

<b><i>Arundinaria fargesii</i> [=Bashania fargesii] (no English common name known) -- FLORIDA</b>		<b>Answer</b>	<b>Score</b>
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 FL climates (USDA hardiness zones; 0-low, 1-intermediate, 2-high)	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 regions with an average of 11-60 inches of annual precipitation	y	1
2.05	Does the species have a history of repeated introductions outside its natural range?	y	
3.01	Naturalized beyond native range	n	-2
3.02	Garden/amenity/disturbance weed	y	2
3.03	Weed of agriculture	n	0
3.04	Environmental weed	n	0
3.05	Congeneric weed	n	0
4.01	Produces spines, thorns or burrs	n	0
4.02	Allelopathic		
4.03	Parasitic	n	0
4.04	Unpalatable to grazing animals	n	-1
4.05	Toxic to animals	n	0
4.06	Host for recognised pests and pathogens	n	0
4.07	Causes allergies or is otherwise toxic to humans		
4.08	Creates a fire hazard in natural ecosystems		
4.09	Is a shade tolerant plant at some stage of its life cycle	unk	0
4.10	Grows on infertile soils (oligotrophic, limerock, or excessively draining soils). North & Central Zones: infertile soils; South Zone: shallow limerock or Histisols.	y	1
4.11	Climbing or smothering growth habit	n	0
4.12	Forms dense thickets		
5.01	Aquatic	n	0
5.02	Grass	y	1
5.03	Nitrogen fixing woody plant	n	0
5.04	Geophyte	n	0
6.01	Evidence of substantial reproductive failure in native habitat		
6.02	Produces viable seed		
6.03	Hybridizes naturally		
6.04	Self-compatible or apomictic		
6.05	Requires specialist pollinators	n	0
6.06	Reproduction by vegetative propagation	y	1
6.07	Minimum generative time (years)		
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		
7.06	Propagules bird dispersed		
7.07	Propagules dispersed by other animals (externally)	n	-1
7.08	Propagules dispersed by other animals (internally)		

8.01	Prolific seed production		
8.02	Evidence that a persistent propagule bank is formed (>1 yr)		
8.03	Well controlled by herbicides		
8.04	Tolerates, or benefits from, mutilation or cultivation		
8.05	Effective natural enemies present in U.S.		
<b>Total Score</b>		<b>2</b>	
<b>Implemented Pacific Second Screening</b>		<b>yes</b>	
<b>Risk Assessment Results</b>		<b>Evaluate</b>	

section	# questions answered	satisfy minimum?
A		11 yes
B		7 yes
C		10 yes
total		28 yes

	Reference	Source data
1.01		Cultivated, but no evidence of selection for reduced weediness
1.02		skip to 2.01
1.03		skip to 2.01
2.01	1. PERAL NAPPFAS Global Plant Hardiness ( <a href="http://www.nappfast.org/Plant_hardiness/NAPPFAS%20Global%20zones/10-year%20climate/PLANT_HARDINESS_10YR%20lgnd.tif">http://www.nappfast.org/Plant_hardiness/NAPPFAS%20Global%20zones/10-year%20climate/PLANT_HARDINESS_10YR%20lgnd.tif</a> ). 2. USDA, ARS, National Genetic Resources Program. Germplasm Resources Information Network - (GRIN) [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland. <a href="http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?409896">http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?409896</a> (30 May 2014). 3. Quatrocchi, U. CRC World Dictionary of Grasses; Common Names, Scientific Names, Eponyms, Synonyms and Etymology. Volumes 1. Boca Raton, FL, USA: CRC/Taylor Francis Group. 2006. Online.	No computer analysis was performed. 1. Global hardiness zone: (5-?)6-9(-10?); equivalent to USDA Hardiness zones (5b-?)6a-9b(10a +?). 2. Distributional range: native to Asia-Temperate: China (Gansu, Henan [w.], Hubei [w.], Shaanxi [s.-c.], Sichuan [n.e.]); cultivated in Asia-Temperate: China. 3. Cold resistant.
