Common.

F. Gourock to Arran.

R. Shettleston, Cathkin, Crossbasket, Gou-
rock, Kilmun, Bute, Arran.

F. Possil Marsh, Renfrew, Bowling, Gou-
rock, Kilmun, Cumbrae, Arran.

Common.

R. Ben Voirlich.

F. Tollcross, Carmyle, Gourock to Arran.

Common.

R. Ben Lomond.

F. Carmyle, Cathkin, Cambuslang, Castle-
milk.

Common.

Common.

R. Possil Marsh, Dalbeth.

Common.

Common.

F. Possil Road, Largs, Cumbrae, Arran,
Kilmun.

Common.

F. Partick, Tollcross, Provanmill, Gourock.

F. Campsie, Lanark, Cambuslang, Cum-
brae, Arran.

R. Lanark.

R. Ben Lomond, Ben Voirlich.

R. Ben Lomond, Ben Voirlich.

R. Bowling (?).

Linaceæ.

Linum catharticum, L.

Radiola millegrana, Sm.

Common.

F. Possil Marsh, Gourock, Cumbrae, Arran.

Malvaceæ.*Lavatera arborea*, L.*Malva sylvestris*, L.   *moschata*, L.   *rotundifolia*, L.*Althæa officinalis*, L.

R. Ailsa Craig, Cumbrae, Bute, Arran.

F. Crossbasket, Dumbarton, Bute, Cumbrae, Arran.

R. Hamilton, Cambuslang, Dumbarton, Innellan.

R. Hamilton, banks of Clyde.

R. Campsie, Arran.

Tiliaceæ.*Tilia parvifolia*, Ehr.   *europæa*, L.   *grandifolia*, Ehr.

R. Langside, Carmyle.

Common.

R. Calderwood, Kilbride Road.

Hypericaceæ.*Hypericum Androsaemum*, L.   *perforatum*, L.   *dubium*, Leers.   *quadrangulum*, L.   *humifusum*, L.   *pulchrum*, L.   *hirsutum*, L.   *elodes*, L.

F. Gourock, Ardentenny, Kilmun, Dunoon, Bute, Cumbrae, Arran.

Common.

F. Cumbrae, Bute, Arran.

F. Carmyle, Kenmuir, Cambuslang, Paisley Canal, Gourock to Arran.

F. Possil, Kelvin, Clyde, Stonelaw, Cambuslang, Paisley Canal.

Common.

F. Carmyle, Kenmuir, Kelvin, Cambuslang, Hamilton, Gourock.

R. Loch Fadd, Lesser Cumbrae, King's Cove, Loch Ranza.

Aceraceæ.*Acer pseudo-platanus*, L.   *campestre*, L.

Common.

R. Great Western Road, St. Germans, Cumbrae.

Geraniaceæ.*Geranium sanguineum*, L.   *phaeum*, L.   *sylvaticum*, L.   *pratense*, L.   *lucidum*, L.   *Robertianum*, L.   *molle*, L.   *pusillum*, L.   *dissectum*, L.*Erodium cicutarium*, L.

R. Greater and Lesser Cumbrae, Port Crawford, Garroch-head, Arran.

R. Blantyre Priory.

F. Cambuslang, Cathcart, Kenmuir, Blantyre Priory, Calderwood, Campsie.

F. Kelvin, Cart, Clyde, Kenmuir.

F. Campsie Glen, Dunglass, Blantyre Priory, Cartlane Crags, Bute, Cumbrae, Arran.

Common.

Common.

R. Cambuslang (?).

Common.

F. Tollcross, Bute, Cumbrae, Arran.

Oxalidaceæ.*Oxalis Acetosella*, L.

Common.

Leguminosæ.*Ulex europæus*, L.

Common.

Genista anglica, L.

Cathkin, Campsie, Lanark.

Sarothamnus scoparius, Koch.

Common.

Ononis arvensis, L.

F. Opposite Dalbeth, Carmyle, Old Waterworks, Haggs Castle, Gourrock.

Anthyllis vulneraria, L.

F. Dalmarnock, Tollcross, Carmunnock Road, Gourrock.

Medicago lupulina, L.

Common.

Trifolium repens, L.

Common.

pratense, L.

Common.

medium, L.

Common.

arvense, L.

R. Hamilton, Cumbræ, Fairlie, Arran.

agrarium, L.

Common.

procumbens, L.

Common.

Lotus corniculatus, L.

Common.

major, Scop.

Common.

Ornithopus perpusillus, L.

R. Tollcross, Bowling.

Vicia lathyroides, L.

R. Cumbræ, Arran.

angustifolia, Roth.

F. Possil, Paisley Canal, Gourrock, Cumbræ, Arran.

sepium, L.

Common.

Cracca, L.

Common.

Orobus, L.

R. Cartlane Craggs, Falls of Clyde.

sylvatica, L.

R. Cartlane Craggs, between Corehouse and Bonnington, Hamilton, Arran.

tetrasperma, Moench.

R. Cambuslang, Dalziel, Govan, Possilpark.

hirsuta, Koch.

F. Cathcart, Tollcross, Cambuslang, Gourrock, Cumbræ, Arran.

Lathyrus pratensis, L.

Common.

sylvestris, L.

R. Struey Rocks.

macrorhizus, Wimm.

Common.

Rosaceæ.*Prunus spinosa*, L.

Common.

insititia, L.

F. Rutherglen, Cambuslang, Kenmuir, Inverkip.

Avium, L.

F. Carmyle, Cambuslang, Milngavie, between Cathcart and Rutherglen.

Padus, L.

F. Kelvin, Crossbasket, Falls of Clyde, Mugdock, Carmyle, Gourrock to Arran.

Spiræa Ulmaria, L.

Common.

Geum urbanum, L.

Common.

rivale, L.

Common.

intermedium, Ehr.

F. Carmyle, Kelvin, Mearns, Gourrock.

- Rubus Chamæmorus*, L.
     saxatilis, L.
     Idæus, L.
     suberectus, And.
     var. plicatus, W. & N.
         rhamnifolius, W. & N.
     var. affinis, W. & N.
     var. Lindlicianus, Lees.
     var. incurvatus, Bab.
         corylifolius, Sm.
         cæsius, L.
         discolor, W. & N.
     var. macrophyllus, W. & N.
         carpinifolius, Blox.
     var. villicaulis, W. & N.
     var. mucronulatus, Bor.
     var. tuberculatus, Bab.
     var. diversifolius, Lind.
         glandulosus, Bell.
     var. rudis, Weihe.
     var. Radula, Weihe.
     var. Kochleri, Weihe.
Fragaria vesca, L.
Comarum palustre, L.
Potentilla anserina, L.
     reptans, L.
     Tormentilla, Sibth.
     var. reptans,
         Fragariastrum, Ehr.
Alchemilla vulgaris, L.
     alpina, L.
     arvensis, Sm.
Agrimonia Eupatorium, L.
     var. odorata, Mill.
Sibbaldia procumbens, L.
Rosa spinosissima, L.
     Sabini, Woods.
     var. Doniana, Woods.
- R. Cleghorn and Bonnington Woods, Campsie Hills.
 F. Cleghorn and Bonnington Woods, opposite Cadzow Castle, Calderwood, Gourrock, Holy Loch, Inverkip, Arran.
 Common.
 F. Cambuslang, Cadder Wilderness, Balmore, Baldernock, Gourrock, Dunoon, Arran.
 F. Cathkin, Forth and Clyde Canal, Baldernock, Kilmun, Cumbræ, Bute, Arran.
 F. Innellan, Bute, Cumbræ, Arran.
 F. Busby, Bardowie, Cumbræ, Bute, Arran.
 F. Paisley Canal, Maryhill, Dunoon, Bute, Cumbræ, Arran.
 F. Gourrock, Dunoon, Cumbræ, Arran.
 Common.
 R. Cambuslang, Milngavie.
 F. Arran, Cumbræ, Bute.
 F. Cambuslang, Milngavie, Cumbræ.
 F. Cathkin, Milngavie, Cumbræ, Bute, Arran.
 R. Cambuslang, Cumbræ, Bute, Arran.
 R. Cadder Wilderness, Cumbræ, Arran.
 F. Cambuslang, Hamilton Farm, Pollokshaws, Busby.
 R. Arran.
 F. Kilmun, Dunoon, Bute, Cumbræ, Arran.
 Common.
 R. Cambuslang Glen, Cumbræ, Bute.
 Common.
 Common.
 Common.
 F. Dalbeth, opposite Dalbeth, Bogle's Hole, Hamilton, Wishaw, Firhill.
 Common.
 F. Lambhill, Cambuslang, Gourrock, Cumbræ.
 Common.
 Common.
 Common on high hills.
 Common.
 F. Crossbasket, Ferniegair, Calder above Black Linn, Bothwell Castle, Gourrock, Cumbræ, Arran.
 R. Lamlash, Road to Glen Rosa, Dippin Rocks.
 R. Ben Lomond, Ben Voirlich.
 F. Bute, Cumbræ, Arran.
 R. Daldowie, Lamlash.
 R. Cumbræ, Bute.

- Rosa Sabini*, var. *involuta*, Sm. R. Lamlash.
mollissima, Willd. F. Clyde, Cathkin, Kittoch Glen, Kilmun,
 Cumbræ, Bute, Arran.
 var. *cærulea*. R. Crossbasket, hills above Mugdock
 Reservoir.
tomentosa, Sm. Common.
 var. *scabriuscula*, Winch. Paisley Canal, Flemington Road, Cambuslang.
rubiginosa, L. R. Hamilton, Uddingston, Calder Glen,
 Cambuslang Glen, Cumbræ.
canina, L. Common.
 var. *lutetiana*, Leman. Common.
 var. *dumalis*, Bech. Common.
 var. *urbica*, Lem. Common.
 var. *dumetorum*, Woods. F. Forth and Clyde Canal, Milngavie,
 Cambuslang, Paisley Canal.
 var. *arvatica*, Puget. Cambuslang Glen, Canal near Maryhill,
 Milngavie.
 var. *cæsia*, Sm. Paisley Canal, Road beyond Giffnock,
 Milngavie.
 var. *Reuteri*, Godet. R. Lamlash.
 var. *subcristata*, Baker. Eastwood Mains Toll, Busby, Paisley
 Canal, Cambuslang.
 var. *Watsoni*, Baker. R. Brodick.
systyla, Woods. R. Milngavie.
arvensis, Huds. R. Bogle's Hole, Kilbride Road, Gourock.
Cratægus Oxyacantha, L. Common.
Pyrus Malus, L. R. Crossbasket, Cadzow, Calderwood.
Aucuparia, Gaert. Common.
Aria, Sm. R. Loch Ranza.

Onagraceæ.

- Epilobium hirsutum*, L. F. Lambhill, Cart, Clyde.
parviflorum, Schreb. F. Clyde, Calderwood, Cart.
montanum, L. Common.
tetragonum, L. Common.
 var. *obscurum*, Sch. Arran.
palustre, L. Common.
alpinum, L. R. Ben Lomond, Ben Voirlich.
Circæa lutetiana, L. F. Kelvin Woods, Langside, Carmyle,
 Cambuslang, Gourock.
alpina, L. R. Hamilton Wood; Mauchlan Hole, Kil-
 bride; Loch Lomond; Arran.

Haloragaceæ.

- Hippuris vulgaris*, L. F. Possil, Forth and Clyde Canal, Frank-
 field, Gourock.
Myriophyllum spicatum, L. Common.
alterniflorum, D.C. R. Cumbræ, Bute.

Lythraceæ.

Lythrum Salicaria, L.
Peplis Portula, L.

F. Banks of Clyde, Cart, Gourrock.
 F. Hogganfield, Frankfield, Deil's Craig
 Dam, Brother Loch, Cumbræ, Arran.

Portulacaceæ.

Montia fontana, L.

F. Possil, Paisley Canal, Cathkin, Gourrock,
 Cumbræ, Arran.

Paronychiaceæ.

Spergularia rubra, St. Hill.

F. Tollcross, Govan, Hamilton, Greenock,
 Cumbræ.

neglecta, Syme.

F. Bowling, Dumbarton, Gourrock.
 Firth.

marginata, Syme.

Common.

Spergula arvensis.

Crassulaceæ.

Cotyledon Umbilicus, L.

Common at Firth.

Sedum Rhodiola, D.C.

F. Loch Eck, Glen Sannox, Ben Voirlich.

Telephium, L.

F. Cathcart, Partick, Allander Toll, Dum-
 barton, Gourrock, Cumbræ.

anglicum, Huds.

Common at Firth.

villosum, L.

F. Cathkin, Campsie Hills, Helensburgh,
 Kilmalcolm, Gourrock, Cumbræ, Arran.

acre, L.

Common at Firth.

Grossulariaceæ.

Ribes alpinum, L.

R. Blantyre Priory, Cadzow Castle, Cal-
 derwood, Stonelaw.

Saxifragaceæ.

Saxifraga stellaris, L.

Common on the higher hills.

oppositifolia, L.

R. Corra Linn, Ben Lomond, Ben Voirlich,
 Lochgoilhead, Arran.

aizoides, L.

Common on the higher hills.

granulata, L.

F. Bogle's Hole, Carmyle, Bothwell, Cam-
 buslang, Calderwood, Busby.

hypnoides, L.

F. Campsie, Dumbarton, Dunglass, Gour-
 rock, Largs, Arran, Lochwinnoch.

Chrysosplenium oppositifolium, L. Common.

alternifolium, L. F. Kenmuir, Cambuslang, Calderwood,
 Cathkin, Fin Glen, near Neilston, Loch-
 winnoch.

Parnassia palustris, L.

F. Pollokshaws, Cathkin, Possil, Milngavie,
 common at Firth.

Umbelliferæ.

Hydrocotyle vulgaris, L.

Common.

Sanicula europæa, L.

F. Kenmuir, Cambuslang, Cathcart, Langside.

- Eryngium maritimum*, L. F. Cumbræ at Fintry Bay, Kilchattan Bay, Arran.
- Cicuta virosa*, L. F. Frankfield, Hogganfield, Bardowie, St. Germans.
- Helosciadium nodiflorum*, Koch. F. Bowling, Gourock, Kilmun, Cumbræ, Arran.
- inundatum*, Koch. F. Hogganfield, Frankfield, Bardowie, St. Germans.
- Ægopodium Podagraria*, L. Common.
- Carum verticillatum*, Koch. Common at Firth.
- Bunium flexuosum*, With. Common.
- Pimpinella Saxifraga*, L. F. Cathkin, Gourock, Inverkip, Cumbræ, Arran.
- Oenanthe fistulosa*, L. R. Bowling (?), Greenock (?).
- Lachenalii*, Gmel. Frequent at Firth.
- crocata*, L. Rouken Glen, common at Firth.
- Æthusa Cynapium*, L. F. Rutherglen, Cathcart, Cambuslang, Govan, Gourock, Cumbræ.
- Ligusticum scoticum*, L. F. Bute, Cumbræ, Arran.
- Meum Athamanticum*, Jacq. F. Cathkin, Fin Glen, Kilmalcolm, Lochwinnoch, Greenock, Inverkip Road, Cloch.
- Angelica sylvestris*, L. Common.
- Peucedanum palustre*, Moench. R. Ardencaple (?).
- Ostruthium*, Koch. R. Langton House, Jackton, Partick, Lambhill, Mearns.
- Heracleum Sphondylium*, L. Common.
- Conium maculatum*, L. F. Cathcart, Cathkin, Tollcross, Cambuslang, Crossbasket, Gourock to Arran.
- Smyrnum Olusatrum*, L. R. Dumbarton Rock, Arran.
- Scandix Pecten-Veneris*, L. R. Farms of Allington and Merryton (?), Chryston, Kirkintilloch.
- Anthriscus sylvestris*, Koch. Common.
- vulgaris*, Pers. R. Dalserf, Govan.
- Chærophyllum temulum*, L. Common.
- Myrrhis odorata*, Scop. F. Cathcart, Cambuslang, Gourock, Cumbræ, Arran.
- Daucus Carota*, L. F. Govan, Cambuslang, Clyde Ironworks, Gourock, Cumbræ, Arran.
- Torilis Anthriscus*, Gaertn. Common.

Araliaceæ.

- Adoxa Moschatellina*, L. F. Kelvin, Carmyle, Kenmuir, Cambuslang, Garscube.
- Hedera Helix*, L. Common.

Caprifoliaceæ.

- Sambucus Ebulus*, L. R. Between Kittochside and Carmunnock, between Milngavie and Dougalston, Milton.
- nigra*, L. F. Kelvinside, Stonelaw, Cathcart.

Viburnum Opulus, L.	F. Langside, Kelvin, Carmyle, Kenmuir, Cambuslang, Rouken Glen.
Lantana, L.	R. Dunglass Glen.
Lonicera Periclymenum, L.	Common.

Rubiaceæ.

Galium verum, L.	Common.
cruciatum, With.	Common.
saxatile, L.	Common.
pusillum, L.	R. Strathblane Hills.
uliginosum, L.	F. Paisley Canal, Cambuslang, Forth and Clyde Canal, Gourock to Arran.
palustre, L. var. <i>Witheringii</i> .	Common.
Mollugo, L.	R. Cartlane Crag, north side; Carmyle.
boreale, L.	F. Carmyle, Dalbeth, Falls of Clyde, Bow- ling.
Aparine, L.	Common.
Sherardia arvensis, L.	F. Ferniegair, Pollokshaws, Cathcart, Rutherglen, Cambuslang.
Asperula odorata, L.	Common.

Valerianaceæ.

Valeriana dioica, L.	R. Balvie (?), Bishop's Loch.
officinalis, L.	Common.
Fedia olitoria, Vahl.	F. Carmyle, Govan, Cambuslang, Gourock, Cumbrae, Arran.
dentata, Koch.	R. Covant Burn (?), Arran (?).

Dipsacaceæ.

Dipsacus sylvestris, L.	R. Arden Quarry, Thornliebank; Inchinnan, Blantyre, Hamilton.
Scabiosa succisa, L.	Common.
Knautia arvensis, Coult.	R. Tollcross, Uddingston, Blantyre.

Compositæ.

Tragopogon pratensis, L.	R. Clyde Ironworks, between Rutherglen and Cathcart.
Apargia hispida, Willd.	Common.
autumnalis, Willd.	Common.
Thrinicia hirta, Roth.	R. Airdrie (?); Glenhove, New Monkland (?).
Hypochaeris radicata, L.	Common.
glabra, L.	R. Whiting Bay, Arran.
Sonchus arvensis, L.	Common.
oleraceus, L.	Common.
asper, Hoffm.	Common.
Crepis virens, L.	Common.
paludosa, Moench.	F. Kenmuir, Cambuslang, Calder, Gourock, Cumbrae, Arran.

- Leontodon Taraxacum*, L. Common.
     var. palustre. Possil Marsh, Cathkin.
Hieracium Pilosella, L. Common.
     alpinum, L. R. Hills above Loch Eck.
     Lawsoni, Sm. R. Arran.
     murorum, L. F. Campsie Glen, Bowling, South Calder,
                     Cadzow, Gourock, Cumbrae, Arran.
     var. caesium, Back. R. Arran.
     sylvaticum, Sm. Common.
     var. maculatum. R. Calderwood, Campsie, Dumbarton, In-
                     verkip.
             gothicum, Fr. R. Campsie, Cumbrae, Arran.
             umbellatum, L. R. Eastfield, Cambuslang.
             boreale, Fries. Common.
Lapsana communis, L. Common.
Arctium Lappa, L. F. Clyde Ironworks, Cambuslang, Carmyle,
                     Rutherglen, Gourock, Cumbrae, Arran.
     var. intermedium. R. Arran.
Carduus nutans, L. R. Mauldslee.
     acanthoides, L. F. Pollokshields, Cathcart, Monkland Canal.
     tenuiflorus, Curt. R. Balvie, Largs.
Cnicus lanceolatus, Willd. Common.
     palustris, Willd. Common.
     arvensis, Hoffm. Common.
     heterophyllus, Willd. R. Daldowie, Kilsyth, Fin Glen, Dunoon,
                     Ben Voirlich, Arran.
     pratensis, Willd. R. Arran.
Carlina vulgaris, L. R. Struey Rocks, Arran.
Centaurea nigra, L. Common.
     Scabiosa, L. R. Calder.
     Cyanus, L. R. Possil Road, Shettleston, Kilmalcolm,
                     Cumbrae.
Bidens cernua, L. F. Butteryburn, Erskine, Kilpatrick, St.
                     Germans, Hamilton.
     tripartita, L. R. Cumbrae, Bute, Arran.
Tanacetum vulgare, L. F. Carmyle, Cambuslang, Bothwell, Gour-
                     ock, Kilmun, Cumbrae, Arran.
Artemisia vulgaris, L. F. Eastfield, Cambuslang, Clyde Ironworks,
                     Cathcart, Kilmun, Gourock, Dunoon,
                     Cumbrae, Arran.
Eupatorium cannabinum, L. F. Kenmuir, Gourock, Wemyss Bay, Cum-
                     brae, Arran.
Antennaria dioica, Gaertn. Common.
Gnaphalium sylvaticum, L. F. Possil, Cathcart, Carmunnock, Gourock-
                     to Arran.
     uliginosum, L. F. Thornliebank, Kelvindock, Gourock to
                     Arran.
Gnaphalium supinum, L. R. Ben Lomond, Ben Voirlich.
Filago minima, Pers. F. Tollcross, Uddingston, Largs, Arran.
     germanica, L. F. Bothwell, Gourock to Arran.
Petasites vulgaris, Desf. Common.

- Tussilago Farfara*, L. Common.
Aster Tripolium, L. F. Renfrew to Arran.
Solidago Virgaurea, L. F. Carmyle, Kenmuir, Cambuslang, Garscube, Gourrock to Arran.
Senecio vulgaris, L. Common.
     viscosus, L. F. Possil Road, Firhill, Rawhead.
     sylvaticus, L. F. Tollcross, Cambuslang, High Blantyre, Gourrock to Arran.
     Jacobæa, L. Common.
     aquaticus, Huds. F. Cambuslang, Renfrew to Arran.
     tenuifolius, Jacq. R. Woodhall near Airdrie.
     saracenicus, L. R. Bothwell Bridge, Uddingston, Mugdock, Kilwinning.
Doronicum Pardalianches, L. R. Carmyle, Cambuslang, Garscube.
Pulicaria dysenterica, Gaertn. R. Struey Rocks and Whiting Bay, Arran.
Bellis perennis, L. Common.
Chrysanthemum Leucanthemum, L. Common.
     segetum, L. F. Cathcart, Pollokshields, Balmore.
Matricaria inodora, L. Common.
     var. maritima. Common.
     Chamomilla, L. R. Merrytown, Possil Road, banks of Clyde.
Anthemis nobilis, L. R. Cumbræ, Bute.
     arvensis, L. R. Haughhead, Tollcross.
     Cotula, L. R. Shields Farm, Cathcart, Govan.
Achillea Ptarmica, L. Common.
     Millefolium, L. Common.

Campanulaceæ.

- Campanula rotundifolia*, L. Common.
     hederacea, L. R. Dunoon, Cloch.
     latifolia, L. F. Carmyle, Cambuslang, Bothwell.
     Trachelium, L. R. Mugdock (?).
Jasione montana, L. F. Tollcross, Kirkintilloch, banks of Clyde, Gourrock to Arran.

Lobeliaceæ.

- Lobelia Dortmanna*, L. R. Bardowie, Mugdock, Loch Lomond, Dunloskin.

Vacciniaceæ.

- Vaccinium Myrtillus*, L. Common.
     Vitis-idaea, L. F. Falls of Clyde, Campsie Hills, Gourrock to Arran.
     Oxycoccus, L. F. Garnkirk, Auld Wives' Lifts, Campsie Hills, Barloch.
     uliginosum, L. R. Ben Voirlich.

Ericaceæ.

- Erica tetralix*, L. Common.
     cinerea, L. Common.

- Calluna vulgaris*, Salisb. Common.
Andromeda polifolia, L. R. Garnkirk, Cadder Moss, Paisley Moss.
Arctostaphylos Uva-ursi, Wimm. R. Holy Island, Arran.

Pyrolaceæ.

- Pyrola secunda*, L. R. Kittoch Glen, Busby.
minor, L. F. Falls of Clyde, Bothwell, Calderwood,
 Possil, Cadder Wilderness, Gourock.

Aquifoliaceæ.

- Ilex Aquifolium*, L. Common.

Oleaceæ.

- Ligustrum vulgare*, L. Common.
Fraxinus excelsior, L. Common.

Apocynaceæ.

- Vinca minor*, L. R. Barcluith, Hamilton, Stonelaw, Cath-
 cart, Bothwell.

Gentianaceæ.

- Erythræa Centaurium*, Pers. F. Between Wishaw and Motherwell, Blan-
 tyre, opposite Dalziel Camp, Gourock
 to Arran.
linarifolia, Pers. F. Largs, Bute, Cumbræ, Arran.
Gentiana campestris, L. F. Cathkin, Airdrie, Kilbride, Craigton,
 Auchineden, Cumbræ, Bute, Arran.
Menyanthes trifoliata, L. F. Possil, Cathkin, Frankfield, Germiston,
 Gourock to Arran.
Villarsia nymphæoides, Vent. R. Forth and Clyde Canal, Corehouse.

Convolvulaceæ.

- Convolvulus arvensis*, L. R. Firhill, Cart near Paisley.
Calystegia sepium, Br. F. Dalmarnock, Dalbeth, Possil Road,
 Barrhead Road, Inchinnan, Gourock to
 Arran.
Soldanella, Br. F. Fintry Bay, Cumbræ; Bute; Arran.

Boraginaceæ.

- Lithospermum arvense*, L. R. Bogle's Hole, Rutherglen, Tollcross,
 Gourock.
Mertensia maritima, Don. F. Cumbræ, Bute, Arran.
Myosotis palustris, With. Common.
repens, Don. F. Possil, Cambuslang, Maryhill, Mearns,
 Gourock to Arran.
cæspitosa, Schultz. F. Possil Marsh, Ferniegair, Cart, Bute,
 Cumbræ, Arran.

- Myosotis arvensis*, Hoffm. Common.
versicolor, Reich. F. Possil, Rutherglen, Tollcross, St. Germans, Gourock.
- collina*, Hoffm. ?
Lycopsis arvensis, L. F. Rutherglen, Cathcart, Carmyle, Gourock to Arran.
- Symphytum officinale*, L. Common.
tuberosum, L. Common.

Solanaceæ.

- Hyoscyamus niger*, L. R. Dumbarton Rock (?).
Solanum Dulcamara, L. F. Cambuslang, Eastfield, Inchinnan, Gourock to Arran.

Orobanchaceæ.

- Lathræa squamaria*, L. R. Gareloch, Carmyle (?).

Scrophulariaceæ.

- Veronica serpyllifolia*, L. Common.
arvensis, L. Common.
scutellata, L. F. Possil, Frankfield, Hogganfield, Gourock to Arran.
- Anagallis*, L. R. Busby, Cumbræ, Bute, Arran.
Beccabunga, L. Common.
officinalis, L. Common.
montana, L. F. Carmyle, Kenmuir, Cambuslang, Cathcart, Langside, Kelvinside, Campsie, Gourock.
- Chamædrys*, L. Common.
hederæfolia, L. Common.
agrestis, L. Common.
- Bartsia viscosa*, L. R. Gourock, between Dumbarton and Helensburgh.
- Odontites*, Huds. Common.
 var. *vena*. F. Bute, Arran.
- Euphrasia officinalis*, L. Common.
Rhinanthus Crista-galli, L. Common.
Melampyrum pratense, L. F. Falls of Clyde, Calderwood, Campsie, Milngavie, Mugdock, Gourock to Arran.
- Pedicularis palustris*, L. F. Possil, Gourock to Arran.
sylvatica, L. Common.
- Scrophularia nodosa*, L. F. Langside, Cart, Clyde, Kelvin, Gourock to Arran.
 R. Inchinnan.
 R. Jerviston (?).
 Common.
- Ehrharti*, Stev. F. Cambuslang, Kelvin, Dalmarnock, Eastfield, Gourock.
aquatica, L. R. Tollcross, Barncluith (?).
 Common.
- Digitalis purpurea*, L. F. Calderwood, Eastfield, Milngavie, Renfrew, Kilmun, Fairlie, Cumbræ, Arran.
- Linaria vulgaris*, Moench.
 minor, Desf.
- Verbascum Thapsus*, L.

Labiatae.

