NOTES ON THE FLORA OF EXTREME SOUTHERN ILLINOIS

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ABSTRACT. — Four species of vascular plants are reported new for Illinois. These are *Gymnopogon ambiguus*, *Panicum mattamuskeetense*, *Cerastium tetrandrum*, and *Waldsteinia fragarioides*. Other species new to southern Illinois, and some species seldom collected in southern Illinois, are included.

Botanizing in the southernmost counties of Illinois during the summer of 1966 and spring of 1967 turned up four species of vascular plants new to the Illinois flora. Several species new to southern Illinois, and many additional records for plants seldom collected in this area, are also reported in this paper. Brief descriptions are given for some of the collecting sites. All specimens are in the herbarium of Southern Illinois University (SIU).

Burke Branch is a tributary of Barren Creek about three miles southwest of Bay City in southern Pope County. Habitats along this branch range from open sunny prairie situations, to deep wooded ravines. In the latter habitat black cohosh (*Cimicifuga rubifolia*) and *Solidago rugosa* occur. One prairie-like community, in a sandy overflow area along the creek, contains big bluestem (*Andropogon gerardii*), *Gaura biennis*, dwarf willow (*Salix humilis*), and yellow gentian (*Gentiana flavida*) among others. Beak rush (*Rhynchospora capitellata*), St. John's-wort (*Hypericum lobocarpum*), and *Coreopsis pubescens* grow in the creek bed, and along its banks.

Hayes Creek forms a small gorge southwest of Eddyville in Pope County. Sandstone ledges rise directly from the creek to heights of forty feet or more in several places. Some of the ledges face north, and support vegetation typical hundreds of miles to the north. Beds of sphagnum moss grow on the wider ledges, while narrow ones support ground pine (*Lycopodium porophilum*), cinnamon fern (*Osmunda cinnamomea*), hay-scented fern (*Dennstaedtia punctilobula*), and closed gentian (*Gentiana andrewsii*). *Selaginella apoda* is particularly abundant. It grows on moist vertical faces of sandstone.

Many of the other collecting areas cited have been described in a previous paper (Schwegman & Mohlenbrock, 1966).

Species New to Illinois

Gymnopogon ambiguus (Michx.) BSP. Beard grass forms a conspicuous grass community with *Aristida purpurascens* along a small creek. Although it is known from as far north as southern Ohio, Kentucky, and southern Missouri (Gleason 1963), it has not previously been found in Illinois. Collection data: Pope County, along Burke Branch, November 16, 1966, *Schwegman 1088*.

Panicum mattamuskeetense Ashe. This grass was found growing along a levee with *Wisteria macrostachya*. Hitchcock (1950) gives its distribution as the coastal plain from Massachusetts to South Carolina, and in southern Indiana. Collection data: Massac County, Mermet Wildlife Refuge, May 17, 1966, *Schwegman 365*.

Cerastium tetrandrum Curtis. This adventive from Europe is apparently spreading across the eastern United States. In 1950, Fernald reported it only from southeastern Virginia. Then in 1957, Steyermark discovered it in Missouri. On April 7, 1967, Mohlenbrock found it along a highway in Union County, Illinois. This species very closely resembles *C. viscosum*, but careful study of the flowers reveals the presence of only five stamens (in the Illinois collection) instead of the ten typical for *C. viscosum*. Collection Data: Union County, along west side of Illinois Route

127, ¾ mile south of Alto Pass, *Mohlenbrock 13222.*

Waldsteinia fragarioides (Michx.) Tratt. The barren strawberry has a limited distribution in the midwest. Fernald (1950) gives its range in this area as Ontario to Minnesota, south locally to Indiana and Missouri. Steyermark (1963) describes the Missouri plants as very rare relict colonies surviving only in a few choice situations. The plants reported here are on a north-facing ledge about 20 feet above Hayes Creek. They form a dense colony 7 feet long and 1 foot wide. Adjacent ledges support *Lycopodium porophilum*, *Mitchella repens*, and *Sedum telephioides*. Collection Data: Pope County, along Hayes Creek, southwest of Eddyville, October 1, 1966, *Schwegman 1961.*

Species New to Southern Illinois

Zannichellia palustris L. The horned pondweed is an infrequent species in northern Illinois, but the collection reported here is the first from southern Illinois. Collection data: Lake Murphysboro State Park, *D. Tindall s.n.*

