Key Words: Evaluate, Vine, Toxic, Milky Sap, Ornamental, White-flowered, Wind-dispersed

Family: ***Apocynaceae***

Taxon: ***Mandevilla boliviensis***

Synonym: *Dipladenia boliviensis Hook. f. (basionym)* ***Common Name:*** white dipladenia
white mandevilla

Questionaire : current 20090513 **Assessor:** Chuck Chimera **Designation:** EVALUATE
Status: Assessor Approved **Data Entry Person:** Chuck Chimera **WRA Score 1**

101	**Is the species highly domesticated?**	**y=-3, n=0**	**n**
102	**Has the species become naturalized where grown?**	**y=1, n=-1**	
103	**Does the species have weedy races?**	**y=1, n=-1**	
201	**Species suited to tropical or subtropical climate(s) - If island is primarily wet habitat, then substitute "wet tropical" for "tropical or subtropical"**	**(0-low; 1-intermediate; 2-high) (See Appendix 2)**	**High**
202	**Quality of climate match data**	**(0-low; 1-intermediate; 2-high) (See Appendix 2)**	**High**
203	**Broad climate suitability (environmental versatility)**	**y=1, n=0**	**n**
204	**Native or naturalized in regions with tropical or subtropical climates**	**y=1, n=0**	**y**
205	**Does the species have a history of repeated introductions outside its natural range?**	**y=-2, ?=-1, n=0**	**y**
301	**Naturalized beyond native range**	**y = 1*multiplier (see Appendix 2), n= question 205**	**n**
302	**Garden/amenity/disturbance weed**	**n=0, y = 1*multiplier (see Appendix 2)**	**n**
303	**Agricultural/forestry/horticultural weed**	**n=0, y = 2*multiplier (see Appendix 2)**	**n**
304	**Environmental weed**	**n=0, y = 2*multiplier (see Appendix 2)**	**n**
305	**Congeneric weed**	**n=0, y = 1*multiplier (see Appendix 2)**	**y**
401	**Produces spines, thorns or burrs**	**y=1, n=0**	**n**
402	**Allelopathic**	**y=1, n=0**	
403	**Parasitic**	**y=1, n=0**	**n**
404	**Unpalatable to grazing animals**	**y=1, n=-1**	
405	**Toxic to animals**	**y=1, n=0**	**y**
406	**Host for recognized pests and pathogens**	**y=1, n=0**	**n**
407	**Causes allergies or is otherwise toxic to humans**	**y=1, n=0**	**y**
408	**Creates a fire hazard in natural ecosystems**	**y=1, n=0**	**n**
409	**Is a shade tolerant plant at some stage of its life cycle**	**y=1, n=0**	
410	**Tolerates a wide range of soil conditions (or limestone conditions if not a volcanic island)**	**y=1, n=0**	**n**
411	**Climbing or smothering growth habit**	**y=1, n=0**	**y**

412	**Forms dense thickets**	**y=1, n=0**	**n**
501	**Aquatic**	**y=5, n=0**	**n**
502	**Grass**	**y=1, n=0**	**n**
503	**Nitrogen fixing woody plant**	**y=1, n=0**	**n**
504	**Geophyte (herbaceous with underground storage organs -- bulbs, corms, or tubers)**	**y=1, n=0**	**n**
601	**Evidence of substantial reproductive failure in native habitat**	**y=1, n=0**	**n**
602	**Produces viable seed**	**y=1, n=-1**	**y**
603	**Hybridizes naturally**	**y=1, n=-1**	
604	**Self-compatible or apomictic**	**y=1, n=-1**	
605	**Requires specialist pollinators**	**y=-1, n=0**	**y**
606	**Reproduction by vegetative fragmentation**	**y=1, n=-1**	**n**
607	**Minimum generative time (years)**	**1 year = 1, 2 or 3 years = 0, 4+ years = -1**	
701	**Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)**	**y=1, n=-1**	**n**
702	**Propagules dispersed intentionally by people**	**y=1, n=-1**	**y**
703	**Propagules likely to disperse as a produce contaminant**	**y=1, n=-1**	**n**
704	**Propagules adapted to wind dispersal**	**y=1, n=-1**	**y**
705	**Propagules water dispersed**	**y=1, n=-1**	**n**
706	**Propagules bird dispersed**	**y=1, n=-1**	**n**
707	**Propagules dispersed by other animals (externally)**	**y=1, n=-1**	
708	**Propagules survive passage through the gut**	**y=1, n=-1**	
801	**Prolific seed production (>1000/m2)**	**y=1, n=-1**	
802	**Evidence that a persistent propagule bank is formed (>1 yr)**	**y=1, n=-1**	
803	**Well controlled by herbicides**	**y=-1, n=1**	
804	**Tolerates, or benefits from, mutilation, cultivation, or fire**	**y=1, n=-1**	
805	**Effective natural enemies present locally (e.g. introduced biocontrol agents)**	**y=-1, n=1**	

