

**Family:** *Areaceae*

**Taxon:** *Livistona saribus*

**Synonym:** *Corypha saribus* Lour. (*basionym*)  
*Livistona cochinchinensis* (Blume) Mart.  
*Livistona hoogendorpii* Teijsm. & Binn. ex Mi  
*Saribus cochinchinensis* Blume

**Common Name:** taraw palm  
 serdang  
 Taraw-Livingstonpalme

Questionnaire :	current 20090513	Assessor:	Patti Clifford	Designation:	EVALUATE
Status:	Assessor Approved	Data Entry Person:	Patti Clifford	WRA Score	6
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		n
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		n
301	Naturalized beyond native range		y = 1*multiplier (see Appendix 2), n= question 205		n
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)		n
305	Congeneric weed		n=0, y = 1*multiplier (see Appendix 2)		y
401	Produces spines, thorns or burrs		y=1, n=0		y
402	Allelopathic		y=1, n=0		
403	Parasitic		y=1, n=0		n
404	Unpalatable to grazing animals		y=1, n=-1		
405	Toxic to animals		y=1, n=0		n
406	Host for recognized pests and pathogens		y=1, n=0		
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		n
409	Is a shade tolerant plant at some stage of its life cycle		y=1, n=0		y

410	Tolerates a wide range of soil conditions (or limestone conditions if not a volcanic island)	y=1, n=0	
411	Climbing or smothering growth habit	y=1, n=0	n
412	Forms dense thickets	y=1, n=0	
501	Aquatic	y=5, n=0	n
502	Grass	y=1, n=0	n
503	Nitrogen fixing woody plant	y=1, n=0	n
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	
604	Self-compatible or apomictic	y=1, n=-1	
605	Requires specialist pollinators	y=-1, n=0	n
606	Reproduction by vegetative fragmentation	y=1, n=-1	
607	Minimum generative time (years)	1 year = 1, 2 or 3 years = 0, 4+ years = -1	
701	Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)	y=1, n=-1	n
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	n
705	Propagules water dispersed	y=1, n=-1	y
706	Propagules bird dispersed	y=1, n=-1	y
707	Propagules dispersed by other animals (externally)	y=1, n=-1	n
708	Propagules survive passage through the gut	y=1, n=-1	y
801	Prolific seed production (>1000/m2)	y=1, n=-1	
802	Evidence that a persistent propagule bank is formed (>1 yr)	y=1, n=-1	
803	Well controlled by herbicides	y=-1, n=1	
804	Tolerates, or benefits from, mutilation, cultivation, or fire	y=1, n=-1	
805	Effective natural enemies present locally (e.g. introduced biocontrol agents)	y=-1, n=1	

