

CAREX × DEAMII HERM. (CYPERACEAE) IN ILLINOIS

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ABSTRACT: *Carex* × *deamii* Herm. is reported from Illinois for the first time.

In 1926 Charles C. Deam collected a sterile *Carex* from Pike County, Indiana. Eight years later, F. J. Hermann collected this *Carex* at the same site. Hermann (1938) named it *Carex* × *deamii* and suggested that it was a hybrid of *C. shortiana* Dewey and *C. typhina* Michx. Steyermark (1963) reported collections of this putative hybrid from four widely scattered locations in Missouri and suggested that *C. squarrosa* might also hybridize with *C. shortiana* to yield the sterile plant. We now report the first documented occurrence of *Carex* × *deamii* Herm. in Illinois.

Shildneck found five clumps of the plant on 14 June 1976 (C-7917) in a shallow ditch on the north shoulder of a road in the southwest corner of Macon County, Illinois. The clumps were scattered in the ditch for about 100 meters. The collection site is on the north-bank floodplain of the Sangamon River near the center of S 25, R 1 W, T 16 N. The road right-of-way flora indicated the pre-road habitat was low prairie. Shildneck made additional collections of the plant at the same site on 7 July 1976 (C-7976), 12 June 1977 (C-8189), 14 June 1979 (C-11117) and 4 July 1979 (C-11204). At least one specimen of the collections is deposited in the following herbaria: ILL, ISM, MBG, MOR, MUHW and SIU.

Numerous other species of *Carex* were associated with *C. × deamii* and, in decreasing order of abundance as recorded by Shildneck, they were: *C. lupuliformis* Startwell, *C. squarrosa* L., *C. annectens* Bickn., *C. molesta* Mack., *C. normalis* Mack., *C. shortiana* Dewey and *C. davisii* Schwein. & Torr. Other plants noted at the site were: *Lobelia cardinalis* L., *Hypericum sphaerocarpum* Michx., *Anemone canadensis* L. and *Zizia aurea* (L.) Koch. No *Carex typhina* could be found at the site nor has Shildneck seen this sedge in Macon County, although it is reported therefrom by Mohlenbrock and Ladd (1978)

At the Field Museum, Hess has compared Shildneck's collections of *C. × deamii* with an isotype and several of Steyermark's Missouri collections of that taxon. The Illinois material is quite comparable with these specimens in the Field Museum. Dan. K. Evans (pers. com.) and Hess each have examined some pollen grains from Shildneck's collections using the stain Cotton Blue in lactophenol and found the grains to be non-viable. The perigynia are quite plump but the sharply trigonous achenes are obviously atrophied. These plants are probably of hybrid origin but the parents are not clearly indicated because the morphological features

of the hybrid are shared among *C. shortiana*, *C. squarrosa* and *C. typhina*. The hybrid occurs with *C. shortiana* and various combinations of the other two sedges. Further testing of *Carex* × *deamii* Herm. is needed to pass judgment on the probable parentage of this interesting sedge.

LITERATURE CITED

- Hermann, E.J. 1938. *Rhodora* 40: 77-86
Möhlenbrock, R.H. and Ladd, D.M. 1978. *Distribution of Illinois Vascular Plants*. Southern Illinois University Press, Carbondale. 282 pp.
Steyermark, J.A. 1963. *Flora of Missouri*. Iowa State University Press, Ames, Iowa. 1725 pp.