2.02		No computer analysis was performed. Native range is well known; refer to 2.01 source data.
2.03	1. Köppen-Geiger climate map ( <a href="http://www.hydrol-earth-syst-sci.net/11/1633/2007/hess-11-1633-2007.pdf">http://www.hydrol-earth-syst-sci.net/11/1633/2007/hess-11-1633-2007.pdf</a> ). 2. eFloras (2008). Published on the Internet <a href="http://www.efloras.org">http://www.efloras.org</a> [accessed 2 June 2014] Missouri Botanical Garden, St. Louis, MO & Harvard University Herbaria, Cambridge, MA.	1. Distribution in the native range occurs in more than 3 climate categories. 2. Mountain forests, pure bamboo forests; (1100-)1700-2000(-2500) m.
2.04	1. World Climate Maps. <a href="http://www.climate-charts.com/World-Climate-Maps.html">http://www.climate-charts.com/World-Climate-Maps.html</a> . Accessed 2 June 2014.	1. Native area: 275 mm-1474 mm (10.9"-58.1").
2.05	1. Ohrnberger, D. The Bamboos of the World: Annotated Nomenclature and Literature of the Species and the Higher and Lower Taxa. 1st ed. Boston: Elsevier Science B.V. 1999. Print.	1. Horticulture: Cultivated in Europe; frost resistance, tolerating -15° C (minor damage to leaves).
3.01		No evidence found.
3.02	1. Royal Horticultural Society. Bamboo. Accessed 6 June 2013. <a href="http://www.rhs.org.uk/advice/profile?PID=79">http://www.rhs.org.uk/advice/profile?PID=79</a>	1. For an exposed site: Bashania. 2. Leptomorph rhizome systems, found in running bamboo, have rhizomes that have a tendency to branch away from the domain plant up to 20 feet away in a single growing season. At the nodes, they have the ability to produce buds that will form either new culms or rhizomes. They are invasive by design and it can be extremely difficult to remove a well-established plant.
3.03		No evidence found.
3.04		No evidence found.
3.05	1. New South Wales Government. Department of Primary Industries Biosecurity. Noxious Weed Declarations. Accessed 2 June 2014. <a href="http://www.dpi.nsw.gov.au/agriculture/pests-weeds/weeds/noxweed">http://www.dpi.nsw.gov.au/agriculture/pests-weeds/weeds/noxweed</a>	1. Though not a serious or principal weed, <i>Arundinaria</i> spp., specifically <i>Arundinaria simonii</i> (syn= <i>Pleioblastus simonii</i> ) is considered a Class 3 Noxious Weed in New South Wales, Australia; "Plants that pose a potentially serious threat to primary production or the environment of a region to which the order applies, are not widely distributed in the area and are likely to spread in the area or to another area. The plant must be fully and continuously suppressed and destroyed." *No evidence could be located for congeneric weed species in the genus <i>Bashania</i> .
4.01		These structures are not included in the description of this species.
4.02		No evidence found.

4.03	1. USDA, ARS, National Genetic Resources Program. Germplasm Resources Information Network - (GRIN) [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland. <a href="http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?409896">http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?409896</a> (30 May 2014).	1. Family: Poaceae (not a parasitic family).
4.04	1. Zhijun Lu, , Wei Wang, Wenhui Zhang, Hong Li, Qing Cao, Gaodi Dang, Dong He, Scott Franklin, 6. Spatial-temporal patterns of <i>Bashania fargesii</i> bamboo shoot emergence and giant panda herbivory[J]. <i>Biodiversity Science</i> , 2009, 17(1): 1-9	1. <i>Bashania fargesii</i> is an important food resource for giant panda in the Qinling Mountains, China, especially in winter and spring when giant panda prefers new shoots.