Designation: EVALUATE **WRA Score** **1**

Supporting Data:

101	1998. Morales, J.F.. A Synopsis of the Genus Mandevilla (Apocynaceae) in Mexico and Central America. Brittonia. 50(2): 214-232.	[Is the species highly domesticated? No evidence]
101	2012. Missouri Botanical Garden. Mandevilla boliviensis. http://www.missouribotanicalgarden.org/gardens-gardening/your-garden/plant-finder/plant-details/kc/a526/mandevilla-boliviensis.aspx	[Is the species highly domesticated? No evidence]
102	2012. WRA Specialist. Personal Communication.	NA
103	2012. WRA Specialist. Personal Communication.	NA
201	1998. Morales, J.F.. A Synopsis of the Genus Mandevilla (Apocynaceae) in Mexico and Central America. Brittonia. 50(2): 214-232.	[Species suited to tropical or subtropical climate(s) 2-High] "Distribution.-Costa Rica, Ecuador, and Bolivia, between 200 and 700 m."
202	1998. Morales, J.F.. A Synopsis of the Genus Mandevilla (Apocynaceae) in Mexico and Central America. Brittonia. 50(2): 214-232.	[Quality of climate match data 2-High]
203	2012. Missouri Botanical Garden. Mandevilla boliviensis. http://www.missouribotanicalgarden.org/gardens-gardening/your-garden/plant-finder/plant-details/kc/a526/mandevilla-boliviensis.aspx	[Broad climate suitability (environmental versatility)? No] "Zone: 10 to 11"
204	1933. Woodson, Jr., R.E.. Studies in the Apocynaceae. IV. The American Genera of Echitoideae. Annals of the Missouri Botanical Garden. 20(4): 605-790.	[Native or naturalized in regions with tropical or subtropical climates? Yes] "Ecuador: Tungurahua: Rio Pastaza, between Bafios and Mera, alt. 4000 ft., 1924, Tate 669 (US). Bolivia exact locality and date lacking, Pearce 708 (K, TYPEM, BG, photograph and analytical drawings)."
204	1998. Morales, J.F.. A Synopsis of the Genus Mandevilla (Apocynaceae) in Mexico and Central America. Brittonia. 50(2): 214-232.	[Native or naturalized in regions with tropical or subtropical climates? Yes] "Distribution. Costa Rica, Ecuador, and Bolivia, between 200 and 700 m." … "Mandevilla boliviensis may be recognized by its epiphytic habit (in Mesoamerica), glabrous leaves with the cuneate base, reduced inflorescences, and white flowers with the tube usually more than 2.9 cm long. This is the only Mandevilla species of the South American Dipladenia complex present in Mesoamerica. The characters used by Woodson (1933, 1936) to separate M. pittieri and M. cereola from M. boliviensis are manifest in the types of all three names, as was explained by Morales (1995)."
205	2005. Staples, G.W./Herbst, D.R.. A Tropical Garden Flora - Plants Cultivated in the Hawaiian Islands and Other Tropical Places. Bishop Museum Press, Honolulu, HI	[Does the species have a history of repeated introductions outside its natural range? Hawaiian Islands] "Two Mandevilla species less often seen in our gardens have been tentatively identified." … "Mandevilla boliviensis…"
205	2012. Dave's Gardern. PlantFiles: Mandevilla, Dipladenia - Mandevilla splendens. http://davesgarden.com/guides/pf/go/1711/	[Does the species have a history of repeated introductions outside its natural range? Cultivated in Florida, Hawaii and throughout the continental U.S. (probably as an indoor plant in colder climates]
301	2007. Randall, R.P.. Global Compendium of Weeds - Index. http://www.hear.org/gcw/	[Naturalized beyond native range? No evidence]
301	2012. Wagner, W.L./Herbst, D.R./Khan, N./Flynn, T.. Hawaiian Vascular Plant Updates: A Supplement to the Manual of the Flowering Plants of Hawai`i & Hawai`i's Ferns & Fern Allies. http://botany.si.edu/pacificislandbiodiversity/hawaianflora/supplement.htm	[Naturalized beyond native range? No evidence from the Hawaiian Islands to date]
302	2007. Randall, R.P.. Global Compendium of Weeds - Index. http://www.hear.org/gcw/	[Garden/amenity/disturbance weed? No] No evidence
303	2007. Randall, R.P.. Global Compendium of Weeds - Index. http://www.hear.org/gcw/	[Agricultural/forestry/horticultural weed?
304	2007. Randall, R.P.. Global Compendium of Weeds - Index. http://www.hear.org/gcw/	[Environmental weed? No] No evidence
305	2007. Randall, R.P.. Global Compendium of Weeds - Mandevilla laxa. http://www.hear.org/gcw/species/mandevilla_laxa/	[Congeneric weed? M. laxa]