- Lycopus europæus*, L. F. Forth and Clyde Canal, Gourrock to Arran.
- Mentha viridis*, L. R. Ferniegair, Largs, Bute, Arran.
- aquatica*, L. F. Paisley Canal, Forth and Clyde Canal, Kelvin, Gourrock to Arran.
- sativa*, L. F. Clyde, Inchinnan, Hamilton, Gourrock to Arran.
- var. *rubra*. R. Lamlash.
- var. *paludosa*. R. Lamlash.
- arvensis*, L. Common.
- Thymus Serpyllum*, L. Common.
- var. *Chamædryas*. Rare.
- Origanum vulgare*, L. R. Clyde Ironworks, Rotten Calder, Falls of Clyde.
- Teucrium Scorodonia*, L. Common.
- Ajuga reptans*, L. Common.
- Ballota nigra*, L. R. Cathcart Castle (?).
- Galeopsis Tetrahit*, L. Common.
- versicolor*, Curt. Common.
- Lamium album*, L. F. Partick, Clyde Ironworks, Langside, Busby, Mearns.
- purpureum*, L. Common.
- incisum*, Willd. F. Cathcart, Rutherglen, Allander Toll.
- intermedium*, Fries. F. Cathcart, Cambuslang, Gourrock to Arran.
- amplexicaule*, L. F. Cathcart, Rutherglen, Cambuslang, Gourrock to Arran.
- Betonica officinalis*, L. R. Hamilton, Nethanfoot.
- Stachys sylvatica*, L. Common.
- palustre*, L. Common.
- var. *ambigua*. F. Innellan, Arrochar, Cumbræ, Bute, Arran.
- arvensis*, L. F. Tollcross, Carmunnock, Gourrock, Largs, Cumbræ, Arran.
- Nepeta Cataria*, L. R. Cragneithan.
- Glechoma*, Benth. Common.
- Calamintha Clinopodium*, Benth. F. Kenmuir, Campsie Glen, Paisley Canal, Hamilton, Busby.
- Acinos*, Clairv. R. Bonnington Farm, Lanark; Newton, Cambuslang.
- Prunella vulgaris*, L. Common.
- Scutellaria galericulata*, L. F. Brother Loch, Bowling, Dumbarton, Gourrock to Arran.
- minor*, L. R. Between Luss and Helensburgh; Cockle Bay, Bute.

Lentibulariaceae.

- Pinguicula vulgaris*, L. Common.
- lusitana*, L. R. Cumbræ, Bute, Arran.
- Utricularia vulgaris*, L. R. Possil; Robroyston; Loch Davie, Arran; Cumbræ.
- minor*, L. R. Frankfield, Possil, St. Germans, Cumbræ.

Primulaceæ.

<i>Primula vulgaris</i> , L.	Common.
<i>veris</i> , L.	R. Cathkin, Bothwell, Hamilton, Paisley Canal.
<i>Glaux maritima</i> , L.	Common.
<i>Lysimachia vulgaris</i> , L.	R. Kenmuir, Cambuslang, Bowling.
<i>thyrsiflora</i> , L.	R. Possil, Forth and Clyde Canal, Monkland Canal.
<i>nemorum</i> , L.	Common.
<i>Nummularia</i> , L.	F. Harvey's Dike, Cambuslang, Bothwell, Old Waterworks.
<i>Anagallis arvensis</i> , L.	F. Tollcross, Cathcart, Gourrock to Arran.
<i>tenella</i> , L.	R. Helensburgh, Gourrock, Bute, Cumbrae, Arran.
<i>Centunculus minimus</i> , L.	R. Cumbrae, Arran.
<i>Samolus Valerandi</i> , L.	Common at Firth.

Plumbaginaceæ.

<i>Armeria vulgaris</i> , Willd.	Common.

Plantaginaceæ.

<i>Plantago major</i> , L.	Common.
<i>lanceolata</i> , L.	Common.
<i>maritima</i> , L.	Cathcart. Common at Firth.
<i>Coronopus</i> , L.	Common.
<i>Littorella lacustris</i> , L.	Common.

Chenopodiaceæ.

<i>Chenopodium album</i> , L.	Common.
<i>var. viride</i> .	Common.
<i>Bonus Henricus</i> , L.	Cathcart, Bothwell, Mugdock.
<i>Atriplex portulacoides</i> , L.	R. Helensburgh (?).
<i>laciniata</i> , Sm.	R. Lamplash.
<i>Babingtonii</i> , Woods.	F. Cumbrae, Bute, Arran.
<i>patula</i> , L.	Common.
<i>angustifolia</i> , Sm.	Common.
<i>var. erecta</i> .	Common.
<i>Salicornia herbacea</i> , L.	Frequent at Firth.
<i>Suaeda maritima</i> , Dumort.	Frequent at Firth.
<i>Salsoli Kali</i> , L.	F. Largs, Cumbrae, Bute, Arran.

Scleranthaceæ.

<i>Scleranthus annuus</i> , L.	F. Tollcross, Possil Road, Clyde Ironworks, Gourrock.

Polygonaceæ.

<i>Polygonum Bistorta</i> , L.	F. Cambuslang, Kelvin, Kilbride, Cumbrae, Arran.

- Polygonum viviparum*, L. f. Ben Lomond, Ben Voirlich, hills above Loch Eck.
Common.
f. Bute, Innellan, Cumbrae, Arran.
Common.
Common.
f. Hogganfield, Frankfield.
Common.
f. Forth and Clyde Canal, Cathcart, Gourock to Arran.
Common.
R. Black Loch.
R. Woodhall, Corehouse, between Fairlie and Largs.
Common.
Common.
R. Lamash.
R. Bothwell, Renfrew.
R. Gareloch (?).
R. Bothwell, Barncluith, Dumbarton.
f. Dalbeth, opposite Carmyle, Bothwell, Cumbrae, Arran.
Common.
R. Between Barncluith and Hamilton Wood.
Common.
Common.
Common on high hills.
- Rumex Hydrolapathum*, Huds.
crispus, L.
obtusifolius, L.
pratensis, M. & K.
aquaticus, L.
alpinus, L.
sanguineus, L.
var. *viridis*.
conglomeratus, Murr.
pulcher, L.
Rumex *Acetosa*, L.
Acetosella, L.
Oxyria reniformis, Hook.

Empetraceæ.

- Empetrum nigrum*, L. Common.

Euphorbiaceæ.

- Mercurialis perennis*, L. Common.
Euphorbia Helioscopia, L. Common.
Peplus, L. f. Rutherglen, Cambuslang, Cathcart, Gourock, Cumbrae, Arran.
f. Strathbungo, Shawlands, Rutherglen, Tollcross, Cumbrae.
exigua, L.

Callitrichaceæ.

- Callitriche verna*, L. Common.
var. *platycarpa*. Common.

Urticaceæ.

- Urtica urens*, L. Common.
dioica, L. Common.
Parietaria officinalis, L. R. Bothwell Castle.

Ulmaceæ.

- Ulmus campestris*, L. Common.
suberosa, Ehr. Frequent.

Myricaceæ.**Myrica Gale, L.**F. Frankfield, Gourock, Kilmun, Bute,
Cumbrae, Arran.**Betulaceæ.****Betula alba, L.**
var. *glutinosa*, Fr.
nana, L.Common.
?
R. Bertram near Carnwath.
Common.**Alnus glutinosa, Gaertn.****Salicaceæ.****Salix pentandra, L.**
fragilis, L.
var. *Russelliana*, Sm.
alba, L.Common.
Common.
F. Rutherglen, Cambuslang.
Common.var. *caerulea*, Sm.

Common.

var. *vitellina*, L.

Common.

undulata, Ehr.

R. Clyde Ironworks.

triandra, L.

R. Balmore.

purpurea, L.

Common.

Helix, L.

F. Clyde Ironworks, Dalbeth, Cart.

viminalis, L.

Common.

acuminata, Sm.

R. St. Germans.

cinerea, L.

Common.

aurita, L.

Common.

caprea, L.

Common.

laurina, L.

R. St. Germans.

nigricans, L., var. *Forsteriana*, R. Possil Marsh.phylicifolia, L., var. *Weigelia*, R. Possil Marsh.var. *laxiflora*.

R. Clyde Ironworks.

fusca, L.

Common.

herbacea, L.

Common on higher hills.

Populus alba, L.

Common.

var. *canescens*.

Frequent.

tremula, L.

F. Cumbrae, Arran.

nigra, L.

Common.

var. *fastigiata*.

Common.

Cupuliferæ.**Fagus sylvatica, L.**

Common.

Castanea vulgaris, Lam.

Common.

Quercus Robur, L.

Common.

var. *sessiliflora*, Salisb.

Frequent.

Corylus Avellana, L.

Common.

Carpinus Betulus, L.

F. Garscube, Kelvinside.

Coniferæ.**Pinus sylvestris, L.**

Common.

Juniperus communis, L.F. Mugdock, Milngavie, Finnich Glen,
Kilmun, Gourock.

- Juniperus communis*, var. *nana*. Frequent.
Taxus baccata, L. Common.

Hydrocharidaceæ.

- Anacharis Alsinastrum*, Bab. F. Cadder, Forth and Clyde Canal, Possil Marsh.

Orchidaceæ.

- Malaxis paludosa*, Sw. R. Inverarnan, Arran, Lochwinnoch.
Epipactis latifolia, L. F. Eastfield, Stonelaw, Bothwell, Nether-
 ton, Garscube, Dougalston.
     grandifolia, Sm. R. Loch Ranza (?).
     ensifolia, Sm. R. Invercloy and Whiting Bay, Arran.
Goodyera repens, R. Br. R. Fullerton Woods.
Listera ovata, Br. F. Paisley Canal, St. Germans, Gourock to
 Arran.
     cordata, Br. F. Gourock, Bute, Cumbrae, Arran.
Neottia Nidus-avis, L. R. Calderwood, Cloch, Cartlane Craggs.
Orchis mascula, L. F. Cathkin, Kittoch Glen, Gourock to Arran.
     latifolia, L. Common.
     maculata, L. Common.
Gymnadenia conopsea, Br. F. Cathkin, Milngavie (?), Gourock to Arran.
Habenaria viridis, Br. R. Cathkin, Daldowie, Dougalston, Gourock
 to Arran.
Habenaria albida, Br. R. Castlemilk, Campsie Hills, Gourock,
 Kilmun, Bute, Arran.
     bifolia, Br. F. Dougalston, Kenmuir, Possil, Paisley
 Canal, Cathkin, Gourock to Arran.
     chlorantha, Bab. F. Calderwood, Dougalston, Gourock to
 Arran.

Iridaceæ.

- Iris Pseudacorus*, L. Common.

Amaryllidaceæ.

- Galanthus nivalis*, L. R. Gairbraid, Castlemilk, Calderwood, Ard-
 gowan.

Trilliaceæ.

- Paris quadrifolia*, L. R. Calderwood, Netherlee, Jerviswood,
 Lennox Castle, Kilsyth.

Liliaceæ.

- Convallaria majalis*, L. R. Falls of Clyde, Cartlane Craggs, Barncluith.
Polygonatum multiflorum, All. R. Mugdock, Bothwell, Corehouse, Cath-
 cart.
Agraphis nutans, Link. Common.
Allium vineale, L. R. Daldowie, Carmyle, Dunglass, Cumbrae,
 Arran.

<i>Allium ursinum</i> , L.	Common.
<i>Gagea lutea</i> , Ker.	R. Hamilton(?).
<i>Tulipa sylvestris</i> , L.	R. Blantyre Priory, Orbiston, Smiddy Croft.
<i>Tofieldia palustris</i> , Huds.	R. Ben Lomond.

Juncaceæ.

<i>Juncus communis</i> , Meyer.	Common.
var. <i>effusus</i> .	Common.
var. <i>conglomeratus</i> .	Common.
<i>glaucus</i> , Ehr.	F. Robroyston, Auchinearn, Baldernock, Ferniegair, Cathkin, Gourrock, Cumbrae, Arran.
<i>maritimus</i> , Sm.	F. Bute, Cumbrae, Arran.
<i>squarrosus</i> , L.	Common.
<i>triglumis</i> , L.	R. Goatfell, Ben Voirlich.
<i>acutiflorus</i> , Ehr.	Common.
<i>lamprocarpus</i> , Ehr.	Common.
<i>obtusiflorus</i> , Ehr.	R. Between Gourrock and Inverkip(?).
<i>uliginosus</i> , Sibth.	Common.
<i>trifidus</i> , L.	R. Goatfell, Ben Voirlich.
<i>compressus</i> , Jacq.	R. Hamilton(?), Gourrock.
var. <i>cænosus</i> .	Common.
<i>bufonius</i> , L.	Common.
<i>Luzula sylvatica</i> , Bich.	Common.
<i>pilosa</i> , Willd.	F. Kelvinside, Kenmuir, Cadder Wilderness.
<i>campestris</i> , Willd.	Common.
var. <i>congesta</i> ,	Common.
<i>spicata</i> , D.C.	R. Ben Lomond, Ben Voirlich.
<i>Narthecium ossifragum</i> , Huds.	Common.

Alismaceæ.

<i>Alisma Plantago</i> , L.	Common.
<i>ranunculoides</i> , L.	R. Possil(?), Bute, Cumbrae, Arran.
<i>Sagittaria sagittifolia</i> , L.	R. Inchinnan, Forth and Clyde Canal.
<i>Triglochin palustre</i> , L.	F. Possil, Frankfield, Hogganfield, Paisley Canal, Gourrock to Arran.
<i>maritimum</i> , L.	Common.

Typhaceæ.

<i>Typha latifolia</i> , L.	R. Ferniegair, Cadder, Lochlibo, Corehouse, Inchinnan, Whiting Bay.
<i>angustifolia</i> , L.	R. Auchmeddan.
<i>Sparganium ramosum</i> , Huds.	Common.
<i>simplex</i> , Huds.	F. Forth and Clyde Canal, Possil, Frank- field, Hogganfield, Paisley Canal, St. Germans.
<i>minimum</i> , Bauh.	F. Forth and Clyde Canal, Frankfield, Gourrock to Arran.

Araceæ.*Arum maculatum*, L.R. Bothwell, Barncluith, Crookston, Car-
beth-Guthrie, Bute, Cumbrae.*Acorus Calamus*, L.

R. Cadder, Castle Semple, Corehouse.

Lemnaceæ.*Lemna trisulca*, L.

R. Possil, Forth and Clyde Canal.

minor, L.

Common.

polyrhiza, L.

R. Firhill.

gibba, L.

R. Firhill.

Naiadaceæ.*Potamogeton densus*, L.

R. Bardowie, Hamilton, Blantyre.

pusillus, L.

F. Possil, Paisley Canal, Forth and Clyde
Canal.

gramineus, L.

R. Possil, Forth and Clyde Canal, Clyde.

crispus, L.

Common.

perfoliatus, L.

Common.

lucens, L.

Common.

nitens, Weber.

R. Loch Ascog, Bute.

heterophyllus, Schreb.

Common.

rufescens, Schrad.

R. Possil, Forth and Clyde Canal.

natans, L.

Common.

oblongus, Viv.

Common.

Zannichellia palustris, L.R. Bogle's Hole (?), Hamilton Bridge,
Kilsyth.*Zostera marina*, L.

Common.

var. *angustifolia*.

Common.

nana, Roth.

R. Between Fairlie and Hunterston, Cumbrae.

Cyperaceæ.*Schoenus nigricans*, L.

Common.

Rhynchospora alba, Vahl.

F. Kilmun, Gareloch, Gourrock, Loch Lomond.

Blysmus compressus, Panz.

F. Greenock, Largs, Fairlie.

rufus, Link.

F. Kilpatrick, Bowling, Kilmun.

Eleocharis palustris, Br.

Common.

multicaulis, Sm.

F. Largs, Cumbrae, Bute, Arran.

acicularis, Br.

R. Bardowie, Arran, Brother Loch.

Isolepis fluitans, R. Br.

R. Frankfield, Bardowie, Gourrock, Cumbrae.

setacea, R. Br.

F. Possil, Clyde, Gourrock to Arran.

Savii, Schultes.

R. Arran.

var. *monostachys*.

R. Arran.

Scirpus lacustris, L.

F. Possil Marsh, Kelvin.

Tabernæmontani, Gmel.

Common between Renfrew and Bowling.

maritimus, L.

F. Bowling, Dumbarton, Wemyss to Largs,
Cumbrae, Arran.

sylvaticus, L.

F. Bothwell, Hamilton, Kenmuir, Kelvin-
side, Inchinnan, Busby.

pauciflorus, Lightf.

F. Dumbarton, Greenock, Gourrock to Arran.

- Scirpus cæspitosus*, L. Common.
Eriophorum vaginatum, L. Common.
     latifolium, Hoppe. R. Bonnington.
     angustifolium, Roth. Common.
Carex dioica, L. R. Gourrock, Inverkip, Cumbræ, Arran.
     pulicaris, L. F. Cathkin, Possil, Paisley Canal, Gourrock to Arran.
     pauciflora, Lightf. R. Goatfell, Ben Lomond, Near Glasgow.
     ovalis, Gooden. Common.
     stellulata, Gooden. Common.
     curta, Gooden. Common.
     remota, L. F. Gairbraid, Kelvin, Kenmuir, Gourrock, Cumbræ, Arran.
     paniculata, L. R. Kenmuir, New Kilpatrick, Cumbræ, Arran.
     teretiuscula, Gooden. R. Possil Marsh, Ferniegair, Little Cumbræ, Arran.
     var. *Ehrhartiana*. R. Bothwell.
     vulpina, L. F. Clyde, Bute, Cumbræ, Arran.
     muricata, L. R. Cathcart Castle, Inverkip, Cumbræ, Arran.
     arenaria, L. F. Helensburgh, Dunoon, Cumbræ, Arran.
     vulgaris, Fries. Common.
     rigida, Gooden. F. Ben Lomond, Ben Voirlich, Goatfell, Arran.
     acuta, L. F. Carmyle, Kenmuir, Gourrock, Cumbræ, Arran.
     aquatilis, Wahl.
     var. *Watsoni*, Syme. R. Kenmuir, Ferniegair.
     saxatilis, L. F. Ben Lomond.
     pilulifera, L. F. Stepps, Kilbride, Cathkin, Craigmaddie, Gourrock, Kilmun, Cumbræ, Arran.
     præcox, Jacq. Common.
     filiformis, L. R. Dunloskin near Dunoon.
     hirta, L. F. Baldernock, Kenmuir, Bowling, Gourrock, Cumbræ, Arran.
     glaucia, Scop. Common.
     panicea, L. Common.
     pallescens, L. F. Crossbasket, Milngavie, Kilmalcolm, Gareloch.
     limosa, L. R. Bowling.
     var. *irrigua*, Hoppe. R. Lanark.
     extensa, Gooden. F. Skelmorlie, Largs, Cumbræ, Arran.
     flava, L. F. Cathkin, Possil, Gourrock, Cumbræ, Arran.
     var. *Æderi*. ?
     fulva, Gooden. F. Craigmaddie, Bowling, Gourrock to Arran.
     var. *speirostachya*. F. Inverkip, Cumbræ, Arran.
     distans, L. R. Cumbræ, Arran.
     binervis, Sm. Common.
     lævigata, Sm. R. Lamlash, Cumbræ, Innellan.

- Carex sylvatica*, Huds. F. Langside, Kelvinside, Cambuslang, Blantyre Priory, Gourrock to Arran.
pendula, Huds. R. Blantyre Priory, Barncluith, Kenmuir, Gourrock.
ampullacea, Gooden. F. Possil, Bardowie, Gourrock, Cumbræ, Arran.
vesicaria, L. F. Possil, Bardowie, Busby.
paludosa, Gooden. Common.
riparia, Curt. F. Carmyle, Kenmuir, Cart.
- Gramineæ.**
- Nardus stricta*, L. Common.
Alopecurus pratensis, L. Common.
geniculatus, L. Common.
Phleum pratense, L. Common.
Anthoxanthum odoratum, L. Common.
Psamma arenaria, R. & S. F. Cumbræ, Bute, Arran.
Digraphis arundinacea, Trin. Common.
Agrostis canina, L. Common.
vulgaris, With. Common.
var. aristata. ?
var. pumila. F. Bute, Cumbræ, Arran.
alba, L. Common.
var. stolonifera. Common.
var. maritima. F. Cumbræ, Arran.
Milium effusum, L. F. Hamilton, Lanark, Gairbraid, Langside.
Melica uniflora, Retz. F. Kelvinside, Kenmuir, Cambuslang, Gourrock to Arran.
nutans, L. R. Bonnington Falls, Cartlane Crag, Busby, Kilpatrick Hills.
Common.
Molinia cærulea, Moench. R. Gilbertfield Castle, Crossbasket.
Catabrosa aquatica, Beauv. F. Cumbræ, Bute, Arran.
var. littoralis. R. Jerviston, Fairlie.
Koeleria cristata, Pers. Common.
Holcus lanatus, L. F. Langside, Cambuslang, St. Germans, Gourrock to Arran.
mollis, L. Common.
Aira cæspitosa, L. R. Ben Lomond.
alpina, L. Common.
flexuosa, L. F. Possil Road, Paisley Canal, Tollcross, Bowling.
Aira caryophyllea, L. F. Tolcross, Mugdock, Bowling, Gourrock.
præcox, L. Common.
Arrhenatherum avenaceum, Beauv. *var. bulbosum*. Common.
Avena fatua, L. R. Uddingston.
strigosa, Schreb. F. Tollcross, Cadder, Cathcart, Bute, Cumbræ, Arran.
pratensis, L. R. Largs, Fairlie, Arran.
planiculmis, Schrad. R. Glen Sannox (?).
pubescens, L. R. Cathkin, Cart.

- Avena flavescens*, L.
Sesleria cærulea, Scop.
Cynosurus cristatus, L.
Dactylis glomerata, L.
Phragmites communis, Trin.
Triodia decumbens, Beauv.

Briza media, L.

Poa aquatica, L.
fluitans, Scop.
maritima, Huds.
compressa, L.
pratensis, L.
trivialis, L.
alpina, L.
nemoralis, L.
annua, L.
Festuca bromoides, L.

ovina, L.
var. *vivipara*.
var. *duriuscula*.
var. *rubra*.
sylvatica, Vill.
pratensis, Huds.
var. *lohiacea*.
elatior, L.
gigantea, Vill.

Bromus asper, L.
sterilis, L.

secalinus, L.
commutatus, Schrad.
racemosus, L.

mollis, L.
Elymus arenarius, L.
Triticum repens, L.
var. *littorale*.
juncum, L.
var. *laxum*.
caninum, Huds.

Brachypodium sylvaticum, Beauv.

Lolium perenne, L.
temulentum, L.
- R. Crosshill, Johnstone, Fairlie, Arran.
R. Ben Lomond.
Common.
Common.
Common.
F. Possil, Cambuslang, Cathkin, Gourrock to Arran.
R. Dougalston, Falls of Clyde, Airdrie, Barncluith, Baldernock.
F. Forth and Clyde Canal, Possil, Cart.
Common.
Common.
R. "Old Oaks," Possil Road, Corrieburn.
Common.
Common.
F. Ben Lomond, Ben Voirlich, Arran (?).
Common.
Common.
F. Possil, Tollcross, Wellshot, Gourrock to Arran.
Common.
F. Bute, Cumbræ, Arran.
Common.
F. Bute, Cumbræ, Arran.
R. Kenmuir.
Common.
R. Dalbeth.
Common.
F. Clyde Ironworks, Carmyle, Kenmuir, Kelvin, Gourrock to Arran.
Common.
F. Old Cathcart, Rutherglen, Shawfield, Cambuslang, Gourrock to Arran.
R. Possil Road, Tollcross, Pollokshields.
R. Shawlands, Eastfield.
F. Keppoch Hill, Cathcart, Paisley Canal, Gourrock to Arran.
Common.
R. Brodick, Kildonan.
Common.
Common.
Frequent.
Common.
F. Partick, Carmyle, Kenmuir, Cathcart, Cambuslang.
F. Kelvinside, Carmyle, Kenmuir, Cambuslang, Gourrock to Arran.
Common.
R. Shettleston.

Plants not Indigenous occurring Occasionally in the District.

- Adonis autumnalis, L. Tollcross.
 Helleborus foetidus, L. Blantyre Priory, Barncluith.
     viridis, L. Bothwell.
 Aquilegia vulgaris, L. Falls of Clyde, Blantyre Priory, Castle-
     milk, Dunglass.
 Aconitum Napellus, L. Hamilton Bridge, Barncluith, Clyde Iron-
     works, Stonelaw, Loch Lomond.
 Chelidonium majus, L. Barncluith, Hamilton, Avon Mill, Craig-
     nethan, Duchal.
 Sinapis nigra, L. Carmyle.
     alba, L. Govan.
 Sisymbrium Sophia, L. Maryhill.
 Hesperis matronalis, L. Cambuslang Glen, Cadder, Holytown.
 Erysimum orientale, Br. Carmyle, Carmunnock, Clyde Ironworks,
     Possilpark, Firhill.
     cheiranthoides, L. Troon.
 Turritis glabra, L. Partick, Bowling.
 Armoracia rusticana, Baumg.
     amphibia, Koch.
 Draba muralis, L. Botanic Garden as a weed, Cumbrae.
 Camelina sativa, Cr. Lambhill, Kirkintilloch, Chryston.
 Thlaspi arvense, L. Dalbeth, Innellan, Cumbrae.
 Iberis amara, L. Clyde Ironworks.
 Lepidium Draba, L. Renfrew, Troon.
 Senebiera didyma, Pers. Troon.
 Reseda lutea, L. Govan, Tollcross.
 Saponaria officinalis, L. Old Waterworks.
     Vaccaria, L. Clyde Ironworks.
 Linum usitatissimum, L. Govan, Maryhill, Lambhill.
 Hypericum calycinum, L. Largs, Gourrock.
     elatum, Ait. Greenock.
 Geranium nodosum, L. Bothwell.
 Impatiens Noli-me-tangere, L. Castlemilk, Rotten Calder.
 Oxalis corniculata, L. Barncluith.
 Euonymus europæus, L. Cadzow, Bothwell.
 Ulex Gallii, Planchon. Kingarth.
 Medicago sativa, L. Eastfield, Clyde Ironworks, Govan.
     falcata, L. Cambuslang, Pollokshields, Possilpark,
     Possil Marsh, Firhill, Renfrew.
     denticulata, Willd. Great Western Road, Possilpark, Firhill,
     Lochburnie.
     var. *apiculata*. Great Western Road, Possilpark, Firhill.
 Melilotus officinalis, L. Forth and Clyde Canal, Renfrew.
     parviflora, Lam. Great Western Road, Possilpark, Firhill.
     arvensis, Wallr. Inchinnan.
 Trifolium hybridum, L.
 Vicia sativa, L.

- Vicia lutea*, L.
Lathyris hirsutus, L.
Prunus domestica, L.
Spiræa salicifolia, L.
     filipendula, L.
Fragaria elatior, Ehr.
Potentilla intermedia, Nesl.
Alchemilla conjuncta, Bab.
Pyrus communis, L.
Epilobium angustifolium, L.
     roseum, Schreb.
Sempervivum tectorum, L.
Sedum reflexum, L.
Ribes rubrum, L.
     nigrum, L.
     Grossularia, L.
Saxifraga umbrosa, L.
     Geum, L.
Astrantia major, L.
Petroselinum sativum, Hoffm.
Carum Carui, L.
Valeriana Pyrenaica, L.

Tragopogon porrifolius, L.
Hieracium aurantiacum, L.
Cichorium Intybus, L.
Serratula tinctoria, L.
Carduus Marianus, L.
     eriphorus, Willd.
Centaurea solstitialis, L.
Artemisia Absinthium, L.
Doronicum plantagineum, L.
Inula Helenium, L.
Matricaria Parthenium, L.

Achillea tomentosa, L.
Xanthium spinosum, L.
Campanula rapunculoides, L.
Vinca major, L.
Polemonium cæruleum, L.
Cuscuta Epilinum, Weihe.
Echium vulgare, L.
Pulmonaria officinalis, L.
Lithospermum officinale, L.
Anchusa officinalis, L.
     sempervirens, L.

Borago officinalis, L.
Asperugo procumbens, L.
Cynoglossum officinale, L.
- Renfrew.
 Troon.

 Cartlane Crags.
 Lover's Leap at Chatelherault.
 Stonelaw, Cathcart, Cambuslang, Garscube.
 Bothwell.
 Glen Sannox.
 Chatelherault.
 Avon opposite Barncluith, Stonelaw, Core-house.
 Great Western Road.

 Craignethan, Clyde Ironworks.
 Avon banks, Cambuslang.

 Bothwell, Dalziel Camp, Cartside.
 Partick.
 Possil.
 Bothwell Castle.
 Dalbeth.
 Carmyle, Calderwood, Kilsyth, Woodhall, Lochwinnoch.
 Renfrew, Cumbrae.
 Balvie, Dougalston, Southern Necropolis.
 Belvidere, Tollcross, Maryhill.
 Between Daldowie and Bothwell.
 Dumbarton Castle.
 Dumbarton, Rutherglen.
 Lochburnie.
 Possilpark.
 Bothwell.
 Mugdock, Barncluith.
 Cambuslang, Carmunnock, Cathcart, Kelvinside.
 Spittlehill, Milngavie.
 Helensburgh.
 Langside.
 Bothwell, Skelmorlie, Kelburne.
 Barncluith, Calder, Falls of Clyde.
 Kilsyth, Chryston, Arran.
 Possil Road, Old Waterworks, Govan, Bute.
 Bothwell, Dalbeth, Easterhill.
 Mugdock, Bothwell, Arran.
 Uddingston, Bute.
 Craignethan, Avon opposite Cadzow Castle, Castlemilk.