Designation: EVALUATE

WRA Score 6

## Supporting Data:

101	2004. Palm Society Northern California Chapter. <i>Livistona saribus</i> [Accessed 16 November 2012]. <a href="http://www.palmsnc.org/pages/palm_detail.php?id=44">http://www.palmsnc.org/pages/palm_detail.php?id=44</a>	[Is the species highly domesticated? No] <i>Livistona saribus</i> has only been in cultivation for a few years and not much is known about the characteristics of this species. Specimens are available on a limited basis.
101	2012. WRA Specialist. Personal Communication.	[Is the species highly domesticated? No] No evidence of domestication that reduces invasive traits.
102	2012. WRA Specialist. Personal Communication.	[Has the species become naturalized where grown? NA]
103	2012. WRA Specialist. Personal Communication.	[Does the species have weedy races? NA]
201	2012. USDA ARS National Genetic Resources Program. Germplasm Resources Information Network - (GRIN). <a href="http://www.ars-grin.gov/cgi-bin/npgs/html/index.pl">http://www.ars-grin.gov/cgi-bin/npgs/html/index.pl</a>	[Species suited to tropical or subtropical climate(s) - If island is primarily wet habitat, then substitute "wet tropical" for "tropical or subtropical" ? 2- High] Native region: Indonesia; Philippines.
202	2012. USDA ARS National Genetic Resources Program. Germplasm Resources Information Network - (GRIN). <a href="http://www.ars-grin.gov/cgi-bin/npgs/html/index.pl">http://www.ars-grin.gov/cgi-bin/npgs/html/index.pl</a>	[Quality of climate match data? 2 High] Native region: Indonesia; Philippines.
203	2012. Dave's Garden. PlantFiles: <i>Livistona saribus</i> [Accessed 16 November 2012]. <a href="http://davesgarden.com/guides/pf/go/58170/">http://davesgarden.com/guides/pf/go/58170/</a>	[Broad climate suitability (environmental versatility)? No] Hardiness: USDA Zone 9b: to -3.8 °C (25 °F) USDA Zone 10a: to -1.1 °C (30 °F) USDA Zone 10b: to 1.7 °C (35 °F) USDA Zone 11: above 4.5 °C (40 °F)
203	2012. eFloras. Flora of China Vol. 23 - Arecaceae - <i>Livistona</i> [Accessed 14 November 2012]. <a href="http://www.efloras.org/florataxon.aspx?flora_id=2&amp;taxon_id=200027088">http://www.efloras.org/florataxon.aspx?flora_id=2&amp;taxon_id=200027088</a>	[Broad climate suitability (environmental versatility)?] Lowland rain forests or dry forests, often in periodically inundated habitats; below 600-1100 m. Guangdong, Yunnan [Borneo, Cambodia, Indonesia (Java, Sumatra), Laos, Malaysia (Peninsular), Philippines, Thailand, Vietnam].
204	2012. USDA ARS National Genetic Resources Program. Germplasm Resources Information Network - (GRIN). <a href="http://www.ars-grin.gov/cgi-bin/npgs/html/index.pl">http://www.ars-grin.gov/cgi-bin/npgs/html/index.pl</a>	[Native or naturalized in regions with tropical or subtropical climates? Yes] Native region: Indonesia; Philippines.
205	2004. Palm Society Northern California Chapter. <i>Livistona saribus</i> [Accessed 16 November 2012]. <a href="http://www.palmsnc.org/pages/palm_detail.php?id=44">http://www.palmsnc.org/pages/palm_detail.php?id=44</a>	[Does the species have a history of repeated introductions outside its natural range? No] <i>Livistona saribus</i> has only been in cultivation for a few years and not much is known about the characteristics of this species. Specimens are available on a limited basis.
301	2012. Randall, R.P.. A Global Compendium of Weeds. 2nd Edition. Department of Agriculture and Food, Western Australia	[Naturalized beyond native range? No] No evidence of naturalization.
302	2012. Randall, R.P.. A Global Compendium of Weeds. 2nd Edition. Department of Agriculture and Food, Western Australia	[Garden/amenity/disturbance weed? No] No evidence. The Global Compendium of Weeds lists this species as invasive based on Svenning, J.C. 2002. Non-native ornamental palms invade a secondary tropical forest in Panama. <i>Palms</i> . 46(2): 81-86. However the article states: "while <i>Livistona saribus</i> has no adults in the forest, it is abundant as well established, small to massive (leaves reaching 3-5 m in height) juveniles in much of the forest (despite only a limited number of adults in Gamboa). It seems likely that at least some of these juveniles will be able to reach maturity and thus it may simply be a question of time before <i>Livistona saribus</i> becomes naturalized, too."
303	2012. Randall, R.P.. A Global Compendium of Weeds. 2nd Edition. Department of Agriculture and Food, Western Australia	[Agricultural/forestry/horticultural weed? No] No evidence.
304	2012. Randall, R.P.. A Global Compendium of Weeds. 2nd Edition. Department of Agriculture and Food, Western Australia	[Environmental weed? No] No evidence.