305	2010. Australian Association of Bush Regenerators. Bushland Weeds of the Blue Mountains Region. http://www.aabr.org.au/index.php?option=com_content&view=article&id=53:bushland-weeds-of-the-blue-mountains-region&catid=92:weed-lists&Itemid=75	[Congeneric weed? Yes] M. laxa listed as a weed, but with no description of impacts
305	2012. PlantNET. New South Wales flora online - Mandevilla laxa (Ruiz & Pav.) Woodson. Royal Botanic Gardens & Domain Trust,, Sydney http://plantnet.rbgsyd.nsw.gov.au/cgi-bin/NSWfl.pl?page=nswfl&lvl=sp&name=Mandevilla~laxa	[Congeneric weed? Possibly] "Mandevilla laxa" … " Grown in gardens and naturalized in several areas," [No evidence of negative impacts]
401	1998. Morales, J.F.. A Synopsis of the Genus Mandevilla (Apocynaceae) in Mexico and Central America. Brittonia. 50(2): 214-232.	[Produces spines, thorns or burrs? No evidence] "Epiphytic (in Mesoamerica) or terrestrial vines; stems terete to subterete, glabrous. Leaf blades (3.5-)5-10 X 1.4-4 cm, elliptic, narrowly elliptic to obovate, membranaceous, glabrous; apex acute to long-acuminate; base obtuse to cuneate; upper surface glandular at the base of the midrib, petioles 0.8-2 mm."
402	2012. WRA Specialist. Personal Communication.	[Allelopathic? Unknown]
403	1998. Morales, J.F.. A Synopsis of the Genus Mandevilla (Apocynaceae) in Mexico and Central America. Brittonia. 50(2): 214-232.	[Parasitic? No] "Epiphytic (in Mesoamerica) or terrestrial vines…"
404	2012. eHow. Are Mandevilla Flowers Toxic?. http://www.ehow.com/facts_7396220_mandevilla-flowers-toxic_.html	[Unpalatable to grazing animals? Unknown] "Restrict your pet's access to plants to avoid accidental ingestion. Humans or animals that suffer from low-toxicity symptoms after ingestion of mandevilla flowers should see a doctor or veterinarian." [Milky sap and toxic properties may deter browsing]
405	2012. eHow. Are Mandevilla Flowers Toxic?. http://www.ehow.com/facts_7396220_mandevilla-flowers-toxic_.html	[Toxic to animals? Probably Yes] "Restrict your pet's access to plants to avoid accidental ingestion. Humans or animals that suffer from low-toxicity symptoms after ingestion of mandevilla flowers should see a doctor or veterinarian."
406	2005. Staples, G.W./Herbst, D.R.. A Tropical Garden Flora - Plants Cultivated in the Hawaiian Islands and Other Tropical Places. Bishop Museum Press, Honolulu, HI	[Host for recognized pests and pathogens? No] "Insects are rarely a problem, although some types of scale can infest plants."
406	2012. Missouri Botanical Garden. Mandevilla boliviensis. http://www.missouribotanicalgarden.org/gardens-gardening/your-garden/plant-finder/plant-details/kc/a526/mandevilla-boliviensis.aspx	[Host for recognized pests and pathogens? No] "No serious insect or disease problems. Watch for whiteflies, spider mites and mealybugs, particularly on overwintering plants."
406	2012. Top Tropicals. Mandevilla boliviensis. Top Tropicals Botanical Garden, http://toptropicals.com/cgi-bin/garden_catalog/cat.cgi?uid=Mandevilla_boliviensis	[Host for recognized pests and pathogens? No] "Given adequate care, mandevilla is pest free and fast growing."
407	2010. Cool Exotics. The Plants Database - Mandevilla boliviensis. http://coolexotics.com/plant-525-mandevilla-boliviensis.html	[Causes allergies or is otherwise toxic to humans? Yes] "Note - This vine has poisonous parts if ingested, and has a skin-irritating sap."
407	2012. Dave's Gardern. PlantFiles: Mandevilla, Dipladenia - Mandevilla splendens. http://davesgarden.com/guides/pf/go/1711/	[Causes allergies or is otherwise toxic to humans? Yes. Apocynaceae] "Danger: Parts of plant are poisonous if ingested"
407	2012. Top Tropicals. Mandevilla boliviensis. Top Tropicals Botanical Garden, http://toptropicals.com/cgi-bin/garden_catalog/cat.cgi?uid=Mandevilla_boliviensis	[Causes allergies or is otherwise toxic to humans? Yes] "Parts of plant are poisonous if ingested."
408	2012. WRA Specialist. Personal Communication.	[Creates a fire hazard in natural ecosystems? No] Used in cultivation with no records of naturalization, and no reports of increased fire risks in cultivated settings.
409	2012. Missouri Botanical Garden. Mandevilla boliviensis. http://www.missouribotanicalgarden.org/gardens-gardening/your-garden/plant-finder/plant-details/kc/a526/mandevilla-boliviensis.aspx	[Is a shade tolerant plant at some stage of its life cycle? Possibly] "Sun: Full sun to part shade"