4.05	1. Zhijun Lu, , Wei Wang, Wenhui Zhang, Hong Li, Qing Cao, Gaodi Dang, Dong He, Scott Franklin, 6. Spatial-temporal patterns of <i>Bashania fargesii</i> bamboo shoot emergence and giant panda herbivory[J]. <i>Biodiversity Science</i> , 2009, 17(1): 1-10	1. <i>Bashania fargesii</i> is an important food resource for giant panda in the Qinling Mountains, China, especially in winter and spring when giant panda prefers new shoots.
4.06	1. SanAn, Wu, L. Jin, & Ou XiaoPing. 2010. A new bamboo pest - <i>Tetramesa cereipes</i> . <i>Chinese Bulletin of Entomology</i> , 47(1): 190-192.	1. <i>Tetramesa cereipes</i> Erdös (an insect not present in the U.S.) is a new bamboo pest from China, damaging twigs of <i>Bashania fargesii</i> Keng in Beijing. It has one generation per year in Beijing. It over-winters as mature larvae in its host gall, pupates in late next March, and the adults get out of their host gall between early April and late May. The duration of larvae was usually from mid-May to late November.
4.07		No evidence found.
4.08		No evidence found.
4.09	1. American Bamboo Society. Bamboo Species List. Accessed: 18 March 2014. <a href="http://www.bamboo.org/BambooSourceList/BambooPlants.php?G=All&amp;M=1&amp;Button=Find&amp;U=I&amp;S=1">http://www.bamboo.org/BambooSourceList/BambooPlants.php?G=All&amp;M=1&amp;Button=Find&amp;U=I&amp;S=1</a>	Gradations of partial shade.
4.10	1. eFloras (2008). Published on the Internet <a href="http://www.efloras.org">http://www.efloras.org</a> [accessed 2 June 2014] Missouri Botanical Garden, St. Louis, MO & Harvard University Herbaria, Cambridge, MA. 2. Royal Horticultural Society. Bamboo. Accessed 6 June 2013. <a href="http://www.rhs.org.uk/advice/profile?PID=79">http://www.rhs.org.uk/advice/profile?PID=79</a>	1. Culms pluricaespitose (culms in a series of clumps connected by rhizomes), predominantly tillering in fertile soil, more separated in poor soil. 2. Bamboos thrive in moist, but well-drained soil in a sheltered spot. They tolerate most soil types; will grow in poor soils, but not in constant wet, boggy or extremely dry conditions. <i>Bashania fargesii</i> does well in drier soils.
4.11	1. eFloras (2008). Published on the Internet <a href="http://www.efloras.org">http://www.efloras.org</a> [accessed 2 June 2014] Missouri Botanical Garden, St. Louis, MO & Harvard University Herbaria, Cambridge, MA.	1. Culms basally erect, apically slightly pendulous, 5–8(–13) m.
4.12	1. Quatrocchi, U. CRC World Dictionary of Grasses; Common Names, Scientific Names, Eponyms, Synonyms and Etymology. Volumes 1. Boca Raton, FL, USA: CRC/Taylor Francis Group. 2006. Online.	1. Forming thickets.
5.01	1. eFloras (2008). Published on the Internet <a href="http://www.efloras.org">http://www.efloras.org</a> [accessed 2 June 2014] Missouri Botanical Garden, St. Louis, MO & Harvard University Herbaria, Cambridge, MA.	1. Predominantly tillering in fertile soil (more separated in poor soil) in mountain forests and/or pure bamboo forests.
5.02	1. USDA, ARS, National Genetic Resources Program. Germplasm Resources Information Network - (GRIN) [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland. <a href="http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?409896">http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?409896</a> (30 May 2014).	1. Family: Poaceae.

5.03	1. USDA, ARS, National Genetic Resources Program. Germplasm Resources Information Network - (GRIN) [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland. <a href="http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?409896">http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?409896</a> (30 May 2014).	1. Family: Poaceae.