305	2001. Langeland, K.A./Stocker, R.K.. Control of Non-native Plants in Natural Areas of Florida. Institute of Food & Agricultural Sciences, University of Florida, Gainesville, FL <a href="http://mrec.ifas.ufl.edu/ldspmgmt/Ldsp%20Turf%20Mgmt/PDFfiles/WG20900.pdf">http://mrec.ifas.ufl.edu/ldspmgmt/Ldsp%20Turf%20Mgmt/PDFfiles/WG20900.pdf</a>	[Congeneric weed? Yes] <i>Livistona chinensis</i> is an invasive weed in natural areas in Florida.
305	2011. Florida Exotic Pest Plant Council. Florida EPPC's 2011 Invasive Plant Species List. <a href="http://www.fleppc.org/list/11list.html">http://www.fleppc.org/list/11list.html</a>	[Congeneric weed? Yes] <i>Livistona chinensis</i> is noted as invasive in Florida. It is spreading and abundant but has not caused ecological damage.
401	2012. Dave's Garden. PlantFiles: <i>Livistona saribus</i> [Accessed 16 November 2012]. <a href="http://davesgarden.com/guides/pf/go/58170/">http://davesgarden.com/guides/pf/go/58170/</a>	[Produces spines, thorns or burrs? Yes] Plant has spines or sharp edges; use extreme caution when handling.
401	2012. eFloras. Flora of China Vol. 23 - Areaceae - <i>Livistona</i> [Accessed 14 November 2012]. <a href="http://www.efloras.org/florataxon.aspx?flora_id=2&amp;taxon_id=200027088">http://www.efloras.org/florataxon.aspx?flora_id=2&amp;taxon_id=200027088</a>	[Produces spines, thorns or burrs? Yes] "Stems to 40 m tall, to 65 cm in diam., rough with leaf scars. Leaves palmate; petioles 1-2 m, with green to brown, recurved spines along margins, spines denser proximally, fewer distally on petioles; blades almost circular in outline, 1.5-1.7 m wide, green adaxially and abaxially, irregularly divided for up to 1/2 their length into 80-90 segments, segments in groups, each group separated by a split almost to base of leaf, segments deeply split and pendulous at apices. "
402	2012. WRA Specialist. Personal Communication.	[Allelopathic? Unknown]
403	2010. Nickrent, D.. The parasitic plant connection. Department of Plant Biology, Southern Illinois University, Carbondale <a href="http://www.parasiticplants.siu.edu/index.html">http://www.parasiticplants.siu.edu/index.html</a>	[Parasitic? No] Not a parasitic plant family.
404	2012. WRA Specialist. Personal Communication.	[Unpalatable to grazing animals? Unknown]
405	2008. Wagstaff, D.J.. International poisonous plants checklist: an evidence-based reference. CRC Press, Boca Raton, FL <a href="http://books.google.com/books?id=h7tbd-5ZAQ8C&amp;pg=PR12&amp;lpg=PR12&amp;dq=international+poisonous+plants+checklist&amp;source=bl&amp;ots=Rnb4alCewG&amp;sig=">http://books.google.com/books?id=h7tbd-5ZAQ8C&amp;pg=PR12&amp;lpg=PR12&amp;dq=international+poisonous+plants+checklist&amp;source=bl&amp;ots=Rnb4alCewG&amp;sig=</a>	[Toxic to animals? No] No evidence.
405	2012. National Center for Biotechnology Information. PubMed. <a href="http://www.ncbi.nlm.nih.gov/sites/entrez">http://www.ncbi.nlm.nih.gov/sites/entrez</a>	[Toxic to animals? No] No evidence.
405	2012. Specialized Information Services, U.S. National Library of Medicine. TOXNET toxicology data network [online database]. National Institutes of Health, <a href="http://toxnet.nlm.nih.gov/">http://toxnet.nlm.nih.gov/</a>	[Toxic to animals? No] No evidence.
406	2012. WRA Specialist. Personal Communication.	[Host for recognized pests and pathogens? Unknown]
407	2006. Giesen, W./Wulffraat, S./Zieren, M./Scholten, L.. Mangrove Guidebook for Southeast Asia. Food and Agriculture Organization of the United Nations, Bangkok, Thailand	[Causes allergies or is otherwise toxic to humans? No] The palm cabbage, fruits and seeds are edible. Timber used in construction. Stems are used as masts for sailing vessels (South Borneo).
407	2008. Wagstaff, D.J.. International poisonous plants checklist: an evidence-based reference. CRC Press, Boca Raton, FL <a href="http://books.google.com/books?id=h7tbd-5ZAQ8C&amp;pg=PR12&amp;lpg=PR12&amp;dq=international+poisonous+plants+checklist&amp;source=bl&amp;ots=Rnb4alCewG&amp;sig=">http://books.google.com/books?id=h7tbd-5ZAQ8C&amp;pg=PR12&amp;lpg=PR12&amp;dq=international+poisonous+plants+checklist&amp;source=bl&amp;ots=Rnb4alCewG&amp;sig=</a>	[Causes allergies or is otherwise toxic to humans? No] No evidence.
407	2012. National Center for Biotechnology Information. PubMed. <a href="http://www.ncbi.nlm.nih.gov/sites/entrez">http://www.ncbi.nlm.nih.gov/sites/entrez</a>	[Causes allergies or is otherwise toxic to humans? No] No evidence.
407	2012. Specialized Information Services, U.S. National Library of Medicine. TOXNET toxicology data network [online database]. National Institutes of Health, <a href="http://toxnet.nlm.nih.gov/">http://toxnet.nlm.nih.gov/</a>	[Causes allergies or is otherwise toxic to humans? No] No evidence.
408	2012. WRA Specialist. Personal Communication.	[Creates a fire hazard in natural ecosystems? No] No evidence.