409	2012. Top Tropicals. Mandevilla boliviensis. Top Tropicals Botanical Garden, http://toptropicals.com/cgi-bin/garden_catalog/cat.cgi?uid=Mandevilla_boliviensis	[Is a shade tolerant plant at some stage of its life cycle? Possibly] Full Sun, Semi-Shade
410	2012. Backyard Gardener. Mandevilla boliviensis. http://www.backyardgardener.com/plantname/pda_9083.html	[Tolerates a wide range of soil conditions? No] "pH Range: 5.5 to 6.5 Soil Range: Sandy Loam to Clay Loam"
411	1998. Morales, J.F.. A Synopsis of the Genus Mandevilla (Apocynaceae) in Mexico and Central America. Brittonia. 50(2): 214-232.	[Climbing or smothering growth habit? Yes] "Epiphytic (in Mesoamerica) or terrestrial vines; stems terete to subterete, glabrous. Leaf blades (3.5-)5-10 X 1.4-4 cm, elliptic, narrowly elliptic to obovate, membranaceous, glabrous; apex acute to long-acuminate; base obtuse to cuneate; upper surface glandular at the base of the midrib, petioles 0.8-2 mm."
412	1998. Morales, J.F.. A Synopsis of the Genus Mandevilla (Apocynaceae) in Mexico and Central America. Brittonia. 50(2): 214-232.	[Forms dense thickets? No] "Epiphytic (in Mesoamerica) or terrestrial vines;" [Yes to 4.11]
501	1998. Morales, J.F.. A Synopsis of the Genus Mandevilla (Apocynaceae) in Mexico and Central America. Brittonia. 50(2): 214-232.	[Aquatic? No] "Epiphytic (in Mesoamerica) or terrestrial vines;" [Terrestrial]
502	2012. USDA ARS National Genetic Resources Program. Germplasm Resources Information Network - (GRIN). http://www.ars-grin.gov/cgi-bin/npgs/html/index.pl	[Grass? No] Apocynaceae
503	2012. USDA ARS National Genetic Resources Program. Germplasm Resources Information Network - (GRIN). http://www.ars-grin.gov/cgi-bin/npgs/html/index.pl	[Nitrogen fixing woody plant? No] Apocynaceae
504	1998. Morales, J.F.. A Synopsis of the Genus Mandevilla (Apocynaceae) in Mexico and Central America. Brittonia. 50(2): 214-232.	[Geophyte (herbaceous with underground storage organs -- bulbs, corms, or tubers)? No] "Epiphytic (in Mesoamerica) or terrestrial vines; stems terete to subterete, glabrous. Leaf blades (3.5-)5-10 X 1.4-4 cm, elliptic, narrowly elliptic to obovate, membranaceous, glabrous; apex acute to long-acuminate; base obtuse to cuneate; upper surface glandular at the base of the midrib, petioles 0.8-2 mm."
601	2012. Tropicos.org. Tropicos [Online Database]. Missouri Botanical Garden, http://www.tropicos.org/	[Evidence of substantial reproductive failure in native habitat? No evidence]
602	1998. Morales, J.F.. A Synopsis of the Genus Mandevilla (Apocynaceae) in Mexico and Central America. Brittonia. 50(2): 214-232.	[Produces viable seed? Unknown] "Follicles and seeds unknown."
