

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>Cyperus pilosus (fuzzy flatsedge)</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	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	0
3.02	Garden/amenity/disturbance weed	n	0
3.03	Weed of agriculture	y	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		
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		
4.1	Grows on infertile soils (oligotrophic, limerock, or excessively draining soils)	y	1
4.11	Climbing or smothering growth habit	n	0
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		
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)	1	1
7.01	Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)		
7.02	Propagules dispersed intentionally by people	n	-1
7.03	Propagules likely to disperse as a produce contaminant	?	
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		
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			7

Outcome	Reject*
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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	7	yes
B	9	yes
C	13	yes
total	29	yes

Data collected 2006-2007

Question number	Reference	Source data
1.01		no evidence of cultivation
1.02		
1.03		
2.01		
2.02		
2.03		
2.04	1. New South Wales Flora Online (http://plantnet.rbgsyd.nsw.gov.au/cgi-bin/NSWfl.pl?page=nswfl&lvl=sp&name=Cyperus~pilosus). 2. Smith (1979) Flora Vitiensis Nova: A New Flora of Fiji. Vol. 1. Pacific Tropical Botanical Garden.	1. "Grows in swampy areas in sandy coastal heath" 2. "in swamps and wet places along rivers"
2.05	PIER, Institute of Pacific Islands Forestry (http://www.hear.org/pier/species/cyperus_pilosus.htm).	present in several regions outside of its native range
3.01	Smith (1979) Flora Vitiensis Nova: A New Flora of Fiji. Vol. 1. Pacific Tropical Botanical Garden.	"In Fiji it is a naturalized adventive"
3.02		no evidence
3.03	Holm (1979) A Geographical Atlas of World Weeds. John Wiley and Sons.	Considered a principal agricultural weed in Fiji, and a common weed in Sudan.
3.04		no evidence
3.05	Holm, Plucknett, Pancho, and Herberger (1977) The World's Worst Weeds: Distribution and Biology. The University Press of Hawaii, Honolulu.	" <i>Cyperus rotundus</i> is the world's worst weed."
4.01	Smith (1979) Flora Vitiensis Nova: A New Flora of Fiji. Vol. 1. Pacific Tropical Botanical Garden.	no description of these traits
4.02		no evidence
4.03	Smith (1979) Flora Vitiensis Nova: A New Flora of Fiji. Vol. 1. Pacific Tropical Botanical Garden.	no description of this
4.04		
4.05		no evidence
4.06		
4.07		no evidence
4.08		no evidence
4.09		
4.1	New South Wales Flora Online (http://plantnet.rbgsyd.nsw.gov.au/cgi-	"Grows in swampy areas in sandy coastal heath"

	bin/NSWfl.pl?page=nswfl&lvl=sp&name=Cyperus ~pilosus).	
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
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.	Cyperaceae
5.03	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.	herbaceous Cyperaceae
5.04		
6.01		
6.02	PIER, Institute of Pacific Islands Forestry (http://www.hear.org/pier/species/cyperus_pilosus.htm).	propagation: seed
6.03		
6.04		
6.05	Hafliger et al. (1982) Monocot Weeds 3. Monocot Weeds Excluding Grasses. CIBA-GEIGY Ltd., Basel, Switzerland.	"The Cyperaceae are annual or perennial herbs with...inconspicuous flowers which are pollinated by the wind."
6.06	Smith (1979) Flora Vitiensis Nova: A New Flora of Fiji. Vol. 1. Pacific Tropical Botanical Garden.	rhizome stoloniferous
6.07	Smith (1979) Flora Vitiensis Nova: A New Flora of Fiji. Vol. 1. Pacific Tropical Botanical Garden.	annual or short-lived perennial
7.01		
7.02		no evidence
7.03	Wagner, Herbst, and Sohmer (1999) Manual of the flowering plants of Hawai'i. University of Hawai'i Press/Bishop Museum Press, Honolulu.	"in Hawaii perhaps introduced in connection with rice cultivation"
7.04	Smith (1979) Flora Vitiensis Nova: A New Flora of Fiji. Vol. 1. Pacific Tropical Botanical Garden.	fruit a small achene
7.05		no evidence
7.06		sedge
7.07		no evidence of any means of attachment
7.08		sedge
8.01		
8.02		
8.03		
8.04		
8.05		