

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>Myrcia dichasialis</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)	1	
2.03	Broad climate suitability (environmental versatility)	?	
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?	?	
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		
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	?	
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		
7.05	Propagules water dispersed		
7.06	Propagules bird dispersed		
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
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section	# questions answered	satisfy minimum?
A	8	Yes
B	5	Yes
C	7	Yes
total	20	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	<p>1. PERAL NAPPFAST Global Plant Hardiness (http://www.nappfast.org/Plant_hardiness/NAPPFAST%20Global%20zones/10-year%20climate/PLANT_HARDINESS_10YR%20gnd.tif). 2. Harvard University Herbarium Databases (http://asaweb.huh.harvard.edu:8080/databases/specimens?id=119378). 3. Holst, BK and Todzia, CA (1990) Léon Croizat's Plant Collections from the Franco-Venezuelan Expedition to the Headwaters of the Rio Orinoco. <i>Annals of the Missouri Botanical Garden</i> 77: 485-516. 4. The New York Botanical Garden Virtual Herbarium (http://sciweb.nybg.org/science2/vii2.asp). 5. Global Biodiversity Information Facility (http://data.gbif.org/species/15646737). 6. Morales Rojas, T and Castillo Suarez, A. Catálogo Dendrológico comentado del bosque ribereño de la confluencia de los rios Cuao-Sipapo (Estado Amazonas, Venezuela). <i>Acta Bot. Venez.</i> (online). Jan. 2005, vol.28, no.1 [cited 27 May 2008], p.63-88. Available from World Wide Web: <http://www.scielo.org.ve/scielo.php?script=sci_arttext&pid=S0084-59062005000100004&lng=en&nrm=iso>. 7. <i>Herbier de Guyane (CAY)</i> (http://www.cayenne.ird.fr/aublet2/Pop_up_Referentiel_GI_GF.php3?grande_unite=Dicotyledones).</p>	<p>1. Global hardiness zones (8-9?-)10-13. 2. Specimen was collected in Loreto, Peru. 3. Species is listed as having been collected from the Río Orinoco, above Ugueto. 4. Specimens were collected from Venezuela (Amazonas), Brazil (Acre), and Peru (Loreto). 5. Distribution: Colombia, Venezuela, Ecuador, Peru. 6. "Distribution: AM, BO." [Amazonas and Bolivar states, Venezuela]. 7. Specimen(s) collected in French Guiana and deposited in herbarium.</p>
2.02		
2.03	<p>1. Köppen-Geiger climate map (http://www.hydro-earth-syst-sci.net/11/1633/2007/hess-11-1633-2007.pdf). 2. Harvard University Herbarium Databases (http://asaweb.huh.harvard.edu:8080/databases/specimens?id=119378). 3. Holst, BK and Todzia, CA (1990) Léon Croizat's Plant Collections from the Franco-Venezuelan Expedition to the Headwaters of the Rio Orinoco. <i>Annals of the Missouri Botanical Garden</i> 77: 485-516. 4. The New York Botanical Garden Virtual Herbarium (http://sciweb.nybg.org/science2/vii2.asp). 5.</p>	<p>1. Distribution range is uncertain -- possibly 2-3 climatic regions. 2. Specimen was collected in Loreto, Peru. 3. Species is listed as having been collected from the Río Orinoco, above Ugueto. 4. Specimens were collected from Venezuela (Amazonas), Brazil (Acre), and Peru (Loreto). 5. Distribution: Colombia, Venezuela, Ecuador, Peru. 6. "Distribution: AM, BO." [Amazonas and Bolivar states, Venezuela]. 7.</p>

