

Family: *Fabaceae*

Taxon: *Albizia julibrissin*

Synonym: *Albizia rosea* Carrière

Common Name: albizia
mimosa
pink sirius
silktree

Questionnaire :	current 20090513	Assessor:	Patti Clifford	Designation: H(HPWRA)
Status:	Assessor Approved	Data Entry Person:	Patti Clifford	WRA Score 18
101	Is the species highly domesticated?		y=-3, n=0	n
102	Has the species become naturalized where grown?		y=1, n=-1	
103	Does the species have weedy races?		y=1, n=-1	
201	Species suited to tropical or subtropical climate(s) - If island is primarily wet habitat, then substitute "wet tropical" for "tropical or subtropical"		(0-low; 1-intermediate; 2-high) (See Appendix 2)	High
202	Quality of climate match data		(0-low; 1-intermediate; 2-high) (See Appendix 2)	High
203	Broad climate suitability (environmental versatility)		y=1, n=0	y
204	Native or naturalized in regions with tropical or subtropical climates		y=1, n=0	y
205	Does the species have a history of repeated introductions outside its natural range?		y=-2, ?=-1, n=0	y
301	Naturalized beyond native range		y = 1*multiplier (see Appendix 2), n= question 205	y
302	Garden/amenity/disturbance weed		n=0, y = 1*multiplier (see Appendix 2)	n
303	Agricultural/forestry/horticultural weed		n=0, y = 2*multiplier (see Appendix 2)	n
304	Environmental weed		n=0, y = 2*multiplier (see Appendix 2)	y
305	Congeneric weed		n=0, y = 1*multiplier (see Appendix 2)	y
401	Produces spines, thorns or burrs		y=1, n=0	n
402	Allelopathic		y=1, n=0	
403	Parasitic		y=1, n=0	n
404	Unpalatable to grazing animals		y=1, n=-1	n
405	Toxic to animals		y=1, n=0	n
406	Host for recognized pests and pathogens		y=1, n=0	y
407	Causes allergies or is otherwise toxic to humans		y=1, n=0	n
408	Creates a fire hazard in natural ecosystems		y=1, n=0	
409	Is a shade tolerant plant at some stage of its life cycle		y=1, n=0	n
410	Tolerates a wide range of soil conditions (or limestone conditions if not a volcanic island)		y=1, n=0	y

411	Climbing or smothering growth habit	y=1, n=0	n
412	Forms dense thickets	y=1, n=0	y
501	Aquatic	y=5, n=0	n
502	Grass	y=1, n=0	n
503	Nitrogen fixing woody plant	y=1, n=0	y
504	Geophyte (herbaceous with underground storage organs -- bulbs, corms, or tubers)	y=1, n=0	n
601	Evidence of substantial reproductive failure in native habitat	y=1, n=0	n
602	Produces viable seed	y=1, n=-1	y
603	Hybridizes naturally	y=1, n=-1	y
604	Self-compatible or apomictic	y=1, n=-1	n
605	Requires specialist pollinators	y=-1, n=0	n
606	Reproduction by vegetative fragmentation	y=1, n=-1	y
607	Minimum generative time (years)	1 year = 1, 2 or 3 years = 0, 4+ years = -1	3
701	Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)	y=1, n=-1	y
702	Propagules dispersed intentionally by people	y=1, n=-1	y
703	Propagules likely to disperse as a produce contaminant	y=1, n=-1	n
704	Propagules adapted to wind dispersal	y=1, n=-1	y
705	Propagules water dispersed	y=1, n=-1	y
706	Propagules bird dispersed	y=1, n=-1	n
707	Propagules dispersed by other animals (externally)	y=1, n=-1	n
708	Propagules survive passage through the gut	y=1, n=-1	
801	Prolific seed production (>1000/m2)	y=1, n=-1	y
802	Evidence that a persistent propagule bank is formed (>1 yr)	y=1, n=-1	y
803	Well controlled by herbicides	y=-1, n=1	y
804	Tolerates, or benefits from, mutilation, cultivation, or fire	y=1, n=-1	y
805	Effective natural enemies present locally (e.g. introduced biocontrol agents)	y=-1, n=1	

Designation: H(HPWRA)

WRA Score 18

Supporting Data:

