Drosera filiformis Raf. × tracyi Macf. (Droseraceae)—southeastern Washington County, Florida, elevation 20 m, 29 May 2010. Plants were found flowering on the wet borders of a low, sandy lake, with Drosera filiformis Raf. and Drosera tracyi Macf.

Previous Knowledge

This represents the first collection of this plant in the wild. One parent plant, Drosera tracyi, occurs along the Gulf Coast, from Louisiana (historical only— the plant has not been collected for at least 30 years) through Mississippi, Alabama, the panhandle of Florida, and into southwestern Georgia.

The other parent plant, Drosera filiformis, occurs in widely scattered locations along the Atlantic Coast, with records for Nova Scotia, Massachusetts, Rhode Island (probably extinct), Connecticut (historical only), New York, New Jersey, and Maryland, then after large range gaps the plant reappears in North Carolina and northwestern Florida. Reports from Delaware and South Carolina appear to be anecdotal. It has been collected from adjacent counties in West Virginia and Pennsylvania, but these plants are believed to be introduced. Both Drosera filiformis and Drosera tracyi have been introduced to other states by horticulturists, as well.

The populations of Drosera filiformis in Florida are of considerable interest; I have been studying these plants for several years, and a discussion of them will be published separately.

Significance

The only opportunity for natural overlap of the two parent species is in Florida (Bay and Washington Counties). A single location has been documented where both species occur together, but a 1990 herbarium specimen from this site indicates that there is "no sign of intergradation" (L.C. Anderson, 183046; FSU). In 2010 I visited this location, accompanied by Elizabeth M. Salvia. Despite careful searches only Drosera filiformis was observed; no Drosera tracyi or hybrids were detected.

In 2008-2009, a number of carnivorous plant enthusiasts (Makoto Honda, Jim Miller, Randy Zerr) reported a site where both species occurred, and where hybridization was reportedly occurring. In 2010 I visited this location with Brian Barnes, Jim Miller, Elizabeth Salvia, and Randy Zerr, and observed both parent species. Furthermore, a hybrid swarm was visible with at least hundreds of plants present. The full extent of the population could not be assessed because our team was driven from the site by electrical storms.

The hybrid nature of the plants was evident because the plants were very large (leaf lengths approximately 25-28 cm; inflorescence lengths approximately 43-50 cm). This is larger than is typical for Drosera filiformis, but is more typical for Drosera tracyi. Meanwhile, the gland tentacles and leaf blades were suffused with pale red pigmentation. This pigmentation is absent in Drosera tracyi, while it is darker red in Drosera filiformis. The hybrid (involving Floridian Drosera filiformis) has been made in cultivation by Brian Barnes, and has similar characteristics.

The hybrids were producing large numbers of seeds, although many of the seeds had aborted and were only approximately 1/4-1/3 normal size. Similarly, a cultivar (Drosera 'California Sunset') was made by a horticulturist in 1973, and is demonstrably fertile.

Voucher specimens have been submitted to the University of California, Davis (DAV), #BR100502, and Florida State University, Tallahassee (FSU), #BR100503. Color photographs from the 2010 trip can be seen at http://www.sarracenia.com.