602	2010. Cool Exotics. The Plants Database - Mandevilla boliviensis. http://coolexotics.com/plant-525-mandevilla-boliviensis.html	[Produces viable seed? Presumably Yes] Propagation - cutting, layering, seeds This plant can be propagated by seeds in spring or by cuttings in mid-spring (herbaceous cuttings) to late-summer (ripe wood cuttings)."
602	2012. Dave's Gardern. PlantFiles: Mandevilla, Dipladenia - Mandevilla splendens. http://davesgarden.com/guides/pf/go/1711/	[Produces viable seed? Possibly No in Cultivation] "Propagation Methods: By dividing the rootball From softwood cuttings By simple layering"
603	2012. Roseland House Garden & Nursery. Mandevilla boliviensis (Syn Dipladenia). http://www.roselandhouse.co.uk/climbers/mandevilla%20boliviensis.htm	[Hybridizes naturally? Unknown] "Much confusion over the name with it being changed back and forth, and this plant is most likely a hybrid." [Reports of hybrid cultivars are common on horticultural websites, but no evidence was found of natural hybridization in the peer-reviewed literature]
604	1999. Torres, C./Galetto, L.. Factors constraining fruit set in Mandevilla pentlandiana (Apocynaceae). Botanical Journal of the Linnean Society. 129: 187-205.	[Self-compatible or apomictic? Unknown. Other Mandevilla exhibit self compatibility] "The reproductive success of Mandevilla pentlandiana was studied to disclose its reproductive strategy, and to determine the links between nectar production, breeding system, fruit set and inflorescence size. The plant produces many inflorescences with a large number of flowers but initiates few fruits (9%). This vine is self-compatible but not autogamous."
604	2004. Löhne, C./Machado, I.C./Porembski, S./Erbar, C./Leins, P.. Pollination biology of a Mandevilla species (Apocynaceae), characteristic of NE-Brazilian inselberg vegetation. Botanische Jahrbücher für Systematik. 125(2): 229-243.	[Self-compatible or apomictic? Unknown. Other Mandevilla exhibit self compatibility] "Although autogamy does not occur in unvisited flowers due to strict herkogamy, self-pollination mediated by visiting insects seems possible in the self-compatible flowers. Assuming that insect mediated autogamy occurs, the high pollen load on the stigma at the end of anthesis can be understood: Even if a bee does not spend much time in the population of Mandevilla investigated, single flower visits may ensure successful pollen transfer. This insect-mediated self-pollination may be interpreted as compensation for the low frequency of flower visitors on inselbergs."