101	2010. WRA Specialist. Personal Communication.	No evidence.
201	2010. USDA, ARS, National Genetic Resources Program. Germplasm Resources Information Network - (GRIN) [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?28398	Native to: Asia temperate - Iran, Turkey, Azerbaijan, China, Japan, Taiwan; Asia tropical - Bhutan, India, Nepal, Pakistan, Myanmar.
202	2010. USDA, ARS, National Genetic Resources Program. Germplasm Resources Information Network - (GRIN) [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?28398	Native to: Asia temperate - Iran, Turkey, Azerbaijan, China, Japan, Taiwan; Asia tropical - Bhutan, India, Nepal, Pakistan, Myanmar.
203	1993. Gilman, E.F./Watson, D.G.. <i>Albizia julibrissin</i> mimosa. Fact Sheet ST-68: .Institute of Food and Agricultural Science, University of Florida, Gainesville http://hort.ifas.ufl.edu/database/documents/pdf/tree_fact_sheets/albjula.pdf	USDA hardiness zones: 6b-9.
203	2003. Weber, E.. <i>Invasive Plant Species of the World. A Reference Guide to Environmental Weeds..</i> CABI Publishing, Wallingford, UK	Where native, this tree grows in scrub and woodland on moist sites. Resistant to drought and tolerates moderate frost.
203	2005. CAB International. <i>Forestry Compendium.</i> CAB International, Wallingford, UK	Altitude range: 0-2100 m.
204	2010. USDA, ARS, National Genetic Resources Program. Germplasm Resources Information Network - (GRIN) [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland. URL: http://www.ars-grin.gov/cgi-bin/npgs/html/genus.pl?1738	Widely naturalized. Native to: Asia temperate - Iran, Turkey, Azerbaijan, China, Japan, Taiwan; Asia tropical - Bhutan, India, Nepal, Pakistan, Myanmar.
205	2005. CAB International. <i>Forestry Compendium.</i> CAB International, Wallingford, UK	<i>Albizia</i> was introduced into Europe in 1745. It is widely planted as an ornamental tree in temperate and tropical zones. It is being considered as an agroforestry tree, but there are concerns due to its weedy characteristics and invasiveness in the United States.
205	2010. Missouri Botanical Garden. Kemper Center for home gardening <i>Albizia julibrissin</i> . Missouri Botanical Garden, http://www.mobot.org/gardeninghelp/plantfinder/plant.asp?code=A848	<i>Albizia</i> has been widely planted in the United States as an ornamental and has escaped cultivation and naturalized in many areas of the southern U.S. and California.
301	2010. Missouri Botanical Garden. Kemper Center for home gardening <i>Albizia julibrissin</i> . Missouri Botanical Garden, http://www.mobot.org/gardeninghelp/plantfinder/plant.asp?code=A848	<i>Albizia</i> has been widely planted in the United States as an ornamental and has escaped cultivation and naturalized in many areas of the southern U.S. and California
301	2010. USDA, ARS, National Genetic Resources Program. Germplasm Resources Information Network - (GRIN) [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?28398	Widely naturalized.
302	2003. Weber, E.. <i>Invasive Plant Species of the World. A Reference Guide to Environmental Weeds..</i> CABI Publishing, Wallingford, UK	Invades forest edges, and disturbed sites.
303	2010. Randall, R.. <i>Albizia julibrissin</i> . Global Compendium of Weeds, http://www.hear.org/gcw/species/albizia_julibrissin/	No evidence.
304	2003. Weber, E.. <i>Invasive Plant Species of the World. A Reference Guide to Environmental Weeds..</i> CABI Publishing, Wallingford, UK	Forms dense stands that reduce light levels and nutrients and prevent the establishment of native plants.

