

Drosera filiformis var. *floridana* B.Rice var. nov.

Diagnosis

Most easily identified by its range, which is limited to Florida, versus further north on the Atlantic Coast for *Drosera filiformis* Raf. var. *filiformis*. *Drosera filiformis* var. *floridana* tends to have narrower leaves deeply suffused red-orange, thinner scapes and smaller flowers [*In situ facilissime distinguitur area distributionis (Florida vs. litori septentrionaliore Atlantici maris in casu Droserae filiformis var. filiformis)*]. Var. *floridana* folia angustiora atriter rubro-aurantiaco suffusa, scapum tenuiorem et flores parviores habere tendit].

Type

Holotype: Washington County, Florida. USA, 20 m. 29 May 2010, Barry Rice #BR100504 (DAV, acc. no. 188879).

Etymology

The varietal epithet *floridana* denotes the range of this variety, which is restricted to Florida. Since this plant occurs along the north-south migratory pathways of numerous birds, it is quite possible that some amount of gene-flow occurs between this population and the more northerly populations of *Drosera filiformis*. Based upon this hypotheses, the rank of variety has been chosen instead of subspecies.

Distribution and Habitat

Originally reported by Godfrey (1974), this plant is known only from a dozen or so sites in Bay County and (especially) Washington County. A single claimed specimen for Liberty County (Anderson 10436 FSU) was most probably a dwarfed *Drosera tracyi*—attempts to relocate this plant have been unsuccessful. *Drosera filiformis* var. *floridana* occurs on the sandy margins of shallow ponds, ditches and sink holes, growing in pure sand or peaty soils (Godfrey, 1974; Schnell, 2002; Rice, 2011).

Affinities

While *Drosera filiformis* var. *floridana* is unmistakably different from *D. tracyi*, the differences between *D. filiformis* var. *filiformis* and *D. filiformis* var. *floridana* are more subtle. The scape of *D. filiformis* var. *floridana* tends to be shorter (78–162 mm) than that of *D. filiformis* var. *filiformis* (130–250 mm). Also, the petiole length for *D. filiformis* var. *floridana* is only 1–6(–10) mm, while the petiole length for *D. filiformis* var. *filiformis* is usually greater, 4–15 mm long. *Drosera filiformis* var. *filiformis* with petioles as short as the southern variety have only been seen on one plant (B. Rice, pers. observ.), an herbarium collection from New Jersey. Botanists who are very familiar with both varieties may be able to use other morphometrics (such as leaf thickness, scape thickness, flower size) to distinguish the two plants, but these are matters of subtlety.

The clearest method of distinguishing plants other than by range is by pigmentation; the leaves of *Drosera filiformis* var. *floridana* are usually suffused uniformly with significant amount of orange, orange-red, or bright, purplish red, while *D. filiformis* var. *filiformis* is olive green, olive-red or very occasionally dark purple.

The hybrid between *Drosera filiformis* var. *floridana* and *D. tracyi* has been encountered in the wild. This plant is discussed separately alongside the other *Drosera* hybrids. The hybrid is intermediate in all respects between the two parents and is easily separated from them in the field (Rice, 2011).



Figure 2.564 A plant of *Drosera filiformis* var. *floridana* growing in a saturated sand substrate, Washington County, Florida (Photo: Arthur Yin).



Figure 2.565 A bank of *Drosera filiformis* var. *floridana* plants growing alongside a shallow body of water, Washington County, Florida (Photo: Barry Rice).



Figure 2.566 Plants of *Drosera filiformis* var. *floridana* growing within a shallow stream, Washington County, Florida (Photo: Barry Rice).



Figure 2.567 Plants of *Drosera filiformis* var. *floridana* emerging from dormancy in the spring, Washington County, Florida (Photo: Barry Rice).

Description

This plant is similar to *Drosera filiformis* var. *filiformis* in its general characters. *Drosera filiformis* var. *floridana* has slightly more filiform leaves, a thinner scape and slightly smaller flowers. The petioles and laminae are deeply pigmented orange, red or purplish (Rice, 2011; B. Rice, pers. observ.).