 Bute.
 Cambuslang Glen.

<i>Echinospermum</i> Lappula, Lehm.	Renfrew, Denniston.
deflexum.	Possil.
<i>Atropa</i> Belladonna, L.	Cathcart.
<i>Solanum</i> nigrum, L.	Gareloch, Largs, Cumbrae.
<i>Mimulus</i> luteus, L.	Cathkin.
<i>Veronica</i> Buxbaumii, Ten.	Cumbrae.
<i>Scrophularia</i> vernalis, L.	Bothwell.
<i>Antirrhinum</i> majus, L.	Barncluith, Chatelherault, Mugdock.
<i>Linaria</i> Cymbalaria, Mill.	Bothwell, Maryhill.
Elatine, Mill.	Troon.
<i>Leonurus</i> cardiaca, L.	Craignethan, Corehouse.
<i>Lamium</i> maculatum, L.	Barncluith, Mugdock.
<i>Lysimachia</i> ciliata, L.	Dumbarton, Loch Lomond.
<i>Plantago</i> media, L.	Innellan.
lanceolata, L., var. <i>Timbali</i> .	Kilmarnock Road.
<i>Chenopodium</i> rubrum, L.	
<i>Suaeda</i> fruticosa, Forsk.	Troon.
<i>Polygonum</i> Fagopyrum, L.	
<i>Daphne</i> Laureola, L.	Bothwell.
<i>Mercurialis</i> annua, L.	Troon.
<i>Euphorbia</i> Lathyrus, L.	Barncluith, Hamilton.
<i>Humulus</i> Lupulus, L.	Tollcross, Stonelaw, Possilpark.
<i>Hippophaë</i> rhamnoides, L.	Toward.
<i>Iris</i> foetidissima, L.	Cumbrae.
<i>Narcissus</i> Pseudo-narcissus, L.	Kittoch Glen, Dunoon.
<i>Ruscus</i> aculeatus, L.	Bothwell, Row.
<i>Convallaria</i> majalis, L.	Falls of Clyde, Barncluith.
<i>Allium</i> Schœnoprassum, L.	Arran.
<i>Ornithogalum</i> umbellatum, L.	Barncluith, Cart, Dunglass.
<i>Tulipa</i> sylvestris, L.	Bothwell.
<i>Alopecurus</i> agrestis, L.	Govan, Hillhead.
<i>Setaria</i> viridis, Beauv.	Renfrew.
glauca, Beauv.	Great Western Road.
<i>Phalaris</i> canariensis, L.	
paradoxa.	Great Western Road.
<i>Polypogon</i> monspeliensis, Desf.	Great Western Road.
<i>Agrostis</i> Spica-venti, L.	Great Western Road, Denniston.
<i>Bromus</i> secalinus, L.	Possil Road, Tollcross, Pollokshields.
arvensis, L.	Possil Road, Tradeston.
<i>Lolium</i> italicum, Braun.	Shettleston, Carmyle.

RICHARD M'KAY.

The preceding list of Phanerogamia is for the district of the Clyde Valley. Want of time has prevented its extension to the whole of the West of Scotland.

SUB-KINGDOM CRYPTOGRAMIA.

Filices.

- Polypodium vulgare*, L.
Phegopteris, L.
Dryopteris, L.
alpestre, Hoppe.
Cryptogramma crispa, Br.
- Polystichum aculeatum*, Sw.
var. lobatum.
angulare, W.
Lonchitis, Sw.
- Lastrea Oreopteris*, Sw.
Filix-mas, Sw.
var. incisa, Moore.
var. producta, Moore.
var. paleacea, Moore.
cristata, Sw.
dilatata, Sw.
var. spinulosa, Presl.
var. recurva, Newman.
var. glandulosa, Newm.
var. nana, Newm.
var. collina, Newm.
var. pumila, Moore.
var. dumetorum, Sm.
- Cryptopteris fragilis*, Bernh.
var. dentata.
- Athyrium Filix-fœmina*, Bernh.
var. irriguum, Roth.
var. molle, Roth.
var. marinum, Moore.
var. incisum, Hoff.
var. laxum, Schu.
var. odontomanes, Moore.
- Common.
F. Hamilton, Calderwood, Dougalston,
Drymen Road, Gourrock to Arran.
F. Cadzow, Cambuslang, Calder, Kelvin,
Campsie, Drymen Road, Garscube,
Gourrock to Arran.
R. Ben Voirlich.
R. Ben Lomond, Neilston Pad, Kilpatrick
Hills, Kilmalcolm, Campsie Hills, Kil-
syth, Kilmun, Glen Sannox.
F. Calderwood, Gourrock, Bute, Arran.
Common.
F. Kilsyth, Helensburgh, Skelmorlie, Largs,
Cumbrae, Bute, Arran.
R. Ben Lomond, Ben Voirlich.
Common.
Common.
Frequent.
F. Garscube, Cadder Wilderness, Gourrock
to Arran.
F. Cumbrae, Arran.
R. Crofthead.
Common.
F. Lochlibo, Loch Lomond, Tarbet, Mugdock.
F. Between Brodick and Corrie, Lamblash.
F. Cadder Wilderness, Bute, Arran.
F. Cadder Wilderness, Bute, Arran.
F. Bute, Arran, Colintrave.
Colintrave, Bute, Arran.
Cadder Wilderness, Colintrave, Bute, Arran.
F. Barncluth, Hamilton, Cadzow, Falls of
Clyde, Campsie Glen, Calderwood, Kit-
toch Glen, Gourrock to Arran.
R. Tarbet, Rashfield, Holy Loch.
Common.
Common.
R. Hamilton, Cumbrae, Bute, Arran.
R. Inverkip, Cumbrae, Bute, Arran.
Common.
F. Hamilton, Ardencaple, Helensburgh,
Bute, Arran.
F. Cambuslang, Kilmun, Rothesay, Lamblash.

- Asplenium Adiantum-nigrum*, L. F. Cathcart, Cambuslang, Calderwood, Crossbasket, Falls of Clyde, Cadzow, Bowling, Dumbarton, Gourrock to Arran.
- Asplenium Ruta-muraria*, L. F. Maryhill Road, Calderwood, Cathcart, Bowling, Dumbarton, Gourrock to Arran. Common.
- Trichomanes*, L. F. Falls of Clyde; Kilsyth; Fin Glen; Rashfield, Holy Loch; Glen Messen, Dunoon, Arran, Ben Voirlich.
- viride*, Huds. R. Wemyss Bay, Bute, Cumbræ, Arran.
- marinum*, L. F. Falls of Clyde, Barncluith, Hamilton, Calderwood, Crossbasket, Cambuslang, Holy Loch, Gourrock to Arran.
- Scolopendrium vulgare*, Sym. R. Paisley.
- Ceterach officinarum*, Willd. Common.
- Pteris aquilina*, L. Common.
- Blechnum boreale*, Sw. Common.
- Trichomanes radicans*, Sw. R. Arran.
- Hymenophyllum tunbridgense*, Sm. F. Milngavie, Gourrock, Inverkip, Luss, Tarbet, Puck's Glen on Holy Loch, Dunoon, Bute, Arran.
- Wilsoni*, Hook. F. Bowling, Pillar Craigs, Campsie Glen, Fin Glen, Gourrock, Inverkip, Loch Lomond, Kilmun, Glen Messen, Tigh-na-Bruich, Bute, Fairlie, Cumbræ, Arran.
- Osmunda regalis*, L. R. Between Inverkip and Gourrock, Loch Lomond, Kilmun, Dunoon, Wemyss Bay, Cumbræ, Bute, Arran.
- Ophioglossum vulgatum*, L. R. Woodhall, Possil (?), Paisley Canal, Cambuslang, Craigenglen, Kilsyth, Gourrock, Cumbræ, Arran.
- Botrychium Lunaria*, Sw. R. Neilston Pad, Kilsyth, Gourrock, Largs, Bute, Cumbræ, Arran.

Lycopodiaceæ.

- Lycopodium clavatum*, L. F. Paisley Canal (?), Craigmaddie, Stepps, Milngavie, Gourrock, Kilmun, Dunoon, Bute, Cumbræ, Arran.
- Lycopodium selaginoides*, L. Common.
- alpinum*, L. F. Paisley Canal (?), Holy Loch, Gourrock, Inverkip, Largs, Bute, Cumbræ, Arran.
- Selago*, L. F. Craigmaddie, Cathkin, Stepps, Gourrock, Kilmun, Dunoon, Bute, Cumbræ, Arran.
- annotinum*, L. R. Ben Voirlich.
- Isoetes lacustris*, L. R. Loch Cochno, Lily Loch, Loch Lomond, Bute.

Marsileaceæ.

- Pilularia globulifera*, L. R. Frankfield, Bishop Loch, Loch Lomond.

Equisetaceæ.

Equisetum Telmateia, Ehr.	R. St. Germans, Wemyss Bay, Arran.
arvense, L.	Common.
umbrosum, Willd.	R. Clyde near Newton, Campsie Glen, Bonnington.
sylvaticum, L.	Common.
limosum, L.	Common.
palustre, L.	F. Paisley Canal, Frankfield.
hyemale, L.	R. Falls of Clyde, Kenmuir, Carmyle, Kelvinside.
variegatum, Schl.	R. Frankfield.

RICHARD M'KAY.

CRYPTOGAMIA—*continued.*

Musci.

- Andreaea alpina*, Turn.
     obovata, Theden.
     petrophila, Ehr.
     alpestris, Schr.
     Rothii, W. & M.
     Grimsulana, Bruch.
     falcata, Schr.
     nivalis, Hook.
Sphagnum cymbifolium, Schr.
     compactum, Brid.
     molluscum, Bruch.
     rubellum, Wils.
     acutifolium, Ehr.
     fimbriatum, Wils.
     cuspidatum, Dill.
     var. *plumosum*.
         recurvum, Beauv.
         contortum, Schultz.
         Lindbergii, Sch.
         obesum, Wils.
         subsecundum, N. & H.
         curvifolium, Wils.
         squarrosum, W. & M.
         teres, Schr.
         laricinum, Spruce.
         molle, Sull.
         Girgensohni.
         mnioophylloides, M'K.
Archidium phascoides, Brid.
Phascum serratum, Schreb.
     muticum, Schreb.
     triquetrum, Spruce.
     patens, Hed.
     rectum, Sm.
     alternifolium, B. & S.
     subulatum, L.
Gymnostomum tenue, Schrad.
     rupestre, Schw.
     var. *compactum*.
         curvirostrum, Hed.
         microstomum, Hed.
Weissia controversa, Hed.
     mucronata, B. & S.
     cirrhatta, Hed.
- F. Western Highland hills.
 Very rare. Ben Lawers.
 Common.
 R. Uam Vohr.
 Frequent.
 R. Ben Lawers.
 R. Craig na Gour.
 R. Ben Nevis.
 Common.
 F. Callander, c. fr.
 F. Bogs.
 R. Goat Fell, Arran.
 Common.
 Common.
 Common.
 Common.
 Common.
 Frequent.
 Frequent.
 R. Ben Luoí.
 R. Frankfield Loch.
 F. Milngavie.
 Glen Falloch.
 Common.
 R. Ben Ledi, Ben Voirlich.
 F. Milngavie, &c.
 R. Ben Lawers.
 R. Ben Ledi.
 R. Ben Wyvis.
 R. Possil Marsh.
 F. Near Glasgow.
 Frequent.
 R. Near Glasgow.
 R. Hamilton.
 R. Near Bowling.
 F. Canniesburn, &c.
 F. Canniesburn, &c.
 R. Stonelaw.
 Common.
 R. Glen Falloch.
 Frequent.
 Frequent.
 Common.
 F. Dowanhill in fruit.
 Common.

- Weissia crispula*, Hed. Frequent on Western Mountains.
 var. β . Ben Lawers.
     verticillata, Brid. Common. In fruit, Cardross.
     compacta, Schl. R. Ben Lawers.
     serrulata, Fk. R. Ben Lawers.
Rhabdoweissia fugax, B. & S. Common.
     denticulata, B. & S. F. Ben Vhorlich, Western Highlands.
Campylostelium saxicola, B. & S. R. Bracklin Bridge.
Brachyodus trichodes, N. & H. R. Bothwell Castle.
Seligeria recurvata, B. & S. F. Gourrock, Bothwell Abbey.
Stylostegium caespitium, B. & S. R. Ben Lawers.
Blindia acuta, B. & S. Frequent.
Arctoa fulvella, B. & S. R. Ben Lawers.
Cynodontium Bruntoni, B. & S. F. Gourrock, &c.
Dicranum virens, Hed. R. Ben Lawers.
 var. *wahlenbergii*. Ben Ledi.
 var. *strictum*. Ben Luoi.
     crispum, Hed. R. Lennoxtown.
     squarrosum, Schrad. Common.
     cerviculatum, Hed. F. Gartcosh Moor.
     varium, Hed. Common.
 var. β . Ben Lomond.
     rufescens, Turn. R. Near Paisley.
     subulatum, Hed. F. Western Highland hills.
     heteromallum, Hed. Common.
     Starkii, W. & M. F. Western Highland hills.
     Blyttii, B. & S. F. Western Highland hills.
     Scottianum, Turn. R. Tighnabruich, Dunoon.
     longifolium, Hed. R. Ben Lawers.
     pellucidum, Hed. Common.
 var. *fagimontanum*. F. Campsie Hills.
 var. *serratum*. R. Callander.
     Schreberi, Hed. R. Lennoxtown.
     circinnatum, Wils. R. Ben Vhorlich, Ben Donagh.
         several varieties. Ben Vhorlich.
     fuscescens, Turn. Common.
 var. β . leaves falcate. Hills behind Dunoon.
     scoparium, Hed. Common.
 var. *orthocladum*. F. Callander.
     majus, Turn. Common.
     palustre, Brid. Common. Doune in fruit.
 var. β . Near Callander.
 var. γ . *juniperifolium*. R. Craig na Gour.
     spurium, Hed. R. Trossachs.
     arcticum, Schr. R. Ben Lawers.
     polycarpum, Ehr. F. Western Highland hills.
 var. *strumiferum*. R. Cobbler, &c.
     longisetum, M'K. Common.
     falcatum, Hed. F. Western Highland hills.
     Kinlayanum, Schr. F. Western Highland hills.
     Dickieanum, Wils. R. Ben Donagh.

- Desmatodon nervosus*, B. & S. R. Cardross.
Leucobryum glaucum, Hampe. Common. Fruit, Ben Lomond.
Ceratodon purpureus, Brid. Common.
     cylindricus, B. & S. R. Callander.
Dicranodontium aristatum, Mitt. F. Milngavie, Lennox town.
     sericeum, Schr. R. Soccoch Hill.
     longirostre, W. & M. R. Cardross.
Campylopus Shawii, Wils. R. North Uist.
     alpinus, Schr. R. Western Highland hills.
     flexuosus, Brid. Common.
     Swartzii, Schr. Frequent.
     brevipilus, B. & S. R. Tyndrum.
     compactus, Schr. R. Western Highland hills.
     brevifolius, Schr. R. Soccoch Hill; Arrochar.
     densus, B. & S. Common.
     longipilus, Brid. Common.
     turfaceus, B. & S. Common.
Pottia minutula, Ehr. R. Stevenston.
     truncatula, L. Common.
     crinita, Wils. R. Maryhill.
     Heimii, B. & S. R. Bothwell Abbey.
     cavifolia, Ehr. F. Glasgow.
Anacalypta lanceolata, Rohl. R. Bowling.
     latifolia, Nott. R. Ben Lawers.
Distichium inclinatum, B. & S. R. Sands of Stevenston.
     capillaceum, B. & S. F. Western Highland hills.
Didymodon rubellus, B. & S. Common.
     var. *rufulus*, Strn. Ben Lawers.
     rufus, Lorenz. R. Ben Lawers.
     cylindricus, B. & S. R. Campsie in fruit.
     flexifolius, Hook. R. Ben Lomond, Callander.
     recurvifolius, Taylor. R. Ben Vhorlich.
     Daldinianus. F. Western Highland hills.
Trichostomum tophaceum, Brid. R. Possil Road.
     crispulum, Bruch. Frequent, as at Bowling.
     flavo-virens, Bruch. R. Tighnabruich.
     flexicaule, Schwgr. Common on Western Mountains.
     var. *compactum*, Strn. R. Ben Lawers.
     homomallum, B. & S. Common.
     rigidulum, Wils. R. Callander.
     var. *densum*. F. Callander, Killin, &c.
     mutabile, Bruch. Common.
     cirrhifolium, Schr. R. Ben Lomond.
Tortula ambigua, B. & S. R. Glasgow, Pollokshields.
     aloides, B. & S. Common.
     rigida, Schultz. F. Possil Road.
     var. *pilifera*. Possil Road.
     muralis, Timm. Common.
     var. *rupestris*. Near Callander.
     convoluta, Hed. Common.
     var. *Sardowa*. Campsie.

- Tortula revoluta*, Schw. Common.
     vinealis, Brid. R. Cardross.
     insulana, De Not. Common near Glasgow.
     fallax, Hed. R. Stevenston.
   var. β . R. Trossachs.
     ruralis, Hed. R. Falls of Clyde.
     laevipila, Brid. F. Killin, &c.
     intermedia, Brid. R. Bowling.
     papillosa, Wils. R. Kilmun, Callander.
     latifolia, B. & S. R. Renfrew.
     subulata, Brid. Common.
   var. β . Near Callander.
     tortuosa, W. & M. Common; Killin in fruit.
     fragilis, Wils. R. Ben Lawers.
     recurvifolia, Wils. R. Killin, Dailly.
     Mülleri, B. & S. R. Bowling.
     marginata, B. & S. R. Dumbarton.
     ungiculata, Hed. Common.
   var. *cuspidata*. Common.
     gracilis, Schw. R. Bowling.
Cinclidotus fontinaloides, Beauv. R. Clyde.
   var. β . R. Campsie Hills.
     riparius, Arnott, var. *terrestris*. R. Callander.
Encalypta commutata, N. & H. R. Ben Lawers.
     vulgaris, Hed. Common.
   var. β . F. Falls of Clyde.
   var. γ . R. Callander.
     ciliata, Hed. F. Western Highland hills.
     rhabdocarpa, Schw. R. Ben Lawers.
     streptocarpa, Hed. Common. Fruit, Callander.
Hedwigia ciliata, Hed. Common.
Grimmia conferta, B. & S. R. Bowling.
     apocarpa, B. & S. Common.
   var. β . R. Callander.
   var. γ , *crispula*. R. Ben Lawers.
   var. δ , *stricta*. Common.
   var. ϵ , *gracilis*. Common.
   var. ζ , *falcata*. R. Craig Chailiach.
   var. η , *rivularis*. Common.
Grimmia maritima, B. & S. Common.
     orbicularis, B. & S. R. Bowling.
     pulvinata, Sm. Common.
   var. β . Common.
     Schultzii, Brid. R. Bowling, Clova.
     robusta, Ferg. R. Bowling.
     subsquarrosa, Wils. R. Near Glasgow, Killin, Bowling in fruit.
     spiralis, H. & T. F. Western Highland hills.
     Mühlenbeckii, Schr. R. Bothwell.
     trichophylla, Grev. F. Bowling, Callander, &c.
     Hartmanni, Schr. Callander, Killin, &c.
   var. β . Ben Lawers.

- Grimmia ovata*, W. & M. R. Craig Challiach.
leucophaea, Grev. R. Stirling, Bowling.
Donniana, Sm. R. Barrhead, Callander, Bowling.
commutata, Hueb. R. Killin.
elongata, Kaul. Frequent near Glasgow.
patens, B. & S. F. Western Highland hills.
torta, N. & H. F. Western Highland hills.
Racomitrium ellipticum, B. & S. R. Cobbler.
aciculare, Brid. Common.
 var. *denticulatum*. Common.
protensum, Braun. Common. Western Mountains.
sudeticum, B. & S. F. Western Highland hills.
 var. β . R. Ben Lawers.
fasciculare, Brid. Common.
heterostichum, Brid. Common.
lanuginosum, Brid. Common.
canescens, Brid. Common.
 var. *prolixum*. Common.
Ptychomitrium polyphyllum, B. & S. Common.
 var. β . Common.
 var. γ . Common.
Orthotrichum cupulatum, Hoff. R. Falls of Clyde.
 var. γ . R. Falls of Clyde.
Sturmii, Hop. & Horn. R. Stirling Rock, Callander.
tenellum, Bruch. F. Kilmun, Callander.
stramineum, Hsch. Common.
affine, Schrad. Common.
Shawii, Wils. R. Dailly.
rupestre, Schl. Frequent.
Lyellii, Hook. F. Killin in fruit.
rivulare, Turn. R. Girvan, Bothwell.
Sprucei, Mont. R. Girvan, Renfrew.
diaphanum, Schrad. R. Kilmun, Ardrishaig.
leiocarpum, B. & S. Common.
pulchellum, Sm. R. Callander.
saxatile, Brid. R. Stirling.
anomalum, Hed. F. Falls of Clyde.
 var. β . R. Falls of Clyde.
Ludwigii, Schw. R. Callander, Killin.
crispum, Hed. Common.
calvescens, Wils. R. Rowardennan.
Bruchii, Brid. Common.
Drummondii, H. & G. R. Callander.
Hutchinsiae, Sm. F. Ardrishaig, Killin.
phyllanthum, B. & S. Common.
Zygodon lapponicus, B. & S. F. Western Highland hills.
Mougeotii, B. & S. Common. Fruit, Campsie Glen, Craigna Lochan.
viridissimus, Brid. Common.
conoideus, Dicks. R. Glen Lochy.
Stirtoni, Schr. F. Campsie Glen, Ben Lawers.
forma. R. Bowling.

<i>Tetraphis pellucida</i> , Hed.	Frequent.
<i>Tetradontium Brownianum</i> , Schw.	R. Gourrock.
<i>Buxbaumia aphylla</i> , Hall.	R. Bowling, Campsie.
<i>indusiata</i> , Brid.	R. Loch Lomond.
<i>Diphyscium foliosum</i> , W. & M.	F. Western Highland hills.
<i>Atrichum undulatum</i> , Beauv.	Common.
<i>angustatum</i> , Brid.	R. Doune.
<i>tenellum</i> , Roth.	R. Hell's Glen.
<i>Oligotrichum hercynicum</i> , Decand.	F. Western Mountains.
<i>Pogonatum nanum</i> , Brid.	R. Barrhead, Callander.
<i>aloides</i> , Brid.	Common.
<i>urnigerum</i> , Brid.	Common.
<i>alpinum</i> , Brid.	F. Western Highland hills.
<i>Polytrichum sexangulare</i> , Hoppe.	R. Ben Lawers.
<i>gracile</i> , Men.	F. Possil, Frankfield.
<i>formosum</i> , Hed.	F. Frankfield, Possil.
<i>commune</i> , L.	Common.
<i>juniperum</i> , Hed.	Common.
<i>piliferum</i> , Schr.	Common.
<i>Timmia Austriaca</i> , Hed.	R. Ben Lawers.
<i>Norvegica</i> , Zett.	R. Ben Lawers.
<i>Aulacomnion palustre</i> , Schw.	Common.
<i>androgynum</i> Schw.	R. Stirling.
<i>Orthodontium gracile</i> , Schw.	R. Lennoxtown Woods.
<i>Leptobryum pyriforme</i> , Wils.	F. Possil.
<i>Bryum acuminatum</i> , B. & S.	Common.
<i>polymorphum</i> , B. & S.	Common.
<i>elongatum</i> , Dicks.	Common.
<i>crudum</i> , Schr.	F. Campsie.
<i>nutans</i> , Schr.	Common.
var. <i>bicolor</i> .	R. Ben Ledi.
var. <i>longisetum</i> .	Common.
<i>annotinum</i> , Hed.	F. Western Highland hills.
<i>carneum</i> , L.	F. Paisley Canal, &c.
<i>Wahlenbergii</i> , Schw.	F. Western Highland hills.
var. <i>glaciale</i> .	R. Ben Lawers.
<i>Ludwigii</i> , Spreng.	F. Western Highland hills.
<i>Marratii</i> , H. & W.	R. Stevenston.
<i>Warneum</i> , Bland.	R. Sands of Stevenston.
<i>pseudotriquetrum</i> , Schw.	Common.
<i>alpinum</i> , L.	F. Western Highland hills.
var. β .	R. Callander.
var. γ .	R. Killin.
<i>Mühlenbeckii</i> , B. & S.	R. Ben Nevis.
<i>latifolium</i> , Schl.	R. Ben More, Ben Challum.
<i>Duvalii</i> , Voit.	R. Ben Ledi, Ben Lawers.
<i>pallens</i> , Swartz.	Common.
<i>barbatum</i> , Wils.	R. Ben Ledi, Killin.
<i>uliginosum</i> , B. & S.	F. Possil Road, &c.
<i>cernuum</i> , Hed.	Common.
<i>inclinatum</i> , B. & S.	Common.

- Bryum intermedium*, Brid. Common.
bimum, Schr. F. Sands of Stevenston.
 var. *cuspidatum*. R. Sands of Stevenston.
torquescens, B. & S. R. Rothesay, Dailly.
obconicum, Horns. R. Arran, Dailly.
capillare, Hed. Common.
caespitium, L. Common.
murorum, Schr. R. Callander.
sanguineum, Lud. R. Tyndrum.
julaceum, Sm. Common.
argenteum, L. Common. Streets of Glasgow.
Zierii, Dicks. F. Western Highland hills.
demissum, Hook. R. Ben Lawers.
roseum, Schr. R. Millport.
moniliforme, Wils. R. Stevenston.
fallax, Mild. R. Ben Challum.
gracile, Schl. R. Ben Lomond, Ben Lawers.
atropurpureum, W. & M. Common.
cirrhatum, Hoppe & Horns. R. Ben Lawers.
Mnium affine, Bland. R. Possil.
cuspidatum, Hed. Common.
rostratum, Schr. Common.
 var. β . Common.
spinosum, Voit. R. Ben Lawers.
serratum, Brid. F. Western Highland hills.
hornum, L. Common.
undulatum, Hed. Common.
stellare, Hed. R. Callander.
cinclidioides, Hueb. R. Ben Lawers, Ben Challum.
punctatum, Hed. Common.
 var. *cochleariforme*, Wils. Dunoan.
 var. γ . Campsie Hills.
subglobosum, B. & S. Possil Marsh.
insigne, Mitt. F. Ben Ledi, Ben Lawers.
Cinclidium stygium, Swartz. R. Ben Ledi, Ben Lawers.
Meesia uliginosa, Hed. F. Western Highland hills.
Amblyodon dealbatus, Beauv. R. Ben Lawers.
Funaria hygrometrica, Hed. Common.
Entosthodon Templetoni, Schw. R. Kilmun, Gourock.
Physcomitrium pyriforme, B. & S. R. Devol's Glen.
fasciculare, B. & S. R. Devol's Glen.
ericetorum, DeNot. Common.
Bartramidula tenella (Strn.) *fide* Schpr. R. Cobbler.
Bartramia arcuata, Brid. F. Fruit, Trossachs.
fontana, Brid. Common.
caespitosa, Wils. Common. Possil.
calcareo, B. & S. R. Campsie, fruit.
pomiformis, Hed. Common.
 var. *stricta*. Common.
 var. γ . Gourock.
Halleriana, Hed. F. Campsie, Ben Ledi.

