

Albizia julibrissin

Mimosa, silk tree

Introduction

The genus *Albizia* (also *Albizzia*) consists of approximately 150 species distributed in Asia, Africa, Australia, and tropical and subtropical America. Most species are deciduous woody trees and shrubs. They are easily identified by their bipinnately compound leaves. Several *Albizia* species are planted as ornamentals or as a source of tannin extracts. Seventeen species of *Albizia* occur in China, primarily in the southwestern, southern, and southeastern provinces [74][155].

Species of *Albizia* in China [155]

Scientific Name	Scientific Name
<i>A. atopeuensis</i> (Pierre) Nielsen	<i>A. kalkora</i> (Roxb.) Prain
<i>A. bracteata</i> Dunn	<i>A. lebbeck</i> (Linn.) Benth.
<i>A. calcarea</i> Y. H. Huang	<i>A. lucidior</i> (Steud.) Nielsen
<i>A. chinensis</i> (Osbeck) Merr.	<i>A. mollis</i> (Wall.) Boiv.
<i>A. corniculata</i> (Lour.) Druce	<i>A. odoratissima</i> (Linn. f.) Benth.
<i>A. crassiramea</i> Lace	<i>A. procera</i> (Roxb.) Benth.
<i>A. duclouxii</i> Gagnep.	<i>A. sherriffii</i> Baker
<i>A. falcataria</i> (Linn.) Fosberg	<i>A. simeonis</i> Harms
<i>A. julibrissin</i> Durazz.	

Taxonomy:

FAMILY: Leguminosae (Fabaceae)

Genus: *Albizia* Durazz.

Description

Albizia julibrissin is a woody tree with a spreading crown and ridged twigs. It can grow to 16 m tall at maturity. The stems contain many stiff, appressed hairs. Leaves are fern-like, bipinnately compound with 4-12 pairs of pinnae (sometimes 20 pairs in cultivated specimens), with linear lance-shaped stipules and one gland near the base of the rachis (central petiole). Each pinna consists of 10-30 pairs of linear to oblong leaflets that are 6-12 mm



long, 1-4 mm wide, and obliquely acute towards the apex. From June to July, a head inflorescence of attractive pink flowers is produced at the top of the

Leaves and fruits of *Albizia julibrissin*. (Photo by Chuck Barger, UGA.)

northeastern, southwestern, and southern China [155]. Due to its wide cultivation, *A. julibrissin* can be found in almost every province except Hainan [159], Inner Mongolia [119], Heilongjiang [45], and Jilin provinces [45].

Economic Importance

Because of its graceful flowers and umbrella-like canopy, *Albizia julibrissin* has been widely planted as an ornamental tree for landscaping along roads. Its wood can be used for building and

branch. The calyx is 3 mm long and tube-like; the corolla is 8 mm long and tri-lobed. The seeds are contained in elongate, flattened pods that mature from August to October, measuring 9-15 cm long and 1.5-2.5 wide [155].

Habitat

Mimosa trees often grow on hillsides, in valleys, and on plains. Because it is fast-growing and drought-tolerant, *A. julibrissin* is also widely planted along roadways or in gardens for ornamental purposes. It is also grown in sandy areas to prevent erosion [74][111][155].

Distribution

A. julibrissin's native range covers

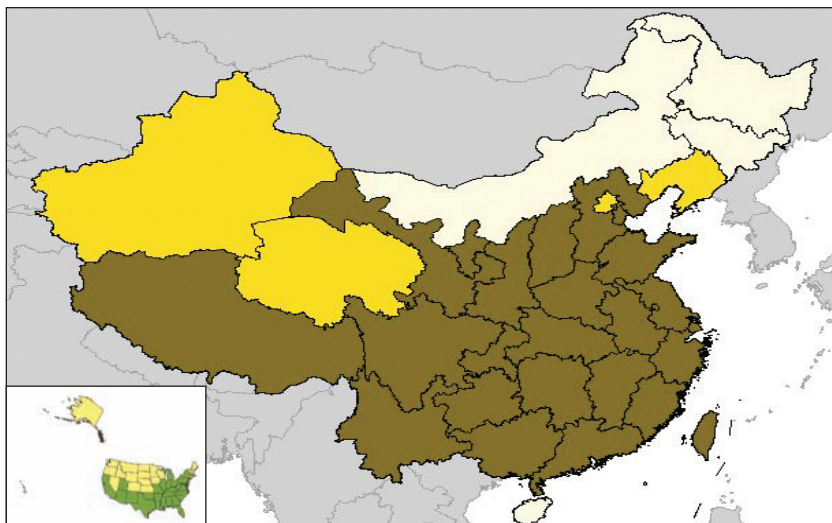


A. julibrissin flowers. (Photo Ted Bodner, Southern Weed Science Society.)

furniture-making. The young leaves are edible. The bark has been utilized as an insect repellent, and as medicine [74] [155].