Phenology

The flowering season has not been clearly delineated, but probably takes place over the spring months of May to June. This hardy species forms hairy hibernacula, by which it is able to survive the winter (B. Rice, pers. observ.)

Notes

This plant is a matter of significant interest to carnivorous plant specialists in botany and horticulture. It is commonly referred to as *Drosera filiformis* 'Florida Red', or by other informal terms (Damon Collingsworth, pers. comms., 2016).



Figure 2.568 Seedlings of *Drosera filiformis* var. *floridana* germinating *en masse* from seed capsules buried in the saturated sand substrate, Washington County, Florida (Photo: Barry Rice).



Figure 2.569 A mature *Drosera filiformis* var. *floridana* plant emerging from dormancy (Photo: Barry Rice).



Figure 2.570 The flower of *Drosera filiformis* var. *floridana* blooming *in situ* (Photo: Barry Rice).



Figure 2.571 Mass flowering of *Drosera filiformis* var. *floridana* plants growing *in situ*, Washington County, Florida (Photo: Barry Rice).



Figure 2.572 A typical plant of *Drosera filiformis* var. *floridana* growing in Washington County, Florida (Photo: Barry Rice).



Figure 2.573 A colony of *Drosera filiformis* var. *floridana* plants observed during the latter part of the flowering season, Washington County, Florida (Photo: Barry Rice).

Drosera × *californica* var. *arenaria* B.Rice nothovar. nov.

(=*Drosera filiformis* var. *floridana* × *tracyi*)

Diagnosis

Hybrid between *Drosera filiformis* Raf. var. *floridana* B.Rice and *Drosera tracyi* Macfarl. Similar in size to *Drosera tracyi*, but leaves and tentacles rose-red [*Hybrida inter Droseram filiformam* var. *floridanam* et *Droseram tracyi*. *Drosera tracyi* similis magnitudine sed foliis et tentaculis roseo-rubris differt].

Type

Holotype: Washington County, Florida. USA, 20 m. 29 May 2010, Barry Rice #BR100502 (DAV, acc. no. 188876). *Paratype*: Washington County, Florida. USA, 20 m. 29 May 2010, Barry Rice no. #BR100503 (FSU, acc. no. 205072).

Etymology

The epithet *arenaria* is the feminine form of the Latin adjective *arenarius* (of or pertaining to sand), a reference to the Floridian habitat in which it most commonly occurs.

Distribution and Habitat

Currently known only from the margins of a single small lake in Washington County, where it grows in sand with both parent taxa.

Affinities

This hybrid is generally intermediate between the parent taxa, but is immediately recognisable in the field when compared directly with them.

Description

Drosera × *californica* var. *arenaria* is similar in size to the larger parent, *Drosera tracyi*, which is much larger than *Drosera filiformis* var. *floridana*, but its leaves and glandular hairs are blushed a rosy-red colour. Seeds are produced, but are irregular in size. These are likely to have reduced fertility, as in the artificial hybrid *Drosera* × *californica* var. *californica* (see Notes). It is not known whether this taxon breeds true from seed.

Phenology

These plants are poorly studied in the wild, so their annual growth cycle is not clearly characterised. However, flowering appears to occur primarily from May to June. This hardy plant forms hairy hibernacula, by which it is able to survive the winter.

Notes

The first hybrid between the species *Drosera filiformis* var. *filiformis* and *D. tracyi* was an artificial hybrid named *D. × californica* Hort. ex Cheek (1993) from its *nomen nudum*, *D. × californica* Slack (1979), itself commemorating the cultivar name 'California Sunset' given by its creator, Joe Mazrimas of California. Since the name *D. × californica* is valid, botanical rules of nomenclature dictate that all other hybrids of the same parentage (no matter the different subspecies or varieties involved) will carry the same hybrid name as a stem, the difference being appended as a nothovarietal name. Thus this plant, which is native only to Florida, must bear the ill-fitting epithet *californica* in its name.



Figure 2.603 *Drosera* × *californica* var. *arenaria*, Washington County, Florida (Photo: Barry Rice).