- Bartramia Oederi*, Swartz. Frequent.
     ithyphylla, Brid. F. Callander.
Conostomum boreale, Swartz. F. Western Highland hills.
Catoscopium nigrum, Brid. R. Ben Lawers.
Discelium nudum, Brid. R. Gartnavel.
Splachnum vasculosum, L. R. Ben Lawers.
     ampullaceum, L. R. Callander.
     sphaericum, Hed. F. Western Highland hills.
Tetraplodon mnioides, B. & S. F. Craig Cailleach, Killin.
     angustatus, B. & S. R. Hell's Glen.
Tayloria serrata, var. *tenuis*, Dicks. R. Ben Lawers.
Dissodon splachnoides, Grev. R. Ben Lawers, Craig Cailleach.
Edipodium Griffithianum, Schw. F. Western Highland hills.
Fissidens exilis, Hed. R. Possil.
     incurvus, Schw. R. Possil.
     crassipes, Wils. R. Possil.
     bryoides, Hed. Common.
     osmundioides, Hed. F. Western Highland hills.
     adiantoides, Hed. Frequent.
     var. β . Frequent.
         taxifolius, Hed. Common.
         tamarindifolius, Donn. F. Possil.
         rupestris, Wils. Frequent.
Anæctangium compactum, Schw. Common.
Leucodon sciuroides, Schw. R. Callander.
     morensis, Schw. R. Killin.
Antitrichia curtipendula, Brid. Common. Fruit, Killin.
Anomodon viticulosus, H. & T. Common. Fruit, Campsie.
Habrodon Notarisii, Schr. R. Killin, Ben Lawers.
Pterogonium filiforme, Hed. F. Western Highland hills.
     gracile, Sw. Frequent.
Isothecium myurum, Dill. Common.
     var. *robustum*. Falls of Clyde.
     mysuroides. Common.
     var. *glaciale*. F. Western Highland hills.
Climacium dendroides, W. & M. Frequent.
Cylindrothecium Montagnei, Müll. R. Killin, Ben Lawers.
Leskea polyantha, Hed. R. Dailly.
     pulvinata, Wahl. R. Falls of Clyde.
     polycarpa, Ehr. Common.
     sericea, Dill. Common.
     rufescens, Hall. F. Western Highland hills.
     subrufa, Wils. F. Western Highland hills.
     nervosa, Schw. R. Ben Lawers.
Myurium Hebridarum, Schr. R. North Uist and Skye.
Hypnum abietinum, Dill. R. Sands of Stevenston.
     decipiens, De Not. F. Ben Lawers.
     delicatulum, L. R. Ben Lawers.
     tamariscinum, Hed. Common.
     splendens, Dill. Common.
     plicatum, Schl. R. Ben Lawers.

- Hypnum salebrosum*, Hoff.
glareosum, Bruch.
albicans, Dill.
velutinum, Dill.
reflexum, Sel.
Starkii, Brid.
Hunti, Schr.
intermixtum, Strn.
rutabulum, Dill.
 var. *plumosulum*.
rivulare, Bruch.
 var. β .
populeum, Hed.
 var. β .
plumosum, Swartz.
dimorphum, Brid.
 var. β .
catenulatum, Schw.
heteropterum, Bruch.
striatum, Spruce.
striatum, Hed.
crassinervium, Tayl.
piliferum, Vaill.
praelongum, Dill.
pumilum, Wils.
Stokesii, Turn.
Swartzii, Turn.
flagellare, Dicks.
Teesdalii, Sm.
depressum, Bruch.
confertum, Dicks.
murale, Dill.
ruscifolium, Dill.
 var. *atlanticum*.
alopecurum, Dill.
Mühlenbeckii, B. & S.
denticulatum, Dill.
 var. *obtusifolium*.
 var. *majus*.
 var. *Donnianum*.
elegans, Hook.
sylvaticum, Dill.
undulatum, Dill.
atrovirens, Dicks.
serpens, Dill.
irriguum, Hook.
fluviatile, Swartz.
riparium, Dill.
Halleri, L., Jun.
polymorphum, Hed.
chrysophyllum, Brid.
- Frequent.
 R. Ben Lawers, Killin, &c.
 Sands of Stevenston.
 Common.
 R. Ben Lawers, Ben Ledi.
 R. Ben Lawers.
 R. Ben Lawers.
 R. Ben Lawers.
 Common.
 Sands of Stevenston.
 F. Arran, Lennoxton.
 Ben Lawers.
 Common.
 Common.
 Common.
 R. Ben Lawers.
 Ben Lawers.
 R. Ben Lawers.
 F. Gourrock, Cardross.
 R. Tighnabruaich.
 Frequent in fruit, Gourrock, &c.
 R. Abbey Craig, Killin.
 Common. In fruit near Barrhead.
 Common.
 F. Cardross.
 R. Arran, &c.
 Rather rare. Near Glasgow.
 F. Arran, Callander.
 R. Gourrock, Cardross.
 R. Dailly, Hamilton.
 Common.
 Common.
 Common.
 Campsie.
 Common.
 R. Ben Ledi, Ben Lawers, &c.
 Common.
 R. Ben Ledi.
 F. Western Highland hills.
 R. Ben Lawers.
 Common.
 Common.
 Common.
 R. Ben Lawers, Ben Ledi.
 Common.
 R. Callander.
 R. Callander.
 F. Possil Road.
 R. Ben Lawers.
 R. Dailly.
 R. Sands of Stevenston.

<i>Hypnum stellatum</i> , Dill.	Frequent.
polygamum, B. & S.	R. Possil.
exannulatum, Schr.	R. Gartcosh Moor.
Kneiffii, B. & S.	F. Western Highland hills.
Sendtneri, Schr.	R. Ben Vhorlich.
Cossoni, Schr.	R. Ben Lawers.
Wilsonianum, Schr.	R. Gartcosh Moor.
fluitans, Dill.	F. Campsie, &c.
revolvens, Swartz.	Common.
uncinatum, Hedw.	Common.
var. β .	Ben Lawers.
commutatum, Dill.	Common.
var. β .	Gourock.
falcatum, Brid.	F. Ben Ledi, &c.
filicinum, Dill.	Common.
rugosum, Dill.	R. Campsie Hills, Craig Challiach, &c.
incurvatum, Brid.	R. Dailly.
pulchellum, Hed.	R. Craig na Gour.
nitidulum, Wahl.	F. Western Highland hills.
Breadalbanense, B. White.	R. Ben Lawers.
callichroum, Br.	F. Western Highland hills.
hamulosum, Fröl., var.	
<i>micranthum</i> .	R. Craig na Gour.
Bambergeri, B. & S.	R. Ben Lawers.
imponens, Hed.	R. Ben Lawers.
cupressiforme, Dill.	Common.
var. <i>tenue</i> .	Common.
var. <i>compressum</i> .	Common.
resupinatum, Wils.	R. Arran.
pratense, Koch.	Common.
molluscum, Dill.	Common.
croceum, Tayl.	F. Western Highland hills.
crista-castrensis, L.	R. Callander, Ben Ledi, &c.
palustre, Dill.	Common.
eugyrium, Schr.	R. Near Callander.
ochraceum, Turn.	F. Western Mountains.
arcticum, Som.	R. Ben Challum, Ben Lawers.
cordifolium, Swartz.	Common.
giganteum, Schr.	F. Near Glasgow.
sarmentosum, Wahl.	F. In fruit, Ben Ledi.
cuspidatum, Dill.	Common.
Schreberi, Dill.	Common. In fruit near Barrhead.
purum, Dill.	Common. In fruit near Milngavie.
stramineum, Dicks.	R. Campsie Hills.
trifarum, W. & M.	R. Ben Lomond, Ben Lawers.
scorpioides, Dill.	F. In fruit near Kilmun.
umbratum, Ehr.	R. Trossachs, Ben Vhorlich, &c.
Oakesii, Sull.	R. Ben Lawers.
molle, Dicks.	Very rare. Ben Lawers.
dilatatum, Wils.	R. Ben Lawers.
squarrosum, Dill.	Common.

Hypnum brevirostre, Ehr.	F. Callander, &c.
triquetrum, Dill.	Common.
loreum, Dill.	Common.
Neckera complanata, B. & S.	Common.
crispa, Dill.	Common.
var. <i>montana</i> .	F. Western Highland hills.
pumila, Huds.	R. Killin, Callander.
Philippeana, Schr.	R. Killin, Callander.
Hookeria lucens, Dill.	Frequent.
Cryphæa heteromalla, Dill.	R. Dailly, Lochgoilhead.
Fontinalis antipyretica, L.	Common.
squamosa, L.	R. Ben Nevis.
Omalia trichomanoides, Dill.	F. Fruit, Kelvin.
Myurella julacea, Vill.	R. Craig Chailliach, Ben Lawers.
apiculata, Hueb.	Craig Chailliach, Ben Lawers.

J. STIRTON,

CRYPTOGAMIA—*continued.*

Hepaticæ.

Haplomitrium Hookeri, N.	R. Innellan.
Gymnomitrium crenulatum, Gott.	R. Arran.
concinatum, Ca.	F. Callander.
coralloides, N.	R. Arran.
Sarcoscyphus Ehrhardti, Cor.	F. Callander.
Alicularia scalaris, Corda.	Common.
compressa, Hook.	R. Cobbler.
Adelanthus Carringtonii, Balf.	R. Ben Voirlich.
Plagiochila spinulosa, N.	Common.
tridenticulata, Tay.	Common.
asplenioides, N.	Common.
Scapania compacta, Lind.	R. Callander.
compressa, Lind.	Common.
undulata, M. & N.	F. Cardross.
nemorosa, Hook.	Common.
irrigua, N.	F. Craigmaddie.
planifolia, N.	R. Dusky Glen.
umbrosa, M. & N.	R. Killin.
curta, N.	R. Innellan.
uliginosa.	F. Possil Marsh.
Jungermannia albicans, L.	Common.
Dicksoni, Hook.	R. Ben Voirlich.
Taylora, Hook.	R. Ben Lomond.
Schraderi, M.	R. Ben Voirlich.
crenulata, Sm.	R. Callander.
hyalina, Ly.	Common.
cordifolia, Hook.	Common.
pumila, With.	R. Ben Lomond.
riparia, L.	Common.
Bantriensis, N.	R. Luss.
scutata, Web.	Common.
setiformis, Eh.	R. Ben Lawers.
barbata, Sch.	Common.
ventricosa, Dick.	R. Luss.
Orcadensis, Hook.	B. Ben Voirlich.
alpestris, Sch.	R. Luss.
intermedia, Lind.	Common.
bicrenata, Lind.	Common.
incisa, Sch.	Common.
elongata, P.	R. Ben Lomond.
minuta, Cr.	Common.
Doniana, Hook.	R. Goat Fell.
Francisci, Hook.	Common.

<i>Jungermannia divaricata</i> , Sm.	Common.
<i>bicuspidata</i> , L.	Common.
<i>curvifolia</i> , Dick.	Common.
<i>trichophylla</i> , L.	R. Ben Lawers.
<i>julacea</i> , Light.	F. Ben Lomond.
<i>Sphagnæcetes communis</i> , N.	Common.
<i>Chiloscyphus polyanthus</i> , Ca.	Common.
<i>Lioclæna lanceolata</i> , N.	F. Fin Glen.
<i>Lophocolea bidentata</i> , N.	F. Kelvinside.
<i>heterophylla</i> , N.	F. Craigend Glen.
<i>spicata</i> , Tay.	F. Campsie.
<i>Calypogeia trichomanes</i> , Cord.	Common.
<i>Saccogyna viticulosa</i> , Dum.	R. Callander.
<i>Lepidozœa reptans</i> , N.	R. Gourrock.
<i>setacea</i> , Mitt.	R. Arran.
<i>Mastigobryum trilobatum</i> , N.	R. Arran.
<i>deflexum</i> , N.	R. Ben Lawers.
var. <i>commune</i> .	R. Ben Lawers.
var. <i>pymœum</i> .	R. Ben Lawers.
<i>Physotium cochleariforme</i> , N.	R. Ben Voirlich.
<i>Trichocolea tomentella</i> , N.	R. Dunoon.
<i>Ptilidium ciliare</i> , N.	F. Ben Lomond.
<i>Radula complanata</i> , Dum.	R. Callander.
<i>aquilegia</i> , Tay.	R. Callander.
<i>Madotheca lævigata</i> , Dum., var.	Spout of Ballagan.
<i>Thuja</i> .	
<i>platyphylla</i> , Dum.	R. Callander.
<i>rivularis</i> , Dum.	R. Callander.
<i>Lejeunia hamatifolia</i> , Dum.	Common.
<i>microscopica</i> , Tay.	Common.
<i>serpyllifolia</i> , Lib.	F. Loch Ridden.
<i>minutissima</i> , Dum.	Common.
<i>calyptrifolia</i> , Dum.	R. Luss.
<i>Frullania dilatata</i> , N.	Common.
<i>fragilifolia</i> , Tay.	Callander.
<i>Tamarisci</i> , N.	Callander.
<i>Blyttia Lyellii</i> , End.	Common.
<i>Morckia hibernica</i> , Gott.	F. Dunoon.
<i>Pellia epiphylla</i> , N.	Common.
<i>calycina</i> , N.	Common.
<i>Blasia pusilla</i> , L.	Callander.
<i>Aneura pinguis</i> , Dum.	R. Arran.
<i>multifida</i> , N.	R. Bute.
<i>palmata</i> , Dum.	R. Bute.
<i>Metzgeria furcata</i> , N.	Common.
<i>Lunularia vulgaris</i> , Mich.	Common.
<i>Marchantia polymorpha</i> , L.	Common.
<i>Preissia commutata</i> , N.	F. Gourrock.
<i>Dumortiera irrigua</i> , N.	R. Arran.
<i>Fegatella conica</i> , Corda.	F. Dusky Glen.
<i>Reboulia hemispherica</i> , Rad.	Common.

Targionia Michelii, Cord.
Anthoceros punctatus, L.
    lævis, L.
Sphærocarpus Michelii, Bell.
Riccia glauca, L.
    crystallina, L.
    fluitans, L.
    natans, L.

F. Gourock.
F. Falls of Clyde.
F. Botanic Gardens.
Common.
Common.
Common.
Common.
F. Luss.

JAMES STIRTON.

R. H. PATERSON.

Lichenes.

In the following List of the Lichens of the West of Scotland, the compiler has included only those that have come under his personal observation.

<i>Ephebe pubescens</i> , Fr.	R. Ben Lawers.
<i>Lichina confinis</i> , Ag.	Not unfrequent. Ormidale, &c.
<i>Pyrenopsis hæmalea</i> , Smrf.	R. Ben Lawers, Craig-na-Gour.
<i>homœopsis</i> , Nyl.	R. Ben Lawers.
<i>grumulifera</i> , Nyl.	R. Ben Arthur.
<i>Collemopsis fururella</i> , Nyl.	R. Ben Lawers.
<i>Collema pulposum</i> , Bernh.	Ben Lawers, &c.
<i>melænum</i> , Ach.	F. Ben Arthur, &c.
<i>furvum</i> , Ach.	Ormidale.
<i>aggregatum</i> , Ach.	R. Killin.
<i>nigrescens</i> , L.	F. Killin, &c.
<i>Leptogium muscicola</i> , Sw.	R. Glen Dochart.
<i>tremelloides</i> , L.	R. Ormidale.
<i>saturninum</i> , Dicks.	Islay, Killin.
<i>Burgessii</i> , Lightf.	R. Kirkpatrick.
<i>lacerum</i> , Ach.	F. Killin, &c.
var. <i>lophæum</i> , Ach.	R. Killin.
<i>scotinum</i> , Ach.	Ben Lawers, Ben Arthur.
<i>Sphinctrina turbinata</i> , Pers.	Common.
<i>Calicium trichiale</i> , var. <i>stemoneum</i> , Ach.	F. Hamilton.
<i>hyperellum</i> , Ach.	F. Hamilton, &c.
<i>Sphærophoron compressum</i> , Ach.	Near Killin.
<i>coralloides</i> , Pers.	c. Tarbert, in fruit.
<i>fragile</i> , Pers.	Common.
<i>Bæomyces rufus</i> , D.C.	F. Arran, Milngavie.
<i>icmadophilus</i> , Ehrh.	Ben Lawers, Ben Arthur.
<i>Cladonia endiviæfolia</i> , Fr.	R. Behind Dunoon.
<i>cervicornis</i> , Schaer.	F. Loch Tay, &c.
<i>alcicornis</i> , Flk.	Not common. Craig-na-Gour.
<i>pyxidata</i> , Fr.	Common.
var. <i>pocillum</i> , Ach.	F. Ben Arthur.
<i>gracilis</i> , Hoffm.	c. Larakeely.
var. <i>chordalis</i> , Ach.	R. Ben Lawers.
<i>verticillata</i> , Flk.	Larakeely.
<i>degenerans</i> , Flk.	Larakeely.
var. <i>aplotea</i> , Ach.	Larakeely.
<i>furcata</i> , Hoffm.	F. Ben Lomond, &c.
<i>cornucopioides</i> , Fr.	R. Ben Ledi.
<i>bellidiflora</i> , Schaer.	R. Ben Arthur.
<i>sylvatica</i> , Hoffm.	Ben Lawers.
<i>rangiferina</i> , Hoffm.	Common.
<i>uncialis</i> , Hoffm., f. <i>turgescens</i> , Fr.	Ben Lawers.

- Cladonia amaurocrea*, Schaer. R. Ben Nevis.
Pilophoron fibula, Tuck. Rather frequent. Ormidale, Ben Arthur, &c.
Stereocaulon coralloides, Fr. Common.
     paschale, Ach. Common.
     tomentosum, Fr. Killin, &c.
     var. *alpinum*, Laur. Ben Lawers.
     var. *botryosum*, Ach. Ben Lawers.
     denudatum, Flk. R. Ben Lawers.
     nanum, Ach. Near Killin.
Thamnolia vermicularis, Sw. R. Ben Lawers, Ben Voirlich.
Usnea barbata, Fr. Common.
     f. *hirta*, Fr. F. Killin, &c.
     f. *dasyypoga*, Fr. Killin.
     f. *florida*, Fr. Loch Lomond, &c.
Alectoria nigricans, Ach. R. Ben Lawers.
     ochroleuca, Ehrh. Killiecrankie.
     var. *cincinnata*, Fr. Ben Voirlich.
     jubata, Ach. Common.
     var. *chalybeiformis*, Ach. Ben Voirlich.
Evernia furfuracea, Mann. F. Killin, &c.
     prunastri, L. Common.
Ramalina scopulorum, Ach. C. Tarbert, &c.
     calicaris, Fr. Common.
     farinacea, L. Common.
     fraxinea, Fr. Common.
     f. *ampliata*, Ach. Dunoon, &c.
Cetraria islandica, L. F. Ben Lomond, Dunoon, &c.
     var. *crispa*, Ach. F. Ben Lawers, &c.
     Delisei, Schaer. R. Ben Nevis.
     aculeata, Fr. Not unfrequent. Dunoon, &c.
     odontella, Ach. Ben More, Assynt.
Platysma nivale, L. R. Ben Nevis.
     cucullatum, Bell. R. Ben Nevis.
     triste, Web. Not unfrequent. Ben Lawers, Cobbler, &c.
     saepincola, Ehrh. Frequent.
     var. *ulophylla*, Ach. Not unfrequent. Ben Tigh, &c.
     Fahlunense, L. R. Ben More, Ben Lawers, &c.
     commixtum, Nyl. R. Ben Lawers.
     juniperinum, L. Loch Tay, &c.
     var. *pinastri*, Scop. R. Grantown.
     glaucum, L. C. Killin, &c.
Nephromium laevigatum, Ach. Not unfrequent. Islay, Killin.
     lusitanicum, Schaer. Common.
Peltigera aphthosa, L. Falls of Clyde, Ben Lawers, &c.
     canina, L. C. Bowling, Campsie, &c.
     f. *membranacea*, Ach. Bowling.
     rufescens, Hffm. Common.
     spuria, Ach. Glen Lyon, &c.
     polydactyla, Hffm. Killin, &c.
     scutata, Dicks. R. Islay, Ormidale.
     horizontalis, L. Loch Tay.

- Peltigera venosa*, L. Killin, Ben Lawers.
Solorina crocea, L. Not unfrequent. Ben More, Ben Lawers, &c.
     saccata, L. Near Killin, foot of Ben Lawers.
     spongiosa, Sm. Ben Lawers.
     bispora, Nyl. Ben Lawers, Canlochan, &c.
Stictina crocata, L. Glen Falloch, Islay, &c.
     sylvatica, L. Loch Tay, Islay, &c.
     scrobiculata, Scop. R. Killin, Islay.
Sticta pulmonacea, Ach. Common.
     var. *hypomela*, Nyl. R. Killin.
     damaecornis, var. *macrophylla*, Hook. R. Killin.
Ricasolia glomulifera, Lightf. Killin, Islay, &c.
     herbacea, Huds. Not unfrequent. Islay, Ormidale.
Parmelia caperata, L. R. Islay, Ormidale.
     olivacea, L. Common.
     stygia, L. R. Ben Nevis, Ben More.
     lanata, L. R. Ben Lawers.
     physodes, L. c. Ben Lawers, in fruit.
     var. *vittata*, Ach. F. Ben Lawers, &c.
     encausta, Sm. R. Ben Lawers.
     revoluta, Flk. R. Ben Lawers, Glen Crow.
     alpicola, Fr. R. Ben Lawers.
     perlata, L. Common in West.
     var. *ciliata*, D.C. Lochgilphead.
     pertusa, Schrank. Not unfrequent in West. Glen Crow, &c.
     aleurites, Ach. R. Ben Tigh, Glen Crow.
     tiliacea, Ach. R. Glen Crow, &c.
     var. *scortea*, Ach. Glen Crow, Dunoon.
     sublaevigata, Nyl. R. Glen Crow.
     fuliginosa, Dub. Ormidale, &c.
     conspersa, Ehrh. Not unfrequent. Lochgoilhead.
     f. *stenophylla*, Ach. Common.
     f. *isidiata*, Anzi. Lochgoilhead.
     Mougeotii, f. *discreta*, Nyl. R. Glen Crow.
     sinuosa, Sm. R. Arran, Glen Crow.
     saxatilis, L. Common.
     var. *omphalodes*, L. F. Ben Lawers.
     var. *panniformis*, Ach. Common.
     laevigata, Sm. R. Glen Crow.
     Millaniana, Strn. R. Glen Crow.
Physcia chrysophthalma, L. R. Ben Tigh, Lochfyne.
     parietina, L. Common.
     var. *polycarpa*, Ehrh. Islay, &c.
     ciliaris, L. Not unfrequent. Loch Tay, &c.
     pulverulenta, Schreb. Common, and several varieties.
     obscura, Ehrh. Common.
     var. *chloantha*, Ach. Islay.
     speciosa, Wulf. Glen Falloch, Ormidale.
     retrogressa, Strn. Ben Lawers.
     stellaris, L. Not unfrequent. Dunoon, &c.

- Physcia stellaris*, var. *tenella*, Scop. Tarbet, &c.
     var. *fimbriatula*, Strn. R. Ben Lawers.
         erosa, Borr. Not unfrequent. Gourock, &c.
         aquila, Ach. Common on sea coast. Islay, &c.
Umbilicaria flocculosa, Wulf. Ben Voirlich, Ben Arthur, &c.
     hyperborea, Ach. Dalwhinnie, Ben Nevis.
     erosa, Web. F. Ben Lawers, &c.
     polyrrhiza, L. Ben Tigh, Tummel, &c.
     proboscidea, Ach. Ben Lawers, &c., Islay.
     cylindrica, L. F. Cobbler, &c.
     var. *denticulata*, Ach. Ben Voirlich, &c.
Psoroma hypnorum, Vahl. Not uncommon. Ben Voirlich, &c.
     f. *sporis majoribus*. Ben Lawers.
Pannaria rubiginosa, Thunb. F. Loch Lomond, Islay, &c.
     leucolepis, Whlnb. R. Ben Lawers.
     f. *apothecis majoribus*. Ben Lawers.
     brunnea, Ach. Not unfrequent on Western Mountains.
     var. *coronata*, Ach. F. Ben Lawers.
         carnosa, Dicks. Ben More, Ben Lawers, &c.
Coccocarpia plumbea, Lightf. F. Islay, Loch Lomond, &c.
Squamaria crassa, Huds. Ormidale, Islay.
     lentigera, Web. Ben Tigh.
     chrysoleuca, Sm. R. Ben Tigh.
     gelida, L. Not unfrequent. Lochgoilhead, &c.
Placodium murorum, Hfm. Common.
     var. *miniaturum*, Hfm. Ben Tigh, &c.
         callopismum, Ach. Near Milngavie.
         fulgens, Sw. R. Ben Tigh.
         bracteatum, Hfm. R. Ormidale.
         elegans, Link. R. Stirling.
Lecanora vitellina, Ach. Not unfrequent. Killin, &c.
     var. *aurella*, Ach. Killin.
     var. *coruscans*, Ach. Killin, Ben Lawers.
         smaragdula, Whlnb. Ben Lawers.
         sinopica, Whlnb. Ben Voirlich, Cobbler, &c.
         fuscata, Schrad. F. Near Glasgow.
         sarcopis, var. *homœopis*, Nyl. Ormidale.
         tartarea, L. Common on mountains.
     var. *frigida*, Ach. R. Ben Lawers.
         parella, L. F. Arran, &c.
     var. *pallescens*, L. Ormidale, Loch Tay.
         rupestris, Scop. F. Killiecrankie, &c.
     var. *calva*, Dicks. Ben Lawers, &c.
         Upsaliensis, L. R. Loch Tay.
         varia, Ehrh. Not unfrequent. Loch Lomond, &c.
     var. *sæpincola*, Ach. R. Ben Lawers.
         atra, Huds. Frequent.
         f. *corticola*, Arran.
     var. *subbyssosidea*, Strn. Killiecrankie.
         circinata, Pers. Near Glasgow.
         mammillifera, Strn. Killiecrankie.

- Lecanora polytropa*, Ehrh. Common.
f. alpigena, Ach. Ben Lawers.
subfusca, L. Common.
var. atrypnea, Ach. Dunoon, &c.
var. chlorona, Ach. Common.
angulosa, Ach. Cobbler, Dunoon.
gangaleoides, Nyl. Arran.
epanora, Ach. R. Killin.
galactina, Ach. F. Troon, Dunoon, &c.
var. livida, Ach. Troon.
Hageni, Ach. Ormidale.
calcareia, L. Not common. Cobbler.
gibbosa, Ach. F. Ben Lawers, &c.
cinereo-rufescens, Ach. Killin.
epulotica, Ach. Ben Lawers.
badia, Ach. c. Ben Lawers, &c.
curvescens, Mudd. R. Ben Lawers.
glaucoma, Hffm. Troon, Ormidale.
aurantiaca, Lightf. Hamilton, &c.
var. inalpina, Ach. Killin.
ochracea, Schaer. R. Ormidale.
ferruginea, Huds. Common.
var. concilians, Nyl. R. Arran.
cerina, Ehrh. F. Killin, foot of Ben Lawers.
pyracea, Ach. Common.
holocarpa, Ehrh. R. Callander.
phlogina, Ach. F. Callander, &c.
sophodes, Ach. F. Ben Lawers, &c.
exigua, Ach. F. Ormidale, &c.
roboris, Duf. Frequent.
subexigua, Nyl. Ormidale.
nivalis, Körb. R. Ben Lawers.
rubra, Hoffm. R. Ben Tigh.
haemmatomma, Ehrh. Not common. Killin, Islay.
ventosa, L. Common.
Urceolaria scruposa, L. Not common. Killin, Ben Lawers.
f. bryophila, Ach. R. Killin.
Pertusaria glomerata, Schleich. R. Ben Lawers.
dealbata, Ach. R. Glen Falloch.
communis, D.C. Common.
velata, Turn. R. Ben Tigh.
ophthalmiza, Nyl. R. Glen Falloch.
Hutchinsiae, Turn. R. Ben Lawers.
leioplaca, Ach. F. Killin, &c.
Thelotrema lepadinum, Ach. F. East Kilbride, Ormidale, &c.
Lecidea decipiens, Ehrh. R. Killin, Ben Lawers.
atro-rufa, Dicks. R. Crianlarich, Ben Lawers.
globifera, Ach.
var. rubiformis, Whlnb. R. Ben Lawers.
armeniaca, D.C. R. Craig-na-Lochan.
lurida, Swartz. R. Ben Lawers.

- Lecidea lugubris*, Smrf. R. Ben Lawers, Cobbler, &c.
sylvicola, var. *infidula*, Nyl. R. Ormidale.
lucida, Ach. R. Near Dunoon, Ben Voirlich.
flexuosa, Fries. R. Killin.
ochrococca, Nyl. R. Glen Falloch.
decolorans, Flk. F. Campsie, &c.
vernalis, Ach. R. Ben Lawers.
dubia, Borr. R. Ben Lawers.
turgidula, Fr. R. Ben Lawers.
viridescens, Schrad. Foot of Ben Lawers.
sanguinaria, L. F. Near Paisley, &c.
didymospora, Strn. R. Ben Lawers.
enteroleuca, Ach. F. Arran, &c.
confertula, Strn. R. Killiecrankie.
calpodes, Strn. Rare.
hemipoliella, var. *semialbula*, Strn. Tummel and Altnabarra.
perobscura, Nyl. R. Near Killin.
aniptiza, Strn. R. Killiecrankie.
sanguineo-atra, Ach. R. Ben Lawers.
parasema, Ach. Very common.
var. *eleochroma*, Ach. F. Killin, &c.
furvella, Nyl. Glen Fender.
asperella, Strn. Ben-y-Gloe.
alpestris, Smrf. R. Ben Lawers, &c.
cuprea, Smrf. R. Ben Lawers, Ben More.
var. *cupreiformis*, E. Nyl. R. Ben Lawers.
var. *lecanotes*, Nyl. R. Ben Lawers.
arctica, Smrf. R. Ben Lawers, Ben Voirlich, &c.
uliginosa, Schrad. F. Trossachs, &c.
melanophæa, Fr. Ben Lawers.
corollidia, Strn. Thurso.
aglæa, Smrf. R. Ben Lawers, Ben Voirlich, &c.
areolata, Schaer. R. Ben Lawers.
tessellata, Flk. Ben Lawers.
pammicta, Strn. Ben Arthur.
inserena, Nyl. R. Ben Lawers.
coarctata, Sm. Frequent.
var. *elacista*, Ach. Ben Lomond.
var. *ornata*, Smrf. Ben Lawers.
Breadalbanensis, Strn. Ben Lawers.
panæola, Ach. Ben Lawers, Ben Voirlich.
var. Ben Voirlich.
Bruyeriana, Schaer. R. Ormidale.
var. *ochracea*, Nyl. Glen Callater.
Kochiana, Hepp. Ormidale.
var. *lygæa*, Ach. Ormidale.
var. Ormidale.
polycarpa, Flk. Ben Lawers, Ben Voirlich.
lapicida, Fr. Frequent.
var. *silacea*, Ach. Ben Lawers.
var. *apotheciis conglomeratis*. Ben Lawers.

