

**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.**

<b><i>Mimosa pudica (sensitive plant)</i></b>			
<b>Question number</b>	<b>Question</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 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	y	0
3.02	Garden/amenity/disturbance weed	y	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	y	1
4.02	Allelopathic	n	0
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	y	1
4.09	Is a shade tolerant plant at some stage of its life cycle	y	1
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	y	1
5.04	Geophyte	n	0
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	n	-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	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	y	1
7.06	Propagules bird dispersed	n	-1
7.07	Propagules dispersed by other animals (externally)	y	1
7.08	Propagules dispersed by other animals (internally)	n	-1
8.01	Prolific seed production	y	1
8.02	Evidence that a persistent propagule bank is formed (>1 yr)	y	1
8.03	Well controlled by herbicides	y	-1
8.04	Tolerates, or benefits from, mutilation or cultivation		
8.05	Effective natural enemies present in Florida, or east of the continental divide		
<b>Total Score</b>			<b>17</b>

<b>Outcome</b>	<b>Reject*</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	6	yes
B	9	yes
C	16	yes
total	31	yes

Data collected 2006-2007

Question number	Reference	Source data
1.01		no evidence of selection for reduced weediness
1.02		
1.03		
2.01		
2.02		
2.03		
2.04		
2.05	1. Holm, Plucknett, Pancho, and Herberger (1977) <i>The World's Worst Weeds: Distribution and Biology</i> . The University Press of Hawaii, Honolulu. 2. Parsons and Cuthbertson (2001) <i>Noxious Weeds of Australia</i> . CSIRO Publishing.	1. "It has been widely introduced and is now pan-tropical." 2. "It was probably introduced to Australia as an ornamental"
3.01	Parsons and Cuthbertson (2001) <i>Noxious Weeds of Australia</i> . CSIRO Publishing.	"a native of tropical America...It is now considered to be a serious weed in South America, the Caribbean, parts of West Africa, Mauritius, Sri Lanka, India, and Southeast Asia, including Indonesia and the Philippines, as well as in Papua New Guinea, Hawaii, and some islands of the south west Pacific."
3.02	Parsons and Cuthbertson (2001) <i>Noxious Weeds of Australia</i> . CSIRO Publishing.	"a weed of...roadsides, home gardens, and waste places close to urban areas"
3.03	Holm, Plucknett, Pancho, and Herberger (1977) <i>The World's Worst Weeds: Distribution and Biology</i> . The University Press of Hawaii, Honolulu.	"It has been reported to be a weed in 22 crops in 38 countries...It can also become a pest in tropical pastures where its high plant populations and thorny stems make grazing difficult and often deny available forage to the grazing animals."
3.04		no evidence
3.05	Parsons and Cuthbertson (2001) <i>Noxious Weeds of Australia</i> . CSIRO Publishing.	<i>M. invisa</i> and <i>M. pigra</i> are both considered noxious weeds in Australia.
4.01	Parsons and Cuthbertson (2001) <i>Noxious Weeds of Australia</i> . CSIRO Publishing.	"scattered prickles along the internodes"; fruit "edged with prickles"
4.02		no evidence
4.03	Parsons and Cuthbertson (2001) <i>Noxious Weeds of Australia</i> . CSIRO Publishing.	no description of this
4.04		

4.05	1. Burrows and Tyrl (2001) Toxic Plants of North America. Iowa State University Press, Ames. 2. Parsons and Cuthbertson (2001) Noxious Weeds of Australia. CSIRO Publishing.	1. "Although specific reports of intoxication problems caused by species of <i>Mimosa</i> are lacking, the plants have been found to contain several potential toxicants." 2. "suspected of poisoning cattle in Papua New Guinea"
4.06		
4.07	Burrows and Tyrl (2001) Toxic Plants of North America. Iowa State University Press, Ames.	"Although specific reports of intoxication problems caused by species of <i>Mimosa</i> are lacking, the plants have been found to contain several potential toxicants." [no evidence of toxicity]
4.08	Holm, Plucknett, Pancho, and Herberger (1977) The World's Worst Weeds: Distribution and Biology. The University Press of Hawaii, Honolulu.	"the dried foliage sometimes is a fire hazard"
4.09	1. Parsons and Cuthbertson (2001) Noxious Weeds of Australia. CSIRO Publishing. 2. Holm, Plucknett, Pancho, and Herberger (1977) The World's Worst Weeds: Distribution and Biology. The University Press of Hawaii, Honolulu.	1. "it tolerates a considerable degree of shade" 2. "It can stand considerable shading"
4.1	Parsons and Cuthbertson (2001) Noxious Weeds of Australia. CSIRO Publishing.	"it grows on a wide range of soils"
4.11	Parsons and Cuthbertson (2001) Noxious Weeds of Australia. CSIRO Publishing.	a low sprawling shrub 15 to 50 cm high
4.12		no evidence
5.01		terrestrial
5.02	Parsons and Cuthbertson (2001) Noxious Weeds of Australia. CSIRO Publishing.	Fabaceae
5.03	Parsons and Cuthbertson (2001) Noxious Weeds of Australia. CSIRO Publishing.	"with thin feeding roots bearing rhizobial nodules on the root hairs"
5.04	Parsons and Cuthbertson (2001) Noxious Weeds of Australia. CSIRO Publishing.	root "a slightly woody branched taproot to 1 m, with thin feeding roots"
6.01		
6.02	Parsons and Cuthbertson (2001) Noxious Weeds of Australia. CSIRO Publishing.	"reproducing by seed"
6.03		
6.04		
6.05		
6.06	Parsons and Cuthbertson (2001) Noxious Weeds of Australia. CSIRO Publishing.	"Common sensitive plant reproduces only by seed"
6.07	Parsons and Cuthbertson (2001) Noxious Weeds of Australia. CSIRO Publishing.	"Flowering commences about 3 months after germination"
7.01		
7.02	Parsons and Cuthbertson (2001) Noxious Weeds of Australia. CSIRO Publishing.	"It was probably introduced to Australia as an ornamental"
7.03		no evidence
7.04		
7.05	Parsons and Cuthbertson (2001) Noxious Weeds of Australia. CSIRO Publishing.	"The one-seeded segments...move easily in flowing water, particularly flood waters."
7.06		dispersed externally

7.07	Parsons and Cuthbertson (2001) Noxious Weeds of Australia. CSIRO Publishing.	"The relatively small pod with its stiff marginal bristles adheres to wool, fur and clothing and may be transported considerable distances by these agents."
7.08		dispersed externally
8.01	Parsons and Cuthbertson (2001) Noxious Weeds of Australia. CSIRO Publishing.	"Common sensitive plant seeds prolifically, a single plant producing from 600 to 700 seeds in a season." [small shrub]
8.02	Holm, Plucknett, Pancho, and Herberger (1977) The World's Worst Weeds: Distribution and Biology. The University Press of Hawaii, Honolulu.	"Seeds stored in a laboratory for 19 years gave a germination of 2 percent." [not in soil, but it has a hard seed coat]
8.03	Parsons and Cuthbertson (2001) Noxious Weeds of Australia. CSIRO Publishing.	"It is susceptible to several herbicides, including dicamba, glyphosate, picloram and triclopyr."
8.04		
8.05		