5.04	1. Quatrocchi, U. CRC World Dictionary of Grasses; Common Names, Scientific Names, Eponyms, Synonyms and Etymology. Volumes 1. Boca Raton, FL, USA: CRC/Taylor Francis Group. 2006. Online.	1. Rhizome amphipodial.
6.01		No evidence found.
6.02		No evidence found.
6.03		1. Bamboo is difficult to hybridize since its flowers are monocarpic.
6.04		No evidence found.
6.05	1. Shor, B., Southern California Chapter. From Flowers to Seedlings. American Bamboo Society. Accessed: 18 March 2014. <a href="http://www.bamboo.org/GeneralInfoPages/FromFlowersToSeedlings.html">http://www.bamboo.org/GeneralInfoPages/FromFlowersToSeedlings.html</a>	1. Most bamboos are wind-pollinated. Insects may be involved with some species.
6.06	1. Zhijun Lu, , Wei Wang, Wenhui Zhang, Hong Li, Qing Cao, Gaodi Dang, Dong He, Scott Franklin, 6. Spatial-temporal patterns of <i>Bashania fargesii</i> bamboo shoot emergence and giant panda herbivory[J]. Biodiversity Science, 2009, 17(1): 1-9.	1. <i>B. fargesii</i> regenerates mainly via new shoot recruitment.
6.07		No evidence found.
7.01	1. eFloras (2008). Published on the Internet <a href="http://www.efloras.org">http://www.efloras.org</a> [accessed 2 June 2014] Missouri Botanical Garden, St. Louis, MO & Harvard University Herbaria, Cambridge, MA. 2. Clayton, W.D., Vorontsova, M.S., Harman, K.T. and Williamson, H. (2006 onwards). GrassBase - The Online World Grass Flora. <a href="http://www.kew.org/data/grasses-db.html">http://www.kew.org/data/grasses-db.html</a> . [accessed 05 May 2013; 12:14 EST].	1. Caryopsis slightly curved, ca. 1 cm, beaked. 2. Caryopsis with adherent pericarp.
7.02	1. USDA, ARS, National Genetic Resources Program. Germplasm Resources Information Network - (GRIN) [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland. <a href="http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?409896">http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?409896</a> (30 May 2014).	1. Economic importance: environmental (ornamental), animal food (forage), materials (fiber).
7.03	1. eFloras (2008). Published on the Internet <a href="http://www.efloras.org">http://www.efloras.org</a> [accessed 2 June 2014] Missouri Botanical Garden, St. Louis, MO & Harvard University Herbaria, Cambridge, MA. 2. eFloras (2008). Published on the Internet <a href="http://www.efloras.org">http://www.efloras.org</a> [accessed 2 June 2014] Missouri Botanical Garden, St. Louis, MO & Harvard University Herbaria, Cambridge, MA. 3. Clayton, W.D., Vorontsova, M.S., Harman, K.T. and Williamson, H. (2006 onwards). GrassBase - The Online World Grass Flora. <a href="http://www.kew.org/data/grasses-db.html">http://www.kew.org/data/grasses-db.html</a> . [accessed 05 May 2013; 12:14 EST].	No evidence to support produce contamination. 1. <i>B. fargesii</i> is found in mountain forests and/or pure bamboo forests. 2. Caryopsis slightly curved, ca. 1 cm, beaked. 3. Caryopsis with adherent pericarp.
7.04	1. eFloras (2008). Published on the Internet <a href="http://www.efloras.org">http://www.efloras.org</a> [accessed 2 June 2014] Missouri Botanical Garden, St. Louis, MO & Harvard University Herbaria, Cambridge, MA. 2. Clayton, W.D., Vorontsova, M.S., Harman, K.T. and Williamson, H. (2006 onwards). GrassBase - The Online World Grass Flora. <a href="http://www.kew.org/data/grasses-db.html">http://www.kew.org/data/grasses-db.html</a> . [accessed 05 May 2013; 12:14 EST].	No morphological features (i.e., wings) that would suggest seeds are adapted for wind. 1. Caryopsis slightly curved, ca. 1 cm, beaked. 2. Caryopsis with adherent pericarp.