304	2005. CAB International. Forestry Compendium. CAB International, Wallingford, UK	"Binggeli (1999) classifies <i>A. julibrissin</i> as moderately invasive. The ability of this species to grow very rapidly, resprout after damage and seed prolifically contribute to its invasiveness in favourable conditions, and sprouts can grow over 1 m in a season. <i>A. julibrissin</i> is a weed mainly in the USA where it is being monitored in 13 southern states according to USFS policy. It is a category A weed (severe threat) in Tennessee, USA where it grows along many roadside slopes, disturbed areas and stream banks. It is also regarded as one of the top ten invasive plant species in Georgia, is a category 1 (altering plant community) species on the Florida Invasives list (SE-EPPC, 2002) and is listed as moderately invasive (with minor influence on ecosystem function and plant composition) in Virginia (Virginia Department of Conservation and Recreation, 2003). In South Africa it is proposed as a category 3 weed under the Conservation of Agricultural Resources Act 1983, subject to further investigation (Henderson, 2001)."
305	2009. Tropical Biology Association. <i>Albizia chinensis</i> . Tropical Biology Association, http://www.tropical-biology.org/research/dip/species/Albizia%20chinensis.htm	<i>Albizia chinensis</i> is invasive in Hawaii and Samoa. It rapidly invades disturbed areas due to fast growth rate and prolific seed production. It creates a fire hazard to ecosystems.
401	2003. Weber, E.. Invasive Plant Species of the World. A Reference Guide to Environmental Weeds.. CAB Publishing, Wallingford, UK	A small, spreading and low-branched shrub or tree up to 16 m tall, with a broad crown and short greyish trunk. Leaves are alternate. Fruit are yellow-green flattened pods up to 15 cm long and 2-3 cm wide. Seeds are c. 3.55 mm long and 1.8 mm wide and have a hard seed coat.
402	2010. WRA Specialist. Personal Communication.	Unknown.
403	2005. CAB International. Forestry Compendium. CAB International, Wallingford, UK	Not parasitic.
404	1974. Parrotta, J.A./Wick, H.L./Walters, G.A.. <i>Albizia Durazz</i> . Woody Plant Seed Manual. U.S. Forest Service Department of Agriculture, http://www.nsl.fs.fed.us/wpsm/index.html	Valuable species for wildlife cover or browse.
405	2010. National Center for Biotechnology Information. PubMed. U.S. National Library of Medicine, Bethesda, Maryland http://www.ncbi.nlm.nih.gov/sites/entrez	No evidence of toxicity in PubMed.
405	2010. Specialized Information Services, U.S. National Library of Medicine. TOXNET Toxicology Data Network [Online Database]. National Institutes of Health, http://toxnet.nlm.nih.gov/	No evidence of toxicity in ToxNet.
406	1993. Gilman, E.F./Watson, D.G.. <i>Albizia julibrissin mimosa</i> . Fact Sheet ST-68: .Institute of Food and Agricultural Science, University of Florida, Gainesville http://hort.ifas.ufl.edu/database/documents/pdf/tree_fact_sheets/albjula.pdf	This species harbors insect (webworm) and disease (vascular wilt) problems. Mimosa (Fusarium) wilt is quite a problem and is fatal. It can spread to adjacent Mimosa trees by root grafts. Problems include cottony cushion scale, mites, Mimosa webworm.
406	2005. CAB International. Forestry Compendium. CAB International, Wallingford, UK	Mimosa wilt, caused by the fungus <i>Fusarium oxysporum</i> f.sp. <i>perniciosum</i> , attacks the tree through the root system and may kill it. This disease is a real problem in the USA where resistant cultivars such as 'Charlotte' and 'Tryon' should be planted. Other wilt diseases include those caused by fungi of the genus <i>Phomopsis</i> , <i>Nectria</i> or <i>Verticillium</i> . The tree is also attacked by <i>Flammulina velutipes</i> , cause of stem rot. The leaves can be attacked by fungi such as <i>Septoria curvata</i> , which causes brown spots on the leaves and leaf fall, and by insects including aphids, cochineals and Coleoptera such as <i>Cossus cossus</i> or <i>Zeuzera pyrina</i> , which dig tunnels in branches and stems causing desiccation and breaking off. <i>A. julibrissin</i> is resistant to honey fungus (<i>Armillaria</i> sp.)
407	2005. CAB International. Forestry Compendium. CAB International, Wallingford, UK	"Young leaves are cooked and used as pot herbs, while cooked flowers are eaten as vegetables. Dried leaves are used as a tea substitute. In China, the flower heads are used as carminative, digestive, sedative and tonic and in the treatment of insomnia, irritability and breathlessness. The bark is anthelmintic, carminative, diuretic, sedative and vermifuge. It is used internally in the treatment of insomnia, irritability, boils and carbuncles and is applied externally to injuries and swellings. A gummy extract obtained from the plant is used as a plaster for abscesses and also as a retentive in fractures and sprains (PFAF, 1999). Leaves provide a useful soil ameliorant when incorporated or applied as a mulch (Jordan, 2004)"

