

*Albizia julibrissin* [简体中文](#) [正體中文](#)

**System:** Terrestrial

Kingdom	Phylum	Class	Order	Family
Plantae	Magnoliophyta	Magnoliopsida	Fabales	Fabaceae

**Common name** mimosa (English), silky acacia (English), powderpuff tree (English), silk tree (English)

**Synonym**

**Similar species**

**Summary** Albizia julibrissin is commonly used as an ornamental tree because of its appealing fragrance, showy flowers and low maintenance requirement. It has escaped from the urban landscape and competes with native plants in disturbed habitats and occasionally in forested areas. Typical disturbed habitat may include roadsides, vacant lots and riparian areas. Albizia julibrissin prefers full sunlight but is salt and drought tolerant and can thrive in a wide range of soil types.



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## Species Description

*Albizia julibrissin* is an umbrella-shaped tree that grows 6 -10m (20 to 35 feet) in height and 6 -10m (25 to 30 feet) in width. Its canopy is open, allowing sunlight to penetrate and grass to grow directly near the base of the trunk. The bark is light brown to gray and nearly smooth. The flowers resemble pom-poms of silk threads, are fragrant, light to dark pink, and arranged in loosely branched, pyramidal flower clusters at the ends of the branches. Fruits are flat seed pods 12cm - 18cm (5 to 7 inches) in length containing light brown, oval-shaped seeds. These pods are gray-brown when mature and remain on the tree into winter. Leaves are alternate, bipinnately compound (consisting of divisions that are already once or several times divided), up to 50cms (20 inches) long, and consisting of 40 to 60 leaflets about 6mm (3/8 of an inch) in length. The leaves are fern-like, giving the tree a finely textured appearance.

## Notes

*Albizia julibrissin* often dies at an early age from Fusarium wilt, a fungal disease for which there is no cure.

## Lifecycle Stages

Although *Albizia julibrissin* grows rapidly under good conditions, it is short-lived because of its weak, brittle wood and susceptibility to wilt disease. Its seeds have impermeable seed coats that allow them to remain dormant for many years. One study showed that 90% of the seeds were viable after five years.

## Uses

*Albizia julibrissin* is a popular ornamental because of its fragrant, showy flowers and because it attracts hummingbirds. However, because of its invasive potential and wilt disease problem (see Notes), several cities have ordinances prohibiting its use (Gilman and Watson, 1993). Some suggested alternative trees include: serviceberry (*Amelanchier arborea*), redbud (*Cercis Canadensis*), flowering dogwood (*Cornus florida*), river birch (*Betula nigra*), fringe tree (*Chionanthus virginicus*), American holly (*Ilex opaca*), and sweetgum (*Liquidambar styraciflua*). *A. julibrissin* has also been used as a reclamation plant because of its ability to establish itself on scoured shores and open areas.

## Habitat Description

*Albizia julibrissin* prefers full sunlight. It is drought, wind, and salt tolerant and can thrive in a wide range of soil types, such as clay, loam, sand, slightly alkaline, acidic, well drained, and occasionally wet soils. *A. julibrissin* is found in disturbed areas, such as roadsides, vacant lots, and riparian areas. Occasionally it is found in forested areas but seldom in forests with full canopy cover. It is usually only found at elevations under 900mts (3,000 feet). Its tolerance of salty soil and moderate salt spray allows it to grow well in oceanside landscapes and along tidal creeks.

## Reproduction

*Albizia julibrissin* reproduces both vegetatively and by seed. Seeds are dispersed mostly below or around the parent plant, but they can be dispersed further by water. If cut or top-killed, resprouts appear. Resprouts from cut or top-killed trees appear quickly and can grow over three feet in a season.

## General Impacts

Dense stands of *Albizia julibrissin* reduce the sunlight and nutrients available to native plants. It is a strong competitor with native trees and shrubs in open areas or forest edges as it can grow in a variety of soils, produce large seed crops, and resprout when damaged. *A. julibrissin* can become a serious competitor along riparian areas, which provide scoured shores and water transportation, making plant establishment and seed dispersal easier.

## Management Info

**Physical:** Small trees can be cut down at ground level. With large trees, it may be easier to make an incision that encircles the base of the tree well below the bark, six inches from the ground. Resprouts are common, so cutting is only an initial control measure and should be followed by chemical controls or repeated cutting. Hand pulling can be effective on young seedlings, and they should be pulled as soon as they are large enough to grasp but before they are old enough to flower. The entire root should be removed to prevent broken fragments from resprouting.

**Chemical:** Chemical controls include glyphosate (Roundup) and triclopyr (Garlon). Glyphosate is a non-selective herbicide that may kill partially contacted, non-target plants, so it should be used with care. In areas where native or other desirable grasses must be conserved, triclopyr should be considered. Triclopyr is a selective herbicide for many broad-leaved plant species.

## Pathway

Used as an ornamental in many areas because of its aesthetic appeal.

## Principal source:

**Compiler:** National Biological Information Infrastructure (NBII) & IUCN/SSC Invasive Species Specialist Group (ISSG)

**Review:** Kristine Johnson Supervisory Forester Great Smoky Mountains National Park. USA

**Publication date:** 2005-01-24

## ALIEN RANGE

[27] UNITED STATES

## BIBLIOGRAPHY

7 references found for *Albizia julibrissin*

### Management information

[European and Mediterranean Plant Protection Organization \(EPPO\), 2006. Guidelines for the management of invasive alien plants or potentially invasive alien plants which are intended for import or have been intentionally imported. EPPO Bulletin 36 \(3\), 417-418.](#)  
[Remaley, Tom, July 13, 1998, Silk Tree PCA Alien Plant Working Group; Great Smoky Mountains National Park, Gatlinburg, TN.](#)

**Summary:** Report on native distribution, distribution in the United States, description, ecological threat, habitat, uses, biology, method and date of introduction, and management.

### General information

[Gilman, Edward F. and Watson, Denis G. November, 1993, Albizia julibrissin University of Florida Environmental Horticulture, Plant Information Databases, 680 Tree Fact Sheets](#)

**Summary:** Detailed description of plant and general statement of landscaping problems.

[ILDIS World Database of Legumes, 2000. Albizia julibrissin Durazz. International Legume Database & Information Service\).](#)

**Summary:** Distribution information, common names, some uses.

[ITIS \(Integrated Taxonomic Information System\), 2004. Online Database Albizia julibrissin](#)

**Summary:** An online database that provides taxonomic information, common names, synonyms and geographical jurisdiction of a species. In addition links are provided to retrieve biological records and collection information from the Global Biodiversity Information Facility (GBIF) Data Portal and bioscience articles from BioOne journals.

Available from: [http://www.itis.gov/servlet/SingleRpt/SingleRpt?search\\_topic=TSN&search\\_value=26449](http://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=26449) [Accessed December 31 2004]

[Kartesz, John K. 2002. Albizia julibrissin Durazz. Silktree USDA Natural Resources Conservation Service Plant Profile; Biota of North America Program University of North Carolina](#)

**Summary:** Report on synonyms, common names, distribution in the United States, and taxonomy.

[Russell, Alice B., 1997, Albizia julibrissin Trees of the Maritime Forest Department of Horticultural Science, North Carolina State University.](#)

**Summary:** General description of plant and habitat.