Bambusa balcooa -- FLORIDA		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 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	y	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	y	2
4.01	Produces spines, thorns or burrs	n	0
4.02	Allelopathic		
4.03	Parasitic	n	0
4.04	Unpalatable to grazing animals		
4.05	Toxic to animals		
4.06	Host for recognised pests and pathogens	?	
4.07	Causes allergies or is otherwise toxic to humans	n	0
4.08	Creates a fire hazard in natural ecosystems		
4.09	Is a shade tolerant plant at some stage of its life cycle	?	
4.10	Grows on infertile soils (oligotrophic, limerock, or excessively draining soils). North & Central Zones: infertile soils; South Zone: shallow limerock or Histisols.	?	
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	n	0
6.02	Produces viable seed	n	-1
6.03	Hybridizes naturally		
6.04	Self-compatible or apomictic		
6.05	Requires specialist pollinators		
6.06	Reproduction by vegetative propagation	?	
6.07	Minimum generative time (years)	55	-1
7.01	Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)	n	-1
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	n	-1
7.06	Propagules bird dispersed	n	-1
7.07	Propagules dispersed by other animals (externally)	n	-1
7.08	Propagules dispersed by other animals (internally)	n	-1

8.01	Prolific seed production	n	-1
8.02	Evidence that a persistent propagule bank is formed (>1 yr)	n	-1
8.03	Well controlled by herbicides		
8.04	Tolerates, or benefits from, mutilation or cultivation		
8.05	Effective natural enemies present in U.S.		
	Total Score	**-1**	
	Implemented Pacific Second Screening	**No**	
	Risk Assessment Results	**Low Risk**	

Section	**Number of questions answered**	**Satisfy minimum?**
A	11	yes
B	4	yes
C	17	yes
Total	32	yes

	Reference	Source data
1.01	1. Alam, M.K., 1995. Bambusa balcooa Roxb.[Internet] Record from Proseabase. Dransfield, S. & Widjaja, E.A. (Editors). PROSEA (Plant Resources of South-East Asia) Foundation, Bogor, Indonesia. http://www.proseanet.org. Accessed from Internet: 27 January 2014. 2. Negi, D & S Saxena. 2011. Micropropagation of Bambusa balcooa Roxb. through axillary shoot proliferation. In Vitro Cellular & Developmental Biology - Plant, 47(5): 604-610.	1. Bambusa balcooa is mostly known from cultivation. It is thought to originate from northern India and Bangladesh where it is widely cultivated. Occasionally it is cultivated outside this region, e.g. in Java, Australia, and in many botanic gardens. 2. This species has been identified as one of the priority bamboos by the National Bamboo Mission.
1.02		skip to 2.01
1.03		skip to 2.01
2.01	1. PERAL NAPPFAST Global Plant Hardiness (http://www.nappfast.org/Plant_hardiness/NAPPFAST%20Global%20zones/10-year%20climate/PLANT_HARDINESS_10YR%20lgnd.tif). 2. 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?409896 (22 January 2014). 3. Clayton, W.D., Vorontsova, M.S., Harman, K.T. and Williamson, H. (2006 onwards). GrassBase - The Online World Grass Flora. http://www.kew.org/data/grasses-db.html. [accessed 23 January 2014; 1:47 PM (EST)].	No computer analysis was performed. 1. Global hardiness zone: (9?-)10-11(-12?); equivalent to USDA Hardiness zones 9a-11b+. 2. Native to Bangladesh; India (Assam, Bihar, West Bengal); Nepal. 3. Distribution: Africa: south; Asia-tropical: India and Indo-China; Australasia: Australia; Pacific: northwestern and north-central.
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 (http://www.hydrol-earth-syst-sci.net/11/1633/2007/hess-11-1633-2007.pdf). 2. Negi, D & S Saxena. 2011. Micropropagation of Bambusa balcooa Roxb. through axillary shoot proliferation. In Vitro Cellular & Developmental Biology - Plant, 47(5): 604-610. 3. Alam, M.K., 1995. Bambusa balcooa Roxb.[Internet] Record from Proseabase. Dransfield, S. & Widjaja, E.A. (Editors). PROSEA (Plant Resources of South-East Asia) Foundation, Bogor, Indonesia. http://www.proseanet.org. Accessed from Internet: 27 January 2014.	1. Distribution in the native range occurs in at least 3 climatic groups. 2. Distributed in different parts of India up to an altitude of 600 m. 3. Bambusa balcooa is grown at altitudes up to 600 m, in a tropical monsoon climate.
2.04	1. World Climate Maps. http://www.climate-charts.com/World-Climate-Maps.html. Accessed 23 January 2014. 2. Alam, M.K., 1995. Bambusa balcooa Roxb.[Internet] Record from Proseabase. Dransfield, S. & Widjaja, E.A. (Editors). PROSEA (Plant Resources of South-East Asia) Foundation, Bogor, Indonesia. http://www.proseanet.org. Accessed from Internet: 27 January 2014.	1. Native areas: 725 mm-4974+ mm (28.6"-195.9+"). 2. Annual rainfall of 2500—3000 mm and a dry season of up to 6 months.
2.05	1.a-c. Australia's Virtual Herbarium (AVH). http://avh.chah.org.au/. Accessed 30 January 2014. 2. Gillis, K et al. 2007. Somatic embryogenesis from mature Bambusa balcooa Roxburgh as basis for mass production of elite forestry bamboos. Plant Cell, Tissue and Organ Culture, 91(2): 115-123.	1.a. Queensland, AU, McEwens Beach, Mackay: (marine) beach ridges, littoral margin herbland; stoloniferous bamboo, growing in large clumps; occasional. 1.b. Queensland, AU, Central Mackay Coast: (terrestrial) roadside, naturalised; bamboo grass; occasional. 1.c. Queensland, AU, Mazlin Creek, just north of Atherton on the road to Mareeba: (terrestrial) mown grassy area to west of the road; tall, dense clump with canes to 10m tall. 2. Bambusa balcooa is only known in cultivation, but is found throughout the tropics in Asia and Africa.