409	2008. Renuka, C.. KFRI Palmetum (Final report of the project KFRI 444/04-Strengthening and enriching the Palmetum). Kerala Forest Research Institute, Kerala	[Is a shade tolerant plant at some stage of its life cycle? Yes] Young plants need protection from light.
409	2012. Dave's Garden. PlantFiles: Livistona saribus [Accessed 16 November 2012]. <a href="http://davesgarden.com/guides/pf/go/58170/">http://davesgarden.com/guides/pf/go/58170/</a>	[Is a shade tolerant plant at some stage of its life cycle? Yes] Sun Exposure: Sun to Partial Shade Light Shade Partial to Full Shade
410	2011. Theilade, I./Schmidt, L./Chhang, P./McDonald, J.A.. Evergreen swamp forest in Cambodia: floristic composition, ecological characteristics, and conservation status. Nordic Journal of Botany. 29: 71-80.	[Tolerates a wide range of soil conditions (or limestone conditions if not a volcanic island)?] Livistona saribus is found on alluvial sandy soils in Cambodia.
410	2012. Dave's Garden. PlantFiles: Livistona saribus [Accessed 16 November 2012]. <a href="http://davesgarden.com/guides/pf/go/58170/">http://davesgarden.com/guides/pf/go/58170/</a>	[Tolerates a wide range of soil conditions (or limestone conditions if not a volcanic island)?] Soil pH requirements: 6.1 to 6.5 (mildly acidic) 6.6 to 7.5 (neutral) 7.6 to 7.8 (mildly alkaline)
411	2012. eFloras. Flora of China Vol. 23 - Arecaceae - Livistona [Accessed 14 November 2012]. <a href="http://www.efloras.org/florataxon.aspx?flora_id=2&amp;taxon_id=200027088">http://www.efloras.org/florataxon.aspx?flora_id=2&amp;taxon_id=200027088</a>	[Climbing or smothering growth habit? No] Palm.
412	2012. WRA Specialist. Personal Communication.	[Forms dense thickets? Unknown]
501	2012. eFloras. Flora of China Vol. 23 - Arecaceae - Livistona [Accessed 14 November 2012]. <a href="http://www.efloras.org/florataxon.aspx?flora_id=2&amp;taxon_id=200027088">http://www.efloras.org/florataxon.aspx?flora_id=2&amp;taxon_id=200027088</a>	[Aquatic? No] Palm, Arecaceae.
502	2012. eFloras. Flora of China Vol. 23 - Arecaceae - Livistona [Accessed 14 November 2012]. <a href="http://www.efloras.org/florataxon.aspx?flora_id=2&amp;taxon_id=200027088">http://www.efloras.org/florataxon.aspx?flora_id=2&amp;taxon_id=200027088</a>	[Grass? No] Arecaceae.
503	2010. www.nationmaster.com. Encyclopedia Nitrogen fixation. Nationmaster.com, <a href="http://www.nationmaster.com/encyclopedia/Nitrogen-fixation">http://www.nationmaster.com/encyclopedia/Nitrogen-fixation</a>	[Nitrogen fixing woody plant? No] Arecaceae
503	2012. eFloras. Flora of China Vol. 23 - Arecaceae - Livistona [Accessed 14 November 2012]. <a href="http://www.efloras.org/florataxon.aspx?flora_id=2&amp;taxon_id=200027088">http://www.efloras.org/florataxon.aspx?flora_id=2&amp;taxon_id=200027088</a>	[Nitrogen fixing woody plant? No] Arecaceae.
504	2012. eFloras. Flora of China Vol. 23 - Arecaceae - Livistona [Accessed 14 November 2012]. <a href="http://www.efloras.org/florataxon.aspx?flora_id=2&amp;taxon_id=200027088">http://www.efloras.org/florataxon.aspx?flora_id=2&amp;taxon_id=200027088</a>	[Geophyte (herbaceous with underground storage organs -- bulbs, corms, or tubers)? No] Palm; woody.
601	2012. WRA Specialist. Personal Communication.	[Evidence of substantial reproductive failure in native habitat? No] No evidence.
602	2008. Renuka, C.. KFRI Palmetum (Final report of the project KFRI 444/04-Strengthening and enriching the Palmetum). Kerala Forest Research Institute, Kerala	[Produces viable seed? Yes] Seeds germinate in one to two months.
602	2012. Dave's Garden. PlantFiles: Livistona saribus [Accessed 16 November 2012]. <a href="http://davesgarden.com/guides/pf/go/58170/">http://davesgarden.com/guides/pf/go/58170/</a>	[Produces viable seed? Yes] Propagate from seed.
603	2012. WRA Specialist. Personal Communication.	[Hybridizes naturally? Unknown]
604	2012. WRA Specialist. Personal Communication.	[Self-compatible or apomictic? Unknown]

