

Assessment date 4 November 2015

<i>Phanera yunnanensis</i> (syn. <i>Bauhiniayunnanensis</i>) All Zones		Answer	Score
1.01	Is the species highly domesticated?	n	0
1.02	Has the species become naturalised where grown?		
1.03	Does the species have weedy races?		
2.01	Species suited to Florida's USDA climate zones (0-low; 1-intermediate; 2-high) North Zone: suited to Zones 8, 9 Central Zone: suited to Zones 9, 10 South Zone: suited to Zone 10	2	
2.02	Quality of climate match data (0-low; 1-intermediate; 2-high)	2	
2.03	Broad climate suitability (environmental versatility)	y	1
2.04	Native or naturalized in habitats with periodic inundation North Zone: mean annual precipitation 50-70 inches Central Zone: mean annual precipitation 40-60 inches South Zone: mean annual precipitation 40-60 inches	y	1
2.05	Does the species have a history of repeated introductions outside its natural range?	y	
3.01	Naturalized beyond native range		
3.02	Garden/amenity/disturbance weed	y	2
3.03	Weed of agriculture	unk	
3.04	Environmental weed	y	4
3.05	Congeneric weed	unk	
4.01	Produces spines, thorns or burrs	n	0
4.02	Allelopathic	unk	0
4.03	Parasitic	n	0
4.04	Unpalatable to grazing animals	unk	-1
4.05	Toxic to animals	unk	0
4.06	Host for recognised pests and pathogens	unk	0
4.07	Causes allergies or is otherwise toxic to humans	unk	0
4.08	Creates a fire hazard in natural ecosystems	unk	0
4.09	Is a shade tolerant plant at some stage of its life cycle	n	0
4.10	Grows on infertile soils (oligotrophic, limerock, or excessively draining soils). North & Central Zones: infertile soils; South Zone: shallow limerock or Histisols.	unk	0
4.11	Climbing or smothering growth habit	y	1
4.12	Forms dense thickets	y	1
5.01	Aquatic	n	0
5.02	Grass	n	0
5.03	Nitrogen fixing woody plant	y	1
5.04	Geophyte	n	0
6.01	Evidence of substantial reproductive failure in native habitat	n	0
6.02	Produces viable seed	y	1

6.03	Hybridizes naturally	unk	-1
6.04	Self-compatible or apomictic	unk	-1
6.05	Requires specialist pollinators	unk	0
6.06	Reproduction by vegetative propagation	unk	-1
6.07	Minimum generative time (years)	2	0
7.01	Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)	?	
7.02	Propagules dispersed intentionally by people	y	1
7.03	Propagules likely to disperse as a produce contaminant	n	-1
7.04	Propagules adapted to wind dispersal	n	-1
7.05	Propagules water dispersed	y	1
7.06	Propagules bird dispersed	unk	-1
7.07	Propagules dispersed by other animals (externally)	n	-1
7.08	Propagules dispersed by other animals (internally)	unk	-1
8.01	Prolific seed production	unk	-1
8.02	Evidence that a persistent propagule bank is formed (>1 yr)	y	1
8.03	Well controlled by herbicides	unk	1
8.04	Tolerates, or benefits from, mutilation or cultivation	unk	-1
8.05		?	
Total Score		5	
Implemented Pacific Second Screening		Yes	
Risk Assessment Results		EVAL	

section	# questions answered	satisfy minimum?
A		8 yes
B		5 yes
C		13 yes
total		26 yes

