

Family: *Cactaceae*

Taxon: *Rhipsalis baccifera*

Synonym: *Cassytha baccifera* Soland. ex J. Mill.
Rhipsalis cassutha Gaertn.

Common Name: mistletoe cactus
Nopalillo-mal ojo

Questionnaire :	current 20090513	Assessor:	Chuck Chimera	Designation: L
Status:	Assessor Approved	Data Entry Person:	Chuck Chimera	WRA Score 0
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	n
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)	n
401	Produces spines, thorns or burrs		y=1, n=0	n
402	Allelopathic		y=1, n=0	n
403	Parasitic		y=1, n=0	n
404	Unpalatable to grazing animals		y=1, n=-1	
405	Toxic to animals		y=1, n=0	n
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	n
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	y
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	n
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	
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	n
705	Propagules water dispersed	y=1, n=-1	n
706	Propagules bird dispersed	y=1, n=-1	y
707	Propagules dispersed by other animals (externally)	y=1, n=-1	
708	Propagules survive passage through the gut	y=1, n=-1	y
801	Prolific seed production (>1000/m2)	y=1, n=-1	n
802	Evidence that a persistent propagule bank is formed (>1 yr)	y=1, n=-1	n
803	Well controlled by herbicides	y=-1, n=1	
804	Tolerates, or benefits from, mutilation, cultivation, or fire	y=1, n=-1	n
805	Effective natural enemies present locally (e.g. introduced biocontrol agents)	y=-1, n=1	

Designation: L

WRA Score 0

Supporting Data:

101	2001. Anderson, E. F.. The cactus family. Timber Press, Portland, OR.	No evidence that the species highly domesticated
201	2001. Anderson, E. F.. The cactus family. Timber Press, Portland, OR.	Distribution: tropical America, tropical Africa, Madagascar, Seychelles, Mauritius, Reunion and Sri Lanka.
202	2001. Anderson, E. F.. The cactus family. Timber Press, Portland, OR.	Distribution: tropical America, tropical Africa, Madagascar, Seychelles, Mauritius, Reunion and Sri Lanka.
203	2005. Faucon, P.. Mistletoe Cactus. Desert-Tropicals, http://www.desert-tropicals.com/Plants/Cactaceae/Rhipsalis_baccifera.html	Recommended Temperature Zone: USDA: 9b-10...Frost Tolerance: Semi tender, needs protection on coldest nights
203	2010. Dave's Garden. PlantFiles: Mistletoe Cactus; Rhipsalis baccifera. Dave's Garden, http://davesgarden.com/guides/pf/go/54385/	Hardiness: USDA Zone 9b: to -3.8 °C (25 °F) USDA Zone 10a: to -1.1 °C (30 °F) USDA Zone 10b: to 1.7 °C (35 °F) USDA Zone 11: above 4.5 °C (40 °F)
204	2001. Anderson, E. F.. The cactus family. Timber Press, Portland, OR.	Distribution: tropical America, tropical Africa, Madagascar, Seychelles, Mauritius, Reunion and Sri Lanka.
205	2001. Anderson, E. F.. The cactus family. Timber Press, Portland, OR.	Distribution: tropical America, tropical Africa, Madagascar, Seychelles, Mauritius, Reunion and Sri Lanka. [broad natural distribution]
205	2006. Lemke, C.. Rhipsalis baccifera - Mistletoe Cactus. Cal's Plant of the Week, http://www.plantoftheweek.org/week369.shtml	Rhipsalis baccifera, or Mistletoe Cactus, is an epiphytic cactus native from Florida to Brazil and Peru, Sri Lanka and tropical Africa...They are of easy culture and make wonderful hanging basket subjects. [popular ornamental, but appears to be used mostly as an indoor plant]
301	2001. Anderson, E. F.. The cactus family. Timber Press, Portland, OR.	Distribution: tropical America, tropical Africa, Madagascar, Seychelles, Mauritius, Reunion and Sri Lanka. [broad natural distribution]
301	2007. Randall, R.. Global Compendium of Weeds. http://www.hear.org/gcw/	No records of naturalization
302	2007. Randall, R.. Global Compendium of Weeds. http://www.hear.org/gcw/	No records of weediness or invasiveness in the garden
303	2007. Randall, R.. Global Compendium of Weeds. http://www.hear.org/gcw/	No records as a weed of agriculture, horticulture or forestry
304	2007. Randall, R.. Global Compendium of Weeds. http://www.hear.org/gcw/	No records as an environmental weed
305	2007. Randall, R.. Global Compendium of Weeds. http://www.hear.org/gcw/	No other species of Rhipsalis are recorded as weeds.
401	2005. Staples, G. W. and D. R. Herbst. A Tropical Garden Flora. Plants Cultivated in the Hawaiian Islands and Other Tropical Places. Bishop Museum Press, Honolulu, HI.	spineless or with 1 or 2 minute bristles at the areoles [no spines, thorns, or burrs]
402	2001. Anderson, E. F.. The cactus family. Timber Press, Portland, OR.	No evidence of allelopathy in genus Rhipsalis
403	2001. Anderson, E. F.. The cactus family. Timber Press, Portland, OR.	Epiphytic cacti grow on other plants but do not derive direct nourishment from them, that is, their roots do not penetrate into the host plant's tissues, nor are their roots in the ground. Examples include...Rhipsalis baccifera
404	2010. WRA Specialist. Personal Communication.	Palatability of vegetative parts of Rhipsalis unknown
405	2004. Gurib-Fakim, A. and T. Brendler. Medicinal and aromatic plants of Indian Ocean islands: Madagascar, Comoros, Seychelles and Mascarenes. medpharm Scientific Publishers, Stuttgart, Germany	Medicinal applications include: bandaging of fractures in man and horses, use as an anthelmintic & administration as an emetic for chest complaints (Zulu medicinal use) (Hocking 1997, Hutchings 1996). The mashed plant is also used for skin irritations and as a shampoo against hair loss (Morton 1990). [several medicinal uses, but no mention of toxicity or inadvertent poisoning of animals]
406	2001. Anderson, E. F.. The cactus family. Timber Press, Portland, OR.	No major pests or pathogens recorded
407	2004. Gurib-Fakim, A. and T. Brendler. Medicinal and aromatic plants of Indian Ocean islands: Madagascar, Comoros, Seychelles and Mascarenes. medpharm Scientific Publishers, Stuttgart, Germany	Medicinal applications include: bandaging of fractures in man and horses, use as an anthelmintic & administration as an emetic for chest complaints (Zulu medicinal use) (Hocking 1997, Hutchings 1996). The mashed plant is also used for skin irritations and as a shampoo against hair loss (Morton 1990). [several medicinal uses, but no mention of toxicity or inadvertent poisoning of humans]
407	2006. Villavicencio Nieto, M. A. and B. E. Pérez Escandón. Useful plants of the state of Hidalgo, Volume 3. UAEH, Hidalgo, Mexico	Main Use: Medicinal...Other Uses: Edible: Fruits are edible