408	2005. CAB International. Forestry Compendium. CAB International, Wallingford, UK	[Possibly] The litter problem of the blooms, leaves, twigs and long seedpods requires consideration when planting this tree.
409	1993. Gilman,E.F./Watson,D.G.. Albizia julibrissin mimosa. Fact Sheet ST-68: .Institute of Food and Agricultural Science, University of Florida, Gainesville http://hort.ifas.ufl.edu/database/documents/pdf/tree_fact_sheets/albjula.pdf	Tree grows in full sun.
409	2010. Missouri Botanical Garden. Kemper Center for home gardening Albizia julibrissin. Missouri Botanical Garden, http://www.mobot.org/gardeninghelp/plantfinder/plant.asp?code=A848	Tolerates full sun to part shade.
410	1993. Gilman,E.F./Watson,D.G.. Albizia julibrissin mimosa. Fact Sheet ST-68: .Institute of Food and Agricultural Science, University of Florida, Gainesville http://hort.ifas.ufl.edu/database/documents/pdf/tree_fact_sheets/albjula.pdf	Soil tolerances: clay, loam, sand, slightly alkaline, acidic, occasionally wet, well-drained.
410	2003. Weber, E.. Invasive Plant Species of the World. A Reference Guide to Environmental Weeds.. CABI Publishing, Wallingford, UK	Well-adapted to poor soils.
411	2003. Weber, E.. Invasive Plant Species of the World. A Reference Guide to Environmental Weeds.. CABI Publishing, Wallingford, UK	Tree.
412	2003. Weber, E.. Invasive Plant Species of the World. A Reference Guide to Environmental Weeds.. CABI Publishing, Wallingford, UK	Forms dense stands.
501	2003. Weber, E.. Invasive Plant Species of the World. A Reference Guide to Environmental Weeds.. CABI Publishing, Wallingford, UK	Tree. Terrestrial.
502	2003. Weber, E.. Invasive Plant Species of the World. A Reference Guide to Environmental Weeds.. CABI Publishing, Wallingford, UK	Fabaceae.
503	2003. Weber, E.. Invasive Plant Species of the World. A Reference Guide to Environmental Weeds.. CABI Publishing, Wallingford, UK	Nitrogen fixing.
504	2003. Weber, E.. Invasive Plant Species of the World. A Reference Guide to Environmental Weeds.. CABI Publishing, Wallingford, UK	Tree.
601	2010. WRA Specialist. Personal Communication.	No evidence.
602	1993. Gilman,E.F./Watson,D.G.. Albizia julibrissin mimosa. Fact Sheet ST-68: .Institute of Food and Agricultural Science, University of Florida, Gainesville http://hort.ifas.ufl.edu/database/documents/pdf/tree_fact_sheets/albjula.pdf	Readily germinates from abundant seeds.
603	2008. Cook, W.. Hybrid Mimosa (Albizia kalkora x julibrissin). Duke University, http://www.duke.edu/~cwcook/trees/alkaju.html	Hybrids of Albizia kalkora and Albizia julibrissin are found in a small area on and near the Duke University campus in North Carolina.
604	1997. Godt, M.J.W.. Estimation of mating system parameter of Albizia julibrissin (Fabaceae). Forest Genetics. 4: 217-221.	" Quantitative estimates of the mating system of Albizia julibrissin, an entomophilous mimosoid leguminous tree, were obtained using six polymorphic allozyme markers. Thirty-six progeny from 24 to 25 maternal families from each of three Georgia populations were analyzed. Despite life history characteristics and pollinator behavior that suggest a potential for inbreeding, mean single and multilocus outcrossing rates did not differ significantly from 1.0 for any population, or for any maternal family. These results strongly suggest that mimosa is self-incompatible."
605	2005. CAB International. Forestry Compendium. CAB International, Wallingford, UK	Flowers are light pink, in terminal clusters of dense heads, each terminating in a stalk. The stamens are numerous and very long, jutting out from the corolla

