1912] Fernald and Wiegand,—A Variety of Chelone glabra 225

anomala and should be so listed. There are still twenty-five Rhode Island species which are known to the writer through published records only.

For Connecticut. Lophozia marchica; Bethany (Miss Lorenz).

The census of New England Hepaticae now stands as follows: Total number of species recorded, 177; number recorded from Maine, 123; from New Hampshire, 130; from Vermont, 109; from Massachusetts, 96; from Rhode Island, 77; from Connecticut, 134; common to all six states, 52.

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A NORTHEASTERN VARIETY OF CHELONE GLABRA.

M. L. FERNALD AND K. M. WIEGAND.

THE common Chelone glabra from New England to Kentucky and the region of the Great Lakes has leaves of a more or less lanceolate outline, gradually tapering to a long slender tip and ordinarily narrowed to a very short-petioled base. This common plant, judging from the Linnean description, "Chelone foliis lanceolatis serratis," is typical C. glabra.

In Newfoundland, Prince Edward Island, northern Maine and Quebec, however, specimens of Chelone show a general tendency toward a more oblong-ovate outline of the leaves and lower bracts. The bases of the upper leaves and foliaceous bracts are also commonly rounded or even occasionally subcordate. On comparing this broad-leaved northern extreme with the more southern typical C. glabra it becomes apparent that in a majority of the specimens of the broad-leaved extreme the leaves increase in size to the base of the inflorescence, while in the plant with the lanceolate leaves tapering to the petiole the leaves at or near the middle of the stem are larger than those above. Occasional specimens in each series, however, occur with the middle and upper leaves nearly uniform in size. The outline of the leaves is somewhat variable in each series, showing occasional transitions, so that, although the majority of the specimens

in the two series seem as readily separable as are *C. glabra* and *C. obliqua*, in the absence of any other characters the broad-leaved northern plant seems best treated as a geographical variety. This tendency to a development of large upper leaves and foliaceous bracts in *C. glabra* is paralleled in the same geographic area by several other cases; for example, *Eupatorium purpureum*, var. *foliosum* Fernald and *Solidago rugosa*, var. *villosa* (Pursh) Fernald.

The broad-leaved extreme of *Chelone glabra* seems not to have been definitely recognized in literature, although it is probable that Hooker's description in the Flora Boreali-Americana of C. glabra: "foliis ovatolanceolatis" was based at least in part upon it, while his "var. β lanceolata Nutt." was apparently the more widely distributed narrow-leaved plant. This interpretation of Hooker's treatment is the more probable from his citation of specimens:—"Hab. a. and β . Canada. Newfoundland, Dr. Morison. New Brunswick. Mr. Kendal." But since Nuttall's var. lanceolata is generally identified with the southern C. obliqua L. it is evident that Hooker's application of the name to the northern plant was through misinterpretation.

Since the broad-leaved northern variety has not been definitely distinguished from C. glabra it is here proposed as:—

C. GLABRA L., var. dilatata, var. nov., foliis oblongo-lanceolatis vel oblongo-ovatis, supremis fere majoribus quam mediis 6–13 cm. longis 2.5–5 cm. latis basi rotundatis vel subcordatis.

Leaves oblong-lanceolate or oblong-ovate; the upper ordinarily larger than those near the middle of the stem, 6-13 cm. long, 2.5-5.5 cm. wide, their bases rounded or subcordate. - Newfoundland, Prince Edward Island, Quebec, and northern Maine. Type, swampy thicket on carboniferous sandstone, Stephenville, Newfoundland, August 15, 1910, Fernald & Wiegand, no. 3941 (in Gray Herb.). Other specimens examined. Newfoundland: boggy open woods, Whitbourne, August 8, 1911, Fernald & Wiegand, no. 6136; margin of a woodland brook, Clarenville, August 19, 1911, Fernald & Wiegand, no. 6138; wet thickets, Norris Arm, August 21 & 22, 1911, Fernald & Wiegand, no. 6139; low damp clearings, Grand Falls, August 14, 1911, Fernald & Wiegand, no. 6137; boggy places in the strand, Birchy Cove, August 22, 1910, Fernald & Wiegand, no. 3942. PRINCE EDWARD ISLAND: swale, Mt. Stewart, July 30, 1912, Fernald, Bartram, Long & St. John, no. 7995; springy railroad ditch, Bloomfield, August 7, 1912, Fernald, Long & St. John, no. 7996. Quebec: moist ground, Lake Edward, August 24, 1904, W. F. Wright, no. 177. MAINE: gravelly thicket, Boundary Lake, Aroostook County, August 12, 1902, Eggleston & Fernald.

¹ Hook. Flor, Bor.-Am. II. 94 (1840).



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