

Australia/New Zealand Weed Risk Assessment adapted for Florida.

Data used for analysis published in: Gordon, D.R., D.A. Onderdonk, A.M. Fox, R.K. Stocker, and C. Gantz. 2008. Predicting Invasive Plants in Florida using the Australian Weed Risk Assessment. Invasive Plant Science and Management 1: 178-195.

<i>Sinocalamus latiflorus (wideleaf bamboo)</i>			
Question number	Question	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)	2	
2.02	Quality of climate match data (0-low; 1-intermediate; 2-high)	2	
2.03	Broad climate suitability (environmental versatility)		
2.04	Native or naturalized in habitats with periodic inundation		
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	n	0
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	y	1
4.03	Parasitic	n	0
4.04	Unpalatable to grazing animals		
4.05	Toxic to animals	n	0
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	n	0
4.09	Is a shade tolerant plant at some stage of its life cycle	n	0
4.1	Grows on infertile soils (oligotrophic, limerock, or excessively draining soils)	?	
4.11	Climbing or smothering growth habit	n	0
4.12	Forms dense thickets	n	0
5.01	Aquatic	n	0

5.02	Grass	y	1
5.03	Nitrogen fixing woody plant	y	1
5.04	Geophyte		
6.01	Evidence of substantial reproductive failure in native habitat		
6.02	Produces viable seed	y	1
6.03	Hybridizes naturally	?	
6.04	Self-compatible or apomictic		
6.05	Requires specialist pollinators	n	0
6.06	Reproduction by vegetative fragmentation	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	?	
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)	?	
8.03	Well controlled by herbicides		
8.04	Tolerates, or benefits from, mutilation or cultivation		
8.05	Effective natural enemies present in Florida, or east of the continental divide		
Total Score			-2

Outcome	Accept*
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*Used secondary screen from: Daehler, C. C., J.L. Denslow, S. Ansari, and H. Kuo. 2004. A risk assessment system for screening out harmful invasive pest plants from Hawaii's and other Pacific islands. *Conserv. Biol.* 18: 360-368.

section	# questions answered	satisfy minimum?
A	6	yes
B	9	yes
C	13	yes
total	28	yes

Data collected 2006-2007

Question number	Reference	Source data
1.01		cultivated, but no evidence of selection for reduced weediness
1.02		
1.03		
2.01	Dransfield, S and EA Widjaja, eds (1995) Plant Resources of South-East Asia. No. 7. Bamboos. PROSEA, Bogor, Indonesia.	"In its area of natural distribution <i>D. latiflorus</i> occurs under subtropical conditions..., tolerating temperatures as low as -4°C."
2.02		
2.03		
2.04		
2.05	Dransfield, S and EA Widjaja, eds (1995) Plant Resources of South-East Asia. No. 7. Bamboos. PROSEA, Bogor, Indonesia.	"The origin of <i>D. latiflorus</i> is not known precisely but it is distributed from Burma (Myanmar) to southern China and Taiwan where it is also found in cultivation...It has been introduced in India, Thailand, Japan, in the early 1970s in the Philippines...and in 1980 in Indonesia."
3.01		no evidence
3.02		no evidence
3.03		no evidence
3.04		no evidence
3.05		no evidence
4.01	Dransfield, S and EA Widjaja, eds (1995) Plant Resources of South-East Asia. No. 7. Bamboos. PROSEA, Bogor, Indonesia.	no description of these traits
4.02	1. Chou, CH (1981) Allelopathic potential of bamboo vegetation in Taiwan. XIII International Botanical Congress, Sydney, Australia 1981: 265. 2. Chou, CH and MH Hou (1981) Allelopathic researches of subtropical vegetations in Taiwan. I. Evaluation of allelopathic potential of bamboo vegetation. Proceedings of the National Science Council, B,	1. "Results of field experiments showed that the inhibition of understory species was due to an allelopathic effect rather than to the competition for light, nutrients and soil moisture. Aqueous leachates of bamboo