605	2010. Missouri Botanical Garden. Kemper Center for home gardening Albizia julibrissin. Missouri Botanical Garden, http://www.mobot.org/gardeninghelp/plantfinder/plant.asp?code=A848	Flowers are fragrant and attractive to bees.
606	2003. Weber, E.. Invasive Plant Species of the World. A Reference Guide to Environmental Weeds.. CABI Publishing, Wallingford, UK	The ability of this species to grow very rapidly, resprout after damage and seed prolifically contribute to its invasiveness in favourable conditions, and sprouts can grow over 1 m in a season
606	2009. Southeast Exotic Pest Plant Council. Mimosa Albizia julibrissin Durazz. Southeast Exotic Pest Plant Council, http://www.se-eppc.org/manual/mimosa.html	Albizia spreads by root suckering.
607	2003. Weber, E.. Invasive Plant Species of the World. A Reference Guide to Environmental Weeds.. CABI Publishing, Wallingford, UK	Fast growing.
607	2005. CAB International. Forestry Compendium. CAB International, Wallingford, UK	Albizia julibrissin is a fast growing tree, sprouts can grow more than 1 m in a vegetative season.
607	2010. Missouri Botanical Garden. Kemper Center for home gardening Albizia julibrissin. Missouri Botanical Garden, http://www.mobot.org/gardeninghelp/plantfinder/plant.asp?code=A848	Fast growing.
701	2009. Southeast Exotic Pest Plant Council. Mimosa Albizia julibrissin Durazz. Southeast Exotic Pest Plant Council, http://www.se-eppc.org/manual/mimosa.html	Albizia is often spread by seed brought in on fill dirt.
702	2010. Missouri Botanical Garden. Kemper Center for home gardening Albizia julibrissin. Missouri Botanical Garden, http://www.mobot.org/gardeninghelp/plantfinder/plant.asp?code=A848	Albizia has been widely planted in the United States as an ornamental and has escaped cultivation and naturalized in many areas of the southern U.S. and California
703	2005. CAB International. Forestry Compendium. CAB International, Wallingford, UK	Unlikely, although It is a widely planted ornamental in temperate and tropical zones and is considered a potential agroforestry tree.
704	1993. Robinson, G.R./Handel, S.N.. Forest restoration on a closed landfill: rapid addition of new species by bird dispersal. Conservation Biology. 7: 271-278.	Wind dispersed.
704	1997. Godt, M.J.W.. Estimation of mating system parameter of Albizia julibrissin (Fabaceae). Forest Genetics. 4: 217-221.	"Biparental inbreeding was insignificant even though seed dispersal via wind-dispersed pods suggests that related individuals may establish in close proximity to one another."
705	2010. Missouri Botanical Garden. Kemper Center for home gardening Albizia julibrissin. Missouri Botanical Garden, http://www.mobot.org/gardeninghelp/plantfinder/plant.asp?code=A848	It can be quite invasive in watersheds where water currents carry and distribute the seeds downstream.
706	2005. CAB International. Forestry Compendium. CAB International, Wallingford, UK	The fruit is a brown, flat pod, 15 cm long, constricted between the seeds, which remains on the plant until the following spring
707	2005. CAB International. Forestry Compendium. CAB International, Wallingford, UK	The fruit is a brown, flat pod, 15 cm long, constricted between the seeds, which remains on the plant until the following spring
708	2010. WRA Specialist. Personal Communication.	Unknown.
801	2003. Weber, E.. Invasive Plant Species of the World. A Reference Guide to Environmental Weeds.. CABI Publishing, Wallingford, UK	Large seed production.
801	2005. CAB International. Forestry Compendium. CAB International, Wallingford, UK	Large seed production.
802	1974. Parrotta, J.A./Wick, H.L./Walters, G.A.. Albizia Durazz. Woody Plant Seed Manual. U.S. Forest Service Department of Agriculture, http://www.nsl.fs.fed.us/wpsm/index.html	Albizia seeds are orthodox in nature. Germination of albizia seeds is slow because of their impermeable seedcoats. Dormancy can be broken either by mechanical scarification, sulfuric acid scarification, or soaking in water.
802	2005. CAB International. Forestry Compendium. CAB International, Wallingford, UK	Seeds of Albizia julibrissin have an impermeable coat and can remain dormant for years.

802	2009. Tropical Biology Association. <i>Albizia chinensis</i> . Tropical Biology Association, http://www.tropical-biology.org/research/dip/species/Albizia%20chinensis.htm	<i>Albizia chinensis</i> seeds last for 5 years in the seed bank.
803	2003. Weber, E.. Invasive Plant Species of the World. A Reference Guide to Environmental Weeds.. CABI Publishing, Wallingford, UK	Effective herbicides for treating cut stumps or seedlings and saplings are glyphosate or triclopyr.
803	2009. Southeast Exotic Pest Plant Council. <i>Mimosa Albizia julibrissin</i> Durazz. Southeast Exotic Pest Plant Council, http://www.se-eppc.org/manual/mimosa.html	Basal Bark Method: This method is effective throughout the year as long as the ground is not frozen. Apply a mixture of 25% triclopyr and 75% horticultural oil to the basal parts of the tree to a height of 30-38 cm (12-15 in) from the ground. Thorough wetting is necessary for good control; spray until run-off is noticeable at the ground line
804	2003. Weber, E.. Invasive Plant Species of the World. A Reference Guide to Environmental Weeds.. CABI Publishing, Wallingford, UK	The ability to resprout after damage makes it a strong competitor.
805	2005. CAB International. Forestry Compendium. CAB International, Wallingford, UK	A species of bruchid seed beetle may be a promising agent for biological control.
805	2009. Southeast Exotic Pest Plant Council. <i>Mimosa Albizia julibrissin</i> Durazz. Southeast Exotic Pest Plant Council, http://www.se-eppc.org/manual/mimosa.html	Mimosa Wilt: <i>Fusarium oxysporum</i> f. <i>perniciosum</i> is a fungus that attacks mimosa in the U.S. and is transferred through the soil. It infects its host through the root system and may be fatal to the tree. It is not used at present and further research is needed.