- Lecidea lithophila*, Ach. Frequent on Western Mountains.
rivulosa, Ach. Common.
 var. *interludens*, Nyl. Ormidale.
fusco-atra, Ach. R. Tigh-na-bruaich.
 var. *fumosa*, Ach. Loch Tay.
 var. *Mosigii*, Ach. c. Paisley, &c.
 var. *grisella*, Flk. Near Killin.
lactea, Flk. Near Killin.
sarcogyniza, Nyl. R. Ben Lawers, Ben Voirlich, &c.
phyllodisca, Strn. Ben Lawers, Ben Voirlich, &c.
sub-Kochiana, Nyl. R. Killiecrankie.
Taylori, Salw. R. Ormidale.
contigua, Fr. R. Islay, Ben Lomond.
 var. *flavicunda*, Ach. Common.
 var. *platycarpa*, Fr. F. Ben Lawers.
albo-coerulescens, Wulf. Common.
confluens, Webr. F. Ben Arthur, &c.
 var. *ochromela*, Nyl. Frequent.
consentiens, Nyl. Ben Lawers.
scutulata, Strn. R. Ben Lawers.
phæops, Nyl. R. Ben Lawers.
umbonella, Nyl. F. Ben Voirlich, &c.
pelobotrya, Whlnb. R. Ben Lawers.
botryiza, Nyl. R. Ben Lawers.
enclitica, Nyl. R. Loch Lomond, Ben Voirlich.
canescens, Dicks. R. Killiecrankie.
verruculosa, Borr. F. Hamilton, &c.
stellulata, Tayl. R. Ormidale.
scabrosa, Ach. R. Ormidale.
disciformis, Fr. R. Ben Lawers.
lypariza, Strn. c. Killin, &c.
atro-alba, var. *chlorospora*, Nyl. R. Killin.
badio-atra, Flk. F. Ben Lomond, &c.
coniops, Whlnb. Ben Lawers.
myriocarpa, D.C. R. Ormidale.
Hookerii, Borr. F. Hamilton, &c.
grossa, Pers. R. Ben Lawers, Ben Tigh.
chalybeia, Borr. c. Killin, &c.
contristans, Nyl. R. Killin.
Templetoni, Tayl. R. Ben Lawers.
candida, Web. R. Ben Lawers.
vesicularis, Hffm. R. Ben Lawers.
colludens, Nyl. Ben Lawers, Ben Voirlich, &c.
 var. *apotheciis conglomeratis*. Ben Lawers.
alpicola, Schaer. R. Ben Lawers.
pineti, Schrad. Glen Falloch.
lutea, Dicks. Tarbert, &c.
cyrtella, Ach. Hamilton, &c.
anomala, Fr. F. Cadder, &c.
Lightfootii, Sm. F. Dunoon, Ormidale.

- Lecidea globulosa*, Flk. Ben Lomond.
tricolor, With. F. Ormidale, &c.
pulverea, Borr. R. Killin, Loch Lomond.
holomeloides, Nyl. B. Ben Lawers.
subincompta, Nyl. R. Ben Lawers.
oribata, Nyl. R. Ben Lawers.
albo-atra, Hffm. Common.
calcareæ, Weis. Ben Lawers, &c.
triphragmia, Nyl. Ben Lawers.
persimilis, Nyl. R. Ben Lawers.
melæna, Nyl. F. Ormidale, &c.
Oederii, Ach. R. Ben Voirlich, Ben Lawers.
aromatica, Sm. Ben Lawers.
rhexoblephara, Nyl. R. Ben Lawers.
foveolaris, Ach. R. Ben Lawers, Craig Chailleach.
sphaeroides, Smrf. F. Milngavie, &c.
sabuletorum, Flk. Moffat, Campsie, &c.
subretrusa, Strn. R. Ben Lawers.
milliaria, Fr. F. Milngavie, &c.
var. *montana*, Nyl. Ben Lawers.
var. *syncomista*, Flk. Ben Lawers.
citrinella, Ach. R. Ormidale, Ben Lawers, &c.
var. *apotheciis conglomeratis*. Ben Lawers.
luteola, Ach. R. Near Aberfeldy.
pelidna, Ach. R. Glen Fender.
absistens, Nyl. Killin.
geographica, L. Common.
var. *gerontica*, Ach. Larakeely.
petræa, Wulf. F. Ben Lomond, &c.
pezizoidea, Ach. R. Ben Lawers.
concentrica, Dav. Ormidale, &c.
excentrica, Ach. Dunoon, Ormidale, &c.
rimosa, Dicks. F. Ben Lomond, &c.
plicatilis, Leight. R. Ben Lawers.
lavata, Ach. R. Ormidale.
fusco-lutea, Dicks. R. Ben Lawers.
cupularis, Ehrh. F. Campsie Glen, &c.
morio, Ram. R. Arran.
fossarum, Duf. R. Ben Lawers.
episema, Nyl. R. Foot of Ben Lawers.
Parmeliarum, Smrf. F. Ben Lawers, &c.
parasitica, Flk. R. Foot of Ben Lawers.
epiphysa, Strn. Ben Lawers.
Lithographa tesserata, D.C. R. Ben Lawers.
Xylographa parallela, Ach. F. Cobbler, Ben Lawers.
var. *pallens*, Nyl. R. Dunoon.
Graphis elegans, Sm. Common on West Coast.
scripta, Ach. Common.
var. *recta*, Humb. F. Dunoon, &c.
var. *serpentina*, Ach. F. Callander, &c.
var. *pulverulenta*, Ach. F. Callander, &c.

- Graphis dendritica*, Ach. R. Rothesay.
Opegrapha constrictella, sp. nov. R. Ben Tigh.
herpetica, Ach. F. Killin, Cobbler.
var. *rubella*, Pers. Not common. Dunoon.
rufescens, Pers. Common.
atra, Pers. Campsie, Stirling.
var. *parallela*, Leight. Loch Lomond.
var. *denigrata*, Ach. F. Ormidale, Tarbert.
saxicola, Ach. Not common. Bothwell Castle.
Chevallieri, Leight. Dunoon.
atricolor, Strn. Common.
varia, Pers. Killin.
var. *notha*, Ach. Dunoon.
var. *tigrina*, Ach. Killin.
vulgata, Ach. R. Killiecrankie.
Arthonia lurida, Ach. Common.
astroidea, Ach. Not common. Loch Lomond.
epipasta, Ach. F. Campsie.
Swartziana, Ach. R. Killiecrankie.
insinuata, Strn. Ben Tigh.
Melaspilea Patersoni, Strn. Not unfrequent. Killin, &c.
Endocarpon miniatum, L. R. Tarbert.
var. *complicatum*, Sw. Ben Lawers.
fluviatile, D.C. Ben Lawers.
rufescens, Ach. Bowling.
Verrucaria epigæa, Pers. Gourock.
acrotella, Ach. Cobbler.
nigrescens, Pers. Ormidale.
plumbea, Ach. R. Craig Chailleach.
calciseda, D.C. R. Islay, Ben Lawers.
tephroides, Ach. R. Ben Lawers.
Borreri, Leight. F. Bowling, &c.
gemmata, Ach. Common.
epidermidis, Ach. Ormidale.
fallax, Nyl. Arrochar.
punctiformis, Ach. Ormidale, Arran.
var. *deminutula*, Nyl. R. Arran.
nitescens, Salw. R. Arrochar.
antecellens, Nyl. R. Ben Lawers.
colleta, Strn. Not common. Lawers.
biformis, Barr. R. Ormidale.
litoralis, Tayl. R. Ben Arthur.
lectissima, Fr. R. Ben Lawers.
melathelia, Nyl. F. Islay, Dunoon.
nitida, Weig. R. Ben Tigh.
glabrata, Ach. R. Ben Lawers.
scotinospora, Nyl. R. Ben Lawers.
intercedens, Nyl. R. Ben Lawers.
rupifraga, Mass. R. Ben Arthur.
Henscheliana, Körb. Ben Voirlich, Ben Lawers, &c.
theleodes, Smrf. R. Ben Lawers.

<i>Verrucaria verrucoso-areolata</i> , Schaer.	R. Ben Lawers.
<i>sub-umbrina</i> , Nyl.	Ben Lawers.
<i>peltophora</i> , Strn.	R. Ben Lawers.
<i>Sendtneri</i> , Kphbr.	Ben Lawers.
<i>superposita</i> , Nyl.	R. Ben Lawers.
<i>ventosicola</i> , Mudd.	F. Cobbler, &c.
<i>gemmifera</i> , Tayl.	Craig Chailleach.
<i>erratica</i> , Mass.	Ben Lawers.
<i>rimosicola</i> , Leight.	Ben Lawers.
<i>nigritella</i> , Nyl.	Ben Lawers.
<i>Dacampia Hookerii</i> , Mass.	Ben Lawers, Ben Tigh.

JAMES STIRTON.

Fungi.

The Fungi included in the following list have been gathered in a very few localities. Bute, Arran, Toward, Kilfinan, Minard, Otter, and Cadder Wilderness are the only stations I have worked out. The Bothwell and Hamilton district, although probably very fertile, has scarcely been touched. In Cadder Wilderness, about four miles from Glasgow, I have gathered between seven and eight hundred species.

Agaricini.

<i>Amanita vernus</i> , Bull.	R. Near Bothwell.
<i>Phalloides</i> , Fr.	Common.
<i>muscaria</i> , L.	Common.
<i>pantherinus</i> , D.C.	R. Cadder Wilderness.
<i>strobiliformis</i> , Fr.	R. Cadder Wilderness.
<i>rubescens</i> , P.	Common.
<i>excelsus</i> , Fr.	R. Kilfinan.
<i>asper</i> , Fr.	R. Ballimore.
<i>vaginatus</i> , Bull.	Common.
<i>Lepiota procerus</i> , Scop.	Common.
<i>rachodes</i> , Vitt.	R. Innellan.
<i>gracilentus</i> , Kromb.	R. Tigh-na-bruaich.
<i>mastoideus</i> , Fr.	R. Kilfinan.
<i>acutesquamosus</i> , Wm.	Glasgow Botanic Gardens.
<i>hispidus</i> , Lasch.	R. Furnace.
<i>Badhami</i> , B. & Br.	R. Minard.
<i>clypeolarius</i> , Bull.	Glasgow Botanic Gardens.
<i>cristatus</i> , Fr.	Common.
<i>naucinus</i> , Fr.	F. Craigend.
<i>cepestipes</i> , Sow.	Glasgow Botanic Gardens.
<i>granulosus</i> , Batsch. var. <i>amianthinus</i> , Scop.	F. Innellan.
<i>polystictus</i> , Berk.	F. Minard.
<i>Armillaria ramentaceus</i> , Bull.	Very rare. Innellan.
<i>melleus</i> , Vahl.	Common.
<i>mucidus</i> , Fr.	Cadder Wilderness.
<i>Tricholoma sejunctus</i> , Sow.	Cadder Wilderness.
<i>portentosus</i> , Fr.	R. Minard.
<i>spermaticus</i> , Fr.	R. Minard.
<i>nictitans</i> , Fr.	Cadder Wilderness.
<i>fulvellus</i> , Fr.	Cadder Wilderness.
<i>albo-brunneus</i> , P.	Common.
<i>rutilans</i> , Schæff.	R. Ballimore.
<i>luridus</i> , Schæff.	Common.
<i>Columbetta</i> , Fr.	F. Cadder Wilderness.
<i>imbricatus</i> , Fr.	R. Furnace.
<i>crassifolius</i> , Berk.	Ballimore.
<i>murinaceus</i> , Bull.	Otter.

<i>Tricholoma terreus</i> , Schæff.	Minard.
<i>sculpturatus</i> , Fr.	F. Minard.
<i>saponaceus</i> , Fr.	R. Strath Lachlan.
<i>meleagris</i> , Sow.	Glasgow Botanic Gardens.
<i>cartilagineus</i> , Bull.	F. Craigend.
<i>cuneifolius</i> , Fr.	R. Kilfinan.
<i>sulfureus</i> , Bull.	Common.
<i>lascivus</i> , Fr.	Common.
<i>inamœnus</i> , Fr.	F. Innellan.
<i>ionides</i> , Bull.	F. Carmyle.
<i>carneus</i> , Bull.	F. Bishop's Loch.
<i>gambosus</i> , Fr.	Common.
<i>albus</i> , Fr.	F. Bothwell.
<i>personatus</i> , Fr.	Common.
<i>acerbus</i> , Bull.	R. Ballimore.
<i>grammopodius</i> , Bull.	Common.
<i>melaleucus</i> , P.	R. Kilfinan.
<i>humilis</i> , Fr.	F. Millhouse.
<i>subpulverulentus</i> , P.	F. Inveryne.
<i>Clitocybe nebularis</i> , Batsch.	Common.
<i>fumosus</i> , P.	F. Cadder Wilderness.
<i>odorus</i> , Bull.	F. Cadder Wilderness.
<i>cerussatus</i> , Fr.	R. Otter.
<i>phyllophilus</i> , Fr.	Bothwell.
<i>candicans</i> , Fr.	R. Old Roman Bridge.
<i>dealbatus</i> , P.	Common.
<i>gallinaceus</i> , Scop.	Common.
<i>elixus</i> , Sow.	F. Cadder Wilderness.
<i>giganteus</i> , Sow.	R. Kelvin Banks.
<i>infundibuliformis</i> , Schæff.	Common.
<i>geotrupus</i> , Bull.	Common.
<i>flaccidus</i> , Sow.	Ballimore.
<i>cyathiformis</i> , Fr.	Common.
<i>brumalis</i> , Fr.	Cadder Wilderness.
<i>metachrous</i> , Fr.	F. Bothwell.
<i>fragrans</i> , Sow.	Common.
<i>ectypus</i> , Fr.	F. Millhouse.
<i>laccatus</i> , Scop.	Common.
<i>Collybia radicans</i> , Relh.	Common.
<i>longipes</i> , Bull.	F. Cadder Wilderness.
<i>platyphyllus</i> , Fr.	R. Otter.
<i>fusipes</i> , Bull.	Common.
<i>maculatus</i> , A. & S.	F. Ballimore.
<i>butyraceus</i> , Bull.	Common.
<i>velutipes</i> , Curt.	Common.
<i>confluens</i> , P.	Common.
<i>ingratus</i> , Schum.	F. Cadder Wilderness.
<i>undatus</i> , Berk.	F. Cadder Wilderness.
<i>conigenus</i> , P.	R. Otter.
<i>cirrhatum</i> , Schum.	Common.
<i>xanthopus</i> , Fr.	R. Innellan.

<i>Collybia</i> <i>esculentus</i> , Jacq.	<i>F. Innellan.</i>
<i>tenacellus</i> , P.	<i>Ballimore.</i>
<i>dryophilus</i> , Bull.	<i>Common.</i>
<i>ocellatus</i> , Fr.	<i>Toward.</i>
<i>laceratus</i> , Lasch.	<i>R. Ballimore.</i>
<i>Mycena</i> <i>pelianthinus</i> , Fr.	<i>F. Cadder Wilderness.</i>
<i>balaninus</i> , P.	<i>R. Cadder Wilderness.</i>
<i>elegans</i> , P.	<i>R. Kilfinan.</i>
<i>strobilinus</i> , Sow.	<i>R. Ballimore.</i>
<i>rosellus</i> , Fr.	<i>R. Ballimore.</i>
<i>purus</i> , P.	<i>Common.</i>
<i>Iris</i> , Berk.	<i>R. Otter.</i>
<i>luteo-albus</i> , Bolt.	<i>R. Bothwell.</i>
<i>lacteus</i> , P.	<i>R. Minard.</i>
<i>proliferus</i> , Sow.	<i>Glasgow Botanic Gardens.</i>
<i>galericulatus</i> , Scop.	<i>Common.</i>
<i>polygrammus</i> , Bull.	<i>Common.</i>
<i>atro-albus</i> , Bull.	<i>R. Kilfinan.</i>
<i>alcalinus</i> , Fr.	<i>Common.</i>
<i>pauperculus</i> , Berk.	<i>R. Otter.</i>
<i>tenuis</i> , Bolt.	<i>R. Kilfinan.</i>
<i>vitilis</i> , Fr.	<i>Common.</i>
<i>speireus</i> , Fr.	<i>R. Ballimore.</i>
<i>acicula</i> , Schæff.	<i>R. Paisley.</i>
<i>sanguineolentus</i> , A. & S.	<i>R. Smuggler's Glen.</i>
<i>crocatus</i> , Schrad.	<i>R. Luss.</i>
<i>galopus</i> , Schrad.	<i>F. Balloch.</i>
<i>epipterygius</i> , Scop.	<i>Common.</i>
<i>vulgaris</i> , P.	<i>F. Roseneath.</i>
<i>roridus</i> , Fr.	<i>R. Kilfinan.</i>
<i>stylobates</i> , P.	<i>F. Bishop's Loch.</i>
<i>tenerrimus</i> , B.	<i>F. Milngavie.</i>
<i>corticola</i> , Schum.	<i>R. Kilfinan.</i>
<i>juncicola</i> , Fr.	<i>Craigmaddie.</i>
<i>Omphalia</i> <i>pyxidatus</i> , Bull.	<i>R. Cadder.</i>
<i>sphagnicola</i> , Berk.	<i>Common.</i>
<i>muralis</i> , Sow.	<i>F. Cadder.</i>
<i>umbelliferus</i> , L.	<i>Common.</i>
<i>rufulus</i> , B. & Br.	<i>R. Bute.</i>
<i>stellatus</i> , Sow.	<i>Common.</i>
<i>Campanella</i> , Batsch.	<i>Common.</i>
<i>Fibula</i> , Bull.	<i>Common.</i>
<i>Belliæ</i> , Johnst.	<i>F. Kilfinan.</i>
<i>integrellus</i> , P.	<i>R. Kilfinan.</i>
<i>Pleurotus</i> <i>dryinus</i> , P.	<i>F. Neilston.</i>
<i>ulmarius</i> , Bull.	<i>F. Craigend.</i>
<i>subpalmatus</i> , Fr.	<i>F. Cadder Wilderness.</i>
<i>fimbriatus</i> , Bolt.	<i>R. Toward.</i>
<i>salignus</i> , Hoffm.	<i>Common.</i>
<i>mitis</i> , P.	<i>Common.</i>
<i>tremulus</i> , Schæff.	<i>R. Ballimore.</i>

<i>Pleurotus</i> <i>acerosus</i> , Fr.	R. Kilfinan.
<i>porrigens</i> , P.	R. Kilfinan.
<i>mastrucatus</i> , Fr.	R. Innellan.
<i>algidus</i> , Fr.	R. Bute.
<i>applicatus</i> , Batsch.	Common.
<i>striatulus</i> , Fr.	Common.
<i>Volvaria</i> <i>bombycinus</i> , Schæff.	R. Kilfinan.
<i>volvaceus</i> , Bull.	Common.
<i>parvulus</i> , Weinm.	F. Innellan.
<i>speciosus</i> , Fr.	Common.
<i>gloiocephalus</i> , Fr.	Common.
<i>Pluteus</i> <i>cervinus</i> , Schæff.	F. Cadder.
<i>nanus</i> , P.	Common.
<i>leoninus</i> , Schæff.	Common.
<i>chrysophæus</i> , Schæff.	Common.
<i>phlebophorus</i> , Ditm.	R. Cadder.
<i>Entoloma</i> <i>prunuloides</i> , Fr.	R. Ballimore.
<i>repandus</i> , Bull.	R. Cadder.
<i>sericellus</i> , Fr.	Common.
<i>clypeatus</i> , L.	Common.
<i>rhodopolius</i> , Fr.	R. Minard.
<i>costatus</i> , Fr.	Common.
<i>sericeus</i> , Bull.	Common.
<i>nidorosus</i> , Fr.	Common.
<i>Clitopilus</i> <i>prunulus</i> , Scop.	Common.
<i>cretatus</i> , Berk.	Common.
<i>Leptonia</i> <i>lampropus</i> , Fr.	Common.
<i>chalybæus</i> , P.	F. Kilfinan.
<i>asprellus</i> , Fr.	Common.
<i>Nolanea</i> <i>pascuus</i> , P.	Common.
<i>rufo-carneus</i> , Berk.	Common.
<i>Eccilia</i> <i>rhodocalyx</i> , Lasch.	F. Cadder.
<i>Pholiota</i> <i>durus</i> , Bolt.	Common.
<i>præcox</i> , P.	Common.
<i>radicosus</i> , Bull.	Common.
<i>aurivellus</i> , Batsch.	Common.
<i>squarrosus</i> , Müll.	Common.
<i>spectabilis</i> , Fr.	Common.
<i>adiposus</i> , Fr.	R. Innellan.
<i>marginatus</i> , Batsch.	F. Kilfinan.
<i>pumilus</i> , Fr.	Common.
<i>Hebeloma</i> <i>relicinus</i> , Fr.	Common.
<i>lanuginosus</i> , Fr.	R. Toward.
<i>scaber</i> , Müll.	Common.
<i>lacerus</i> , Fr.	Common.
<i>focculosus</i> , Berk.	Common.
<i>Hookeri</i> , Klotzsch.	R. Botanic Gardens.
<i>fibrosus</i> , Sow.	R. Toward.
<i>fastigiatus</i> , Fr.	Common.
<i>auricomus</i> , Batsch.	R. Cadder.
<i>sindonium</i> , Fr.	R. Luss.

<i>Hebeloma</i> <i>geophyllum</i> , Sow.	Common.
<i>punctatum</i> , Fr.	R. Toward.
<i>versipellis</i> , Fr.	R. Helensburgh.
<i>Flammula</i> <i>flocifer</i> , Berk.	R. Arran.
<i>lentus</i> , P.	Common.
<i>flavidus</i> , Schæff.	Common.
<i>filiceus</i> , Cooke.	Common.
<i>Naucoria</i> <i>cucumis</i> , P.	Common.
<i>centunculus</i> , Fr.	R. Toward.
<i>melinoides</i> , Fr.	Common.
<i>semiorbicularis</i> , Bull.	Common.
<i>inquilinus</i> , Fr.	F. Glasgow.
<i>furfuraceus</i> , P.	Common.
<i>sobrius</i> , Fr.	R. Arran.
<i>erinaceus</i> , Fr.	Common.
<i>siparius</i> , Fr.	R. Toward.
<i>conspersus</i> , Pers.	Common.
<i>Galera</i> <i>reticulatus</i> , P.	R. Barrhead.
<i>lateritius</i> , Fr.	R. Craigend.
<i>tener</i> , Schæff.	Common.
<i>ovalis</i> , Fr.	Common.
<i>confertus</i> , Bolt.	R. Botanic Gardens.
<i>sparteus</i> , Fr.	R. Kilfinan.
<i>embolus</i> , Fr.	F. Kilfinan.
<i>Hypnorum</i> , Batsch.	F. Kilfinan.
<i>Crepidotus</i> <i>mollis</i> , Schæff.	Common.
<i>Rubi</i> , Berk.	R. Toward.
<i>variabilis</i> , P.	Common.
<i>byssisedus</i> , P.	Common.
<i>Pezizoides</i> , Nees.	R. Cadder.
<i>Psalliota</i> <i>campestris</i> , L.	Common.
<i>arvensis</i> , Schæff.	Common.
<i>silvaticus</i> , Schæff.	F. Kilfinan.
<i>echinatus</i> , Roth.	R. Minard.
<i>æruginosus</i> , Curt.	Common.
<i>albocyaneus</i> , Desm.	F. Toward.
<i>melaspermus</i> , Bull.	R. Cadder Wilderness.
<i>squamosus</i> , Fr.	Common.
<i>stercorarius</i> , Fr.	Common.
<i>semiglobatus</i> , Batsch.	Common.
<i>Hypholoma</i> <i>sublateritius</i> , Fr.	Common.
<i>capnoides</i> , Fr.	F. Toward.
<i>epixanthus</i> , Fr.	R. Toward.
<i>fascicularis</i> , Huds.	Common.
<i>dispersus</i> , Fr.	R. Toward.
<i>lacrymabundus</i> , Fr.	Common.
<i>velutinus</i> , P.	Common.
<i>appendiculatus</i> , Bull.	Common.
<i>egenulus</i> , Berk.	F. Innellan.
<i>Candollianus</i> , Fr.	R. Cadder Wilderness.
<i>lanaripes</i> , Cooke.	Common.

<i>Psilocybe</i> spadiceus, Schæff.	Common.
cernuus, Müll.	R. Minard.
clivensis, Berk.	R. Arran.
Fœnisecii, P.	Common.
coprophilus, Bull.	R. Craigend.
bullaceus, Bull.	R. Craigend.
physaloides, Bull.	F. Innellan.
areolatus, Klotzsch.	Glasgow.
semilanceolatus, Fr.	Common.
comptulus, Berk.	R. Kilfinan.
<i>Psathyra</i> conopilus, P.	F. Cadder Wilderness.
corrugis, P.	Common.
bifrons, Berk.	R. Loch Striven.
obtusatus, Fr.	F. Barrhead.
fibrillosus, P.	R. Toward.
urticæcola, Berk.	R. Craigend.
gossypinus, Fr.	R. Arran.
semivestitus, Berk.	R. Toward.
<i>Panæolus</i> separatus, L.	R. Cadder Wilderness.
fimiputris, Bull.	Common.
campanulatus, L.	Common.
papilionaceus, Bull.	Common.
<i>Psathyrella</i> gracilis, Fr.	Common.
hiascens, Fr.	R. Innellan.
atomatus, Fr.	Common.
disseminatus, P.	Common.
<i>Coprinus</i> comatus, Fr.	Common.
ovatus, Fr.	Common.
sterquilinus, Fr.	Common.
atramentarius, Fr.	Common.
picaceus, Fr.	R. Craigend.
aphthosus, Fr.	R. Kilfinan.
flocculosus, Fr.	F. Glasgow.
extinctorius, Fr.	Common.
fimetarius, Fr.	Common.
tomentosus, Fr.	Common.
niveus, Fr.	Common.
micaceus, Fr.	Common.
aratus, Berk.	R. Innellan.
radians, Fr.	Common.
deliquescens, Fr.	Common.
Hendersonii, Fr.	R. Kilsyth.
macrocephalus, B.	R. Campsie.
lagopus, Fr.	F. Innellan.
nychthemerus, Fr.	F. Helensburgh.
radiatus, Fr.	Common.
domesticus, Fr.	Common.
ephemerus, Fr.	Common.
plicatilis, Fr.	Common.
Spragueii, B. & C.	R. Arran.
hemerobius, Fr.	R. Innellan.

