

**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>Girroniera parvifolia</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)	1	
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	n	0
2.05	Does the species have a history of repeated introductions outside its natural range?	?	
3.01	Naturalized beyond native range	n	-1
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		
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	n	0
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	n	0
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		
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	n	-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		
7.07	Propagules dispersed by other animals (externally)	n	-1
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.		
<b>Total Score</b>			<b>-4</b>

<b>Outcome</b>	<b>Accept</b>
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<b>section</b>	<b># questions answered</b>	<b>satisfy minimum?</b>
A	10	Yes
B	6	Yes
C	9	Yes
total	25	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 ( <a href="http://www.nappfast.org/Plant_hardiness/NAPPFAST%20Global%20zones/10-year%20climate/PLANT_HARDINESS_10YR%20Ign.d.tif">http://www.nappfast.org/Plant_hardiness/NAPPFAST%20Global%20zones/10-year%20climate/PLANT_HARDINESS_10YR%20Ign.d.tif</a> ). 2. Hooker, JD (1890) The Flora of British India. Volume V. Chenopodiaceae to Orchideae. L. Reeve & Co., London. 3. Keßler, PJA, Sidiyasa, K, Zainal, A (1992) Checklist for a tree flora of the Balikpapan-Samarinda Area, East Kalimantan, Indonesia. The Tropenbos Foundation, Wageningen, The Netherlands.	1. Global hardiness zones 12-13. 2. "Perak, Penang, Malacca [Malaysia]". 3. East Kalimantan, Indonesia
2.02		
2.03	1. Köppen-Geiger climate map ( <a href="http://www.hydrol-earth-syst-sci.net/11/1633/2007/hess-11-1633-2007.pdf">http://www.hydrol-earth-syst-sci.net/11/1633/2007/hess-11-1633-2007.pdf</a> ). 2. Hooker, JD (1890) The Flora of British India. Volume V. Chenopodiaceae to Orchideae. L. Reeve & Co., London. 3. Keßler, PJA, Sidiyasa, K, Zainal, A (1992) Checklist for a tree flora of the Balikpapan-Samarinda Area, East Kalimantan, Indonesia. The Tropenbos Foundation, Wageningen, The Netherlands.	1. Only one climatic region. 2. "Perak, Penang, Malacca [Malaysia]". 3. East Kalimantan, Indonesia
2.04	Atlapedia Online ( <a href="http://www.atlapedia.com/online/countries/malaysia">http://www.atlapedia.com/online/countries/malaysia</a> ).	For peninsular Malaysia: "Average annual precipitation for West Malaysia is 2,540 mm (100 inches)."
2.05		no evidence
3.01		no evidence
3.02		no evidence
3.03		no evidence
3.04		no evidence
3.05		no evidence
4.01	1. Hooker, JD (1890) The Flora of British India. Volume V. Chenopodiaceae to Orchideae. L. Reeve	1. "Evergreen unarmed trees or shrubs" [genus description]. 2.

	& Co., London. 2. Zipcodezoo.com ( <a href="http://zipcodezoo.com/Plants/G/Gironniera_parvifolia.asp">http://zipcodezoo.com/Plants/G/Gironniera_parvifolia.asp</a> ).	"Branchlets never spinose" [genus description]. [no other description of these traits]
4.02		
4.03	Hooker, JD (1890) The Flora of British India. Volume V. Chenopodiaceae to Orchideae. L. Reeve & Co., London.	no description of parasitism
4.04		
4.05	Hooker, JD (1890) The Flora of British India. Volume V. Chenopodiaceae to Orchideae. L. Reeve & Co., London.	no evidence
4.06		
4.07	Hooker, JD (1890) The Flora of British India. Volume V. Chenopodiaceae to Orchideae. L. Reeve & Co., London.	no evidence
4.08		
4.09		
4.1	USDA, National Resources Conservation Services (NRCS), Soil Survey Division, World Soil Resources ( <a href="http://soils.usda.gov/use/worldsoils/mapindex/order.html">http://soils.usda.gov/use/worldsoils/mapindex/order.html</a> ).	Malaysia: almost entirely ultisols, with very small amounts of alfisols, entisols and inceptisols (and also very small amounts of histisols and oxisols).
4.11	Hooker, JD (1890) The Flora of British India. Volume V. Chenopodiaceae to Orchideae. L. Reeve & Co., London.	"A shrub or small tree; branches slender."
4.12	Hooker, JD (1890) The Flora of British India. Volume V. Chenopodiaceae to Orchideae. L. Reeve & Co., London.	"A shrub or small tree; branches slender."
5.01		terrestrial
5.02		Ulmaceae
5.03		Ulmaceae
5.04	1. Hooker, JD (1890) The Flora of British India. Volume V. Chenopodiaceae to Orchideae. L. Reeve & Co., London. 2. Keßler, PJA, Sidiyasa, K, Zainal, A (1992) Checklist for a tree flora of the Balikpapan-Samarinda Area, East Kalimantan, Indonesia. The Tropenbos Foundation, Wageningen, The Netherlands. 3. Zipcodezoo.com ( <a href="http://zipcodezoo.com/Plants/G/Gironniera_parvifolia.asp">http://zipcodezoo.com/Plants/G/Gironniera_parvifolia.asp</a> ).	1. "A shrub or small tree; branches slender." [species description]; "evergreen unarmed trees or shrubs" [genus description]. 2. Tree. 3. "Trees or shrubs, evergreen, dioecious or rarely monoecious" [genus description].

6.01		no evidence
6.02		
6.03		
6.04		
6.05		
6.06		
6.07		
7.01		
7.02		no evidence
7.03		no evidence
7.04	<p>1. Hooker, JD (1890) The Flora of British India. Volume V. Chenopodiaceae to Orchideae. L. Reeve &amp; Co., London. 2. Zipcodezoo.com (<a href="http://zipcodezoo.com/Plants/G/Gironniera_parvifolia.asp">http://zipcodezoo.com/Plants/G/Gironniera_parvifolia.asp</a>).</p>	<p>1. "Drupes 2-3 on a long slender peduncle, 1/3 in. broad, often long-beaked, and with the style-arms 1 in. long." [species description]; "drupe ovoid or suborbicular, terete or compressed, often 2-keeled, endocarp hard." [genus description]. 2. "Drupes compressed or not; endocarp bony. Seed with endosperm or not" [genus description]. [no evidence of adaptations to wind dispersal]</p>
7.05		
7.06		
7.07	<p>1. Hooker, JD (1890) The Flora of British India. Volume V. Chenopodiaceae to Orchideae. L. Reeve &amp; Co., London. 2. Zipcodezoo.com (<a href="http://zipcodezoo.com/Plants/G/Gironniera_parvifolia.asp">http://zipcodezoo.com/Plants/G/Gironniera_parvifolia.asp</a>).</p>	<p>1. "Drupes 2-3 on a long slender peduncle, 1/3 in. broad, often long-beaked, and with the style-arms 1 in. long." [species description]; "drupe ovoid or suborbicular, terete or compressed, often 2-keeled, endocarp hard." [genus description]. 2. "Drupes compressed or not; endocarp bony. Seed with endosperm or not" [genus description]. [no evidence of adaptations to external dispersal]</p>
7.08		
8.01		
8.02		
8.03		
8.04		
8.05		