GLOBAL INVASIVE SPECIES DATABASE

FULL ACCOUNT FOR: ***Albizia julibrissin***

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.

view this species on IUCN Red List

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.
\r\nChemical: 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:

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ALIEN RANGE

[27] UNITED STATES

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Managment information

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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 [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.