<i>Bolbitius fragilis</i> , Fr.	Common.
<i>titubans</i> , Fr.	Common.
<i>tener</i> , B.	Common.
<i>Cortinarius caperatus</i> , Fr.	F. Kenmuir.
<i>varius</i> , Fr.	F. Cadder.
<i>cyanopus</i> , Fr.	F. Toward.
<i>anfractus</i> , Fr.	R. Kilfinan.
<i>multiformis</i> , Fr.	R. Minard.
<i>glaucopus</i> , Fr.	R. Cairndow.
<i>callochrous</i> , Fr.	F. Cadder Wilderness.
<i>purpurascens</i> , Fr.	Common.
<i>turbinatus</i> , Fr.	R. Innellan.
<i>scaurus</i> , Fr.	F. Largs.
<i>prasinus</i> , Fr.	Cadder Wilderness.
<i>collinitus</i> , Fr.	Common.
<i>elator</i> , Fr.	Common.
<i>livido-ochraceus</i> , B.	R. Loch Striven.
<i>violaceus</i> , Fr.	R. Minard.
<i>bolaris</i> , Fr.	R. Kilfinan.
<i>sublanatus</i> , Fr.	R. Minard.
<i>tabularis</i> , Fr.	Common.
<i>diabolicus</i> , Fr.	F. Innellan.
<i>caninus</i> , Fr.	R. Minard.
<i>anomalus</i> , Fr.	Common.
<i>sanguineus</i> , Fr.	F. Kilfinan.
<i>cinnamomeus</i> , Fr.	Common.
<i>uliginosus</i> , Berk.	Common.
<i>raphanoides</i> , Fr.	F. Kilfinan.
<i>bulbosus</i> , Fr.	R. Kilfinan.
<i>evernius</i> , Fr.	Common.
<i>armillatus</i> , Fr.	Common.
<i>hinnuleus</i> , Fr.	Common.
<i>periscelis</i> , Weinm.	F. Cadder.
<i>ileopodius</i> , Fr.	F. Arran.
<i>hemitrichus</i> , Fr.	R. Largs.
<i>Armeniacus</i> , Fr.	R. Toward.
<i>castaneus</i> , Fr.	Common.
<i>rigens</i> , Fr.	Common.
<i>leucopus</i> , Fr.	F. Innellan.
<i>acutus</i> , Fr.	R. Minard.
<i>Paxillus involutus</i> , Fr.	Common.
<i>Gomphidius glutinosus</i> , Fr.	R. Toward.
<i>viscidus</i> , Fr.	R. Toward.
<i>gracilis</i> , B. & Br.	R. Toward.
<i>Hygrophorus chrysodon</i> , Fr.	Common.
<i>eburneus</i> , Fr.	Common.
<i>cerasinus</i> , B.	R. Toward.
<i>arbustivus</i> , Fr.	R. Cadder.
<i>olivaceo-albus</i> , Fr.	Common.
<i>pratensis</i> , Fr.	Common.
<i>virgineus</i> , Fr.	Common.

Hygrophorus <i>niveus</i> , Fr.	Common.
<i>russo-coriaceus</i> , B. & Mill.	R. Kilfinan.
<i>ovinus</i> , Fr.	Common.
<i>distans</i> , B.	R. Kilfinan.
<i>lætus</i> , Fr.	Common.
<i>ceraceus</i> , Fr.	Common.
<i>miniatus</i> , Fr.	Common.
<i>puniceus</i> , Fr.	Common.
<i>obrusseus</i> , Fr.	R. Minard.
<i>conicus</i> , Fr.	Common.
<i>psittacinus</i> , Fr.	Common.
<i>calyptræformis</i> , B. & Br.	R. Kilfinan.
<i>unguinus</i> , Fr.	R. Kilsyth.
<i>murinaceus</i> , Fr.	Common.
Lactarius <i>torminosus</i> , Fr.	R. Cadder.
<i>cilicioides</i> , Fr.	R. Toward.
<i>insulsus</i> , Fr.	Common.
<i>zonarius</i> , Fr.	Common in Cadder.
<i>blennius</i> , Fr.	Common.
<i>trivialis</i> , Fr.	R. Minard.
<i>plumbeus</i> , Fr.	Common.
<i>piperatus</i> , Fr.	Common.
<i>vellereus</i> , Fr.	Common.
<i>deliciosus</i> , Fr.	Common.
<i>chrysorrhœus</i> , Fr.	Common.
<i>acris</i> , Fr.	Common.
<i>quietus</i> , Fr.	R. Kilfinan.
<i>serifluus</i> , Fr.	Common.
<i>mitissimus</i> , Fr.	R. Barrhead.
<i>subdulcis</i> , Fr.	Common.
<i>camphoratus</i> , Fr.	R. Minard.
<i>rufus</i> , Fr.	R. Toward.
<i>fuliginosus</i> , Fr.	Common.
Russula <i>nigricans</i> , Fr.	Common.
<i>adusta</i> , Fr.	Common.
<i>delica</i> , Fr.	Common.
<i>sanguinea</i> , Fr.	Common.
<i>rosacea</i> , Fr.	Common.
<i>furcata</i> , Fr.	Common.
<i>vesca</i> , Fr.	Common.
<i>heterophylla</i> , Fr.	Common.
<i>depallens</i> , Fr.	R. Kilfinan.
<i>sardonias</i> , Fr.	R. Toward.
<i>rubra</i> , Fr.	F. Toward.
<i>lepida</i> , Fr.	F. Kilfinan.
<i>virescens</i> , Fr.	Common.
<i>emetica</i> , Fr.	Common.
<i>ochroleuca</i> , Fr.	Common.
<i>foetens</i> , Fr.	Common.
<i>fragilis</i> , Fr.	Common.
<i>integra</i> , Fr.	Common.

<i>Russula aurata</i> , Fr.	Common.
<i>decolorans</i> , Fr.	Common.
<i>nitida</i> , Fr.	Common.
<i>alutacea</i> , Fr.	Common.
<i>lutea</i> , Fr.	Common.
<i>vitellina</i> , Fr.	Common.
<i>chamæleontina</i> , Fr.	Common.
<i>Cantharellus cibarius</i> , Fr.	Common.
<i>aurantiacus</i> , Fr.	Common.
<i>Brownii</i> , B. & Br.	R. Minard.
<i>umbonatus</i> , P.	R. Bute.
<i>tubæformis</i> , Fr.	R. Bute.
<i>infundibuliformis</i> , Fr.	R. Loch Lomond.
<i>muscigenus</i> , Fr.	R. Bute.
<i>retirugus</i> , Fr.	R. Bute.
<i>lobatus</i> , Fr.	R. Tigh-na-braich.
<i>Nyctalis asterophora</i> , Fr.	Common.
<i>parasitica</i> , Fr.	Common.
<i>Marasmius urens</i> , Fr.	Common.
<i>peronatus</i> , Fr.	Common.
<i>porreus</i> , Fr.	Common.
<i>oreades</i> , Fr.	Common.
<i>fusco-purpureus</i> , Fr.	Common.
<i>Wynnei</i> , B. & Br.	R. Toward.
<i>Stephensii</i> , B. & Br.	R. Kilfinan.
<i>erythropus</i> , Fr.	R. Toward.
<i>archyropus</i> , Fr.	R. Cadder.
<i>scorodoni</i> , Fr.	R. Cumbræ.
<i>Vaillantii</i> , Fr.	R. Largs.
<i>fœtidus</i> , Fr.	Common.
<i>nigricans</i> , Berk. MSS.	Common.
<i>amadelpus</i> , Fr.	R. Cadder.
<i>ramealis</i> , Fr.	Common.
<i>androsaceus</i> , Fr.	Common.
<i>rotula</i> , Fr.	Common.
<i>graminum</i> , B. & Br.	Common.
<i>alliaceus</i> , Fr.	R. Kilfinan.
<i>perforans</i> , Fr.	R. Toward.
<i>insititius</i> , Fr.	R. Luss.
<i>Hudsoni</i> , Fr.	R. Craigend.
<i>saccharinus</i> , Fr.	R. Arran.
<i>epiphyllus</i> , Fr.	Common.
<i>Lentinus tigrinus</i> , Fr.	R. Cadder.
<i>Dunalii</i> , Fr.	R. Cadder Wilderness.
<i>lepideus</i> , Fr.	R. Toward.
<i>cochleatus</i> , Fr.	R. Minard.
<i>vulpinus</i> , Fr.	R. Minard.
<i>Panus torulosus</i> , Fr.	R. Minard.
<i>conchatus</i> , Fr.	R. Furnace.
<i>stypticus</i> , Fr.	Common.
<i>Xerotus degener</i> , Fr.	Moss at Ballimore.

<i>Schizophyllum commune</i> , Fr.	Glasgow.
<i>Lenzites betulina</i> , Fr.	Common.
<i>flaccida</i> , Fr.	Common.
<i>sepiaria</i> , Fr.	Common.
<i>abietina</i> , Fr.	Glasgow.

Polyporei.

<i>Boletus luteus</i> , L.	Common.
<i>elegans</i> , Schum.	R. Kilfinan.
<i>flavus</i> , With.	Common.
<i>laricinus</i> , B.	Common.
<i>granulatus</i> , L.	c. Toward.
<i>bovinus</i> , L.	R. Ballimore.
<i>badius</i> , Fr.	R. Kilfinan.
<i>sanguineus</i> , With.	R. Ben Lomond.
<i>piperatus</i> , Bull.	R. Luss.
<i>parasiticus</i> , Bull.	R. Cadder Wilderness.
<i>variegatus</i> , Fr.	R. Row.
<i>striæpes</i> , Sec.	R. Arran.
<i>chrysenteron</i> , Fr.	Common.
<i>subtomentosus</i> , L.	Common.
<i>calopus</i> , Fr.	R. Barrhead.
<i>olivaceus</i> , Schæff.	R. Kilfinan.
<i>pachypus</i> , Fr.	Cadder Wilderness.
<i>Satanas</i> , Lenz.	Ben Brecht.
<i>luridus</i> , Fr.	Cadder Wilderness.
<i>edulis</i> , Bull.	Kilfinan.
<i>impolitus</i> , Fr.	Common.
<i>æstivalis</i> , Fr.	Common.
<i>viscidus</i> , L.	R. Minard.
<i>versipellis</i> , Fr.	Common.
<i>scaber</i> , Fr.	Common.
<i>alutarius</i> , Fr.	Common.
<i>felleus</i> , Bull.	R. Arran.
<i>castaneus</i> , Bull.	R. Toward.
<i>Strobilomyces strobiliaceus</i> , B.	R. Minard.
<i>Polyporus brumalis</i> , Fr.	R. Cadder Wilderness.
<i>fuscidulus</i> , Fr.	R. Kenmuir.
<i>leptocephalus</i> , Fr.	R. Cadder Wilderness.
<i>Schweinitzii</i> , Fr.	R. Cadder.
<i>rufescens</i> , Fr.	R. Cadder.
<i>perennis</i> , Fr.	R. Bowling.
<i>squamosus</i> , Fr.	Common.
<i>Rostkovii</i> , Fr.	R. Millport.
<i>varius</i> , Fr.	Common.
<i>elegans</i> , Fr.	Common.
<i>quercinus</i> , Fr.	Common.
<i>lucidus</i> , Fr.	Common.
<i>intybaceus</i> , Fr.	R. Kilfinan.
<i>cristatus</i> , Fr.	R. Ballimore.
<i>giganteus</i> , Fr.	R. Cadder.

<i>Polyporus sulfureus</i> , Fr.	Common.
heteroclitus, Fr.	R. Cadder.
salignus, Fr.	R. Craigend.
cæsius, Fr.	Common.
destructor, Fr.	Common.
nidulans, Fr.	Common.
fumosus, Fr.	Kilfinan.
adustus, Fr.	Common.
crispus, Fr.	R. Toward.
adiposus, B. & Br.	R. Toward.
amorphus, Fr.	R. Knockdow.
hispidus, Fr.	Common.
dryadeus, Fr.	Kilfinan.
betulinus, Fr.	Common.
pallescens, Fr.	Common.
applanatus, Fr.	R. Barrhead.
fomentarius, Fr.	Common.
nigricans, Fr.	Common.
igniarius, Fr.	Common.
ribis, Fr.	R. Craigend.
salicinus, Fr.	Common.
ulmarius, Fr.	Common.
fraxineus, Fr.	Common.
variegatus, Fr.	R. Ben Lomond.
cervinus, P.	R. Helensburgh.
annosus, Fr.	Common.
connatus, Fr.	Common.
radiatus, Fr.	Common.
velutinus, Fr.	Common.
versicolor, Fr.	Common.
abietinus, Fr.	R. Toward.
contiguus, Fr.	Common.
ferruginosus, Fr.	Common.
nitidus, Fr.	R. Toward.
incarnatus, Fr.	R. Innellan.
purpureus, Fr.	Minard.
cinctus, Berk.	R. Arran.
vulgaris, Fr.	Common.
viridans, Berk.	Common.
molluscus, Fr.	R. Kilfinan.
terrostris, Fr.	R. Minard.
vaporarius, Fr.	Common.
aneirinus, Fr.	R. Kilfinan.
Stephensii, Fr.	R. Arran.
Vaillantii, Fr.	Glasgow.
hybridus, B. & Br.	Glasgow.
<i>Trametes</i> pini, Fr.	Kilfinan.
suaveolens, Fr.	Craigend.
odora, Fr.	Craigend.
gibbosa, Fr.	Minard.
<i>Dædalea quercina</i> , P.	Common.

<i>Dædalea confragosa</i> , P.	R. Craigend.
<i>unicolor</i> , Fr.	Common.
<i>latissima</i> , Fr.	R. Frankfield.
<i>Merulius tremellosus</i> , Schrad.	R. Fairlie.
<i>corium</i> , Fr.	Common.
<i>molluscus</i> , Fr.	R. Largs.
<i>Porinoides</i> , Fr.	Cadder.
<i>rufus</i> , P.	Ben Lomond.
<i>serpens</i> , Fr.	R. Toward.
<i>pallens</i> , Berk.	R. Toward.
<i>lacrymans</i> , Fr.	Common.
<i>aurantiacus</i> , Klotsch.	Common.
<i>Porothelium Friesii</i> , Mont.	R. Ballimore.
<i>Fistulina hepatica</i> , Fr.	Common.

Hydnei.

<i>Hydnum imbricatum</i> , L.	R. Cadder.
<i>repandum</i> , L.	Cadder.
<i>compactum</i> , Fr.	R. Kilfinan.
<i>zonatum</i> , Batsch.	R. Toward.
<i>graveolens</i> , Del.	R. Cadder.
<i>auriscalpium</i> , L.	Common.
<i>coralloides</i> , Scop.	Common.
<i>Erinaceus</i> , Bull.	R. Barrhead.
<i>Caput-Medusæ</i> , Bull.	R. Ballimore.
<i>gelatinosum</i> , Scop.	R. Otter.
<i>ochraceum</i> , P.	Common.
<i>membranaceum</i> , Bull.	Common.
<i>ferruginosum</i> , Fr.	Common.
<i>alutaceum</i> , Fr.	R. Paisley.
<i>spathulatum</i> , Fr.	R. Otter.
<i>udum</i> , Fr.	R. Minard.
<i>niveum</i> , P.	R. Ballimore.
<i>farinaceum</i> , P.	R. Ballimore.
<i>Sistotrema confluens</i> , P.	Cadder Wilderness.
<i>Irpex pendulus</i> , Fr.	R. Toward.
<i>Johnstoni</i> , Berk.	Cadder Wilderness.
<i>obliquus</i> , Fr.	R. Kilfinan.
<i>Radulum quercinum</i> , Fr.	R. Otter.
<i>Phlebia merismoides</i> , Fr.	R. Ballimore.
<i>radiata</i> , Fr.	R. Otter.
<i>vaga</i> , Fr.	R. Otter.
<i>Grandinia granulosa</i> , Fr.	Common.
<i>Odontia fimbriata</i> , Fr.	Common.
<i>Kneiffia setigera</i> , Fr.	Common.

Auricularini.

<i>Craterellus lutescens</i> , Fr.	R. Cadder.
<i>cornucopioides</i> , Fr.	R. Ben Lomond.
<i>sinuosus</i> , Fr.	R. Loch Fad.

<i>Craterellus crispus</i> , Fr.	R. Luss.
<i>Thelephora tuberosa</i> , Grev.	R. Bowling.
<i>anthocephala</i> , Fr.	Common.
<i>palmata</i> , Fr.	R. Luss.
<i>terrestris</i> , Fr.	R. Ballimore.
<i>cristata</i> , Fr.	R. Bute.
<i>mollissima</i> , P.	Common.
<i>laciniata</i> , P.	Common.
<i>byssoides</i> , P.	R. Toward.
<i>sebacea</i> , Fr.	Common.
<i>puteana</i> , Schum.	Common.
<i>laxa</i> , Fr.	R. Milngavie.
<i>arida</i> , Fr.	Common.
<i>olivacea</i> , Fr.	R. Toward.
<i>anthochroa</i> , P.	R. Craigend.
<i>Stereum purpureum</i> , Fr.	Common.
<i>hirsutum</i> , Fr.	Common.
<i>spadiceum</i> , Fr.	Common.
<i>sanguinolentum</i> , Fr.	Common.
<i>rugosum</i> , Fr.	Common.
<i>acerinum</i> , Fr.	Common.
<i>Hymenochaete rubiginosa</i> , Lév.	Common.
<i>tabacina</i> , Lév.	R. Ben Lomond.
<i>corrugata</i> , Berk.	R. Luss.
<i>Auricularia mesenterica</i> , Bull.	Common.
<i>lobata</i> , Somm.	Common.
<i>Corticium giganteum</i> , Fr.	Common.
<i>lacteum</i> , Fr.	R. Cadder Wilderness.
<i>arachnoideum</i> , Berk.	R. Toward.
<i>laeve</i> , Fr.	Common.
<i>sanguineum</i> , Fr.	R. Cadder.
<i>sulfureum</i> , Fr.	Common.
<i>cœruleum</i> , Fr.	Common.
<i>lactescens</i> , Berk.	Craigend.
<i>calceum</i> , Fr.	Common.
<i>quercinum</i> , P.	Common.
<i>cinereum</i> , Fr.	Common.
<i>incarnatum</i> , Fr.	Common.
<i>nudum</i> , Fr.	Common.
<i>confluens</i> , Fr.	Common.
<i>polygonium</i> , P.	Common.
<i>comedens</i> , Fr.	Common.
<i>Sambuci</i> , P.	R. Kilfinan.
<i>Aurora</i> , B. & Br.	Common.
<i>Cyphella galeata</i> , Fr.	Common.
<i>lacera</i> , Fr.	Common.
<i>capula</i> , Fr.	Common.
<i>Curreyi</i> , Berk.	R. Craigend.
<i>fulva</i> , B. & Rav.	Common.
<i>Sparassis crispa</i> , Fr.	Cadder Wilderness.

Clavariei.

Clavaria Botrytis, P.	Inverary.
amethystina, Bull.	R. Cadder.
fastigiata, D.C.	Common.
muscoides, L.	Common.
coralloides, L.	Common.
umbrina, Berk.	Common.
cinerea, Bull.	Common.
cristata, Holmsk.	Common.
rugosa, Bull.	Common.
aurea, Schæff.	R. Innellan.
abietina, Schum.	R. Cadder.
flaccida, Fr.	R. Arran.
crocea, P.	R. Luss.
grisea, P.	R. Luss.
stricta, P.	R. Botanic Gardens.
crispula, Fr.	R. Cadder.
purpurea, Müll.	Common.
rosea, Fr.	R. Minard.
fusiformis, Sow.	Common.
inæqualis, Müll.	Common.
argillacea, Fr.	Common.
tenuipes, B. & Br.	Common.
vermiculata, Scop.	Common.
fragilis, Holmsk.	Common.
pistillaris, L.	R. Kilfinan.
contorta, Fr.	R. Kilfinan.
juncea, Fr.	Common.
acuta, Sow.	R. Botanic Gardens.
uncialis, Grev.	Common.
Calocera viscosa, Fr.	Common.
glossoides, Fr.	R. Minard.
Typhula erythropus, Fr.	Common.
phacorrhiza, Fr.	Common.
incarnata, Fr.	Common.
muscicola, Fr.	Common.
filiformis, Fr.	Common.
gracilis, B. & Desm.	Common.
Pistillaria culmigena, Mont.	Common.
quisquilaris, Fr.	R. Arran.
puberula, Berk.	R. Arran.
pusilla, Fr.	Kenmuir.

Tremellini.

Tremella frondosa, Fr.	R. Barrhead.
foliacea, P.	F. Largs.
lutescens, Fr.	Common.
mesenterica, Retz.	Common.
moriformis, Berk.	R. Cadder.
albida, Huds.	Common.

<i>Tremella indecorata</i> , Somm.	R. Toward.
<i>sarcoides</i> , Sm.	Common.
<i>tubercularia</i> , Bull.	Common.
<i>torta</i> , Willd.	Common.
<i>versicolor</i> , B. & Br.	Common.
<i>viscosa</i> , P.	R. Kilfinan.
<i>epigæa</i> , B. & Br.	R. Bowling.
<i>Exidia recisa</i> , Fr.	Common.
<i>glandulosa</i> , Fr.	Common.
<i>saccharina</i> , Fr.	R. Minard.
<i>Hirneola auricula-Judæ</i> , Berk.	Common.
<i>Næmatelia encephala</i> , Fr.	Ben Lomond.
<i>nucleata</i> , Fr.	R. Luss.
<i>virescens</i> , Cd.	Common.
<i>Dacrymyces violaceus</i> , Fr.	R. Furnace.
<i>deliquescens</i> , Duby.	R. Toward.
<i>stillatus</i> , Nees.	R. Toward.
<i>chrysocomus</i> , Tul.	R. Otter.
<i>Apyprenium lignatile</i> , Fr.	F. Minard.
<i>Hymenula punctiformis</i> , B. & Br.	R. Otter.
<i>Ditiola radicata</i> , Fr.	R. Toward.

Hypogæi.

<i>Octaviania asterosperma</i> , Vitt.	F. Cadder.
<i>Stephensii</i> , Tul.	R. Helensburgh.
<i>Melanogaster ambiguus</i> , Tul.	R. Toward.
<i>Hydnangium carneum</i> , Berk.	Botanic Gardens.
<i>Hysterangium nephriticum</i> , Berk.	R. Helensburgh.
<i>Rhizopogon rubescens</i> , Tul.	R. Helensburgh.
<i>Hymenogaster Klotzschii</i> , Tul.	Botanic Gardens.
<i>muticus</i> , B. & Br.	Botanic Gardens.
<i>vulgaris</i> , Tul.	Common.
<i>citrinus</i> , Vitt.	R. Cadder.
<i>tener</i> , Berk.	R. Helensburgh.

Phalloidei.

<i>Phallus impudicus</i> , L.	Common.
<i>Cynophallus caninus</i> , Fr.	R. Kilsyth.

Trichogastres.

<i>Batarrea phalloides</i> , P.	R. Kilfinan.
<i>Tulostoma mammosum</i> , Fr.	Very rare. Toward.
<i>Geaster coliformis</i> , P.	R. Campsie.
<i>fornicatus</i> , Fr.	Common.
<i>fimbriatus</i> , Fr.	R. Toward.
<i>hygrometricus</i> , P.	R. Minard.
<i>Bovista nigrescens</i> , P.	Common.
<i>plumbea</i> , P.	Common.
<i>Lycoperdon giganteum</i> , Batsch.	Common.
<i>cælatum</i> , Fr.	Common.

<i>Lycoperdon atropurpureum</i> , Vitt.	R. Blantyre.
<i>pusillum</i> , Fr.	R. Kilfinan.
<i>saccatum</i> , Vahl.	Common.
<i>gemmatum</i> , Fr.	Common.
<i>pyriforme</i> , Schæff.	Common.
<i>Scleroderma vulgare</i> , Fr.	Common.
<i>Bovista</i> , Fr.	R. Kilfinan.
<i>verrucosum</i> , Pers.	Common.
<i>Polysaccum olivaceum</i> , Fr.	R. Bothwell.

Myxogastres.

<i>Lycogala epidendrum</i> , Fr.	Common.
<i>parietinum</i> , Fr.	F. Cadder.
<i>Reticularia maxima</i> , Fr.	Common.
<i>atra</i> , Fr.	R. Bothwell.
<i>umbrina</i> , Fr.	Common.
<i>Æthidium septicum</i> , Fr.	Common.
<i>vaporarium</i> , Fr.	Common.
<i>Spumaria alba</i> , D.C.	Common.
<i>Diderma floriforme</i> , P.	Common.
<i>citrinum</i> , Fr.	Common.
<i>vernicosum</i> , P.	F. Kilfinan.
<i>lucidum</i> , Berk.	Common.
<i>spumarioides</i> , Fr.	F. Bute.
<i>nitens</i> , Klotzsch.	R. Arran.
<i>globosum</i> , Fr.	Common.
<i>Didymium melanopus</i> , Fr.	Common.
<i>hemisphaericum</i> , Fr.	F. Cadder.
<i>squamulosum</i> , A. & S.	Common.
<i>farinaceum</i> , Fr.	Common.
<i>leucopus</i> , Fr.	R. Kilfinan.
<i>lobatum</i> , Nees.	Common.
<i>cinereum</i> , Fr.	Common.
<i>Physarum nutans</i> , P.	Common.
var. <i>γ, aureum</i> , Grev.	Common.
<i>rubiginosum</i> , Chev.	Common.
<i>album</i> , Fr.	R. Minard.
<i>atrum</i> , Fr.	Common.
<i>Angioridium sinuosum</i> , Grev.	Common.
<i>Badhamia hyalina</i> , Berk.	R. Kilfinan.
<i>nitens</i> , Berk.	Common.
<i>Craterium pedunculatum</i> , Trent.	Common.
<i>minutum</i> , Fr.	Common.
<i>Diachea elegans</i> , Fr.	R. Toward.
<i>Stemonitis fusca</i> , Roth.	Common.
<i>ferruginea</i> , Ehib.	Common.
<i>pulchella</i> , Bab.	Common.
<i>violacea</i> , Fr.	Common.
<i>arcyrioides</i> , Somm.	Common.
<i>Enerthenema elegans</i> , Bowm.	Common.
<i>Dictydium umbilicatum</i> , Schrad.	R. Toward.

<i>Cribraria intricata</i> , Schrad.	R. Kilfinan.
<i>Arcyria punicea</i> , P.	Common.
<i>incarnata</i> , P.	Common.
<i>umbrina</i> , Schum.	Common.
<i>ochroleuca</i> , Fr.	Common.
<i>Trichia pyriformis</i> , Hoffm.	Common.
<i>fallax</i> , P.	R. Kilfinan.
<i>clavata</i> , P.	Common.
<i>turbinata</i> , With.	Common.
<i>chrysosperma</i> , D.C.	Common.
<i>serpula</i> , P.	Common.
<i>Perichæna abietina</i> , Fr.	R. Toward.
<i>Licea cylindrica</i> , Fr.	Common.
<i>applanata</i> , Berk.	Common.
<i>Phelonitis strobilina</i> , Fr.	Common.

Nidulariacei.

<i>Cyathus striatus</i> , Hoffm.	Common.
<i>vernicosus</i> , D.C.	Common.
<i>Crucibulum vulgare</i> , Tul.	Common.
<i>Sphæroبولus stellatus</i> , Tode.	Common.
<i>Polyangium vitellinum</i> , Ditm.	R. Arran.

Sphæronemei.

<i>Leptostroma caricinum</i> , Fr.	Common.
<i>spireæ</i> , Fr.	Common.
<i>vulgare</i> , Fr.	Common.
<i>Phoma concentricum</i> , Desm.	R. Botanic Gardens.
<i>hederæ</i> , Desm.	Common.
<i>lingam</i> , Desm.	Common.
<i>radula</i> , B. & R.	Common.
<i>samarorum</i> , Desm.	Common.
<i>piceum</i> , B. & Br.	Common.
<i>microscopicum</i> , B. & Br.	Common.
<i>nebulosum</i> , Berk.	Common.
<i>longissimum</i> , Berk.	Common.
<i>bicuspidatum</i> , Berk.	R. Minard.
<i>Leptothyrium juglandis</i> , Lib.	Common.
<i>fragariæ</i> , Lib.	Common.
<i>ribis</i> , Lib.	Common.
<i>Actinothyrium graminis</i> , Kze.	Common.
<i>Cryptosporium caricis</i> , Cd.	Common.
<i>Sphæronema subulatum</i> , Tode.	Common.
<i>vitreum</i> , Cd.	Common.
<i>Sphæropsis cylindrospora</i> , Desm.	Common.
<i>epitricha</i> , B. & Br.	Common.
<i>arundinacea</i> , Lév.	R. Kilfinan.
<i>taxi</i> , Berk.	R. Luss.
<i>alismatis</i> , Curr.	Common.
<i>Dothiora pyrenophora</i> , Fr.	Common.
<i>sphæroides</i> , Fr.	Common.