	Reference	Source data
1.01		Cultivated but no evidence of selection for reduced weediness
1.02		Skip to question 2.01
1.03		Skip to question 2.01
2.01	<p>1. PERAL NAPPFAST Global Plant Hardiness. http://www.nappfast.org/Plant_hardiness/2012/PHZ%20update201230%20yr%20%20300dpi.tif (Accessed: 30 October 2015) 2. Dave's Garden. http://davesgarden.com/guides/pf/go/60707/#b (Accessed: 30 October 2015) 3. Plant Delights Nursery. http://www.plantdelights.com/Bauhinia-yunnanensis-for-sale/Buy-Climbing-Chinese-Orchid-Tree/ (Accessed: 4 November 2015) 4. Plants Lust. http://plantlust.com/plants/bauhinia-yunnanensis/ (Accessed: 4 November 2015) 5. Technigro. http://www.technigro.com.au/documents/Weed%20Watch%20Yunnan%20bauhinia%20web.pdf (Accessed: 4 November 2015)</p>	<p>No computer analysis was performed. 1. Florida North Zone: Hardiness zones 8 and 9. Central Zone: Hardiness zones 9 and 10. South Zone: Hardiness zone 10. 2. Grows in USDA Hardiness Zones 9 and 10. 3&4. Grows in USDA Hardiness Zones 7b to 10b. 5. Native to southern China, Myanmar, and northern Thailand.</p>
2.02		Native range is well known
2.03	<p>1. The University of Melbourne. Köppen-Geiger Climate Map of the World. http://people.eng.unimelb.edu.au/mpeel/koppen.html (Accessed: 30 October 2015) 2. Technigro. http://www.technigro.com.au/documents/Weed%20Watch%20Yunnan%20bauhinia%20web.pdf (Accessed: 4 November 2015)</p>	<p>1. Native to Köppen-Geiger Climate Zones Am, Aw, Cwa, Cwb, Cfa, Cfb, and BSh. 2. Native to southern China, Myanmar, and northern Thailand.</p>
2.04	<p>1. Climate Charts. World Climate Maps. http://www.climate-charts.com/World-Climate-Maps.html#rain (Accessed: 30 October 2015) 2. Technigro. http://www.technigro.com.au/documents/Weed%20Watch%20Yunnan%20bauhinia%20web.pdf (Accessed: 4 November 2015)</p>	<p>1. Native to areas with rainfall in these ranges. 2. Native to southern China, Myanmar, and northern Thailand.</p>
2.05	<p>1. Technigro Australia. http://www.technigro.com.au/documents/Weed%20Watch%20Yunnan%20bauhinia%20web.pdf (Accessed: 30 October 2015) 2. Dave's Garden. http://davesgarden.com/guides/pf/go/60707/#b (Accessed: 30 October 2015)</p>	<p>1. "Yunnan bauhinia has been recorded from a few locations in south-eastern Queensland in the last five years. The first record was from disturbed bushland along the Brisbane River in the suburb of St. Lucia in 2007. Plants had probably become established in this area from dumped garden waste, and were climbing about 8m up eucalypt trees. Shortly afterwards, in 2008, an infestation was recorded smothering young trees in another part of St. Lucia. Another infestation was also spotted growing over roadside vegetation in the Gold Coast hinterland in 2009. Yunnan bauhinia has also recently become naturalised in Miami-Dade County in southern Florida." 2. Said to grow in California, Florida, and Texas</p>
3.01	<p>1. Technigro Australia. http://www.technigro.com.au/documents/Weed%20Watch%20Yunnan%20bauhinia%20web.pdf (Accessed: 30 October 2015)</p>	<p>1. "Yunnan bauhinia has been recorded from a few locations in south-eastern Queensland in the last five years. The first record was from disturbed bushland along the Brisbane River in the suburb of St. Lucia in 2007. Plants had probably become established in this area from dumped garden waste, and were climbing about 8m up eucalypt trees. Shortly afterwards, in 2008, an infestation was recorded smothering young trees in another part of St. Lucia. Another infestation was also spotted growing over roadside vegetation in the Gold Coast hinterland in 2009. Yunnan bauhinia has also recently become naturalised in Miami-Dade County in southern Florida."</p>

