than the sphagnous meadow which surrounded it except on the landward side. . . . There was a small patch a yard or so square with only a few plants. I do not remember seeing any of the ordinary form there. Associated plants were *Lonicera caerulea*, *Rhodora canadensis*, *Carex vestita*, while near by were *Ilex glabra*, *I. laevigata*, *Azalea viscosa*, var. *glauca*, *Nemopanthes fascicularis*, *Arethusa bulbosa*, *Carex bullata*, *stricta*, *filiformis*, *Eriophorum paucinervium* and others. I cannot account for its presence here; certainly the cutting off of the woodland would not explain it. Some of the plants mentioned are also northern, and in another portion of the swamp I found *Chiogenes* and *Clintonia borealis*, both rare in this county; also *Cornus canadensis*." A cross should mark this in my list.

Vaccinium pennsylvanicum, var. *nigrum*, Wood. Mr. J. R. Churchill collected on July 17, 1886, in the Blue Hills Reservation, Quincy, Massachusetts, the typical form of this species with blue berries, and near by the variety with black berries without bloom. The contrast between the two forms was noted at the time. I have seen these specimens in Mr. Churchill's herbarium.

Mr. W. W. Eggleston collected this form on Twin Mountains, West Rutland, Vermont, on July 1, 1899, and recorded it in the Flora of Vermont, 1900, p. 69. I have seen Mr. Eggleston's specimens both in Dr. Brainerd's herbarium and my own. These two states should each be represented by a cross in my list.

CAMBRIDGE, MASSACHUSETTS.

SCUTELLARIA PARVULA AND S. AMBIGUA.

M. L. FERNALD.

THE dwarf skullcap, although not a common plant in New England, is known at a few stations in Maine, Vermont and Connecticut. The Maine and Connecticut plant, however, differs in one striking characteristic from specimens from Lake Champlain and adjacent Quebec; the former being minutely puberulent or glabrate, the latter densely pubescent with spreading viscid hairs. Examination of herbarium material shows that both these forms are widely distributed in North America, and an attempt to place them satisfactorily has brought to light an interesting history.

Michaux published *Scutellaria parvula*[1] in 1803 characterizing it as follows: "S. pusilla: dense pubescens: foliis ovalibus, integris, omnibus conformibus: floribus axillaribus. *Obs.* Affinis *S. minori*. Folia sessilia, parvula, ima interdum subdentata. *Hab.* in regione Illinoensi et Canada."

Pursh, although he cited an additional region (Virginia) for the plant, added nothing important to the characterization of the species, for he quoted Michaux's description. Sir William Hooker, however, published a plate of the species in 1825, and although in the drawing the pubescence of the stem is not brought out, that character is emphasized in his description: "*plant* everywhere covered with short glandular pubescence."[2] The ample description made apparently from material collected in Canada either by Mrs. Shepard, Mr. Goldie, or Dr. John Richardson agrees in detail with the Lake Champlain plant and with Quebec specimens in the Gray Herbarium collected by Mrs. Shepard, herself (whose plant is cited by Hooker in his Flora Boreali-Americana) and by Macrae. This plant, a common species in Illinois and the only form known to us from Quebec, may be taken without hesitation to represent the true *S. parvula* of Michaux collected, "in regione Illinoensi et Canada." It is not restricted, however, to these regions, but as already stated has a broad range, from Quebec and northern Vermont to Michigan (and the Saskatchewan?) south to Tennessee and Texas.

The other form, the smoothish plant of Maine and Connecticut, is likewise of broad range, and it was first described by Nuttall, in 1818, as *Scutellaria ambigua*, "Stem 4 to 6 inches high, smooth, mostly purple."[3] It was soon reduced, however, to *S. parvula*, and since the publication of Hooker's Flora Boreali-Americana it has apparently remained in unmerited but uninterrupted oblivion. Under the name *S. parvula* both the smoothish and the glandular-hairy plants passed among American botanists until the publication of the Synoptical Flora. There, although he still followed the tradition of treating both the common forms as *S. parvula*, Dr. Gray described as var. *mollis* a very hairy and overgrown plant of the Mississippi bottoms. Although these plants of Dr. Gray's var. *mollis* are much larger (nearly 3 dm. high) and stouter

[1] Michx. Fl. ii. 11.

[2] Hook. Exot. Fl. ii. t. 106.

[3] Gen. ii. 37.

and with larger leaves than in specimens of less favored soils, they cannot be otherwise separated from the very pubescent plant left by him to represent in part true *S. parvula.*

That the very pubescent *S. parvula* of Michaux and the smoothish plant associated with it are marked extremes there can be no doubt, but, differing only in the degree of pubescence and in an inconstant tendency in the leaves, they seem better treated as varieties than as distinct species. The smoothish plant, which has been carefully identified with Nuttall's type kindly placed at the writer's service by Mr. Stewardson Brown of the Philadelphia Academy of Sciences, should take as its varietal designation the name given it by Nuttall as a species.