3.01	1. Australia's Virtual Herbarium (AVH). http://avh.chah.org.au/. Accessed 30 January 2014. 2. Gillis, K et al. 2007. Somatic embryogenesis from mature Bambusa balcooa Roxburgh as basis for mass production of elite forestry bamboos. Plant Cell, Tissue and Organ Culture, 91(2): 115-123.	1. Queensland, AU, Central Mackay Coast: (terrestrial) roadside, naturalised; bamboo grass; occasional. 2. It is naturalized in South-Africa, after its introduction in the 19th century (Ohrnberger 1999).
3.02	1.a-c. Australia's Virtual Herbarium (AVH). http://avh.chah.org.au/. Accessed 30 January 2014. 2. Gillis, K et al. 2007. Somatic embryogenesis from mature Bambusa balcooa Roxburgh as basis for mass production of elite forestry bamboos. Plant Cell, Tissue and Organ Culture, 91(2): 115-123.	1.a. Queensland, AU, McEwens Beach, Mackay: (marine) beach ridges, littoral margin herbland; stoloniferous bamboo, growing in large clumps; occasional. 1.b. Queensland, AU, Central Mackay Coast: (terrestrial) roadside, naturalised; bamboo grass; occasional. 1.c. Queensland, AU, Mazlin Creek, just north of Atherton on the road to Mareeba: (terrestrial) mown grassy area to west of the road; tall, dense clump with canes to 10m tall. 2. Bambusa balcooa is only known in cultivation, but is found throughout the tropics in Asia and Africa.
3.03		No evidence found.
3.04		No evidence found.
3.05	1. Holm, L. et al. A Geographical Atlas of World Weeds. New York: John Wiley & Sons, 1979. Print. 2. Global Invasive Species Database, 2005. Bambusa vulgaris. Available from: http://www.issg.org/database/species/ecology.asp?si=1399&fr=1&sts=sss&lang=EN [Accessed 3 February 2014].	1. Bambusa vulgaris is listed as being present as a weed in Jamaica. 2. Bambusa vulgaris is the most widespread member of its genus, and has long been cultivated across the tropics and subtropics. It prefers lowland humid habitats, but tolerates a wide range of climatic conditions and soil types. It commonly naturalizes, forming monospecific stands along river banks, roadsides and open ground.
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. http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?409896 (22 January 2014).	1. Family: Poaceae (not a parasitic family).
4.04		No evidence found.
4.05		No evidence found.
4.06	1. Alam, M.K., 1995. Bambusa balcooa Roxb.[Internet] Record from Proseabase. Dransfield, S. & Widjaja, E.A. (Editors). PROSEA (Plant Resources of South-East Asia) Foundation, Bogor, Indonesia. http://www.proseanet.org. Accessed from Internet: 27 January 2014 AND: Boa, ER & BL Brady. Sarocladium oryzae associated with blight of Bambusa species in Bangladesh. Transactions of the British Mycological Society, 89(2): 161-166. 2. Farr, D.F., & Rossman, A.Y. Fungal Databases, Systematic Mycology and Microbiology Laboratory, ARS, USDA. Retrieved 3 February 2014, from http://nt.ars-grin.gov/fungaldatabases/.	1. In Bangladesh a serious disease of Bambusa balcooa is bamboo blight, attacking young bamboos during or soon after the elongation growth and resulting in dieback; only in B. vulgaris are clumps killed outright (Boa & Brady 1987). Sarocladium oryzae (=Acremonium strictum) is the main fungus associated with blight symptoms, but the causal agent is not yet known. 2. Distribution of S. oryzae is considered widespread; however only one account of the fungus Acrocylindrium oryzae(=Sarocladium oryzae, Acremonium strictum) was recorded in 1977 in Louisiana affecting Oryza sativa.
4.07	1. Negi, D & S Saxena. 2011. Micropropagation of Bambusa balcooa Roxb. through axillary shoot proliferation. In Vitro Cellular & Developmental Biology - Plant, 47(5): 604-610.	1. Young shoots are edible and bitter in taste.
4.08		No evidence found.
4.09		Many nursery sites indicate grows in full sun to partial shade, but no definitive evidence of shade tolerance.
4.10	1. Alam, M.K., 1995. Bambusa balcooa Roxb.[Internet] Record from Proseabase. Dransfield, S. & Widjaja, E.A. (Editors). PROSEA (Plant Resources of South-East Asia) Foundation, Bogor, Indonesia. http://www.proseanet.org. Accessed from Internet: 27 January 2014.	1. It grows in any type of soil but prefers heavy textured soils with good drainage.