604	2012. Learn 2 Grow. Mandevilla boliviensis. http://www.learn2grow.com/plants/mandevilla-boliviensis/	[Self-compatible or apomictic? Possibly No] "Self-Sowing - No"
605	1998. Morales, J.F.. A Synopsis of the Genus Mandevilla (Apocynaceae) in Mexico and Central America. Brittonia. 50(2): 214-232.	[Requires specialist pollinators? Possibly Yes] "Inflorescences usually longer than the subadjacent leaves, glabrous, 2-6-flowered; peduncle 1-2 cm; pedicels 1-2.7 cm; bracts 1-1.5 mm long, scarious. Sepals 6-8 mm, ovate, long acuminate; corolla infundibuliform, white, the tube yellow within, glabrous without; lower part of tube 1.2-1.8 cm long, straight, upper part 1.7-2.3 cm long, 10-13 mm diam. At the orifice, conic; lobes 2.3-3 X 1.7-2 cm, obovate, spreading. Stamens inserted near the orifice of the tube; anthers 8-10 mm. Ovary ca. 2 mm long, glabrous; style 8-11 mm long; disk glands usually 2, <1 mm long, distinct."
605	2004. Löhne, C./Machado, I.C./Porembski, S./Erbar, C./Leins, P.. Pollination biology of a Mandevilla species (Apocynaceae), characteristic of NE-Brazilian inselberg vegetation. Botanische Jahrbücher für Systematik. 125(2): 229-243.	[Requires specialist pollinators? Probably Yes. Description of related species] "Flowers of this Mandevilla species are large, tubular to salverform and very showy due to bright pink colour and exposed presentation on the plant. Although nectar production could not be proved, anatomical studies showed a typical secretory tissue at the base of the gynoecium. Flowers were visited by different species of large bees, but visitation rate - at least during the observation phase - was very low. However, ca. 60 % of the flowers analysed were naturally pollinated and ca. 35 % set fruit."
605	2007. More, M./Sersic, A.N./Cocucci, A.A.. Restriction of Pollinator Assemblage Through Flower Length and Width in Three Long-Tongued Hawkmoth–Pollinated Species of Mandevilla (Apocynaceae, Apocynoideae). Annals of the Missouri Botanical Garden. 94: 485-5	[Requires specialist pollinators? Probably Yes. Related species require specialist pollinators] "The long-tongued hawkmoth species Manduca sexta (L.) was the major pollinator of Mandevilla longiflora (Desf.) Pichon and Mandevilla petraea (A. St.-Hil.) Pichon. Surprisingly, another long tongued species, Manduca tucumana (Rothschild & Jordan), was the main pollinator of the short flowered Mandevilla laxa (Ruiz & Pav.) Woodson. Here, the operative flower width was a decisive factor restricting the pollinator spectrum to hawkmoths with proboscides narrow enough to release the pollination apparatus. Short tongued hawkmoths, which also have wider proboscides, cannot release the pollination mechanism. In M. petraea, the operative length, and not the operative width, restricts the pollinator assemblage. Thus, two different plant strategies were observed to restrict the pollinator spectrum: floral tube length and the operative width of the pollination mechanism." …"The three Mandevilla species studied were pollinated exclusively by nocturnal hawkmoths. There are previous records of hawkmoth pollination for only nine species of Apocynaceae s.l., of which three belong to Asclepiadoideae"
606	2011. Gardening Australia. Plant Profile: Mandevilla. http://www.abc.net.au/gardening/stories/s1866508.htm	[Reproduction by vegetative fragmentation? No evidence of natural vegetative spread] "Take care if trimming back as all parts exude a sometimes irritant milky latex when cut. They can be propagated from half-hardened stems in summer, or from cuttings."
607	2012. WRA Specialist. Personal Communication.	Minimum generative time (years)? Unknown]
701	2012. WRA Specialist. Personal Communication.	[Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)? No evidence] Fruit and seeds may be rarely, if ever, produced in cultivation, as reflected in the absence of any documented evidence of this species becoming naturalized and/or invasive.
702	1998. Vermeulen, N.. Encyclopedia of House Plants. 2nd Print. Rebo Productions, Lisse, Netherlands	[Propagules dispersed intentionally by people? Yes. Uncommon ornamental] "Despite the attractiveness you do not come across this climber very often."
703	1998. Morales, J.F.. A Synopsis of the Genus Mandevilla (Apocynaceae) in Mexico and Central America. Brittonia. 50(2): 214-232.	[Propagules likely to disperse as a produce contaminant? No evidence] "Follicles and seeds unknown."
704	1998. Morales, J.F.. A Synopsis of the Genus Mandevilla (Apocynaceae) in Mexico and Central America. Brittonia. 50(2): 214-232.	[Propagules adapted to wind dispersal? Yes, if produced] "Mandevilla fruits are apocarpous follicles or rarely syncarpous by fusion after fertilization. The follicles may be cylindrical to moniliform or submoniliform, usually membranaceous and pubescent to glabrous or glabrate. The seeds are numerous, dry, elongate, compressed to subterete, longitudinally ribbed, truncate and comose at the micropylar end, with the coma directed toward the apex of the follicle."
705	1998. Morales, J.F.. A Synopsis of the Genus Mandevilla (Apocynaceae) in Mexico and Central America. Brittonia. 50(2): 214-232.	[Propagules water dispersed? No] "Mandevilla fruits are apocarpous follicles or rarely syncarpous by fusion after fertilization. The follicles may be cylindrical to moniliform or submoniliform, usually membranaceous and pubescent to glabrous or glabrate. The seeds are numerous, dry, elongate, compressed to subterete, longitudinally ribbed, truncate and comose at the micropylar end, with the coma directed toward the apex of the follicle." [Seeds if produced, are adapted for wind-dispersal]

