

Native Wildflowers: *Mimosa strigillosa* Torr. & A. Gray ¹

Jeffrey G. Norcini and James H. Aldrich²

Two species of *Mimosa* are considered native to Florida: *Mimosa strigillosa* and *Mimosa quadrivalvis*. *Mimosa strigillosa*, commonly called powderpuff for the shape of its showy flowers, is also referred to as sunshine mimosa. Two varieties of *Mimosa quadrivalvis* are known in Florida – *Mimosa quadrivalvis* var. *angustata*, sensitive brier, and *Mimosa quadrivalvis* var. *floridana*, Florida sensitive brier. Sensitive brier is the most widespread of the three as it occurs in many of the counties throughout Florida in habitats ranging from disturbed sites to upland to mesic flatwoods. Florida sensitive brier occurs only in peninsular Florida and is found in disturbed areas as well as mesic flatwoods. Powderpuff overlaps most of the range of sensitive brier but only has been found as far west as Leon County. It often occurs in disturbed areas with well-drained soils and is becoming more widespread along roadsides. All three taxa typically are found growing in full sun to high pine shade.

Description

The three native mimosas are groundcovers and have purple, test-tube-brush-like flowers. Powderpuff is easily distinguished from the sensitive briars because powderpuff lacks the short spines that occur along sensitive brier stems. The overlapping



Figure 1. Powderpuff flowers and foliage. Note the immature, fuzzy pods in the upper right-hand corner.

stems of powderpuff and high density of small, pinnately compound leaves form a thick mat that is only 2 to 3 inches high (Fig. 1). Stems often root along their length and can penetrate deep into soil, one of the likely reasons that powderpuff is drought tolerant. Powderpuff flowers (~1 inch long), which are showier and larger than those of sensitive brier, occur mainly in spring. Flowers give way to small, flattened pods that are ripe when they turn brown; pods open up when seeds are mature. Seeds have a

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2. Associate Professor, native wildflower specialist, and Senior Biological Scientist, North Florida Research & Education Center, Quincy, FL 32351.

hard seedcoat and need to be scarified to allow quick germination. Methods to scarify seeds are described in "Propagation of Landscape Plants" (2).

While powderpuff is perennial, top growth will die back in winter in north Florida. Dieback becomes less severe from north to south, and is negligible or absent in south central and south Florida. Plantings that do not die in winter might become somewhat thin and yellow.

Landscape Use

Powderpuff is a groundcover adaptable to a wide variety of situations including residential and commercial landscapes, roadsides and ecological restoration (Fig. 2, Fig. 3). As a legume, its roots can become nodulated with nitrogen fixing bacteria and hence can add nitrogen to the soil. Plantings are likely to nodulate fastest where it exists or previously existed because the nitrogen fixing bacteria might already be in the soil.



Figure 2. Powderpuff along I-75 in Alachua County, Florida.

Powderpuff can spread quickly – an important consideration for those using it in residential or commercial landscapes. As few as four or five pots of powderpuff planted in a landscape can cover 200 to 300 sq. ft. in less than a full growing season. Its rapid spread, dense, mat-like habit, and deep root system also make it a good species for erosion control.

Despite its rapidly spreading nature, powderpuff is not overly competitive and can be interplanted with turf. Grasses will grow through it and aggressive weeds can out compete it. However, grasses and weeds can be mowed back without affecting



Figure 3. Powderpuff used as turf.

powderpuff because it usually grows below mowing height.

In residential and commercial landscapes, powderpuff will become yellowish if it does not nodulate, a process that might take a year or two. Plantings can be fertilized, but this will delay or prevent nodulation. However, fertilization will stimulate flowering (Terry Zinn, personal communication). Use a low rate of controlled-release fertilizer that will last throughout the summer. Fertilizers should contain no or low amounts of phosphorus (P) unless results of a soil test show that P is deficient in your soil.

Establishment

Plantings can be established with containerized plants, rooted sprigs (stem pieces with roots at one or more nodes [Terry Zinn, personal comm.]) or by direct seeding. If using transplants or sprigs, irrigate the planting for 2 to 4 weeks to prevent the soil from drying out. Seeds should be scarified before planting to ensure germination. Nonscarified seeds will take 1 year or more to germinate. Sow seeds about 1/4 inch deep in late summer or early fall. Seeds planted in late spring or summer might not give rise to plants that flower that season.

Pests

Little sulphur butterfly (*Pyrisitia lisa* [formerly *Eurema lisa*]) caterpillars will feed on powderpuff foliage (1). These larvae can be desirable (or not) depending on your point of view. No diseases have

been observed under north Florida landscape conditions, nor have we observed evidence of deer browsing.

Availability

At present, container and seed production of powderpuff in Florida is limited. However, since it has been named one of the 2008 "Plants of the Year" by the Florida Nursery, Growers & Landscape Association, production will likely increase with demand expected to rise. Florida growers producing plants or seeds for retail and wholesale can be found at the web sites listed below. If possible, purchase plants derived from seeds or plants adapted to your region of the state. For more information about the importance of seed or plant origin, read "Native Plants: An Overview" (3).

Plants

- Association of Florida Native Nurseries

<http://www.afnn.org>

- Floridanativeplants.net

<http://www.floridanativeplants.net/>

- The FNGLA Plant & Product Locator

<http://www.fngla.org/locator/searchPlants.asp>

- Betrock's hortworld.com

<http://www.plantfinder.com/availability/plantavailability1.asp>

Seeds

- Florida Wildflower Seed and Plant Growers Assoc., Inc.

<http://floridawildflowers.com/index.htm>

Note: Powderpuff seeds are being produced in Florida but might not be listed because of limited quantities; contact the Association about availability.

businessmanager@floridawildflowers.com

References

1. Biophilia Nature Center, Native Nursery & Bookstore. <http://www.biophilia.net/>, accessed 20 Sept. 2007.
2. Ingram, D.L. and T.H. Yeager. 1991. Propagation of landscape plants. Florida Coop. Ext. Serv. Publ. CIR579. <http://edis.ifas.ufl.edu/MG108>
3. Norcini, J.G. 2006. Native plants: an overview. Fla. Coop. Ext. Serv. Publ. ENH 1045. <http://edis.ifas.ufl.edu/EP297>