3.02	1. Technigro Australia. http://www.technigro.com.au/documents/Weed%20Watch%20Yunnan%20bauhinia%20web.pdf (Accessed: 30 October 2015) 2. Global Compendium of Weeds. http://www.hear.org/gcw/species/bauhinia_yunnanensis/ (Accessed: 30 October 2015)	1. "Can completely smother other vegetation during summer"; "In Australia, it has become established on roadsides and in disturbed vegetation in urban areas." 2. Classified as a weed
3.03		No evidence
3.04	1. Technigro Australia. http://www.technigro.com.au/documents/Weed%20Watch%20Yunnan%20bauhinia%20web.pdf (Accessed: 30 October 2015)	1. "Can completely smother other vegetation during summer"; "This vine has the capacity to climb over and envelope shrubs and younger trees. Field observations indicate that it can totally smother riparian vegetation at certain times of the year, forming a dense canopy that impedes light penetration and prevents the growth and regeneration of understorey plants."
3.05	1. Phytoneuron. http://www.phytoneuron.net/PhytoN-Phanerayunnanensis.pdf (Accessed: 30 October 2015)	1. "Although long regarded as a Bauhinia, it is best placed in the genus Phanera"
4.01	1. Technigro Australia. http://www.technigro.com.au/documents/Weed%20Watch%20Yunnan%20bauhinia%20web.pdf (Accessed: 30 October 2015) 2. Flora of China. http://www.efloras.org/florataxon.aspx?flora_id=2&taxon_id=200011967 (Accessed: 30 October 2015)	1&2. These features are not listed in the description of the plant
4.02		No evidence
4.03		No evidence
4.04		No evidence
4.05		No evidence
4.06		No evidence
4.07		No evidence
4.08		No evidence
4.09	1. Dave's Garden. http://davesgarden.com/guides/pf/go/60707/#b (Accessed: 30 October 2015)	1. "Sun Exposure: Full Sun to Partial Shade"
4.10	1. Zone 9 Tropicals. http://www.zone9tropicals.com/bauhinia-yunnanensis-orchid-vine-p-477.html?osCsid=994913 (Accessed: 4 November 2015) 2. Plant Lust. http://plantlust.com/plants/bauhinia-yunnanensis/ (Accessed: 4 November 2015) 3. Plants DB. http://www.plantsdb.gr/en/plants-library/vines/293-bauhinia-yunnanensis (Accessed: 4 November 2015)	1. "[grow] in fertile, well drained soil" 2. "Soil needs: adaptable" 3. "Soil type and pH: Acidic of slightly acidic, well draining" --- insufficient evidence
4.11	1. Technigro Australia. http://www.technigro.com.au/documents/Weed%20Watch%20Yunnan%20bauhinia%20web.pdf (Accessed: 30 October 2015)	1. "Can completely smother other vegetation during summer"; "Yunnan bauhinia is a woody vine or climber"; "This vine has the capacity to climb over and envelope shrubs and younger trees. Field observations indicate that it can totally smother riparian vegetation at certain times of the year, forming a dense canopy that impedes light penetration and prevents the growth and regeneration of understorey plants."
4.12	1. Technigro Australia. http://www.technigro.com.au/documents/Weed%20Watch%20Yunnan%20bauhinia%20web.pdf (Accessed: 30 October 2015)	1. "This vine has the capacity to climb over and envelope shrubs and younger trees. Field observations indicate that it can totally smother riparian vegetation at certain times of the year, forming a dense canopy that impedes light penetration and prevents the growth and regeneration of understorey plants."
5.01	1. The Institute for Regional Conservation. http://regionalconservation.org/ircs/database/plants/PlantPage.asp?TXCODE=Phanyunn (Accessed: 30 October 2015)	1. "Substrate: Terrestrial "
5.02	1. Technigro Australia. http://www.technigro.com.au/documents/Weed%20Watch%20Yunnan%20bauhinia%20web.pdf (Accessed: 30 October 2015) 2. USDA Plants Databse. http://plants.usda.gov/core/profile?symbol=BAYU (Accessed: 30 October 2015)	1. "Yunnan bauhinia is a woody vine or climber" 2. "Growth Habit: Shurb/Vine"