In the Botanical Club Check List Dr. Britton raised to specific rank Dr. Gray's *Scutellaria parvula*, var. *mollis*, the overgrown pubescent plant of the Mississippi valley, and he gave it the specific name *S. campestris.*[1] That this large form has nothing but its size to distinguish it from the ordinary pubescent plant we have already stated, and this view is supported by Dr. Britton's treatment of the two forms in the Illustrated Flora. There *S. parvula* is described as "glabrous, or slightly pubescent," and *S. campestris* "densely pubescent all over." Thus it seems that the name *S. campestris*, Britton, was intended to cover not merely the large *S. parvula*, var. *mollis*, Gray, but all the forms which are "densely pubescent all over." If, however, we are to treat the two forms as specifically distinct, we must take for the smooth plant of the Illustrated Flora (*S. parvula*, Britton) its Nuttallian name *S. ambigua*; and to the pubescent plant, recently described by Dr. Britton as a new species, we must apply Michaux's name *S. parvula*, given to the plant which is "dense pubescens," or as expressed by Hooker "everywhere covered with short glandular pubescence."

The two forms, which in their extremes may usually be recognized, are distinguished as follows:

S. PARVULA, Michx. Plant strongly stoloniferous and producing moniliform tubers: stems simple or branched, mostly clustered, 0.8 to 3 dm. high, pubescent with spreading often viscid hairs: leaves ovate or ovate-oblong, more or less pubescent, entire or sparingly toothed, at most 1.2 cm. broad, all but the lowest sessile: flowers axillary, the pedicels about equalling the hairy calyx: corolla

[1] Mem. Torr. Club, v. 283.

slender, blue, 0.5 to 1 cm. long: seeds strongly papillose. — Fl. ii. 11; Hook. Exot. Fl. ii. t. 106, & Fl. Bor.-Am. ii. 115; Gray, Syn. Fl. ii. 380 (in part) including var. *mollis*. *S. campestris*, Britton, Mem. Torr. Club, v. 283, & in Britton & Brown, Ill. Fl. iii. 82, fig. 3084. — QUEBEC, without locality (*Mrs. Shepard*, *Macrae*): VERMONT, North Ferrisburg, June, 1881 (*E. & C. E. Faxon*); dry barren soil, Burlington, July, 1894 (*L. R. Jones & W. W. Eggleston*), June, 1896 (*A. J. Grout*): NEW YORK, Dexter (*Alphonso Wood*): OHIO, limestone soil, Ottawa Co., June, 1895 (*E. L. Moseley*): MICHIGAN, without locality (*Houghton*); Iona, 1877 (*E. F. Smith*): ILLINOIS, Fulton Co. (*J. Wolf*); sandy banks of the Mississippi, Oquawka, June, 1873 (*H. N. Patterson*): TENNESSEE, open woods, Henderson, May, 1893 (*S. M. Bain*, no. 38): MISSOURI, St. Louis, April, 1844 (*G. Engelmann*); Montier, May, 1894 (*B. F. Bush*, no. 316): TEXAS (*Wright*, &c.). Passing to

Var. **ambigua**. Stem and leaves sparingly appressed-puberulent or glabrate: leaves often more oblong and entire, but sometimes ovate and toothed. — *S. ambigua*, Nutt. Gen. ii. 37. *S. parvula*, authors, in part; Britton l. c. 81, fig. 3083; not Michx. — MAINE, gravelly bank, Dover, Sept. 1896 (*M. L. Fernald*, no. 466); exsiccated clay soil, North Berwick, July, 1895 (*J. C. Parlin*, no. 305): CONNECTICUT, East Haven, 1855 (*Geo. Thurber*): PENNSYLVANIA, woods, Schuylkill River (Herb. Acad. Nat. Sci. Phila.): OHIO, dry and open forests — *type* (*Thos. Nuttall*, Herb. Acad. Nat. Sci. Phila.): KENTUCKY, Lexington, 1835 (*C. W. Short*): ILLINOIS, without station, 1845 (*S. B. Mead*); near Oquawka, Aug. 1873 *H. N. Patterson*): WISCONSIN, Milwaukee (*I. A. Lapham*); Madison (*T. J. Hale*): IOWA, Ames, June 1897 (*R. Combs & C. R. Ball*): MISSOURI, Independence, May, 1894 (*B. F. Bush*, no. 825): KANSAS, prairie, Riley Co., May, 1895 (*J. B. Norton*, no. 411): LOUISIANA (*Hale*): TEXAS, (*E. Hall*, no. 453).

GRAY HERBARIUM.

LYSIMACHIA PUNCTATA IN EASTERN MASSACHUSETTS.—*Lysimachia punctata*, L., which although not mentioned in the 6th edition of Gray's Manual, is illustrated in Britton and Brown's Flora, has been found growing in a wild state at Brockton Heights near the Easton line. It was first discovered here in the summer of 1900. This is one of the rarest of the genus, the only other station known for this species near here being at Whitman, Massachusetts. The few plants found near Easton are unfortunately in danger of extermination by enthusiastic plant hunters of this vicinity.—ARTHUR CLARK, North Easton, Massachusetts.