REDISCOVERY OF *RHYNCHOSPORA (PSILOCARYA) NITENS* (CYPERACEAE) IN THE GREAT LAKES REGION.

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*Rhynchospora nitens* (Vahl) A. Gray is a sedge of primarily southern coastal plain distribution in the United States, occurring eastwards from Texas along the Gulf coastal plain, and then northwards along the Atlantic coastal plain to Massachusetts. It has also been recorded as a coastal plain disjunct in the Great Lakes region in northwest Indiana (Pepoon, 1927; Peattie, 1930; Deam 1940). Southward, *R. nitens* occurs in the tropics through the Caribbean and into Central America (Thomas, 1994). *Rhynchospora nitens* and related annual species such as *R. scirpoides* (Torr.) Griseb. and the primarily tropical *R. eximia* (Nees) Boeck, have in the past sometimes been recognized as the genus *Psilocarya* (Fernald, 1950; Voss, 1972; Swink & Wilhelm, 1994), but almost all authors now subsume them into a more broadly circumscribed *Rhynchospora* (Tucker, 1987; Bruhl, 1995; Goetghebeur, 1998).

*Rhynchospora nitens*, however, is very rare in the northern portions of its range. In New England, it was rediscovered after a hiatus of half a century (Sorrie 1977), and there had been only one prior collection. In the Great Lakes region, until this discovery, it was last recorded in 1899 in Porter County, Indiana and thought to be “now possibly extirpated in the Chicago region” (Swink & Wilhelm, 1994). It was then one of only two species of coastal plain disjuncts in the Great Lakes region that had not been collected in this century, the other being *Limnobium spongia* (Bosc) Steud. (Reznicek, 1994).

The species was rediscovered in the Great Lakes region, and also added to the flora of Michigan on 18 August 1999 at Goose Lake in Allegan County. The summer and fall of 1999 provided an excellent opportunity for searching for plants occurring on drawn down lake and pond shores, including many coastal plain disjuncts, because of the generally low water levels throughout the Great Lakes region. Goose Lake, like some other small, very shallow, and nearly flat-bottomed lakes, was completely drawn down, the bottom being a peaty and sandy meadow dominated by species characteristic of such draw down habitats, including extensive, colorful stands of *Rhexia virginica* L., *Panicum* ssp., *Polygonum* ssp., *Rhynchospora macrostachya* A. Gray, and *R. capitellata* (Michx.) Vahl, and numerous other forbs and graminoids. *Rhynchospora nitens* was abundant in the central areas of the lake bottom, forming a continuous colony acres in size with many thousands of plants. At this site, *R. scirpoides* (Reznicek 10967, MICH) was also present and reasonably frequent, but occurred primarily around the margin of the lake and less commonly throughout the lake bottom. A number of other similar sites in southwestern Michigan were examined after this
discovery, ranging north to Oceana County, and although *R. scirpoides* was locally frequent in suitable habitats, no other stations for *R. nitens* were discovered.

Considerable searching, both in New England and in the Great Lakes region, has confirmed that the species is indeed very rare in the north, though one possible confounding factor in its recognition is similarity to the much more common and widespread *Rhynchospora scirpoides*. Superficially, these two species of generally similar habitat are essentially identical in appearance although, like Sorrie (1977), I noted that the spikelets of *R. nitens* had a subtle greyish cast to them (caused by a wider hyaline margin to the scale apices) that helped differentiate them from the dark brown spikelets of *R. scirpoides*. However, a quick examination of the achene tubercles will easily separate the two species. The tubercles of *R. nitens* are short, less than 0.5 mm long, distinctly broader than long, and abruptly contracted into the promptly deciduous style. Those of *R. scirpoides* are much longer, conspicuously longer than wide, and gradually tapered into the more or less persistent style. These differences are visible in the field with the naked eye or a low power hand lens. The achenes of *R. nitens* are also strongly transversely rugose, much more so than the nearly smooth achenes of *R. scirpoides* (Fig. 1). When they are just reaching maturity, the achenes of *R. scirpoides* also show a conspicuous pale border that is absent on the achenes of *R. nitens*.

![Achenes of *Rhynchospora nitens* (left) and *R. scirpoides* (right), from Reznicek 10966 and 10967 (MICH) respectively. The scale bar represents 0.5 mm.](image-url)
SPECIMEN CITATION


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LITERATURE CITED


ANNOUNCEMENT