	Republic of China 5: 284-292.	leaves significantly inhibited the growth of several understory species and were also toxic to germinating seeds of lettuce, ryegrass and rice. The most toxic bamboo species were <i>Sinocalamus latiflorus</i> ,...". 2. Aqueous extracts of <i>Sinocalamus latiflorus</i> showed the highest phytotoxicity, of 14 bamboo species studied, on seed germination and radicle growth of lettuce, rye grass, and rice.
4.03	Dransfield, S and EA Widjaja, eds (1995) Plant Resources of South-East Asia. No. 7. Bamboos. PROSEA, Bogor, Indonesia.	no description of this
4.04		
4.05		no evidence
4.06	Dransfield, S and EA Widjaja, eds (1995) Plant Resources of South-East Asia. No. 7. Bamboos. PROSEA, Bogor, Indonesia.	"The most common diseases of <i>D. latiflorus</i> are: bamboo mosaic virus..., leaf rust..., bacterial wilt disease attacking shoots..., wood rotting. No serious pests have been recorded."
4.07	Dransfield, S and EA Widjaja, eds (1995) Plant Resources of South-East Asia. No. 7. Bamboos. PROSEA, Bogor, Indonesia.	" <i>D. latiflorus</i> is most important for its young shoots which are used as a vegetable and considered delicious."
4.08		no evidence
4.09	Meredith, TJ (2001) Bamboo for Gardens. Timber Press, Portland, Oregon.	light: full sun
4.1	Dransfield, S and EA Widjaja, eds (1995) Plant Resources of South-East Asia. No. 7. Bamboos. PROSEA, Bogor, Indonesia.	"It grows best in moist, fertile soils." [but unclear whether it is capable of growing in poor soils]
4.11	USDA, NRCS. 2005. The PLANTS Database, Version 3.5 (http://plants.usda.gov). Data compiled from various sources by Mark W. Skinner. National Plant Data Center, Baton Rouge, LA 70874-4490 USA.	growth habit: graminoid/shrub
4.12		no evidence
5.01		terrestrial
5.02	USDA, NRCS. 2005. The PLANTS Database, Version 3.5 (http://plants.usda.gov). Data compiled from various sources by Mark W. Skinner. National Plant Data Center, Baton Rouge, LA 70874-4490 USA.	Poaceae
5.03	Gu, XP, XL Wu, and YD Wang (2001) Study on associated nitrogen fixation of several sympodial bamboo species. Forest Research 14: 28-34.	<i>Dendrocalamus latiflorus</i> was found to fix nitrogen.
5.04		
6.01		
6.02	1. Dransfield, S and EA Widjaja, eds (1995) Plant Resources of South-East Asia. No. 7. Bamboos.	1. " <i>D. latiflorus</i> can be

	PROSEA, Bogor, Indonesia. 2. Sinoh, VO (2001) Bamboo propagation by seeds. Canopy International 27: 5-11.	propagated by seed and by rhizome". 2. A survey of different bamboo species in the Philippines showed that <i>Dendrocalamus latiflorus</i> produces viable seeds.
6.03	Dransfield, S and EA Widjaja, eds (1995) Plant Resources of South-East Asia. No. 7. Bamboos. PROSEA, Bogor, Indonesia.	"Promising hybrids have been developed from crossings of <i>D. latiflorus</i> with <i>Bambusa pervariabilis</i> McClure (for paper-making material), <i>Bambusa textilis</i> McClure (for culm production) and <i>Dendrocalamus minor</i> (McClure) Chia & Fung (for culm production). [but these are artificial crosses - unknown whether it hybridizes naturally]
6.04		
6.05		grass
6.06	Dransfield, S and EA Widjaja, eds (1995) Plant Resources of South-East Asia. No. 7. Bamboos. PROSEA, Bogor, Indonesia.	" <i>D. latiflorus</i> can be propagated by seed and by rhizome".
6.07	Wang, T and M Chen (1972) Flowering and seeding of giant bamboo (<i>Sinocalamus latiflorus</i>). <i>Silvae Genetica</i> 21: 251-252.	"some farmers say requires a 60-year cycle from seed to flowering" [but time to vegetative reproduction unknown]
7.01		
7.02	Dransfield, S and EA Widjaja, eds (1995) Plant Resources of South-East Asia. No. 7. Bamboos. PROSEA, Bogor, Indonesia.	cultivated primarily for its young shoots, and also as an ornamental
7.03		no evidence
7.04	1. Dransfield, S and EA Widjaja, eds (1995) Plant Resources of South-East Asia. No. 7. Bamboos. PROSEA, Bogor, Indonesia. 2. Wang, T and M Chen (1972) Flowering and seeding of giant bamboo (<i>Sinocalamus latiflorus</i>). <i>Silvae Genetica</i> 21: 251-252.	1. "Caryopsis cylindrical to ovoid, 8-12 mm x 4-6 mm" 2. 9-10 mm awns at tip of seeds
7.05		no evidence
7.06		grass
7.07	Dransfield, S and EA Widjaja, eds (1995) Plant Resources of South-East Asia. No. 7. Bamboos. PROSEA, Bogor, Indonesia.	"Caryopsis cylindrical to ovoid, 8-12 mm x 4-6 mm" [no evidence of any means of attachment]
7.08		grass
8.01	1. Dransfield, S and EA Widjaja, eds (1995) Plant Resources of South-East Asia. No. 7. Bamboos. PROSEA, Bogor, Indonesia. 2. Wang, T and M Chen (1972) Flowering and seeding of giant bamboo (<i>Sinocalamus latiflorus</i>). <i>Silvae Genetica</i> 21: 251-252.	1. "Flowering is rare in Taiwan; sporadic flowering and fruiting is a normal occurrence in the Philippines, Indonesia and China."; "seed is usually rather rare" 2. "some farmers say requires a 60-year cycle from

		seed to flowering"; dies soon after flowering; even when it does flower, "seed production is sparse"
8.02	Dransfield, S and EA Widjaja, eds (1995) Plant Resources of South-East Asia. No. 7. Bamboos. PROSEA, Bogor, Indonesia.	"Seed rapidly loses its viability." [likely referring to seeds in storage]
8.03		
8.04		
8.05		