<i>Clinterium obturatum</i> , Fr.	R. Ballimore.
<i>Acrosperrum graminum</i> , Lib.	Common.
<i>Diplodia vulgaris</i> , Lév.	Common.
<i>oospora</i> , Berk.	Common.
<i>tecta</i> , B. & Br.	Common.
<i>consors</i> , B. & Br.	Common.
<i>arbuticola</i> , Fr.	R. Campsie.
<i>illicis</i> , Curr.	Common.
<i>Hendersonia arcus</i> , B. & Br.	R. Craigend.
<i>Vermicularia dematium</i> , Fr.	Common.
<i>trichella</i> , Grev.	Common.
<i>atramentaria</i> , B. & Br.	Common.
<i>Discosia alnea</i> , Lib.	Common.
<i>Pilidium acerinum</i> , Kze.	Common.
<i>Melasmia acerina</i> , Lév.	Common.
<i>alnea</i> , Lév.	Common.
<i>Piggotia astroidea</i> , B. & Br.	Common.
<i>Septoria ulmi</i> , Kze.	Common.
<i>oxyacanthæ</i> , Kze.	Common.
<i>aceris</i> , B. & Br.	Common.
<i>salicella</i> , B. & Br.	Common.
<i>ægopodii</i> , Desm.	Common.
<i>lepidii</i> , Desm.	Common.
<i>nodorum</i> , Berk.	Common.
<i>hippocastani</i> , B. & Br.	Common.
<i>Ralfsii</i> , B. & Br.	Common.
<i>insularis</i> , B. & Br.	Common.
<i>Badhami</i> , B. & Br.	Common.
<i>polygonorum</i> , Desm.	Common.
<i>convolvuli</i> , Desm.	Common.
<i>cornicola</i> , Desm.	Common.
<i>heterochroa</i> , Desm.	Common.
<i>graminum</i> , Desm.	Common.
<i>stemmaea</i> , Berk.	R. Campsie.
<i>hederæ</i> , Desm.	Common.
<i>pyricola</i> , Desm.	Common.
<i>hydrocotyles</i> , Desm.	Common.
<i>ficariæ</i> , Desm.	Common.
<i>menyanthes</i> , Desm.	Common.
<i>epilobii</i> , West.	Common.
<i>rosarum</i> , West.	Common.
<i>sedi</i> , West.	Common.
<i>fraxini</i> , Desm.	Common.
<i>populi</i> , Desm.	Common.
<i>Ascochyta pisi</i> , Lib.	Common.
<i>dianthi</i> , Berk.	F. Craigend.
<i>Cystotricha striola</i> , B. & Br.	Common.
<i>Neottiosporia caricum</i> , Desm.	Common.
<i>Dinemasporium graminum</i> , Lév.	Common.
<i>Asteroma ulmi</i> , Kl.	Common.
<i>prunellæ</i> , Purt.	Common.

<i>Asteroma padi</i> , Grev.	Common.
<i>rosæ</i> , D.C.	Common.
<i>veronicæ</i> , Desm.	Common.
<i>Rabenhorstia rudis</i> , Fr.	Craigend.
<i>tiliæ</i> , Fr.	Common.
<i>Discella carbonacea</i> , B. & Br.	Common.
<i>microsperma</i> , B. & Br.	Common.

Melanconiei.

<i>Melanconium bicolor</i> , Nees.	Common.
<i>magnum</i> , Berk.	Common.
<i>Stegonosporium cellulosum</i> , Cd.	Common.
<i>Stilbospora ovata</i> , P.	Common.
<i>angustata</i> , P.	R. Innellan.
<i>Asterosporium Hoffmanni</i> , M. & N.	Common.
<i>Coryneum pulvinatum</i> , Kze.	Common.
<i>disciforme</i> , Kze.	Common.
<i>compactum</i> , B. & Br.	R. Otter.
<i>microstichum</i> , B. & Br.	R. Botanic Gardens.
<i>Pestalozzia Guepini</i> , Desm.	R. Botanic Gardens.
<i>Cheirospora botryospora</i> , Fr.	Common.
<i>Nemaspora crocea</i> , P.	Common.
<i>rosæ</i> , Desm.	Common.
<i>Myxosporium orbiculare</i> , Berk.	R. Botanic Gardens.
<i>colliculosum</i> , Berk.	Common.
<i>Gloeosporium concentricum</i> , B. & Br.	Common.
<i>fructigenum</i> , Berk.	Common.
<i>ficariæ</i> , Berk.	Common.

Torulacei.

<i>Torula monilioides</i> , Cd.	Common.
<i>ovalispora</i> , Berk.	Common.
<i>pulvillus</i> , B. & Br.	Common.
<i>abbreviata</i> , Cd.	R. Toward.
<i>hysterioides</i> , Cd.	Common.
<i>cylindrica</i> , Berk.	Common.
<i>herbarum</i> , Lk.	Common.
<i>graminis</i> , Desm.	Common.
<i>sporendonema</i> , B. & Br.	Common.
<i>Bactridium flavum</i> , Kze.	Common.
<i>helvellæ</i> , B. & Br.	Common.
<i>Helicosporium pulvinatum</i> , Fr.	Common.
<i>Bispora monilioides</i> , Cd.	Common.
<i>Septonema irregulare</i> , Berk.	R. Craigend.
<i>Sporochisma mirabile</i> , B. & Br.	Common.
<i>Sporidesmium polymorphum</i> , Cd.	Common.
<i>pyriforme</i> , Cd.	R. Glasgow.
<i>melanopum</i> , B. & Br.	Common.
<i>scutellare</i> , B. & Br.	
<i>alternariæ</i> ,	R. Craigend.

Sporidesmium Lepraria, B. & Br.	Common.
fungorum, Berk.	Common.
uniseptatum, B. & Br.	R. Bowling.
Dictyosporium elegans, Cd.	Common.
Echinobotryum atrum, Cd.	Common.
Gymnosporium arundinis, Cd.	Common.

Pucciniæi.

Xenodochus carbonarius, Schl.	R. Botanic Gardens.
Phragmidium bulbosum, Fr.	Common.
gracile, Berk.	Common.
mucronatum, Fr.	Common.
acuminatum, Fr.	Common.
obtusatum, Fr.	Common.
Triphragmium ulmariae, Lk.	Common.
Puccinia graminis, P.	Common.
striola, Lk.	Common.
coronata, Cd.	Common.
truncata, B. & Br.	R. Craigend.
polygonorum, Lk.	Common.
vaginalium, Lk.	Common.
primulæ, Grev.	Common.
veronicarum, D.C.	Common.
glechomatis, D.C.	Common.
menthæ, P.	Common.
scorodoniæ, Lk.	F. Cumbræ.
scrophulariæ, Lib.	Common.
vincæ, Berk.	Common.
campanulæ, Carm.	Common.
compositarum, Schl.	Common.
syngenesiarum, Lk.	Common.
glomerata, Grev.	Common.
variabilis, Grev.	Common.
galiorum, Lk.	Common.
umbelliferarum, D.C.	Common.
ægopodii, Lk.	Common.
saniculæ, Grev.	F. Campsie.
smyrnii, Cd.	Common.
anemones, P.	Common.
calthæ, Lk.	Common.
violarum, Lk.	Common.
lychnidearum, Lk.	Common.
umbilici, Guép.	F. Cumbræ.
rhodiolæ, B. & Br.	R. Ben Lomond.
saxifragarum, Schl.	F. Milngavie.
chrysosplenii, Grev.	F. Barrhead.
epilobii, D.C.	F. Innellan.
pulverulenta, Grev.	Common.
circaeæ, P.	Common.
fabæ, Lk.	R. Craigend.

<i>Gymnosporangium juniperi</i> , Lk.	R. Ben Lomond.
<i>Podisoma juniperi</i> , Fr.	R. Kilfinan.
<i>foliicolum</i> , Berk.	R. Kilfinan.
<i>Uredo potentillarum</i> , D.C.	Common.
<i>saxifragarum</i> , D.C.	Common.
<i>filicum</i> , Desm.	Common.
<i>pustulata</i> , P.	R. Possil.
<i>caryophyllacearum</i> , Johnst.	Common.
<i>quercus</i> , Brond.	Common.
<i>alliorum</i> , D.C.	R. Campsie.
<i>bifrons</i> , Grev.	Common.
<i>Trichobasis symphyti</i> , Lév.	Common.
<i>petroselini</i> , Berk.	Common.
<i>oblongata</i> , Berk.	R. College.
<i>suaveolens</i> , Lév.	Common.
<i>geranii</i> , Berk.	Common.
<i>Uromyces alliorum</i> , D.C.	Common.
<i>appendiculata</i> , Lév.	Common.
<i>ficariæ</i> , Lév.	Common.
<i>intrusa</i> , Lév.	F. Barrhead.
<i>Coleosporium tussilaginis</i> , Lév.	Common.
<i>pingue</i> , Lév.	Common.
<i>petasites</i> , Lév.	Common.
<i>campanulæ</i> , Lév.	Common.
<i>sonchi-arvensis</i> , Lév.	Common.
<i>rhinanthacearum</i> , Lév.	Common.
<i>Melampsora euphorbiæ</i> , Cast.	Common.
<i>populina</i> , Lév.	Common.
<i>tremulæ</i> , Tul.	Common.
<i>betulina</i> , Desm.	Common.
<i>salicina</i> , Lév.	Common.
<i>Lecythea rosæ</i> , Lév.	Common.
<i>populina</i> , Lév.	Common.
<i>euphorbiæ</i> , Lév.	Common.
<i>mixta</i> , Lév.	F. Craigend.
<i>saliceti</i> , Lév.	Common.
<i>valerianæ</i> , Berk.	Common.
<i>lini</i> , Lév.	Common.
<i>Cystopus candidus</i> , Lév.	F. Largimore.
<i>Polycystis colchici</i> , Tul.	F. Craigend.
<i>violæ</i> , B. & Br.	Common.
<i>Tilletia caries</i> , Tul.	Common.
<i>Ustilago urceolorum</i> , Tul.	Common.
<i>carbo</i> , Tul.	Common.
<i>longissima</i> , Tul.	Common.
<i>hypodytes</i> , Fr.	Common.
<i>Salveii</i> , B. & Br.	Common.
<i>vinosa</i> , Tul.	R. Kilmun.
<i>utriculosa</i> , Tul.	Common.
<i>flosculorum</i> , Tul.	Common.
<i>receptaculorum</i> , Fr.	Common.

<i>Ustilago antherarum</i> , Tul.	Common.
<i>Tuburcinia scabies</i> , Berk.	Common.

Æcidiacei.

<i>Røestelia cancellata</i> , Reb.	Common.
<i>cornuta</i> , Tul.	Common.
<i>Peridermium pini</i> , Chev.	Common.
<i>elatinum</i> , Lk.	Common.
<i>Æcidium albescens</i> , Grev.	r. Kilfinan.
<i>epilobii</i> , D.C.	Common.
<i>soldanellæ</i> , Hornsch.	Common.
<i>tragopogonis</i> , Pers.	Common.
<i>euphorbiæ</i> , Pers.	Common.
<i>berberidis</i> , Pers.	Common.
<i>thalictri</i> , Grev.	Common.
<i>crassum</i> , Pers.	Common.
<i>periclymeni</i> , D.C.	Common.
<i>calthæ</i> , Grev.	Common.
<i>ranunculacearum</i> , D.C.	Common.
<i>galii</i> , Pers.	Common.
<i>bunii</i> , D.C.	Common.
<i>valerianacearum</i> , Dub.	Common.
<i>asperifolii</i> , Pers.	Common.
<i>grossulariæ</i> , D.C.	Common.
<i>urticæ</i> , D.C.	Common.
<i>orobi</i> , D.C.	Common.
<i>compositarum</i> , Mart.	Common.
var. <i>taraxaci</i> , Grev.	Common.
var. <i>prenanthis</i> , Pers.	Common.
var. <i>tussilaginis</i> , Pers.	Common.
var. <i>Jacobææ</i> , Grev.	Common.
var. <i>lapsani</i> , Purt.	Common.
<i>saniculæ</i> , Carm.	Common.
<i>violæ</i> , Schum.	Common.
<i>poterii</i> , Cooke.	Common.
<i>geranii</i> , D.C.	Common.
<i>menthæ</i> , D.C.	Common.
<i>pedicularis</i> , Lobosch.	Common.
<i>primulæ</i> , D.C.	Common.
<i>rubellum</i> , Pers.	Common.
<i>ari</i> , Berk.	Common.
<i>allii</i> , Berk.	Common.
<i>Endophyllum sempervivi</i> , Lév.	Botanic Gardens.

Isariacei.

<i>Isaria farinosa</i> , Fr.	Common.
<i>citrina</i> , P.	Common.
<i>intricata</i> , Fr.	Common.
<i>puberula</i> , Berk.	Common.
<i>Anthina flammea</i> , Fr.	F. Cadder.
<i>Ceratium hydnoides</i> , A. & S.	Common.

<i>Pachnocybe subulata</i> , Berk.	Common.
<i>grisea</i> , Berk.	F. Kilfinan.
<i>acicula</i> , Berk.	R. Otter.
<i>albida</i> , Berk.	R. Otter.

Stilbacei.

<i>Stilbum vaporarium</i> , B. & Br.	Common.
<i>fimetarium</i> , B. & Br.	Common.
<i>rigidum</i> , P.	R. Minard.
<i>bicolor</i> , P.	Common.
<i>nigrum</i> , Berk.	Common.
<i>vulgare</i> , Tode.	Common.
<i>Volutella ciliata</i> , Fr.	Common.
<i>Tubercularia vulgaris</i> , Tode.	Common.
<i>granulata</i> , P.	Common.
<i>nigricans</i> , Lk.	Common.
<i>Fusarium lateritium</i> , Nees.	Common.
<i>Myrothecium roridum</i> , Tode.	Common.
<i>Epicoccum neglectum</i> , Desm.	Common.
<i>equiseti</i> , Berk.	Common.
<i>Illosporium roseum</i> , Fr.	Common on Lichens.
<i>carneum</i> , Fr.	Common on Lichens.
<i>corallinum</i> , Roberge.	Common on Lichens.
<i>coccineum</i> , Fr.	Common on Lichens.

Dematiei.

<i>Arthrobotryum atrum</i> , B. & Br.	Common.
<i>Dendryphium comosum</i> , Walr.	Common.
<i>curtum</i> , B. & Br.	Common.
<i>fumosum</i> , Berk.	Common.
<i>Sporocybe byssoides</i> , Fr.	Common.
<i>alternata</i> , Berk.	Common.
<i>Stachybotrys atra</i> , Cd.	Common.
<i>lobulata</i> , Berk.	Common.
<i>Haplographium delicatum</i> , B. & Br.	Common.
<i>Monotospora megalospora</i> , B. & Br.	R. Luss.
<i>Cephalotrichum curtum</i> , Berk.	Common.
<i>Oedemium atrum</i> , Fr.	Common.
<i>Helicocoryne viridis</i> , Cd.	Common.
<i>Helminthosporium Smithii</i> , B. & Br.	Common.
<i>folliculatum</i> , Cd.	Common.
<i>macrocarpum</i> , Grev.	Common.
<i>nanum</i> , Nees.	Common.
<i>tiliæ</i> , Fr.	Common.
<i>clavariarum</i> , Desm.	Common.
<i>dendroideum</i> , Berk.	Common.
<i>altum</i> , Preuss.	Common.
<i>Macrosporium cheiranthi</i> , Fr.	Common.
<i>concinnum</i> , Berk.	Common.
<i>Helicoma Mulleri</i> , Cd.	R. Innellan.
<i>Cladotrichum triseptatum</i> , B. & Br.	F. Minard.

<i>Polythrincium trifolii</i> , Kze.	Common.
<i>Cladosporium herbarum</i> , Lk.	Common.
<i>dendriticum</i> , Walr.	Common.
<i>lignicolum</i> , Cd.	Common.
<i>nodulosum</i> , Cd.	Common.
<i>Arthrimum sporophleum</i> , Kze.	Common.
<i>Sporodum conopleoides</i> , Cd.	Common.

Mucedines.

<i>Aspergillus glaucus</i> , Lk.	Common.
<i>candidus</i> , Lk.	Common.
<i>roseus</i> , Lk.	Common.
<i>mollis</i> , Berk.	Common.
<i>virens</i> , Lk.	Common.
<i>Botrytis citrina</i> , Berk.	Common.
<i>terrestris</i> , P.	Common.
<i>Acrospira mirabilis</i> , B. & Br.	Common.
<i>Peronospora parasitica</i> , Cd.	Common.
<i>destructor</i> , Casp.	Common.
<i>infestans</i> , Casp.	Common.
<i>ganglioniformis</i> , Casp.	Common.
<i>arborescens</i> , Casp.	Common.
<i>viciæ</i> , Casp.	Common.
<i>arenariæ</i> , Casp.	Common.
<i>effusa</i> , Casp.	Common.
<i>sparsa</i> , Berk.	Common.
<i>Verticillium nanum</i> , B. & Br.	Common.
<i>Haplaria grisea</i> , Lk.	Common.
<i>Polyactis vulgaris</i> , Lk.	Common.
<i>cana</i> , Berk.	Common.
<i>vera</i> , Berk.	Common.
<i>cinerea</i> , Berk.	Common.
<i>Penicillium crustaceum</i> , Fr.	Common.
<i>sparsum</i> , Grev.	Common.
<i>bicolor</i> , Fr.	Common.
<i>candidum</i> , Lk.	Common.
<i>Oidium aureum</i> , Lk.	Common.
<i>fasciculatum</i> , Berk.	Common.
<i>concentricum</i> , B. & Br.	Common.
<i>Monilia fasciculata</i> , Cd.	Common.
<i>racemosa</i> , Purt.	Common.
<i>Cylindrium septatum</i> , Bon.	Common.
<i>Dactylium pyriferum</i> , Fr.	Common.
<i>dendroides</i> , Fr.	Common.
<i>roseum</i> , Berk.	Common.
<i>Fusidium griseum</i> , Lk.	Common.
<i>flavovirens</i> , Fr.	Common.
<i>Sporotrichum chlorinum</i> , Lk.	Common.
<i>aurantiacum</i> , Grev.	Common.
<i>sulphureum</i> , Grev.	Common.
<i>laxum</i> , Grev.	Common.

<i>Sporotrichum fenestrale</i> , Ditm.	Common.
<i>Myxotrichum chartarum</i> , Kze.	Common.
<i>Acremonium verticillatum</i> , Lk.	R. Glasgow.
<i>fuscum</i> , Schm.	Common.
<i>Clonostachys araucaria</i> , Cd.	R. Cadder.
<i>Botryosporium pulchrum</i> , Cd.	Common.
<i>diffusum</i> , Cd.	Common.
<i>Papulaspora sepedonioides</i> , Preuss.	Common.
<i>Rhopalomyces candidus</i> , B. & Br.	R. Glasgow.

Sepedonieae.

<i>Sepedonium chrysospermum</i> , Lk.	Common.
<i>roseum</i> , Fr.	Common.
<i>Fusisporium betæ</i> , Desm.	F. Craigend.
<i>udum</i> , Berk.	Common.
<i>atrovirens</i> , Berk.	Common.
<i>solani tuberosi</i> , Mart.	Common.
<i>Epochnium macrosporoideum</i> , Berk.	R. Minard.
<i>Psilonia nivea</i> , Fr.	F. Cadder.
<i>gilva</i> , Fr.	Common.
<i>arundinis</i> , Desm.	Common.

Trichodermaceae.

<i>Pilacre faginea</i> , B. & Br.	Common.
<i>Trichoderma viride</i> , P.	Common.

Elvellaceae.

<i>Morchella esculenta</i> , Pers.	R. Kilfinan.
<i>semilibera</i> , D.C.	R. Otter.
<i>Gyromitra esculenta</i> , Fr.	R. Kilfinan.
<i>Helvella crispa</i> , Fr.	Common.
<i>lacunosa</i> , Afz.	Common.
<i>elastica</i> , Bull.	Common.
<i>ephippium</i> , Lev.	Common.
<i>Verpa digitaliformis</i> , Pers.	R. Ben Lomond.
<i>conica</i> , Sow.	R. Ben Lomond.
<i>Mitrula cucullata</i> , Fr.	Common.
<i>paludosa</i> , Fr.	Common.
<i>alba</i> , W. Smith.	R. Ben Lomond.
<i>Spathularia flavida</i> , Pers.	R. Toward.
<i>Leotia lubrica</i> , Pers.	Common.
<i>Vibrissea truncorum</i> , Fr.	R. Ben Lomond.
<i>Geoglossum viride</i> , P.	Common.
<i>olivaceum</i> , P.	R. Kilfinan.
<i>glutinosum</i> , P.	R. Otter.
<i>viscosum</i> , P.	Common.
<i>glabrum</i> , P.	Common.
<i>hirsutum</i> , P.	Common.
<i>difforme</i> , Fr.	R. Innellan.
<i>Peziza acetabulum</i> , L.	R. Cadder Wilderness.
<i>badia</i> , P.	Bishop's Loch.

<i>Peziza aurantia</i> , Fr.	Common.
<i>cochleata</i> , Huds.	Common.
<i>succosa</i> , B.	Common.
<i>repanda</i> , Wahl.	Common.
<i>cerea</i> , Sow.	R. Botanic Gardens.
<i>vesiculosa</i> , Bull.	Common.
<i>micropus</i> , P.	Common.
<i>pustulata</i> , P.	Common.
<i>cupularis</i> , L.	Common.
<i>cornubiensis</i> , B. & Br.	R. Kilfinan.
<i>granulata</i> , Bull.	Common.
<i>rutilans</i> , Fr.	F. Campsie.
<i>polytricha</i> , Sch.	Common.
<i>leucoloma</i> , Reb.	R. Kilsyth.
<i>glumarum</i> , Desm.	R. Craigend.
<i>fascicularis</i> , A. & S.	Common.
<i>furfuracea</i> , Fr.	Common.
<i>coccinea</i> , Jacq.	Common.
<i>melastoma</i> , Sow.	R. Kilfinan.
<i>hemispherica</i> , Wigg.	R. Otter.
<i>brunnea</i> , A. & S.	Common.
<i>scutellata</i> , L.	Common.
<i>livida</i> , Sch.	R. Toward.
<i>stercorea</i> , P.	Common.
<i>albo-spadicea</i> , Grev.	R. Cadder Wilderness.
<i>ciliaris</i> , Schr.	Common.
<i>virginea</i> , Batsch.	Common.
<i>nivea</i> , Fr.	Common.
<i>calycina</i> , Schum.	Common.
<i>bicolor</i> , Bull.	Common.
<i>caulicola</i> , Fr.	R. Cadder.
<i>tricolor</i> , Sow.	R. Blantyre.
<i>rufo-olivacea</i> , A. & S.	F. Otter.
<i>sulphurea</i> , P.	Common.
<i>plano-umbilicata</i> , Grev.	Common.
<i>villosa</i> , P.	Common.
<i>Berkeleyi</i> , Blox.	R. Campsie.
<i>aspidicola</i> , B. & Br.	Common.
<i>clavariarum</i> , Desm.	Common.
<i>straminum</i> , B. & Br.	Common.
<i>vectis</i> , B. & Br.	Common.
<i>aurelia</i> , P.	R. Milngavie.
<i>domestica</i> , Sow.	F. Innellan.
<i>cæsia</i> , P.	F. Cadder.
<i>rosæ</i> , P.	Common.
<i>fusca</i> , P.	Common.
<i>sanguinea</i> , P.	R. Largimore.
<i>rudis</i> , B.	Common.
<i>bolaris</i> , Batsch.	F. Ballimore.
<i>siparia</i> , B. & Br.	R. Minard.
<i>ledi</i> , A. & S.	R. Glencoe.

<i>Peziza firma</i> , P.	Common.
<i>ciborioides</i> , Fr.	Common.
<i>coronata</i> , Bull.	Common.
<i>inflexa</i> , Bolt.	Common.
<i>striata</i> , Fr.	Common.
<i>nitidula</i> , B. & Br.	F. Bothwell.
<i>cyathoidea</i> , Bull.	Common.
<i>caucus</i> , Reb.	Common.
<i>clavus</i> , A. & S.	Common.
<i>vinosa</i> , A. & S.	Common.
<i>cinerea</i> , Batsch.	Common.
<i>sphærioides</i> , P.	Common.
<i>xanthostigma</i> , Fr.	R. Toward.
<i>leucostigma</i> , Fr.	F. Cadder.
<i>vulgaris</i> , Fr.	Common.
<i>atrata</i> , P.	Common.
<i>fusarioides</i> , B.	Common.
<i>lacustris</i> , Fr.	R. Bothwell.
<i>melanotheja</i> , Fr.	Common.
<i>compressa</i> , A. & S.	F. Minard.
<i>flexella</i> , Fr.	R. Toward.
<i>Helotium fibuliforme</i> , Fr.	F. Cadder.
<i>agaricinum</i> , B.	R. Kilfinan.
<i>aciculare</i> , Fr.	Common.
<i>subtile</i> , Fr.	R. Toward.
<i>æruginosum</i> , Fr.	Common.
<i>serotinum</i> , Fr.	Common.
<i>virgultorum</i> , Fr.	Common.
var. <i>β, flavescens</i> , Holms.	Common.
<i>lutescens</i> , Fr.	Common.
<i>conigenum</i> , Fr.	Common.
<i>phascoides</i> , Fr.	Common.
<i>luteolum</i> , Curr.	Common.
<i>aquaticum</i> , Curr.	R. Blantyre.
<i>tuba</i> , Fr.	F. Blantyre.
<i>calyculus</i> , Fr.	F. Innellan.
<i>citrinum</i> , Fr.	Common.
<i>pallescens</i> , Fr.	R. Toward.
<i>lenticulare</i> , Fr.	R. Bute.
<i>ochraceum</i> , B.	R. Bute.
<i>cribrosum</i> , B.	R. Largs.
<i>claro-flavum</i> , B.	F. Kilfinan.
<i>herbarum</i> , Fr.	Common.
<i>epiphyllum</i> , Fr.	R. Minard.
<i>punctatum</i> , Fr.	F. Glasgow.
<i>Patellaria atrata</i> , Fr.	Common.
<i>rhabarbarina</i> , B.	F. Craigend.
<i>livida</i> , B. & Br.	R. Toward.
<i>discolor</i> , Mont.	Common.
<i>aquatica</i> , Curr.	R. Blantyre.
<i>palustris</i> , Curr.	Common.

<i>Laquearia sphæralis</i> , Fr.	F. Minard.
<i>Tympanis fraxini</i> , Schw.	Common.
<i>conspersa</i> , Fr.	R. Innellan.
<i>Cenangium ribis</i> , Fr.	Common.
<i>prunastri</i> , Fr.	Common.
<i>aucupariæ</i> , Fr.	R. Craigend.
<i>pulveraceum</i> , Fr.	F. Kilfinan.
<i>fuliginosum</i> , Fr.	Common.
<i>ferruginosum</i> , Fr.	Common.
<i>quercinum</i> , Fr.	Common.
<i>rubi</i> , Fr.	Common.
<i>Ascobolus furfuracens</i> , P.	Common.
<i>vinosus</i> , B.	Common.
<i>trifolii</i> , Bernh.	Common.
<i>carneus</i> , P.	Common.
<i>Bulgaria inquinans</i> , Fr.	Common.
<i>sarcoides</i> , Fr.	R. Minard.
<i>Agyrium rufum</i> , P.	Common.
<i>Stictis radiata</i> , P.	Common.
<i>pallida</i> , P.	R. Kilfinan.
<i>microstoma</i> , Carm.	Common.
<i>nivea</i> , P.	Common.
<i>lichenicola</i> , Mont.	Common.
<i>hysterioides</i> , Desm.	Common.
<i>parallela</i> , Fr.	R. Toward.
<i>longa</i> , Fr.	Common.
<i>versicolor</i> , Fr.	Common.
<i>phacidioides</i> , Fr.	R. Botanic Gardens.
<i>Ascomyces bullatus</i> , B.	Common.
<i>deformans</i> , B.	Common.

Tuberacei.

<i>Stephensia bombycina</i> , Tul.	R. Minard.
<i>Elaphomyces variegatus</i> , Vitt.	R. Toward.

Phacidiacei.

<i>Phacidium pini</i> , Schm.	Common.
<i>carbonaceum</i> , Fr.	Common.
<i>vaccinii</i> , Fr.	R. Kilfinan.
<i>coronatum</i> , Fr.	Common.
<i>dentatum</i> , Fr.	Common.
<i>rubi</i> , Fr.	Common.
<i>repandum</i> , Fr.	Common.
<i>simulatum</i> , B. & Br.	R. Otter.
<i>Heterosphæria patella</i> , Grev.	Common.
<i>Rhytisma maximum</i> , Fr.	Common.
<i>andromedæ</i> , Fr.	Common.
<i>salicinum</i> , Fr.	Common.
<i>acerinum</i> , Fr.	Common.
<i>punctatum</i> , Fr.	Common.
<i>urticæ</i> , Fr.	Common.

<i>Hysterium pulicare</i> , Pers.	Common.
<i>elongatum</i> , Wahl.	Common.
<i>curvatum</i> , Fr.	Common.
<i>lineare</i> , Fr.	R. Kilfinan.
<i>fraxini</i> , P.	Common.
<i>conigenum</i> , Moug. & N.	F. Toward.
<i>vaccinii</i> , Carm.	Common.
<i>rubi</i> , Pers.	Common.
<i>pinastri</i> , Schrad.	Common.
<i>melaleucum</i> , Fr.	F. Campsie.
<i>commune</i> , Fr.	Common.
<i>arundinaceum</i> , Schrad.	Common.
<i>maculare</i> , Fr.	R. Campsie.
<i>Ailographum amplum</i> , B. & Br.	R. Paisley.
<i>Asterina Babingtonii</i> , B.	R. Ballimore.
<i>Lophium mytilinum</i> , Fr.	Toward.
<i>Stegia ilicis</i> , Fr.	Common.
<i>Trochila craterium</i> , Fr.	Common.
<i>lauro-cerasi</i> , Fr.	Common.