7.05	1. eFloras (2008). Published on the Internet <a href="http://www.efloras.org">http://www.efloras.org</a> [accessed 2 June 2014] Missouri Botanical Garden, St. Louis, MO & Harvard University Herbaria, Cambridge, MA. 2. Clayton, W.D., Vorontsova, M.S., Harman, K.T. and Williamson, H. (2006 onwards). GrassBase - The Online World Grass Flora. <a href="http://www.kew.org/data/grasses-db.html">http://www.kew.org/data/grasses-db.html</a> . [accessed 05 May 2013; 12:14 EST].	1. Caryopsis slightly curved, ca. 1 cm, beaked. 2. Caryopsis with adherent pericarp.
7.06	1. eFloras (2008). Published on the Internet <a href="http://www.efloras.org">http://www.efloras.org</a> [accessed 2 June 2014] Missouri Botanical Garden, St. Louis, MO & Harvard University Herbaria, Cambridge, MA. 2. Clayton, W.D., Vorontsova, M.S., Harman, K.T. and Williamson, H. (2006 onwards). GrassBase - The Online World Grass Flora. <a href="http://www.kew.org/data/grasses-db.html">http://www.kew.org/data/grasses-db.html</a> . [accessed 05 May 2013; 12:14 EST].	1. Caryopsis slightly curved, ca. 1 cm, beaked. 2. Caryopsis with adherent pericarp.
7.07	1. eFloras (2008). Published on the Internet <a href="http://www.efloras.org">http://www.efloras.org</a> [accessed 2 June 2014] Missouri Botanical Garden, St. Louis, MO & Harvard University Herbaria, Cambridge, MA. 2. Clayton, W.D., Vorontsova, M.S., Harman, K.T. and Williamson, H. (2006 onwards). GrassBase - The Online World Grass Flora. <a href="http://www.kew.org/data/grasses-db.html">http://www.kew.org/data/grasses-db.html</a> . [accessed 05 May 2013; 12:14 EST].	No morphological features that would suggest seeds are adapted for attachment to fur. 1. Caryopsis slightly curved, ca. 1 cm, beaked. 2. Caryopsis with adherent pericarp.
7.08	1. Zhijun Lu, , Wei Wang, Wenhui Zhang, Hong Li, Qing Cao, Gaodi Dang, Dong He, Scott Franklin, 6. Spatial-temporal patterns of <i>Bashania fargesii</i> bamboo shoot emergence and giant panda herbivory[J]. Biodiversity Science, 2009, 17(1): 1-9	1. <i>Bashania fargesii</i> is an important food resource for giant panda in the Qinling Mountains, China, especially in winter and spring when giant panda prefers new shoots.
8.01		No evidence found.
8.02		
8.03		1. Eradicating the whole plant: a.) with very tall bamboos, which can be difficult to spray, cut down canes to soil level in late winter and then apply a glyphosate-based weedkiller (e.g. Scotts Roundup Ultra 3000, Scotts Tumbleweed, Bayer Tough Rootkill, Bayer Garden Super Strength Weedkiller or Doff Maxi Strength Glyphosate Weedkiller) to the young growth in late spring and early summer. Several treatments may be needed; b). Alternatively, cut canes to ground and treat with a stump and root killer containing glyphosate (e.g. Scotts Roundup Tree Stump & Rootkiller, Bayer Tree Stump Killer, Doff Tree Stump & Tough Weedkiller and William Sinclair Deep Root Ultra Tree Stump & Weedkiller) or triclopyr (Vitax SBK Brushwood Killer). Treat foliage of any regrowth.
8.04		
8.05		