Related Species

As a cultivated variety, *A. julibrissin* Durazz f. *rosae* (Carr.) Rehd grows in a relatively small form and produces light pink flowers. *Albizia chinensis* (Osbeck) Merr., with similar economic importance to *A. julibrissin*, is distinguished from mimosa by its semicordate stipules and greenish white flowers. *Albizia chinensis* occurs in the provinces of Fujian, Guangdong, Guangxi, Hunan, Tibet, and Yunnan^[155].



Natural Enemies of Albizia

Nine fungal species are recorded from plants of the genus *Albizia*. *Ravenelia japonica* is known to infect *A. julibrissin*.

Seventy-five arthropod species belonging to 27 families and 6 orders are associated with *Albizia* spp. Five insects may be host-specific to *A. julibrissin*.

Fungi

Phylum	Family	Species	H.R.	Ref.
Basidiomycota	Ganodermataceae	<i>Ganoderma tropicum</i> (Jungh.) Bres.	po	23
	Hymenochaetaceae	<i>Phellinus torulosus</i> (Pers.) Bourdot & Galzin	po	23
		<i>Xanthochrous hispidus</i> (Bull.) Pat.	po	23
	Polyporaceae	<i>Lenzites shichiana</i> (Teng & L. Ling) Teng	oo	23
	Raveneliaceae	<i>Ravenelia japonica</i> Dietel & P. Syd.	o	23
		<i>Ravenelia sessilis</i> Berk.	oo	23
Sphaerophragmiaceae	<i>Sphaerophragmium acaciae</i> (Cooke) Magnus	oo	23	
Anamorphic <i>Glomerella</i>		<i>Colletotrichum lebbek</i> (Syd.) Petr.	mo	23
Anamorphic <i>Mycosphaerella</i>		<i>Pseudocercospora glaucae</i> (Syd.) Y.L. Guo & X.J. Liu	mo	23 [†]
			oo	110

[†] Recorded as *Cercospora glauca* Syd.

Arthropods (next page)

Order	Family	Species	H. R.	Ref.	
Coleoptera	Bruchidae	<i>Bruchidius terrenus</i> (Sharp)	m	139	
	Cerambycidae	<i>Acalolepta permutans</i> (Pascoe)	po	158	
		<i>Cacia cretifera</i> Hope	po	124	
		<i>Ceresium leucosticticum</i> White	po	124	
		<i>Chlorophorus miwai</i> Gressitt	p	85	
		<i>Coptops leucostictica leucostictica</i> White	po	124	
			po	124	
		<i>Dere thoracica</i> White	p	9	
			p	85	
		<i>Derolus volvulus</i> (Fabricius)	po	9	
		<i>Pterolophia rigida</i> (Bates)	p	9	
		<i>Rhaphuma horsfieldi</i> (White)	po	124	
		<i>Xystrocera festiva</i> Thomson	po	79	
	<i>Xystrocera globosa</i> (Olivier)	p	9		
		m	85		
	Chrysomelidae	<i>Paropsides nigrofasciata</i> (Jacoby)	m	65	
			m	85	
			mo	185	
	Crioceridae	<i>Sagra fulgida janthina</i> Chen	p	85	
	Eumolpidae	<i>Trichochrysea imperialis</i> (Baly)	po	65	
			po	139	
<i>Trichochrysea nitidissima</i> (Jacoby)		po	65		
		po	139		
Scolytidae	<i>Trypodendron lineatum</i> Olivier	p	85		
	<i>Xyleborus andrewesi</i> Blandford	mo	182		
Hemiptera	Coreidae	<i>Anoplocnemis phasiana</i> (Fabricius)	p	85	
			p	140	
			p	192	
		<i>Homoeocerus striicornis</i> Scott	po	85	
			p	192	
			<i>Homoeocerus walkeri</i> Kirby	oo	192
			<i>Homoeocerus walkerianus</i> Lethierry et Severin	p	65
	p	85			
	<i>Sinotagus nasutus</i> Kiritschenko	p	193		
	Pentatomidae	<i>Erthesina fullo</i> (Thunberg)	p	85	
	Plataspidae	<i>Coptosoma davidi</i> Montandon	m	193	
			<i>Coptosoma intermedia</i> Yang	p	193
			<i>Coptosoma notabilis</i> Montandon	p	65
			<i>Megacopta distanti</i> (Montandon)	p	65
<i>Paracopta maculata</i> Hsiao et Jen			mo	193	
<i>Paracopta rufiscuta</i> Hsiao et Jen			po	193	
Homoptera	Asterolecaniidae	<i>Russellaspis pustulans</i> (Cockerell)	po	151	
	Coccidae	<i>Eulecanium</i> sp.	m	85	
		<i>Takahashia wuchangensis</i> Tseng	m	85	
	Fulgoridae	<i>Lycorma delicatula</i> (White)	p	140	
			p	204	
	Lecanodiaspididae	<i>Cosmococcus albizziae</i> Borchsenius	mo	151	
	Margarodidae	<i>Laccifer lacca</i> (Kerr)	p	85	
	Pseudococcidae	<i>Paraputo albizzicola</i> Borchsenius	mo	150	
	Psyllidae	<i>Acizzia albizzicola</i> Li et Yang	mo	140	
m			65		
<i>Psylla yamatonica</i> Kuwayama			m	137	
<i>Psylla yamatonica</i> Kuwayama	m	85			