605	1986. Henderson, A.. A Review of Pollination Studies in the Palmae. Botanical Review. 52: 221-259.	[Requires specialist pollinators? No] Nectar secretion and insect pollination has been reported for the genus <i>Livistona</i> in cultivated plants in Indonesia. [genus-level description]
606	2012. WRA Specialist. Personal Communication.	[Reproduction by vegetative fragmentation/ Unknown]
607	2004. Palm Society Northern California Chapter. <i>Livistona saribus</i> [Accessed 16 November 2012]. <a href="http://www.palmsnc.org/pages/palm_detail.php?id=44">http://www.palmsnc.org/pages/palm_detail.php?id=44</a>	[Minimum generative time (years)?] Slow growth rate.
607	2012. WRA Specialist. Personal Communication.	[Minimum generative time (years)? Unknown]
701	2012. WRA Specialist. Personal Communication.	[Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)? No] No evidence.
702	2012. Dave's Garden. PlantFiles: <i>Livistona saribus</i> [Accessed 16 November 2012]. <a href="http://davesgarden.com/guides/pf/go/58170/">http://davesgarden.com/guides/pf/go/58170/</a>	[Propagules dispersed intentionally by people? Yes] There are <i>Livistona saribus</i> plants at the San Diego zoo and Huntinton Gardens, California.
702	2012. East Lake Nursery. <i>Livistona saribus</i> [Accessed 16 November 2012]. <a href="http://eastlakenursery.com/plantsfieldgrown/tarawlivistonasaribus.html">http://eastlakenursery.com/plantsfieldgrown/tarawlivistonasaribus.html</a>	[Propagules dispersed intentionally by people? Yes] East Lake Nursery has <i>Livistona saribus</i> for sale.
702	2012. Garden of Delights. Guard palm - <i>Livistona saribus</i> [Accessed 16 November 2012]. <a href="http://gardenofdelights.com/livistona-saribus-guard-palm-taraw-palm.html">http://gardenofdelights.com/livistona-saribus-guard-palm-taraw-palm.html</a>	[Propagules dispersed intentionally by people? Yes] Garden of Delights has <i>Livistona</i> for sale.
703	2012. WRA Specialist. Personal Communication.	[Propagules likely to disperse as a produce contaminant? No] No evidence.
704	2012. eFloras. Flora of China Vol. 23 - Arecaceae - <i>Livistona</i> [Accessed 14 November 2012]. <a href="http://www.efloras.org/florataxon.aspx?flora_id=2&amp;taxon_id=200027088">http://www.efloras.org/florataxon.aspx?flora_id=2&amp;taxon_id=200027088</a>	[Propagules adapted to wind dispersal? No] Fruits blue or blue-gray, globose to ellipsoid, to 2.5 × 2 cm.
