

Var. BREVICALYCINA Wettstein (*in litteris*).

Differs from the type by its much shorter calyx and by the very deep purple colour of the corolla, the lobes of which are denticulate, but destitute of fringes.

Collected in a swamp on Mt. Massive near Leadville, Colorado, at an elevation of 11,000 feet, near timber-line.

Among the other North American species, which by Gray were referred to *G. serrata* Gunn., are the two varieties : *grandis* and *holopetala*, none of which, however, are referable to this or any of the other species that occur in this country. They represent several vegetative and floral characters by which they appear to be distinct from all the others, and may consequently be considered as independent species : *G. holopetala* (Gray) and *G. grandis* (Gray).

It would, thus, appear as if *G. serrata* Gunn. has not, so far, been collected in North America, judging from the collections, which have been examined, but we do not think it improbable that it may be found on this continent, since it occurs on the west-coast of Greenland ; it should be looked for on the north-Atlantic coast in the immediate vicinity of the sea-shore and north of the arctic circle.

The American species, which we have described in the preceding pages, represent members of the section *Crossopetalæ* Frœl., to which *G. serrata* Gunn. belongs, but they exhibit a marked difference from this by the carinate calyx-lobes, the presence of nectaries and by the winged stamens ; their habit is, also, somewhat different, if we consider *G. procera* and *G. nesophila*. Small, one-flowered specimens have been found of all these species, but such individuals do not deserve rank as even varieties. Their small size, lesser developed foliage and the single flower may depend on their development from poor seeds, on their occurrence in drier soil or, finally, on the fact that they are developed as root-shoots. Such root-shoots are not uncommon in *G. holopetala* and have, furthermore, been recorded as characteristic of the European *G. ciliata* L. in accordance with Irmisch.