Sphæriacei.

<i>Torrubia militaris</i> , Fr.	Common.
<i>entomorrhiza</i> , Fr.	Common.
<i>gracilis</i> , B.	R. Bowling.
<i>purpurea</i> , Fr.	Common.
<i>microcephala</i> , Tul.	Common.
<i>myrmecophila</i> , B.	R. Toward.
<i>Hypocrea rufa</i> , Fr.	Common.
<i>citrina</i> , Fr.	R. Toward.
<i>luteo-virens</i> , Fr.	R. Cadder.
<i>farinosa</i> , B. & Br.	Common.
<i>typhina</i> , B.	Common.
<i>Xylaria polymorpha</i> , Grev.	Common.
<i>digitata</i> , Grev.	Common.
<i>corniformis</i> , Mont.	Common.
<i>hypoxylon</i> , Grev.	Common.
<i>carpopbila</i> , Fr.	Common.
<i>vaporaria</i> , Berk.	Common.
<i>Thamnomycetes hippotrichioides</i> , Ehrb.	Common.
<i>Poronia punctata</i> , Fr.	Common.
<i>Hypoxyton ustulatum</i> , Bull.	Common.
<i>luteum</i> , Fr.	R. Minard.
<i>concentricum</i> , Grev.	Common.
<i>coccineum</i> , Bull.	Common.
<i>multiforme</i> , Fr.	Common.
<i>cohaerens</i> , Fr.	Common.
<i>fuscum</i> , Fr.	Common.
<i>rubiginosum</i> , Fr.	Common.
<i>serpens</i> , Fr.	Common.
<i>udum</i> , Fr.	Common.
<i>Diatrype bullata</i> , Fr.	Common.

<i>Diatrype undulata</i> , Fr.	Common.
<i>stigma</i> , Fr.	Common.
<i>disciformis</i> , Fr.	Common.
<i>aspera</i> , Fr.	Common.
<i>verrucæformis</i> , Fr.	Common.
<i>quercina</i> , Fr.	Common.
<i>varians</i> , Curr.	Common.
<i>scabrosa</i> , Fr.	Common.
<i>ulicis</i> , B.	Common.
<i>ferruginea</i> , Fr.	Common.
<i>flavo-virens</i> , Fr.	Common.
<i>sordida</i> , B. & Br.	Common.
<i>hystrix</i> , Fr.	Common.
<i>strumella</i> , Fr.	Common.
<i>pyrrhocystis</i> , B. & Br.	R. Innellan.
<i>elevata</i> , B. & Br.	Common.
<i>lata</i> , Fr.	Common.
<i>decipiens</i> , Fr.	Common.
<i>cincta</i> , B. & Br.	Common.
<i>Valsa prunastri</i> , Fr.	Common.
<i>stellulata</i> , Fr.	Common.
<i>syngenesia</i> , Fr.	Common.
<i>nivea</i> , Fr.	Common.
<i>leucostoma</i> , Fr.	Common.
<i>luteola</i> , Fr.	Common.
<i>profusa</i> , Fr.	Common.
<i>dissepta</i> , Fr.	Common.
<i>controversa</i> , Fr.	Common.
<i>dryina</i> , Curr.	Common.
<i>coronata</i> , Fr.	Common.
<i>leiphæmia</i> , Fr.	Common.
<i>turgida</i> , Fr.	Common.
<i>salicina</i> , Fr.	Common.
<i>ambiens</i> , Fr.	Common.
<i>platanigera</i> , B. & Br.	Common.
<i>fenestrata</i> , B. & Br.	Common.
<i>quernea</i> , Curr.	Common.
<i>tetraspora</i> , Curr.	Common.
<i>pulchella</i> , Fr.	Common.
<i>furfuracea</i> , Fr.	Common.
<i>hypodermia</i> , Fr.	Common.
<i>tilaginea</i> , Curr.	Common.
<i>vestita</i> , Fr.	Common.
<i>Melogramma fusisporum</i> , Fr.	Common.
<i>homaleum</i> , Fr.	Common.
<i>Dothidea ribesia</i> , Pers.	Common.
<i>roseæ</i> , Fr.	Common.
<i>filicina</i> , Fr.	Common.
<i>rubra</i> , Pers.	Common.
<i>fulva</i> , Holl. & Schm.	Common.
<i>ulmi</i> , Fr.	Common.

<i>Dothidea</i> <i>betulina</i> , Fr.	Common.
<i>heraclei</i> , Fr.	Common.
<i>podagrariæ</i> , Fr.	Common.
<i>trifolii</i> , Fr.	Common.
<i>junci</i> , Fr.	Common.
<i>graminis</i> , Fr.	Common.
<i>caricis</i> , Fr.	Common.
<i>sambuci</i> , C.	R. Kilfinan.
<i>Isothea</i> <i>pustula</i> , B.	Common.
<i>saligna</i> , B.	R. Craigend.
<i>Hypospila</i> <i>quercina</i> , Fr.	Common.
<i>populina</i> , Fr.	Common.
<i>Stigmatea</i> <i>conferta</i> , Fr.	Common.
<i>geranii</i> , Fr.	Common.
<i>ranunculi</i> , Fr.	Common.
<i>Robertiani</i> , Fr.	Common.
<i>polygonorum</i> , Fr.	Common.
<i>alchemillæ</i> , Grev.	Common.
<i>Potentillæ</i> , Fr.	Common.
<i>Nectria</i> <i>ochracea</i> , Fr.	R. Botanic Gardens.
<i>cinnabarina</i> , Fr.	Common.
<i>coccinea</i> , Fr.	Common.
<i>curcurbitula</i> , Fr.	Common.
<i>sinopica</i> , Fr.	R. Craigend.
<i>aquifolia</i> , B.	R. Kilfinan.
<i>Ralsii</i> , B. & Br.	R. Luss.
<i>hirta</i> , Blox.	F. Helensburgh.
<i>aurantia</i> , Fr.	Common.
<i>flavida</i> , Fr.	Common.
<i>peziza</i> , Fr.	Common.
<i>platasca</i> , B.	Cadder Wilderness.
<i>sanguinea</i> , Fr.	Common.
<i>episphæria</i> , Fr.	Common.
<i>ochraceo-pallida</i> , B. & Br.	F. Minard.
<i>muscivora</i> , B. & Br.	R. Arran.
<i>arenula</i> , B. & Br.	Common.
<i>graminicola</i> , B. & Br.	Common.
<i>Rousseliana</i> , Mont.	F. Craigend.
<i>umbrina</i> , Fr.	Common.
<i>Sphæria</i> <i>thelena</i> , Fr.	R. Kilfinan.
<i>aquila</i> , Fr.	Common.
<i>Desmazierii</i> , B. & Br.	R. Cadder.
<i>tristis</i> , Tode.	Common.
<i>biformis</i> , P.	Common.
<i>racodium</i> , P.	Common.
<i>ovina</i> , P.	Common.
<i>cæsia</i> , Curr.	Common.
<i>mutabilis</i> , P.	Common.
<i>brassicæ</i> , Klot.	Common.
<i>canescens</i> , P.	Common.
<i>strigosa</i> , A. & S.	Common.

<i>Sphaeria hirsuta</i> , Fr.	Common.
<i>macrotricha</i> , B. & Br.	R. Barrhead.
<i>calva</i> , Tode.	Common.
<i>pilosa</i> , P.	Common.
<i>superficialis</i> , Curr.	R. Toward.
<i>bombarda</i> , Batsch.	Common.
<i>spermoides</i> , Hoffm.	Common.
<i>papaverea</i> , B. & Br.	Common.
<i>moriformis</i> , Tode.	Common.
<i>confluens</i> , Tode.	Common.
<i>mammæformis</i> , P.	R. Biggar.
<i>pomiformis</i> , P.	Common.
<i>pulvis-pyrius</i> , P.	Common.
<i>ordinata</i> , Fr.	Common.
<i>rubicola</i> , Curr.	Common.
<i>collabens</i> , Curr.	Common.
<i>caudata</i> , Curr.	Common.
<i>pertusa</i> , P.	F. Glasgow.
<i>Aspegrenii</i> , Fr.	Common.
<i>vilis</i> , Fr.	Common.
<i>populina</i> , P.	Common.
<i>acervata</i> , Fr.	Common.
<i>dioica</i> , Moug.	Common.
<i>berberidis</i> , P.	Common.
<i>laburni</i> , P.	R. Craigend.
<i>apotheciorum</i> , Mass.	Common.
<i>nidula</i> , Sow.	R. Barrhead.
<i>elongata</i> , Fr.	Common.
<i>juglandis</i> , Fr.	Common.
<i>loniceræ</i> , Sow.	Common.
<i>culmifraga</i> , Fr.	Common.
<i>macrostoma</i> , Tode.	Common.
<i>arundinis</i> , Fr.	Common.
<i>cirrhusa</i> , P.	Common.
<i>pilifera</i> , Fr.	R. Toward.
<i>lampadophora</i> , B. & Br.	Common.
<i>spinosa</i> , P.	Common.
<i>livida</i> , Fr.	Common.
<i>apiculata</i> , Curr.	Common.
<i>anserina</i> , P.	F. Campsie.
<i>velata</i> , P.	R. Craigend.
<i>cæolata</i> , Curr.	Common.
<i>decedens</i> , Fr.	Common.
<i>fraxinicola</i> , Curr.	Common.
<i>spiculosa</i> , P.	Common.
<i>inquilina</i> , Fr.	R. Innellan.
<i>scirpicola</i> , D.C.	Common.
<i>blepharodes</i> , B. & Br.	Common.
<i>obtecta</i> , Curr.	Common.
<i>lanata</i> , Fr.	Common.
<i>pruinosa</i> , Fr.	Common.

<i>Sphæria millepunctata</i> , Grev.	Common.
<i>salicella</i> , Fr.	Common.
<i>gigaspora</i> , Desm.	Common.
<i>aucta</i> , B. & Br.	Common.
<i>trivialis</i> , B. & Br.	Common.
<i>revelata</i> , B. & Br.	F. Campsie.
<i>conformis</i> , B. & Br.	F. Craigend.
<i>rubi</i> , Curr.	Common.
<i>sepincola</i> , Fr.	Common.
<i>intermixta</i> , B. & Br.	Common.
<i>tamaricis</i> , Grev.	Common.
<i>melina</i> , B. & Br.	R. Cadder.
<i>appendiculosa</i> , B. & Br.	Common.
<i>pusilla</i> , Curr.	F. Kilfinan.
<i>rusci</i> , Wallr.	Common.
<i>pinastri</i> , Fr.	R. Toward.
<i>lirella</i> , P.	R. Craigend.
<i>acus</i> , Blox.	Common.
<i>pantherina</i> , B.	Common.
<i>pardalota</i> , Mont.	R. Botanic Gardens.
<i>ceuthosporoides</i> , B.	R. Bothwell.
<i>curvirostra</i> , Sow.	F. Blantyre.
<i>rostellata</i> , Fr.	Common.
<i>coniformis</i> , Fr.	Common.
<i>acuminata</i> , Sow.	Common.
<i>herbarum</i> , P.	Common.
<i>rubella</i> , P.	Common.
<i>doliolum</i> , P.	Common.
<i>complanata</i> , Tode.	Common.
<i>nigrella</i> , Fr.	Common.
<i>vectis</i> , B. & Br.	R. Craigend.
<i>planiuscula</i> , B. & Br.	Common.
<i>nigrans</i> , Desm.	Common.
<i>modesta</i> , Desm.	Common.
<i>commanipula</i> , B. & Br.	R. Innellan.
<i>tosta</i> , B. & Br.	R. Innellan.
<i>caulium</i> , Fr.	Common.
<i>fimbriata</i> , B.	Common.
<i>coryli</i> , Batsch.	Common.
<i>avellanæ</i> , Schm.	Common.
<i>tubæformis</i> , Tode.	Common.
<i>setacea</i> , P.	Common.
<i>recutita</i> , Fr.	R. Minard.
<i>helicospora</i> , B. & Br.	Common.
<i>palustris</i> , B. & Br.	Common.
<i>carpineæ</i> , Fr.	R. Botanic Gardens.
<i>pteridis</i> , Desm.	Common.
<i>brassicæcola</i> , B. & Br.	Common.
<i>punctiformis</i> , Fr.	Common.
<i>maculæformis</i> , P.	Common.
<i>eryngii</i> , Fr.	R. Cumbrae.

<i>Sphæria rumicis</i> , Desm.	Common.
<i>erysiphina</i> , B. & Br.	R. Possil.
<i>ostruthii</i> , Fr.	Common.
<i>ligustri</i> , Desm.	Common.
<i>Ceratostoma caprinum</i> , Fr.	Common.
<i>Massaria fœdans</i> , Fr.	Common.
<i>inquinans</i> , Fr.	Common.
<i>Hercospora pupula</i> , Fr.	Common.
<i>Pyrenophora phæocomes</i> , Fr.	Common.
<i>Gibbera vaccinii</i> , Fr.	R. Campsie.
<i>Dichæna rugosa</i> , Fr.	Common.
<i>strobilina</i> , Fr.	Common.
<i>Capnodium elongatum</i> , B. & Desm.	Common.

Perisporiacei.

<i>Thelebolus terrestris</i> , A. & S.	F. Otter.
<i>Perisporium princeps</i> , B.	Common.
<i>Lasiobotrys loniceræ</i> , Kze.	Common.
<i>Sphærotheca pannosa</i> , Leu.	Common.
<i>Castagnei</i> , Lev.	F. Craigend.
<i>Phyllactinia guttata</i> , Fr.	Common.
<i>Uncinula adunca</i> , Lev.	Common.
<i>bicornis</i> , Lev.	Common.
<i>Microsphæria berberidis</i> , Lev.	Common.
<i>grossulariæ</i> , Lev.	Common.
<i>penicillata</i> , Lev.	Common.
<i>Erysiphe Linkii</i> , Lev.	Common.
<i>lamprocarpa</i> , Lk.	F. Milngavie.
<i>graminis</i> , D.C.	Common.
<i>Martii</i> , B.	Common.
<i>tortilis</i> , Lk.	R. Innellan.
<i>communis</i> , Schl.	Common.
<i>Chætomium elatum</i> , Kze.	Common.
<i>glabrum</i> , B.	Common.
<i>Ascotricha chartarum</i> , B.	R. Glasgow.
<i>Eurotium herbariorum</i> , Lk.	Common.

Onygenei.

<i>Onygena equina</i> , Pers.	F. Kilfinan.
<i>apus</i> , B. & Br.	R. Glasgow.

Antennariei.

<i>Antennaria semiovata</i> , B. & Br.	Common.
<i>Zasmidium cellare</i> , Fr.	Common.

Mucorini.

<i>Ascophora mucedo</i> , Tode.	Common.
<i>elegans</i> , Cd.	R. Craigend.
<i>Mucor phycomyces</i> , Berk.	Common.
<i>ramosus</i> , Bull.	Common.

<i>Mucor mucedo</i> , L.	Common.
<i>caninus</i> , P.	Common.
<i>fusiger</i> , Lk.	Common.
<i>clavatus</i> , Lk.	Common.
<i>amethysteus</i> , Berk.	Common.
<i>tenerrimus</i> , Berk.	Common.
<i>subtilissimus</i> , Berk.	Common.
<i>Pilobolus roridus</i> , Bolt.	Common.
<i>crystallinus</i> , Tode.	Common.
<i>Hydrophora stercorea</i> , Tode.	Common.
<i>Endodromia vitrea</i> , B.	Common.
<i>Sporodinia dichotoma</i> , Cd.	Common.
<i>Acrostalagmus cinnabarinus</i> , Cd.	Common.
<i>Syzygites megalocarpus</i> , Ehb.	Common.
<i>Endogone pisiformis</i> , Lk.	Common.

Saprolegniei.

<i>Saprolegnia ferax</i> , P.	Common.
<i>monoica</i> , P.	Common.

R. H. PATERSON.

Algæ.—Marine.

Several species are inserted in this list on the authority of Mr. Hennedy.

<i>Spermoseira litorea</i> , K.	Common.
<i>Sphærozyga Thwaitesii</i> , H.	F. Cumbrae.
<i>Broomei</i> , Th.	R. Arran.
<i>Monormia intricata</i> , B.	F. Largs.
<i>Spirulina tenuissima</i> , K.	Common.
<i>Hutchinsiae</i> , K.	Common.
<i>Oscillatoria littoralis</i> , C.	Common.
<i>subuliformis</i> , Th.	F. Largs.
<i>insignis</i> , Th.	F. Cumbrae.
<i>Microcoleus anguiformis</i> , H.	F. Cumbrae.
<i>Lyngbya majuscula</i> , D.	F. Cumbrae.
<i>Carmichaelii</i> , H.	R. Cumbrae.
<i>speciosa</i> , C.	R. Arran.
<i>Calothrix confervicola</i> , A.	F. Arran.
<i>luteola</i> , G.	F. Cumbrae.
<i>scopulorum</i> , W. & M.	F. Holy Isle.
<i>fasciculata</i> , A.	F. Cumbrae.
<i>pannosa</i> , A.	Common.
<i>hydroides</i> , C.	Common.
<i>Schizosiphon Warreniæ</i> .	R. Arran.
<i>Rivularia plicata</i> , C.	F. Arran.
<i>atra</i> , R.	F. Corriegills.
<i>Bangia fusco-purpurea</i> , D.	R. Gourrock.
<i>ceramicola</i> , Lig.	F. Cumbrae.
<i>carnea</i> , D.	F. Arran.
<i>Porphyra laciniata</i> , Lig.	Common.
<i>vulgaris</i> , A.	Common.
<i>Ulva latissima</i> , Lin.	Common.
<i>Lactuca</i> , Lin.	F. Cumbrae.
<i>Linza</i> , Lin.	F. Innellan.
<i>Enteromorpha intestinalis</i> , Lin.	Common.
<i>compressa</i> , Lin.	Common.
<i>erecta</i> , Lyn.	Common.
<i>ramulosa</i> , S.	F. Cumbrae.
<i>percursa</i> , A.	F. Bute.
<i>Conferva litorea</i> , H.	Common.
<i>tortuosa</i> , D.	F. Cumbrae.
<i>implexa</i> , D.	R. Bute.
<i>melagonium</i> , W. & M.	R. Corriegills.
<i>ærea</i> , D.	F. Ailsa.
<i>Youngana</i> , D.	F. Cumbrae.
<i>Rhizoclonium riparium</i> , R.	R. Arran.

<i>Cladophora rupestris</i> , Lin.	Common.
<i>lætevirens</i> , D.	Common.
<i>Balliana</i> , Hard.	R. Ailsa.
<i>refracta</i> , A.	R. Cumbræ.
<i>albida</i> , Hud.	R. Arran.
<i>lanosa</i> , R.	F. Cumbræ.
<i>arcta</i> , D.	F. Cumbræ.
<i>flavescens</i> , R.	R. Arran.
<i>fracta</i> , Fl. Dan.	F. Arran.
<i>Vaucheria velutina</i> , A.	Common.
<i>Bryopsis plumosa</i> , Hud.	Common.
<i>Codium tomentosum</i> , Hud.	Common.
<i>Corynespora pedicellata</i> , J.A.	R. Cumbræ.
<i>Callithamnion plumula</i> , E.	
<i>Turneri</i> , D.	R. Corry.
<i>tetragonum</i> , Wi.	F. Cumbræ.
<i>Hookeri</i> , D.	R. Cumbræ.
<i>roseum</i> , S.	R. Arran.
<i>byssoideum</i> , Ar.	R. Arran.
<i>polyspermum</i> , A.	F. Fintry Bay.
<i>corymbosum</i> , S.	R. Largs.
<i>Rothii</i> , Lin.	R. Arran.
<i>floridulum</i> , D.	F. Arran.
<i>virgatulum</i> , H.	R. Cumbræ.
<i>Daviesii</i> , S.	R. Largs.
<i>Wrangelia multifida</i> , Hud.	F. Cumbræ.
<i>Griffithsia equisetifolia</i> , Lig.	F. Arran.
<i>corallina</i> , Lin.	F. Fintry Bay.
<i>setacea</i> , E.	R. Loch Ranza.
<i>Ceramium rubrum</i> , Hud.	Common.
<i>botryocarpum</i> , Gr.	Common.
<i>decurrens</i> , K.	F. Arran.
<i>Deslongchampsii</i> , Ch.	F. Brodick.
<i>strictum</i> , K.	R. Lamdash.
<i>nodosum</i> , K.	Common.
<i>flabelligerum</i> , J. A.	F. Ailsa.
<i>echionotum</i> , J. A.	F. Cumbræ.
<i>acanthonotum</i> , C.	F. Cumbræ.
<i>ciliatum</i> , E.	Common.
<i>Ptilota plumosa</i> , Lin.	Common.
<i>elegans</i> , Bo.	Common.
<i>Dudresnaia coccinea</i> , A.	Common.
<i>Hudsoni</i> , H.	R. Arran.
<i>Gloriosiphonia capillaris</i> , Hud.	F. Cumbræ.
<i>Actinococcus Henedyi</i> , Ha.	R. Cumbræ.
<i>Cruoria Arnottii</i> , H.	R. Cumbræ.
<i>Schizymenia edulis</i> , St.	Common.
<i>Scinaia furcellata</i> , T.	Common.
<i>Halymenia ligulata</i> , W.	R. Girvan.
<i>Dumontia filiformis</i> , Fl. Dan.	Common.
<i>Furcellaria fastigiata</i> , Hud.	Common.

<i>Polyides rotundus</i> , Gm.	R. Lady Isle.
<i>Ahnfeldtia plicata</i> , Hud.	Common.
<i>Peyssonella Dubyi</i> , Cr.	F. Cumbræ.
<i>Phyllophora rubens</i> , Lin.	F. Holy Isle.
<i>membranifolius</i> , G. & W.	Common.
<i>Brodicii</i> , T.	F. Cumbræ.
<i>Chondrus crispus</i> , Lin.	Common.
<i>Gigartina mamillosa</i> , G. & W.	Common.
<i>Gelidium corneum</i> , Hud.	Common.
<i>Cystoclonium purpurascens</i> , Hud.	Common.
<i>Gracilaria confervoides</i> , Lin.	Common.
<i>Sphærococcus coronopifolius</i> , G. & W.	F. Cumbræ.
<i>Rhodomenia palmata</i> , Lin.	Common.
<i>Calliblepharis jubata</i> , G. & W.	Arran.
<i>Callophyllis laciniata</i> , Hud.	Common.
<i>Rhodophyllis bifida</i> , G. & W.	Common.
<i>Plocamium coccineum</i> , Hud.	Common.
<i>Nitophyllum punctatum</i> , Wi.	R. Arran.
<i>Bonnemaisoni</i> , A.	R. Arran.
<i>laceratum</i> , Gm.	F. Cumbræ.
<i>Wormskioldia sanguinea</i> , Lin.	Common.
<i>sinuosa</i> , G. & W.	Common.
<i>alata</i> , Hud.	Common.
<i>Hypoglossum</i> , W.	F. Innellan.
<i>ruscifolia</i> , T.	R. Arran.
<i>Lithocystis Allmanni</i> , Ha.	F. Cumbræ.
<i>Hildenbrandtia rubra</i> , M.	F. Fintry Bay.
<i>Melobesia calcarea</i> , La.	F. Innellan, Cumbræ.
<i>polymorpha</i> , Lin.	Common.
<i>fasciculata</i> , La.	Common.
<i>membranacea</i> , La.	Common.
<i>verrucata</i> , La.	Common.
<i>pustulata</i> , La.	Common.
<i>Jania rubens</i> , Lin.	Common.
<i>Corallina officinalis</i> , Lin.	Common.
<i>Champia parvula</i> , A.	
<i>Chylocladia clavellosa</i> , T.	
<i>articulata</i> , Hud.	Common.
<i>Catenella opuntia</i> , G. & W.	Common.
<i>Lomentaria kaliformis</i> , G. & W.	Common.
<i>ovalis</i> , En.	R. Dunoon.
<i>Chondria dasyphylla</i> , W.	F. Cumbræ.
<i>Laurencia pinnatifida</i> , Gm.	F. Arran.
<i>cæspitosa</i> , La.	R. Cumbræ.
<i>Bonnemaisonia asparagoides</i> , W.	R. Cumbræ.
<i>Dasya coccinea</i> , Hud.	Common.
<i>arbuscula</i> , Ag.	R. Lamblash.
<i>Chrysomenia clavellosa</i> .	R. Cumbræ.
<i>Polysiphonia urceolata</i> , S.	Common.
<i>formosa</i> , Su.	Common.
<i>fibrata</i> , Dil.	Common.

<i>Polysiphonia elongella</i> , Ha.	Common.
<i>elongata</i> , Hud.	Common.
<i>violacea</i> , A.	R. Holy Isle.
<i>fibrillosa</i> , Dil.	F. Girvan.
<i>Brodiaei</i> , Dil.	R. Cumbræ.
<i>nigrescens</i> , Hud.	R. Cumbræ.
<i>atro-rubescens</i> , Dil.	R. Arran.
<i>fastigiata</i> , R.	Common.
<i>parasitica</i> , Hud.	F. Cumbræ.
<i>byssoides</i> , G. & W.	R. Brodick.
<i>Rhodomela lycopodioides</i> , Lin.	R. Largs.
<i>subfusca</i> , W.	Common.
<i>Odonthalia dentata</i> , Lin.	Common.
<i>Myriotrichia clavæformis</i> , Ha.	R. Cumbræ.
<i>Ectocarpus siliculosus</i> , Lyn.	Common.
<i>Hincksia</i> , Ha.	R. Cumbræ.
<i>tomentosus</i> , Hud.	F. Arran.
<i>crinitus</i> , C.	R. Cumbræ.
<i>distortus</i> , C.	R. Cumbræ.
<i>Landsburgii</i> , Ha.	F. Arran.
<i>litoralis</i> , Lin.	Common.
<i>granulosus</i> , var. <i>tesselatus</i> , Had.	Common.
<i>sphærophorus</i> , C.	R. Arran.
<i>brachiatus</i> , Ha.	R. Millport.
<i>pusillus</i> , Ha.	R. Tan Buoy.
<i>fasciculatus</i> , Ha.	R. Toward.
<i>Mertensii</i> , T.	R. Toward.
<i>Sphacelaria scoparia</i> , Lin.	Common.
<i>plumosa</i> , Lyn.	R. Cumbræ.
<i>cirrhosa</i> , Ro.	R. Ailsa.
<i>radicans</i> , Dil.	Common.
<i>racemosa</i> , Grev.	R. Arran.
<i>Cladostephus verticillatus</i> , Li.	F. Cumbræ.
<i>spongiosus</i> , Hud.	Common.
<i>Myrionema strangulans</i> , Grev.	F. Cumbræ.
<i>Leclancherii</i> , Ch.	R. Loch Striven.
<i>punctiforme</i> , Lyn.	R. Arran.
<i>Elachista fucicola</i> , V.	F. Cumbræ.
<i>stellulata</i> , Gr.	F. Cumbræ.
<i>Grevillii</i> .	R. Fintry Bay.
<i>Ralfsia verrucosa</i> , Ar.	Common.
<i>Leathesia tuberiformis</i> , S.	Common.
<i>crispa</i> , Ha.	R. Cumbræ.
<i>Mesogloia vermicularis</i> , A.	F. Ailsa.
<i>virescens</i> , C.	F. Loch Ranza.
<i>Chordaria flagelliformis</i> , M.	R. Cumbræ.
<i>Litosiphon pusillus</i> , C.	F. Cumbræ.
<i>Laminariæ</i> , Lyn.	F. Cumbræ.
<i>Asperococcus Turneri</i> , Dil.	R. Loch Ranza.
<i>echinatus</i> , Me.	Common.
<i>Punctaria latifolia</i> , Grev.	R. Arran.

<i>Punctaria plantaginea</i> , R.	F. Cumbrae.
<i>tenuissima</i> , Grev.	F. Cumbrae.
<i>Striaria attenuata</i> , Grev.	R. Arran.
<i>fragilis</i> , J. A.	R. Cumbrae.
<i>Dictyosiphon fœniculaceus</i> , Hud.	Common.
<i>Stilophora rhizoides</i> , Ehr.	R. Arran.
<i>Lyngbyæi</i> , J. A.	R. Cumbrae.
<i>Dictyota dichotoma</i> , Hud.	Common.
<i>intricata</i> , Grev.	R. Cloch.
<i>Zonaria parvula</i> , Grev.	F. Brodick.
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