

Mimosa (*Albizia julibrissin*)

Becky Koepke-Hill, Extension Assistant, Plant Sciences

Greg Armel, Assistant Professor, Extension Weed Specialist for Invasive Weeds, Plant Sciences



Origin:

Mimosa is native to Asia, from Iran to Japan. It was introduced to the United States in 1745 as an ornamental plant.

Description:

Mimosa is a legume with double-compound leaves that give the 20- to 40-foot tree a fern-like appearance. Each leaf has 10 to 25 leaflets and 40 to 60 subleaflets per leaflet. In the summer, the tree produces pink puff flowers. Fruits are produced in the fall and are contained in tan seedpods. The tree often has multiple stems and a broad, spreading canopy. Seedlings can be confused with other double-compound legumes, but mimosa does not have thorns or prickles

like black locust (*Robinia pseudoacacia*), and has a woody base, unlike hemp sesbania (*Sesbania exaltata*).

Habitat:

Mimosa is cold-hardy to USDA hardiness zone 6 and is not found in elevations above 3,000 feet. Mimosa will thrive in full sun in a wide range of soils in any disturbed habitat, such as stream banks, roadsides and old fields. Mimosa can live in partial shade, but is almost never found in full shade or dense forests. Mimosa often spreads by seeds from nearby ornamental plantings, or by fill dirt containing mimosa seeds. It is a growing problem in aquatic environments, where mimosa gets started on the disturbed stream banks, and its seeds are carried by the running water.

Environmental Impact:

Mimosa is challenging to remove once it is established. Seeds can survive more than five years in the soil, and mimosa re-sprouts vigorously from any remaining root material. Mimosa produces many seed pods in one season, and up to 90 percent of the seeds can be viable after five years of dormancy. The tree is host to webworm and is susceptible to vascular wilt. Mimosa will generally have two to three taproot-like roots that can crack sidewalks and other structures as they grow in diameter. All of these factors make this plant a strong competitor against native plants.



Control methods:

Mimosa can be hand-pulled when it is still young. As mimosa can sprout from live root parts, pull plants when the soil is moist to help the roots stay intact while being pulled. Basal bark and “hack and squirt” treatments with glyphosate and triclopyr or treatments of aminopyralid (1.75oz ai/acre), clopyralid or triclopyr applied to foliage while plants are small enough to avoid spraying non-target species will also control mimosa. Please visit <http://hortweeds.tennessee.edu/webapp/test/Default.aspx> for assistance in finding the appropriate herbicide product.

Alternative plants:

Many plants are available that provide similar benefits to mimosa. The following are just a few potential possibilities:

- serviceberry (*Amelanchier arborea*)
- redbud (*Cercis canadensis*)
- flowering dogwood (*Cornus florida*)
- fringe tree (*Chionanthus virginicus*)
- American holly (*Ilex opaca*)

References:

Gilman, Edward F., D. G. Watson. 1993. Albizia julibrissin, Mimosa. United States Forest Service. Fact Sheet ST-68. Accessed online April 17, 2009.

<http://hort.ufl.edu/trees/ALBJULA.pdf>.

Invasive.org: Center for Invasive Species and Ecosystem Health. Invasive and Exotic Species Profiles. The University of Georgia - Warnell School of Forestry and Natural Resources and College of Agricultural and Environmental Sciences - Dept. of Entomology. Accessed online April 17, 2009.

<http://www.invasive.org/species/subject.cfm?sub=3004>

Remaley, Tom. 2005. Plant Conservation Alliance’s Alien Plant Working Group Least Wanted: Silk Tree Albizia julibrissin Durz. Pea family (Fabaceae). Accessed online April 17, 2009.

<http://www.nps.gov/plants/alien/fact/brpa1.htm>

Visit the UT Extension Web site at
<http://www.utextension.utk.edu/>

W232 09/09 10-0048

Programs in agriculture and natural resources, 4-H youth development, family and consumer sciences, and resource development.
University of Tennessee Institute of Agriculture, U.S. Department of Agriculture and county governments cooperating.
UT Extension provides equal opportunities in programs and employment.