

***Mimosa strigillosa* Torrey & A. Gray (Mimosaceae) in Illinois**

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ABSTRACT

Mimosa strigillosa Torrey & A. Gray, powderpuff, is reported as an addition to the flora of Illinois. This species has been found growing along the Ohio River in Massac County and at the confluence of the Ohio and Mississippi Rivers in Alexander County.

INTRODUCTION

While surveying public owned sites in preparation for a summer flora course in July 2002, a population of *Mimosa strigillosa* Torrey & A. Gray, powderpuff, was located at Fort Defiance State Historic Site in Alexander County, Illinois. It was later discovered that John Schwegman had collected this species from Massac County, Illinois, along the Ohio River in July 2000. Voucher specimens were collected at each site and have been deposited at the Illinois Natural History Survey Herbarium in Champaign, Illinois (ILLS). Nomenclature for associated species follows Mohlenbrock (1986).

SPECIES DESCRIPTION AND COLLECTION INFORMATION

Mimosa strigillosa Torrey & A. Gray is now known from 8 states in the Coastal Plain Physiographic Province of the southeastern United States, ranging from Georgia and Florida, west to Texas and north to Missouri (Isley, 1998, USDA, NRCS, 2002). It is also found in Argentina, Mexico, Paraguay, and Uruguay (USDA, NRCS, 2002). Powderpuff is a prostrate perennial herb with annual stems that reach up to 4 m long. The stems are usually covered with long bristle-like hairs that point up the stem. The stems are not usually prickly as is common with most other species of *Mimosa*. Leaves are alternate and twice pinnate compound, with each leaf having 4 to 6 pairs of pinnae and each pinna having 10 to 15 pairs of leaflets. The leaf will close up slowly upon disturbance. The most distinguishing feature of the flowers is the long pink to purple filaments that are long exerted from the petals. Each filament is terminated with a yellow anther. The fruit is an oblong legume from 1.5 to 2.0 cm long that is segmented and is usually covered with bristle-like hairs. The fruit splits at each segment, which is typically 5 mm in length. This species is found in open sandy habitats in pinelands, meadows, along streams, and in hammock forests (Small 1933, Correll and Johnston 1970, Isley 1998, Diggs, et al. 1999).

Collection Information

1) Massac County, IL, local along bank of Ohio River at mile marker 949. 29 July 2000. John Schwegman s.n. 2) Alexander Co., IL, local along bank of Mississippi River at top of rip-rap approximately 100 yards from the confluence of the Ohio and Mississippi Rivers. 7 July 2002. Mark A. Basinger s.n. Associated species included *Amaranthus* spp. (amaranth), *Chamaesyce maculata* (L.) Small (nodding spurge), *C. humistrata* (Engelm.) Small (riverbank spurge), *C. serpens* (HBK.) Small (round-leaved spurge), *C. supina* (Raf.) Moldenke (creeping spurge), *Cynanchum laeve* (Michx.) Pers. (blue vine), *Eragrostis cilianensis* (All.) Mosher. (stinking love grass), *Heliotropium indicum* L. (blue heliotrope), *Ipomoea lacunosa* L. (white morning glory), *Rorippa sylvestris* (L.) Bess. (creeping yellow cress), and *Tribulus terrestris* L. (punctureweed).

The status of powderpuff in Illinois as native or adventive is problematic. At the Massac County station, this species has survived severe drought and flooding since its initial discovery in 2000. Associated species are primarily native riverbank species such as *Amorpha fruticosa* L. (false indigo), *Cynanchum laeve*, *Diodia virginiana* L. (rough buttonweed), and *Spermacoce glabra* Michx. (smooth buttonweed). John Schwegman (personal communication) feels that powderpuff is native to this site and that it has moved north in response to a warming climate. At the second station in Alexander County, powderpuff occurs at the top of a rip rap zone with a mixture of native and non-native taxa. There is a substantial amount of barge traffic at both sites, therefore, powderpuff may be adventive at this site. Since the center of the distribution of this species lies in the lower Mississippi River floodplain region of Mississippi and Louisiana and these reports are range extensions over 200 miles north of the primary distribution (Isley 1998), powderpuff may best be considered adventive in Illinois.

LITERATURE CITED

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