4.11	1. 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?409896 (22 January 2014). 2. Alam, M.K., 1995. Bambusa balcooa Roxb.[Internet] Record from Proseabase. Dransfield, S. & Widjaja, E.A. (Editors). PROSEA (Plant Resources of South-East Asia) Foundation, Bogor, Indonesia. http://www.proseanet.org. Accessed from Internet: 27 January 2014.	1. Family: Poaceae. 2. Culm erect with pendulous tip, (5—)17.5(—30) m tall.
4.12		No evidence found.
5.01	1. 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?409896 (22 January 2014).	1. Family: Poaceae.
5.02	1. 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?409896 (22 January 2014). 2. Alam, M.K., 1995. Bambusa balcooa Roxb.[Internet] Record from Proseabase. Dransfield, S. & Widjaja, E.A. (Editors). PROSEA (Plant Resources of South-East Asia) Foundation, Bogor, Indonesia. http://www.proseanet.org. Accessed from Internet: 27 January 2014.	1. Family: Poaceae. 2. Culm erect with pendulous tip, (5—)17.5(—30) m tall.
5.03	1. 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?409896 (22 January 2014).	1. Family: Poaceae.
5.04	1. 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?409896 (22 January 2014). 2. Alam, M.K., 1995. Bambusa balcooa Roxb.[Internet] Record from Proseabase. Dransfield, S. & Widjaja, E.A. (Editors). PROSEA (Plant Resources of South-East Asia) Foundation, Bogor, Indonesia. http://www.proseanet.org. Accessed from Internet: 27 January 2014.	1. Family: Poaceae. 2. Culm erect with pendulous tip, (5—)17.5(—30) m tall.
6.01		No evidence to support this as B. balcooa is known mostly in cultivation only.
6.02	1. Negi, D & S Saxena. 2011. Micropropagation of Bambusa balcooa Roxb. through axillary shoot proliferation. In Vitro Cellular & Developmental Biology - Plant, 47(5): 604-610.	1. After flowering, B. balcooa clump dies without setting seeds (Tewari 1992); it can only be propagated through asexual means.
6.03		No evidence found.
6.04		No evidence found.
6.05		No evidence found.
6.06	1. Negi, D & S Saxena. 2011. Micropropagation of Bambusa balcooa Roxb. through axillary shoot proliferation. In Vitro Cellular & Developmental Biology - Plant, 47(5): 604-610.	1. Vegetative propagation through culm cuttings, branch cuttings, or rhizomes is difficult on account of few and bulky propagules, season specificity, and low rooting ability of the culm and branch cuttings. Because of low success rates with vegetative propagation it is unsuitable for largescale propagation of this species. In contrast, in vitro propagation techniques allow mass proliferation of this species within a relatively short period of time.

