

**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>Ipomoea horsfalliae (prince's vine)</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	?	
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	y	0
4.01	Produces spines, thorns or burrs	n	0
4.02	Allelopathic	n	0
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	y	1
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	y	1
4.12	Forms dense thickets	n	0
5.01	Aquatic	n	0

5.02	Grass	n	0
5.03	Nitrogen fixing woody plant	n	0
5.04	Geophyte	y	1
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		
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	y	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)		
8.03	Well controlled by herbicides		
8.04	Tolerates, or benefits from, mutilation or cultivation	y	1
8.05	Effective natural enemies present in Florida, or east of the continental divide		
<b>Total Score</b>			<b>4</b>

<b>Outcome</b>	<b>Accept*</b>
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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	5	yes
B	10	yes
C	15	yes
total	30	yes

Data collected 2006-2007

Question number	Reference	Source data
1.01		used horticulturally, but no evidence for selection of reduced weediness
1.02		
1.03		
2.01		
2.02		
2.03		
2.04		
2.05	1. Whistler (2000) Tropical Ornamentals: a Guide. Timber Press, Portland. 2. Adams, CD (1972) Flowering Plants of Jamaica. University of the West Indies, Mona, Jamaica.	1. " <i>Ipomoea horsfalliae</i> , prince's vine, is native to the West Indies but is widely if not commonly cultivated in the tropics for its crimson or, rarely, pink flowers." 2. "widely introduced into into other tropical countries"
3.01	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?20177">http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?20177</a> ). 2. Whistler (2000) Tropical Ornamentals: a Guide. Timber Press, Portland. 3. USDA, NRCS. 2005. The PLANTS Database, Version 3.5 ( <a href="http://plants.usda.gov">http://plants.usda.gov</a> ). Data compiled from various sources by Mark W. Skinner. National Plant Data Center, Baton Rouge, LA 70874-4490 USA.	1. Native in Guyana, Suriname, Venezuela, and Brazil; naturalized in Jamaica and elsewhere. BUT 2. " <i>Ipomoea horsfalliae</i> , prince's vine, is native to the West Indies". 3. considered native to Puerto Rico [unclear whether it is native or naturalized in the Caribbean]
3.02		no evidence
3.03		no evidence
3.04		no evidence
3.05	Weber (2003) Invasive Plant Species of the World. CABI Publishing.	<i>I. aquatica</i> considered an environmental weed in the southeastern US; <i>I. cairica</i> considered an environmental weed in Australia; and <i>I. indica</i> considered an environmental weed in southern Europe, southern