706	1998. Morales, J.F.. A Synopsis of the Genus Mandevilla (Apocynaceae) in Mexico and Central America. Brittonia. 50(2): 214-232.	[Propagules bird dispersed? No] "Mandevilla fruits are apocarpous follicles or rarely syncarpous by fusion after fertilization. The follicles may be cylindrical to moniliform or submoniliform, usually membranaceous and pubescent to glabrous or glabrate. The seeds are numerous, dry, elongate, compressed to subterete, longitudinally ribbed, truncate and comose at the micropylar end, with the coma directed toward the apex of the follicle."
707	1998. Morales, J.F.. A Synopsis of the Genus Mandevilla (Apocynaceae) in Mexico and Central America. Brittonia. 50(2): 214-232.	[Propagules dispersed by other animals (externally)? Possibly, if seeds were produced] "Mandevilla fruits are apocarpous follicles or rarely syncarpous by fusion after fertilization. The follicles may be cylindrical to moniliform or submoniliform, usually membranaceous and pubescent to glabrous or glabrate. The seeds are numerous, dry, elongate, compressed to subterete, longitudinally ribbed, truncate and comose at the micropylar end, with the coma directed toward the apex of the follicle." [Comose seeds, if produced, may adhere to the fur of animals]
708	2005. Staples, G.W./Herbst, D.R.. A Tropical Garden Flora - Plants Cultivated in the Hawaiian Islands and Other Tropical Places. Bishop Museum Press, Honolulu, HI	[Propagules survive passage through the gut? Unknown] "Seeds numerous, ± boat-shaped, with tuft of hairs." [Seeds wind-dispersed in genus, but fruit apparently not produced in Hawaiian Islands. If produced, unlikely to be consumed]
801	1998. Morales, J.F.. A Synopsis of the Genus Mandevilla (Apocynaceae) in Mexico and Central America. Brittonia. 50(2): 214-232.	[Prolific seed production (>1000/m2)? Unknown] "Mandevilla fruits are apocarpous follicles or rarely syncarpous by fusion after fertilization. The follicles may be cylindrical to moniliform or submoniliform, usually membranaceous and pubescent to glabrous or glabrate. The seeds are numerous, dry, elongate, compressed to subterete, longitudinally ribbed, truncate and comose at the micropylar end, with the coma directed toward the apex of the follicle."
802	2012. WRA Specialist. Personal Communication.	[Evidence that a persistent propagule bank is formed (>1 yr)? Unknown]
803	2012. WRA Specialist. Personal Communication.	[Well controlled by herbicides? Unknown] No information on herbicide efficacy or chemical control of this species
804	2012. Missouri Botanical Garden. Mandevilla boliviensis. http://www.missouribotanicalgarden.org/gardens-gardening/your-garden/plant-finder/plant-details/kc/a526/mandevilla-boliviensis.aspx	[Tolerates, or benefits from, mutilation, cultivation, or fire? Unknown] "Pinch to promote shrubby growth." [May tolerate some pruning]
805	2012. WRA Specialist. Personal Communication.	[Effective natural enemies present locally (e.g. introduced biocontrol agents)? Unknown]

Summary of Risk Traits

High Risk / Undesirable Traits

- Thrives in tropical climates
- Congeneric Weed (*Mandevilla laxa*)
- Toxic properties
- Tolerates many soil conditions (and potentially able to exploit many different habitat types)
- Intentionally planted by people (increases chances of escape)
- Seed (if produced) dispersed by wind

Low Risk / Desirable Traits

- No records of naturalization or invasiveness reported
- Unarmed
- Requires full sun
- Fruit & seed may be rarely, if ever, produced in cultivation
- Limited seed production minimizes risk of escape
- Landscaping and ornamental value