6.07	1. Negi, D & S Saxena. 2011. Micropropagation of Bambusa balcooa Roxb. through axillary shoot proliferation. In Vitro Cellular & Developmental Biology - Plant, 47(5): 604-610.	1. B. balcooa has a long flowering cycle of 55–60 yr, after which the clump dies without setting seeds (Tewari 1992).
7.01	1. Negi, D & S Saxena. 2011. Micropropagation of Bambusa balcooa Roxb. through axillary shoot proliferation. In Vitro Cellular & Developmental Biology - Plant, 47(5): 604-610.	1. Vegetative propagation through culm cuttings, branch cuttings, or rhizomes is difficult on account of few and bulky propagules, season specificity, and low rooting ability of the culm and branch cuttings. Also, B. balcooa clump dies after flowering without setting seeds (Tewari 1992); it can only be propagated through asexual means.
7.02	1. 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?409896 (22 January 2014). 2. Alam, M.K., 1995. Bambusa balcooa Roxb.[Internet] Record from Proseabase. Dransfield, S. & Widjaja, E.A. (Editors). PROSEA (Plant Resources of South-East Asia) Foundation, Bogor, Indonesia. http://www.proseanet.org. Accessed from Internet: 27 January 2014. 3. Negi, D & S Saxena. 2011. Micropropagation of Bambusa balcooa Roxb. through axillary shoot proliferation. In Vitro Cellular & Developmental Biology - Plant, 47(5): 604-610.	1. Economic importance: materials (cane, fiber). 2. Bambusa balcooa is only cultivated on a small scale, in home gardens or village groves. 3. There is an ever increasing demand for B. balcooa by the pulp and paper, wood chip, building, and construction industries
7.03	1. Negi, D & S Saxena. 2011. Micropropagation of Bambusa balcooa Roxb. through axillary shoot proliferation. In Vitro Cellular & Developmental Biology - Plant, 47(5): 604-610.	1. Vegetative propagation through culm cuttings, branch cuttings, or rhizomes is difficult on account of few and bulky propagules, season specificity, and low rooting ability of the culm and branch cuttings. Also, B. balcooa clump dies after flowering without setting seeds (Tewari 1992); it can only be propagated through asexual means.
7.04	1. Negi, D & S Saxena. 2011. Micropropagation of Bambusa balcooa Roxb. through axillary shoot proliferation. In Vitro Cellular & Developmental Biology - Plant, 47(5): 604-610.	1. Vegetative propagation through culm cuttings, branch cuttings, or rhizomes is difficult on account of few and bulky propagules, season specificity, and low rooting ability of the culm and branch cuttings. Also, B. balcooa clump dies after flowering without setting seeds (Tewari 1992); it can only be propagated through asexual means.
7.05	1. Negi, D & S Saxena. 2011. Micropropagation of Bambusa balcooa Roxb. through axillary shoot proliferation. In Vitro Cellular & Developmental Biology - Plant, 47(5): 604-610.	1. Vegetative propagation through culm cuttings, branch cuttings, or rhizomes is difficult on account of few and bulky propagules, season specificity, and low rooting ability of the culm and branch cuttings. Also, B. balcooa clump dies after flowering without setting seeds (Tewari 1992); it can only be propagated through asexual means.
7.06	1. Negi, D & S Saxena. 2011. Micropropagation of Bambusa balcooa Roxb. through axillary shoot proliferation. In Vitro Cellular & Developmental Biology - Plant, 47(5): 604-610.	1. After flowering, B. balcooa clump dies without setting seeds (Tewari 1992); it can only be propagated through asexual means.
7.07	1. Negi, D & S Saxena. 2011. Micropropagation of Bambusa balcooa Roxb. through axillary shoot proliferation. In Vitro Cellular & Developmental Biology - Plant, 47(5): 604-610.	1. After flowering, B. balcooa clump dies without setting seeds (Tewari 1992); it can only be propagated through asexual means.
7.08	1. Negi, D & S Saxena. 2011. Micropropagation of Bambusa balcooa Roxb. through axillary shoot proliferation. In Vitro Cellular & Developmental Biology - Plant, 47(5): 604-610.	1. After flowering, B. balcooa clump dies without setting seeds (Tewari 1992); it can only be propagated through asexual means.
8.01	1. Negi, D & S Saxena. 2011. Micropropagation of Bambusa balcooa Roxb. through axillary shoot proliferation. In Vitro Cellular & Developmental Biology - Plant, 47(5): 604-610.	1. B. balcooa clump dies after flowering without setting seeds (Tewari 1992).
8.02	1. Negi, D & S Saxena. 2011. Micropropagation of Bambusa balcooa Roxb. through axillary shoot proliferation. In Vitro Cellular & Developmental Biology - Plant, 47(5): 604-610.	1. B. balcooa clump dies after flowering without setting seeds (Tewari 1992).

8.03		No evidence found.
8.04		No evidence found.
8.05		No evidence found.