705	2006. Giesen, W./Wulffraat, S./Zieren, M./Scholten, L.. Mangrove Guidebook for Southeast Asia. Food and Agriculture Organization of the United Nations, Bangkok, Thailand	[Propagules water dispersed? Yes] A species of lowlands, especially lowland swamps on the landward side of mangroves. Forms extensive forests on coastal hills. Grows both in tall forests and in low shrub/grass vegetation, including seasonally swampy <i>Melaleuca</i> wooded grasslands. Mangrove associate species. [documented distribution along waterway/swamp]
706	2012. eFloras. Flora of China Vol. 23 - Arecaceae - <i>Livistona</i> [Accessed 14 November 2012]. <a href="http://www.efloras.org/florataxon.aspx?flora_id=2&amp;taxon_id=200027088">http://www.efloras.org/florataxon.aspx?flora_id=2&amp;taxon_id=200027088</a>	[Propagules bird dispersed? Yes] Fruits blue or blue-gray, globose to ellipsoid, to 2.5 × 2 cm. [Protocol states: Where there is no information on dispersal, assume 'yes' for fleshy fruits that are <3–4 cm in diameter.]
707	2012. eFloras. Flora of China Vol. 23 - Arecaceae - <i>Livistona</i> [Accessed 14 November 2012]. <a href="http://www.efloras.org/florataxon.aspx?flora_id=2&amp;taxon_id=200027088">http://www.efloras.org/florataxon.aspx?flora_id=2&amp;taxon_id=200027088</a>	[Propagules dispersed by other animals (externally)? No] Fruits blue or blue-gray, globose to ellipsoid, to 2.5 × 2 cm.
708	2012. eFloras. Flora of China Vol. 23 - Arecaceae - <i>Livistona</i> [Accessed 14 November 2012]. <a href="http://www.efloras.org/florataxon.aspx?flora_id=2&amp;taxon_id=200027088">http://www.efloras.org/florataxon.aspx?flora_id=2&amp;taxon_id=200027088</a>	Propagules survive passage through the gut? Yes] Fruits blue or blue-gray, globose to ellipsoid, to 2.5 × 2 cm. [Protocol states: Where there is no information on dispersal, assume 'yes' for fleshy fruits that are <3–4 cm in diameter.]
801	2012. WRA Specialist. Personal Communication.	[Prolific seed production (>1000/m <sup>2</sup> )? Unknown]
802	2012. WRA Specialist. Personal Communication.	[Evidence that a persistent propagule bank is formed (>1 yr)? Unknown]
803	2012. WRA Specialist. Personal Communication.	[Well controlled by herbicides? Unknown]
804	2012. WRA Specialist. Personal Communication.	[Tolerates, or benefits from, mutilation, cultivation, or fire? Unknown]
805	2012. WRA Specialist. Personal Communication.	[Effective natural enemies present locally (e.g. introduced biocontrol agents)? Unknown]

## **Summary of Risk Traits**

### **High Risk / Undesirable Traits**

- Native to tropical region
- Another species in the genus is invasive in Florida
- Has spines
- Tolerates shade when young
- Bird dispersal
- Water dispersal
- Human dispersal as an ornamental, landscape plant

### **Low Risk / Desirable Traits**

- Not naturalized
- Not known as invasive
- Non-toxic
- Slow growth rate