Carex conoidea Schk. This sedge is northern in distribution, and was previously unknown from the southern half of Illinois. Collection data: Massac County, shallow temporary pool on post oak flats, Mermet Wildlife Refuge, April 28, 1966, *Schwegman 252.*

Habenaria lacera (Michx.) Lodd. This orchid was found around "marshy" springs, and in moist soil along spring branches. Winterringer and Evers (1960) show no record of it south of Vermilion County. Collection data: Pope County, near Massac Lookout Tower, June 19, 1966, *Martha and John Schwegman 498;* Massac County, ¼ mile southeast of Mill Spring, June 25, 1966, *Schwegman 526.*

Habenaria flava (L.) R. Br. There seems to be no record of this species south of Wabash County. It grows in a colony of about 50 plants, of which only one flowered in 1966. It is associated with *Onoclea sensibilis* in a rich alluvial forest. Collection data: Massac County, Black Bottom, 2½ miles southeast of Unionville, July 30, 1966, *Schwegman 728.*

Lespedeza simulata Mack. & Bush. Jones (1963) reports this plant only from Crawford County. In southern Illinois it grows in a hill prairie with *Acerates viridiflora*, *Lespedeza virginica*, and *L. capitata*. Gleason (1963) suggests that it may be a hybrid of the latter two species. Collection data: Pope County, Millstone Knob, September 11, 1966, *Schwegman 989.*

Species Seldom Collected in Southern Illinois

Paspalum lentiferum Lam. Mohlenbrock, *et al.* (1962) reported this grass from Pulaski County for its first Illinois station. It was considered adventive at this site. In Massac County it grows in wet openings on post oak flats as well as wet roadside ditches. It appears to be native in the former habitat. Collection data: Massac County, Mermet Wildlife Refuge, August 13, 1966, *Schwegman 799.*

Carex caroliniana Schw. This sedge was formerly known in Illinois only from Jackson County. Collection data: Massac County, Mermet Wildlife Refuge, May 17, 1966 *Schwegman 361.*

Carex laevivaginata (Kükenth.) Mack. Collection data: Pope County, near Massac Lookout Tower, in wet soil near a spring, July 9, 1966, *Schwegman 608.*

Allium tricoccum Ait. This more northern onion had its only southern Illinois station in a deep ravine in Jackson County. The collection reported here is in a woods on a gentle southwest-facing slope beneath a limestone bluff. *Asarum reflexum* and *Hybanthus concolor* are associated with it. Collection data: Massac County, Dan Mathis farm, 4 miles north of Mermet, May 12, 1966, *Schwegman 323* (leaves), and June 28, 1966, *Schwegman 546* (flower and fruit).

Tipularia discolor (Pursh.) Nutt. Collection data: Massac County, along a small stream in woods, NW¼, Sect. 22, T 15 S, R 6 E, March, 1966, *Schwegman 179.*

Triphora trianthophora (Sw.) Rydb. Collection data: Johnson County, rich woods, along the south side of Black Slough northwest of Belknap, September 25, 1966, *Schwegman 1031.*

Hibiscus moscheutos L. Jones (1963) reports this from Williamson County for its only other southern Illinois station. It is the commonest species of *Hibiscus* around Mermet Lake. Collection data: Massac County, Mermet Wildlife Refuge, July 27, 1966, *Schwegman 708.*

Hypericum lobocarpum Gatt. This was formerly known in Illinois only from Massac County (Mohlenbrock and

Voigt, 1959). Collection data: Pope County, along Burke Branch, September 5, 1966, *Schwegman 948*.

Steironema radicans (Hook.) Gray. Collection data: Johnson County, Goose Pond, 4 miles southwest of Vienna, in low swampy woods, August 21, 1966, *Schwegman 851*.

Gentiana flavida Gray. This is the second collection of this gentian from southern Illinois. Collection data: Pope County, along Burke Branch, September 5, 1966, *Schwegman 946*.

Salvia pitcheri Torr. Collection data: Massac County, on dry limestone ledges, Dan Mathis farm 4 miles north of Mermet, September 1, 1966, *Schwegman 915*.

Solidago rugosa Mill. This rare goldenrod was growing along a creek in a wooded ravine. Collection data: Pope County, along Burke Branch, September 24, 1966, *Schwegman 1032*.

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