

On the Occurrence of the Cedar Glade Endemic *Viola egglestonii* in Kentucky

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ABSTRACT

Viola egglestonii Brainerd, previously known to occur only in Bullitt County in Kentucky, is reported from 3 localities in Nelson County. A 1977 publication reporting the species as "common" in Hart County and "abundant" in Warren County is repudiated.

Viola egglestonii Brainerd (Violaceae) is a perennial, stemless blue violet endemic to cedar (limestone) glades of the southeastern United States. Its center of distribution is in the Central Basin of Tennessee, but disjunct populations occur on cedar glades in Alabama, Georgia, and Kentucky. In Kentucky, the species was known only from Bullitt County in north-central Kentucky, where it occurs on cedar glades developed on Silurian limestone (Baskin and Baskin 1975a, Baskin and Baskin 1975b).

We have discovered 3 other populations of *V. egglestonii* on small cedar glades in Nelson County: (1) along old US Highway 31E, 0.8 miles (1.3 km) south of State Highway 46 east of Balltown (J. and C. Baskin #1797, 12 September 1976, KY, VDB), (2) along Jim Clark Rd., 0.2 miles (0.3 km) west of State Highway 46 east of Balltown (J. and C. Baskin #1922, 19 May 1977, KY, VDB), and (3) along Nat Rogers Road (State Highway 46), 1.5 miles (2.4 km) west of US 31E (J. and C. Baskin #1913, 19 May 1977, KY, VDB). Those localities are approximately 20 miles (32 km) south of the nearest population of *V. egglestonii* in Bullitt County. The Nelson County cedar glades on which *V. egglestonii* grows also are on Silurian limestone.

Characteristic cedar glade species growing with *V. egglestonii* in Nelson County include *Agave virginica* L., *Asclepias verticillata* L., *Croton capitatus* Michx., *C. monanthogynus* Michx., *Desmanthus illinoensis* (Michx.) MacM., *Euphorbia corollata* L., *Houstonia canadensis* Willd., *H. nigricans* (Lam.) Fern., *Hypericum dolabriforme*

Vent., *Isanthus brachiatus* (L.) BSP, *Nothoscordum bivalve* (L.) Britt., *Panicum flexile* (Gattinger) Scribn., *Rosa carolina* L., *Ruellia humilis* Nutt., *Scutellaria parvula* Michx., *Sisyrinchium albidum* Raf., and *Sporobolus vaginiflorus* (Torr.) Wood. Nomenclature follows Fernald 1950. The blue-green alga *Nostoc commune* Vauch. also is present.

In a compilation entitled "Endangered Plants and Animals of Kentucky," Babcock (1977) showed, on a county map of Kentucky, *V. egglestonii* occurring in Bullitt, Hart, and Warren counties. Furthermore, he indicated that *V. egglestonii* is "common" in Bullitt and Hart counties and "abundant" in Warren County. In Bullitt County, we have located about a dozen populations of *V. egglestonii* in the eastern portion of the county. For the most part, those populations are small, often with less than 100 plants scattered over an area of only a few square meters. Although there are a few small cedar glades in Hart and Warren counties, we have never found *V. egglestonii* on any of them. The only mention in the literature of the occurrence of the species in Warren County is in a report entitled "Violets of North America" by Ezra Brainerd in 1921. In that report, Brainerd mentioned a single specimen of *V. egglestonii* collected by Miss Sadie F. Price from near Bowling Green on 11 April 1899. According to Brainerd, that specimen was at the St. Louis Botanical Garden, and it was labeled *V. falcata* Greene. We have corresponded with Dr. Marshall Crosby of the St. Louis Botanical Garden about the Sadie Price specimen. In a letter to J.

Baskin dated 13 June 1977, Dr. Crosby stated that, "I have been unable to locate this specimen filed either under *V. eggles-tonii* or *V. falcata*." Thus, there is no speci-men to verify that *V. egglestonii* has ever been collected in Warren County.

The only report of the occurrence of *V. egglestonii* in Hart County is by Braun (1943) in her catalogue of spermatophytes of Kentucky. Dr. Braun reported a single collection of the species from Hart County. The specimen is now deposited in the U.S. National Herbarium, bearing a label with the following information: E. Lucy Braun No. 3910 "on dry sw slope, open red cedar "Big Woods" in Hart County, Ky., May 2, 1941." We have carefully examined the specimen, and it definitely is not *V. eggles-tonii*. We were unable to identify the species, but it appears to be either *V. escu-lenta* Ell. or *V. triloba* Schwein. var. *triloba*. The lobing of the leaves and the sparse pubescence on the leaf surfaces are charac-teristic of *V. esculenta*, a species not known to occur in Kentucky. The specimen has leaf lobing characteristic of *V. triloba* var. *triloba*, and it was collected within the range of that species. However, the leaves

on the specimen are not very pubescent as they are in good *V. triloba* var. *triloba* (Brainerd 1921, Russell 1965). Thus, there is no specimen to verify the occurrence of *V. egglestonii* in Hart County.

In summary, *Viola egglestonii* in Ken-tucky appears to be restricted to a few small populations on cedar glades in Bullitt and Nelson counties.

LITERATURE CITED

BABCOCK, J. V. 1977. Endangered plants and animals in Kentucky. A publication of the Office of Research and Engineering Services. College of Engineering, University of Ken-tucky. Lexington, Ky. 128 pp.

BASKIN, C. C., AND J. M. BASKIN. 1975a. The cedar glade flora of Bullitt County, Kentucky. *Castanea* 40:184-190.

BASKIN, J. M., AND C. C. BASKIN. 1975b. Geo-graphical distribution of the cedar glade en-demic *Viola egglestonii*. *Rhodora* 77:427-429.

BRAINERD, E. 1921. Violets of North America. *Vt. Agric. Exp. Sta. Bull.* 224. 172 pp.

BRAUN, E. L. 1943. An annotated catalogue of spermatophytes of Kentucky. Published by the author, Cincinnati, Ohio. 161 pp.

FERNALD, M. L. 1950. Gray's manual of botany. 8th Ed. Amer. Book Co., New York, N.Y. 1632 pp.

RUSSELL, N. H. 1965. Violets (*Viola*) of central and eastern United States. *Sida* 2:1-113.



Baskin, Jerry M and Baskin, Carol C. 1978. "On the occurrence of the cedar glade endemic *Viola egglesonii* in Kentucky." *Transactions of the Kentucky Academy of Science* 39(1-2), 74–75.

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