Order	Family	Species	H. R.	Ref.	
Isoptera	Termitidae	<i>Odontotermes formosanus</i> (Shiraki)	p	85	
Lepidoptera	Geometridae	<i>Culcula panterinaria</i> (Bremer et Grey)	p	66	
		<i>Semiothisa defixaria</i> Walker	m	85	
	Lycaenidae	<i>Amblopala avidiena avidiena</i> (Hewitson)	m	158	
		<i>Leptotes plinius</i> (Fabricius)	po	203	
	Noctuidae			po	65
			<i>Dinumma deponens</i> Walker	po	85
				po	158
			<i>Enmonodia feniseca</i> Guenée	po	141
			<i>Hypopyra vespertilio</i> (Fabricius)	po	85*
			<i>Hyospila signipalpis</i> (Walker)	m	65
				m	141
			<i>Selepa celtis</i> Moore	m	85
			<i>Speiredonia martha</i> (Butler)	m	85
				m	209
				m	85
			<i>Speiredonia retorta</i> Linnaeus	m	141
				m	205
			<i>Spirama martha</i> (Butler)	m	65
		<i>Spirama retorta</i> (Linnaeus)	m	65	
			m	158	
	Nymphalidae		<i>Charaxes bernardus</i> (Fabricius)	po	203
			<i>Neptis hylas</i> (Linnaeus)	p	85
			<i>Neptis sappho intermedia</i> (Pallas)	po	85
			<i>Pantoporia hordonia</i> (Stoll)	po	203
			<i>Polyura athamas</i> (Drury)	po	203
			<i>Polyura eudamippus cupidinius</i> (Fruhstorfer)	po	203
			<i>Polyura eudamippus</i> Doubledaly	p	158
			<i>Polyura narcaea</i> (Hewitson)	po	158
			<i>Polyura nepenthes</i> (Grose-Smith)	m	158
Pieridae		<i>Eurema hecabe</i> (Linnaeus)	p	85	
			p	158	
		<i>Eurema hecabe hobsoni</i> (Butler)	p	203	
Pyalidae		<i>Longiculcita vinaceella abstractella</i> Roesler	po	65	
Saturniidae			po	65	
		<i>Attacus atlas</i> (Linnaeus)	p	207	
Tortricidae		<i>Cryptophlebia ombrodelta</i> (Lower)	p	113	
		<i>Pandemis corylana</i> (Fabricius)	p	113	
Thysanoptera	Phlaeothripidae	<i>Haplothrips chinensis</i> Priesner	p	132	
		<i>Haplothrips kurdjumovi</i> Karny	p	132	
	Thripidae	<i>Ajothrips</i> sp.	m	132	
		<i>Frankliniella intonsa</i> (Trybom)	p	132	
		<i>Thrips flavus</i> Schrank	p	132	
	<i>Thrips florum</i> Schmutz	m	132		

*Recorded as *Enmonoda vespertilio* Fabricius