

Australia/New Zealand Weed Risk Assessment adapted for United States.

Data used for analysis published in: Gordon, D.R. and C.A. Gantz. 2008. Potential impacts on the horticultural industry of screening new plants for invasiveness. Conservation Letters 1: 227-235. Available at: <http://www3.interscience.wiley.com/cgi-bin/fulltext/121448369/PDFSTART>

<i>Aspidistra patentiloba</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 U.S. 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)	n	0
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	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		
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		
4.09	Is a shade tolerant plant at some stage of its life cycle	y	1
4.1	Grows on one or more of the following soil types: alfisols, entisols, or mollisols	y	1
4.11	Climbing or smothering growth habit	?	
4.12	Forms dense thickets		

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	n	0
6.02	Produces viable seed		
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	n	-1
7.05	Propagules water dispersed		
7.06	Propagules bird dispersed	y	1
7.07	Propagules dispersed by other animals (externally)	?	
7.08	Propagules dispersed by other animals (internally)	?	
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 U.S.		
Total Score			2

Outcome	Accept*
----------------	----------------

*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	11	Yes
B	6	Yes
C	9	Yes
total	26	yes

Data collected 2008

Question number	Reference	Source data
1.01		used horticulturally, but no evidence of significant modification
1.02		
1.03		
2.01	1. PERAL NAPPFAST Global Plant Hardiness (http://www.nappfast.org/Plant_hardiness/NAPPFAST%20Global%20zones/10-year%20climate/PLANT_HARDINESS_10YR%20Ign d.tif). 2. Lang, K.-Y et al (1999) Taxonomic and phytogeographic studies on the genus <i>Aspidistra</i> Ker-Gawl. (<i>Liliaceae</i>) in China. Acta Phytotaxonomica Sinica 37(5): 468-508.	1. Global hardiness zones 9-10. 2. China: Guangxi: Nanning.
2.02		
2.03	1. Köppen-Geiger climate map (http://www.hydrol-earth-syst-sci.net/11/1633/2007/hess-11-1633-2007.pdf). 2. Lang, K.-Y et al (1999) Taxonomic and phytogeographic studies on the genus <i>Aspidistra</i> Ker-Gawl. (<i>Liliaceae</i>) in China. Acta Phytotaxonomica Sinica 37(5): 468-508.	1. One climatic region. 2. China: Guangxi: Nanning.
2.04	Climate Source (http://www.climatesource.com/cn/fact_sheets/chinapt_xl.jpg).	For Guangxi Province, the average annual precipitation is 31.5 in/yr -- 196.9 in/yr.
2.05	1. Jearrard's Herbal (http://www.johnjearrard.co.uk/convallariaceae/aspidistra/patentiloba.html). 2. Lang, K.-Y et al (1999) Taxonomic and phytogeographic studies on the genus <i>Aspidistra</i> Ker-Gawl. (<i>Liliaceae</i>) in China. Acta Phytotaxonomica Sinica 37(5): 468-508.	1. Cultivated in the United Kingdom. 2. "Cultivated in Guangxi School of Pharmacy".
3.01		no evidence
3.02		no evidence

3.03		no evidence
3.04		no evidence
3.05		no evidence
4.01	Wu, ZY and Raven, PH (editors), Flora of China, Vol. 24, P. 247. Science Press, Beijing, & Missouri Botanical Garden Press, St. Louis.	no description of these traits
4.02		
4.03	Wu, ZY and Raven, PH (editors), Flora of China, Vol. 24, P. 247. Science Press, Beijing, & Missouri Botanical Garden Press, St. Louis.	no description of parasitism
4.04		
4.05	Wu, ZY and Raven, PH (editors), Flora of China, Vol. 24, P. 247. Science Press, Beijing, & Missouri Botanical Garden Press, St. Louis.	no evidence
4.06		
4.07	Wu, ZY and Raven, PH (editors), Flora of China, Vol. 24, P. 247. Science Press, Beijing, & Missouri Botanical Garden Press, St. Louis.	no evidence
4.08		
4.09	Plant Delights Nursery (http://www.plantdelights.com/Catalog/Current/Detail/07059.html).	"Light shade to shade".
4.1	USDA, National Resources Conservation Services (NRCS), Soil Survey Division, World Soil Resources (http://soils.usda.gov/use/worldsoils/mapindex/order.html).	Primarily ultisols in this region.
4.11	Wu, ZY and Raven, PH (editors), Flora of China, Vol. 24, P. 247. Science Press, Beijing, & Missouri Botanical Garden Press, St. Louis.	"Scape 2.5-4 cm...Flower solitary".
4.12		
5.01		
5.02		Liliaceae
5.03		Liliaceae
5.04	Wu, ZY and Raven, PH (editors), Flora of China, Vol. 24, P. 247. Science Press, Beijing, & Missouri Botanical Garden Press, St. Louis.	"Rhizome subterete".
6.01		no evidence
6.02		

6.03		
6.04		
6.05		
6.06	Wu, ZY and Raven, PH (editors), Flora of China, Vol. 24, P. 247. Science Press, Beijing, & Missouri Botanical Garden Press, St. Louis.	"Rhizome subterete".
6.07		
7.01		
7.02	1. Jearrard's Herbal (http://www.johnjearrard.co.uk/convallariaceae/aspidistra/patentiloba.html). 2. Lang, K.-Y et al (1999) Taxonomic and phytogeographic studies on the genus <i>Aspidistra</i> Ker-Gawl. (Liliaceae) in China. <i>Acta Phytotaxonomica Sinica</i> 37(5): 468-508.	1. Cultivated in the United Kingdom. 2. "Cultivated in Guangxi School of Pharmacy".
7.03		no evidence
7.04	Wu, ZY and Raven, PH (editors), Flora of China, Vol. 24, P. 247. Science Press, Beijing, & Missouri Botanical Garden Press, St. Louis.	"Berry purple, subglobose, 1.4-1.7 cm in diam." [no evidence of adaptations to wind dispersal]
7.05		
7.06	Wu, ZY and Raven, PH (editors), Flora of China, Vol. 24, P. 247. Science Press, Beijing, & Missouri Botanical Garden Press, St. Louis.	"Berry purple, subglobose, 1.4-1.7 cm in diam., softly prickly".
7.07	Wu, ZY and Raven, PH (editors), Flora of China, Vol. 24, P. 247. Science Press, Beijing, & Missouri Botanical Garden Press, St. Louis.	"Berry purple, subglobose, 1.4-1.7 cm in diam., softly prickly". [no evidence of adaptations to external dispersal]
7.08	Wu, ZY and Raven, PH (editors), Flora of China, Vol. 24, P. 247. Science Press, Beijing, & Missouri Botanical Garden Press, St. Louis.	"Berry purple, subglobose, 1.4-1.7 cm in diam., softly prickly".
8.01		
8.02		
8.03		
8.04		
8.05		