		Africa, Australia, and New Zealand.
4.01	Whistler (2000) Tropical Ornamentals: a Guide. Timber Press, Portland.	no description of these traits
4.02		no evidence
4.03	Whistler (2000) Tropical Ornamentals: a Guide. Timber Press, Portland.	no description of this
4.04		
4.05		no evidence
4.06	Muruvanda, DA, JW Beardsley, and WC Mitchell (1986) Additional alternate hosts of the sweet-potato weevils <i>Cylas formicarius elegantulus</i> and <i>Euscepes postfasciatus</i> (Coleoptera, Curculionidae) in Hawaii, USA. Proceedings of the Hawaiian Entomological Society 26: 93-96.	<i>I. horsfalliae</i> was found to be a new host for the sweet potato weevil <i>Cylas formicarius elegantulus</i> .
4.07		no evidence
4.08		no evidence
4.09	1. Black, RJ (2001) Vines for Florida. University of Florida, IFAS Extension, Circular 860 ( <a href="http://edis.ifas.ufl.edu/pdffiles/MG/MG09700.pdf">http://edis.ifas.ufl.edu/pdffiles/MG/MG09700.pdf</a> ). 2. Logee's Greenhouses, Ltd. ( <a href="http://www.logees.com/prodinfo.asp?number=R2022-2">http://www.logees.com/prodinfo.asp?number=R2022-2</a> ). 3. Burke's Backyard ( <a href="http://www.burkesbackyard.com.au/2001/archives/2001_archives/in_the_garden/flowering_plants_and_shrubs/cardinal_creeper">http://www.burkesbackyard.com.au/2001/archives/2001_archives/in_the_garden/flowering_plants_and_shrubs/cardinal_creeper</a> ). 4. Whistler (2000) Tropical Ornamentals: a Guide. Timber Press, Portland.	1. full sun 2. full sun 3. prefers full sun 4. "sunny to partially shaded places are preferred"
4.1	1. Whistler (2000) Tropical Ornamentals: a Guide. Timber Press, Portland. 2. Burke's Backyard ( <a href="http://www.burkesbackyard.com.au/2001/archives/2001_archives/in_the_garden/flowering_plants_and_shrubs/cardinal_creeper">http://www.burkesbackyard.com.au/2001/archives/2001_archives/in_the_garden/flowering_plants_and_shrubs/cardinal_creeper</a> ).	1. "fertile, moist, but well-drained soils...are preferred" 2. "It prefers a rich, well-drained soil".
4.11	1. Whistler (2000) Tropical Ornamentals: a Guide. Timber Press, Portland. 2. Adams, CD (1972) Flowering Plants of Jamaica. University of the West Indies, Mona, Jamaica.	1. vine 2. "Twiner to 10 m. high"
4.12		no evidence
5.01		terrestrial
5.02	USDA, NRCS. 2005. The PLANTS Database, Version 3.5 ( <a href="http://plants.usda.gov">http://plants.usda.gov</a> ). Data compiled from various sources by Mark W. Skinner. National Plant Data Center, Baton Rouge, LA 70874-4490 USA.	Convolvulaceae
5.03	USDA, NRCS. 2005. The PLANTS Database, Version 3.5 ( <a href="http://plants.usda.gov">http://plants.usda.gov</a> ). Data compiled from various sources by Mark W. Skinner. National Plant Data Center, Baton Rouge, LA 70874-4490 USA.	Convolvulaceae
5.04	Burke's Backyard ( <a href="http://www.burkesbackyard.com.au/2001/archives/2001_archives/in_the_garden/flowering_plants_and_shrubs/cardinal_creeper">http://www.burkesbackyard.com.au/2001/archives/2001_archives/in_the_garden/flowering_plants_and_shrubs/cardinal_creeper</a> ).	"can form a tuber with age (this becomes a problem if you try to dig the plant out, as it will sucker from the tuber"
6.01		
6.02	Whistler (2000) Tropical Ornamentals: a Guide.	propagate by seeds

	Timber Press, Portland.	
6.03		
6.04		
6.05		
6.06	Burke's Backyard ( <a href="http://www.burkesbackyard.com.au/2001/archives/2001_archives/in_the_garden/flowering_plants_and_shrubs/cardinal_creeper">http://www.burkesbackyard.com.au/2001/archives/2001_archives/in_the_garden/flowering_plants_and_shrubs/cardinal_creeper</a> ).	"can form a tuber with age (this becomes a problem if you try to dig the plant out, as it will sucker from the tuber"
6.07		
7.01		
7.02	1. Whistler (2000) Tropical Ornamentals: a Guide. Timber Press, Portland. 2. Adams, CD (1972) Flowering Plants of Jamaica. University of the West Indies, Mona, Jamaica.	1. "widely if not commonly cultivated in the tropics for its crimson or, rarely, pink flowers." 2. "widely introduced into into other tropical countries"
7.03		no evidence
7.04	1. Adams, CD (1972) Flowering Plants of Jamaica. University of the West Indies, Mona, Jamaica. 2. USDA, NRCS. 2005. The PLANTS Database, Version 3.5 ( <a href="http://plants.usda.gov">http://plants.usda.gov</a> ). Data compiled from various sources by Mark W. Skinner. National Plant Data Center, Baton Rouge, LA 70874-4490 USA.	1. "seeds dark brown, 6-7 mm. long, with tawny-silky marginal hairs up to 10 mm. long" 2. photo of seeds shows they have many long, soft hairs around the margin
7.05		no evidence
7.06		wind dispersed
7.07	1. Whistler (2000) Tropical Ornamentals: a Guide. Timber Press, Portland. 2. Adams, CD (1972) Flowering Plants of Jamaica. University of the West Indies, Mona, Jamaica.	1. "fruit a subglobose capsule" 2. "capsule abruptly pointed, 13-16 mm. long; seeds dark brown, 6-7 mm. long, with tawny-silky marginal hairs up to 10 mm. long" [no evidence of any means of attachment - has hairs on seeds, but they are soft]
7.08		wind dispersed
8.01	Whistler (2000) Tropical Ornamentals: a Guide. Timber Press, Portland.	fruit "infrequently formed in cultivation"
8.02		
8.03		
8.04	Logee's Greenhouses, Ltd. ( <a href="http://www.logees.com/prodinfo.asp?number=R2022-2">http://www.logees.com/prodinfo.asp?number=R2022-2</a> ).	"it can be pruned hard after flowering", "a strong and resilient plant"
8.05		