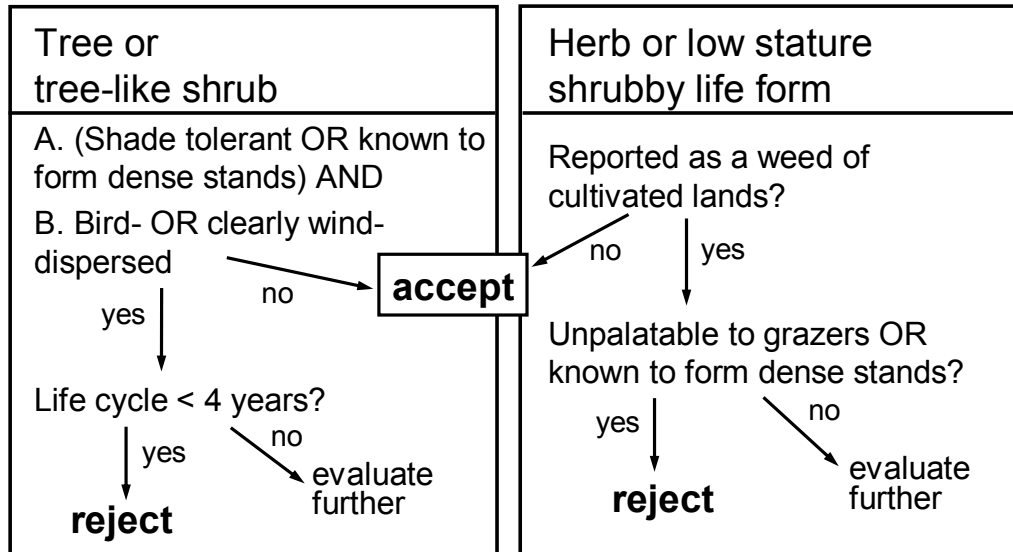
5.03	1. Technigro Australia. http://www.technigro.com.au/documents/Weed%20Watch%20Yunnan%20bauhinia%20web.pdf (Accessed: 30 October 2015) 2. USDA Plants Database. http://plants.usda.gov/core/profile?symbol=BAYU (Accessed: 4 November 2015)	1. "Yunnan bauhinia is a woody vine or climber" 2. "Family: Fabaceae"
5.04	1. Technigro Australia. http://www.technigro.com.au/documents/Weed%20Watch%20Yunnan%20bauhinia%20web.pdf (Accessed: 30 October 2015) 2. Flora of China. http://www.efloras.org/florataxon.aspx?flora_id=2&taxon_id=200011967 (Accessed: 30 October 2015)	1&2. No evidence of these specialized structures found in the description of the plant
6.01		No evidence
6.02	1. Technigro Australia. http://www.technigro.com.au/documents/Weed%20Watch%20Yunnan%20bauhinia%20web.pdf (Accessed: 30 October 2015) 2. Dave's Garden. http://davesgarden.com/guides/pf/go/60707/#b (Accessed: 30 October 2015)	1. "The elongated fruit pods are relatively large (8-15 cm long and 15-20 mm wide) and somewhat flattened. They contain several flattened blackish seeds about 7-9 mm across."; "This species reproduces mainly by seed, but may also have the capacity to spread by layering." 2. Propagation from seed
6.03		No evidence
6.04		No evidence
6.05		No evidence
6.06	1. Technigro Australia. http://www.technigro.com.au/documents/Weed%20Watch%20Yunnan%20bauhinia%20web.pdf (Accessed: 30 October 2015)	1. "This species reproduces mainly by seed, but may also have the capacity to spread by layering." --- insufficient evidence
6.07	1. Dawn. http://www.dawn.com/news/859479/snake-in-the-grass (Accessed: 30 October 2015) 2. Onalee's Seeds. http://www.onalee.com/catalog.php/onaleeisrael/dt66029/pd1741872/Orchid_Vine_Butterfly_Vine_Fairy_Vine_Perennial_Bauhinia_Seeds (Accessed: 30 October 2015)	1. "Bauhinia yunnanensis should begin flowering within eighteen months of sowing the seed." 2. "These can take a year to 18 months, depending on conditions, to get the first blooms from seed"
7.01	1. Technigro Australia. http://www.technigro.com.au/documents/Weed%20Watch%20Yunnan%20bauhinia%20web.pdf (Accessed: 30 October 2015)	1. "Its seeds are probably mainly spread in discarded garden waste"--- no evidence
7.02	1. Technigro Australia. http://www.technigro.com.au/documents/Weed%20Watch%20Yunnan%20bauhinia%20web.pdf (Accessed: 30 October 2015) 2. Phytoneuron. http://www.phytoneuron.net/PhytoN-Phanerayunnanensis.pdf (Accessed: 30 October 2015) 3. Zone 9 Tropicals. http://www.zone9tropicals.com/bauhinia-yunnanensis-orchid-vine-p-477.html?osCsid=994913 (Accessed: 30 October 2015)	1. "This plant is occasionally grown as a garden ornamental and is also known as Orchid vine or Butterfly vine" 2. "Occasionally cultivated in tropical and warm temperate regions of both the Old and New World, it is easily grown from seed which is readily available from a variety of commercial sources." 3. Available for purchase online.
7.03		No evidence
7.04	1. USDA Plants Database. http://plants.usda.gov/core/profile?symbol=BAYU (Accessed: 30 October 2015)	1. See photo. Seeds lack traits indicating wind dispersal.
7.05	1. Technigro Australia. http://www.technigro.com.au/documents/Weed%20Watch%20Yunnan%20bauhinia%20web.pdf (Accessed: 30 October 2015)	1. "once established in natural areas, seeds may also be spread downstream during floods"
7.06		No evidence
7.07	1. USDA Plants Database. http://plants.usda.gov/core/profile?symbol=BAYU (Accessed: 30 October 2015)	1. See photo. Seed lacks a mechanism of attachment.
7.08		No evidence
8.01		No evidence
8.02	1. Phytoneuron. http://www.phytoneuron.net/PhytoN-Phanerayunnanensis.pdf (Accessed: 30 October 2015)	1. "Naturally dispersed seeds remain viable for several years."
8.03	1. Technigro Australia. http://www.technigro.com.au/documents/Weed%20Watch%20Yunnan%20bauhinia%20web.pdf (Accessed: 30 October 2015)	1. "Chemical control may be more feasible on larger plants that are difficult to remove by physical methods. Basal bark or cut stump applications of products containing fluroxypyr (e.g. Starane), glyphosate (e.g. Roundup) or triclopyr + picloram (e.g. Grazon DS, Access or Tordon Double Strength) may be effective." --- insufficient evidence

8.04		No evidence
8.05		No evidence

Phanera yunnanensis

Pacific second screening: decision rules for species with WRA scores between 1 and 6

(from Daehler *et al.* 2004)



Vines must pass both tests

There was no information regarding weed of agriculture. This species does form dense thickets, but there was no evidence regarding bird dispersal. Considering these unknowns, the result of the SS is **'EVALUATE FURTHER'**