	<p>Global Biodiversity Information Facility (http://data.gbif.org/species/15646737). 6. Morales Rojas, T and Castillo Suarez, A. Catálogo Dendrológico comentado del bosque ribereño de la confluencia de los rios Cuao-Sipapo (Estado Amazonas, Venezuela). Acta Bot. Venez. (online). Jan. 2005, vol.28, no.1 [cited 27 May 2008], p.63-88. Available from World Wide Web: <http://www.scielo.org.ve/scielo.php?script=sci_artext&pid=S0084-59062005000100004&lng=en&nrm=iso>. 7. Herbar de Guyane (CAY) (http://www.cayenne.ird.fr/aublet2/Pop_up_Referentiel_GI_GF.php3?grande_unite=Dicotyledones).</p>	Specimen(s) collected in French Guiana and deposited in herbarium.
2.04	<p>1. Atlapedia Online (http://www.atlapedia.com/online/countries/peru.htm). 2. Atlapedia Online (http://www.atlapedia.com/online/countries/venezual.htm). 3. Atlapedia Online (http://www.atlapedia.com/online/countries/brazil.htm). 4. Atlapedia Online (http://www.worldtradepress.com/Precipitation_Map_Colombia.html). 5. World Trade Press (http://www.worldtradepress.com/Precipitation_Map_Ecuador.html). 6. Atlapedia Online (http://www.atlapedia.com/online/countries/frenguin.htm).</p>	<p>1. For Peru: average annual precipitation varies from 2,540 mm (100 inches) to 3,960 mm (156 inches) depending on the region. 2. For Venezuela: the wet season is from May to November with an average annual precipitation varying from 1,400 mm (55 inches) in the Andes to 280 mm (11 inches) on the coast. 3. For Brazil: "the nationwide average annual precipitation varies between 1,010 mm (40 inches) and 2,030 mm (80 inches)." 4. Most of Colombia receives between 49.2 and 98.4 inches of rainfall per year, depending upon the region. 5. For Ecuador: average annual precipitation ranges from 3.9 in/yr to greater than 98.4 in/yr. 6. For French Guiana: average annual precipitation is more than 2,500 mm (100 inches).</p>
2.05		no evidence
3.01		no evidence
3.02		no evidence
3.03		no evidence
3.04		no evidence
3.05		
4.01	McVaugh, R (1956) Tropical American Myrtaceae notes on generic concepts and descriptions of	no description of these traits

	previously unrecognized species. Fieldiana: Botany 29(3): 185-190. Chicago Natural History Museum, Chicago.	
4.02		
4.03	McVaugh, R (1956) Tropical American Myrtaceae notes on generic concepts and descriptions of previously unrecognized species. Fieldiana: Botany 29(3): 185-190. Chicago Natural History Museum, Chicago.	no description of parasitism
4.04		
4.05	McVaugh, R (1956) Tropical American Myrtaceae notes on generic concepts and descriptions of previously unrecognized species. Fieldiana: Botany 29(3): 185-190. Chicago Natural History Museum, Chicago.	no evidence
4.06		
4.07	McVaugh, R (1956) Tropical American Myrtaceae notes on generic concepts and descriptions of previously unrecognized species. Fieldiana: Botany 29(3): 185-190. Chicago Natural History Museum, Chicago.	no evidence
4.08		
4.09		
4.1	<p>USDA, National Resources Conservation Services (NRCS), Soil Survey Division, World Soil Resources (http://soils.usda.gov/use/worldsoils/mapindex/order.html).</p>	<p>Peru: Loreto: mostly oxisols, small amounts of inceptisols and ultisols; Venezuela: Amazonas: mostly oxisols with small amounts of inceptisols and ultisols; Bolivar: mostly ultisols and oxisols with a small amount of entisols; Brazil: Acre: appears to be entirely oxisols; Colombia: ultisols, entisols, alfisols (main types), (oxisols and andisols are present in the south and along the Pacific Coast); Ecuador: primarily andisols and oxisols, but there are also small amounts of entisols, inceptisols, mollisols and ultisols, mostly along the west coast; French Guiana: almost entirely oxisols, with a small amount of inceptisols and a very small amount of entisols. [Since so many of the areas are primarily oxisols, it is still uncertain whether the species occurs in any other soil order</p>

		type].
4.11	McVaugh, R (1956) Tropical American Myrtaceae notes on generic concepts and descriptions of previously unrecognized species. Fieldiana: Botany 29(3): 185-190. Chicago Natural History Museum, Chicago.	"Perhaps a shrub, or a tree up to 10 meters high".
4.12		
5.01		terrestrial
5.02	McVaugh, R (1956) Tropical American Myrtaceae notes on generic concepts and descriptions of previously unrecognized species. Fieldiana: Botany 29(3): 185-190. Chicago Natural History Museum, Chicago.	Myrtaceae
5.03	McVaugh, R (1956) Tropical American Myrtaceae notes on generic concepts and descriptions of previously unrecognized species. Fieldiana: Botany 29(3): 185-190. Chicago Natural History Museum, Chicago.	Myrtaceae
5.04	McVaugh, R (1956) Tropical American Myrtaceae notes on generic concepts and descriptions of previously unrecognized species. Fieldiana: Botany 29(3): 185-190. Chicago Natural History Museum, Chicago.	"Perhaps a shrub, or a tree up to 10 meters high".
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		
7.05		
7.06		
7.07		
7.08		
8.01		
8.02		
8.03		
8.04		
8.05		