408	2004. Gurib-Fakim, A. and T. Brendler. Medicinal and aromatic plants of Indian Ocean islands: Madagascar, Comoros, Seychelles and Mascarenes. medpharm Scientific Publishers, Stuttgart, Germany	Perennial succulent growing on trees or rocks [no evidence of increased fire risk with this species, and unlikely to spread fire given succulent habit]
409	2005. Faucon, P.. Mistletoe Cactus. Desert-Tropicals, http://www.desert-tropicals.com/Plants/Cactaceae/Rhipsalis_baccifera.html	Sun Exposure: Light shade to shade
409	2005. Zachos, E.. Tempting tropicals: 175 irresistible indoor plants. Timber Press, Portland, OR.	These are understory plants and grow best in bright indirect light to part sun. If light is inadequate, the plant will not flower and fruit.
409	2006. Lemke, C.. Rhipsalis baccifera - Mistletoe Cactus. Cal's Plant of the Week, http://www.plantoftheweek.org/week369.shtml	Rhipsalis baccifera need partial to full shade with a well-drained soil mix
410	2010. Dave's Garden. PlantFiles: Mistletoe Cactus; Rhipsalis baccifera. Dave's Garden, http://davesgarden.com/guides/pf/go/54385/	Soil pH requirements: 6.1 to 6.5 (mildly acidic) 6.6 to 7.5 (neutral)
411	2001. Anderson, E. F.. The cactus family. Timber Press, Portland, OR.	Plants epiphytic or lithophytic, 1-4 m (3.3-13 ft) long, extension shoots of indeterminate growth, with composite areoles, branching acrotonic.
411	2010. De La Rosa Manzano, E. and O. Briones. Germination Response of the Epiphytic Cactus Rhipsalis baccifera (J. S. Miller) Stearn to Different Light Conditions and Water Availability. International Journal of Plant Sciences. 171: 267-274.	It has been observed that Rhipsalis baccifera is mostly distributed on the bases of the relatively thick trunks and branches of trees located in the humid montane forest, where it may get greater access to moisture
412	2001. Anderson, E. F.. The cactus family. Timber Press, Portland, OR.	No evidence that this epiphytic plant forms dense thickets
501	2001. Anderson, E. F.. The cactus family. Timber Press, Portland, OR.	Terrestrial [epiphytic, not aquatic]
502	2001. Anderson, E. F.. The cactus family. Timber Press, Portland, OR.	Cactaceae [not a grass]
503	2001. Anderson, E. F.. The cactus family. Timber Press, Portland, OR.	Cactaceae [not N-fixing]
504	2001. Anderson, E. F.. The cactus family. Timber Press, Portland, OR.	Plants epiphytic or lithophytic, 1-4 m (3.3-13 ft) long, extension shoots of indeterminate growth, with composite areoles, branching acrotonic. [not a geophyte]
601	2001. Anderson, E. F.. The cactus family. Timber Press, Portland, OR.	No evidence of substantial reproductive failure in native habitat
602	2005. Staples, G. W. and D. R. Herbst. A Tropical Garden Flora. Plants Cultivated in the Hawaiian Islands and Other Tropical Places. Bishop Museum Press, Honolulu, HI.	globose, whitish or pinkish translucent berries about 0.25" in diameter that contain several black seeds [Produces viable seed]
602	2006. Lemke, C.. Rhipsalis baccifera - Mistletoe Cactus. Cal's Plant of the Week, http://www.plantoftheweek.org/week369.shtml	Rhipsalis baccifera is propagated by cuttings and from seed in spring.
603	2010. WRA Specialist. Personal Communication.	Ability to hybridize naturally unknown
604	2001. Anderson, E. F.. The cactus family. Timber Press, Portland, OR.	Most cacti are obligate outcrossers, meaning that pollen must come from flowers of other individuals to effect fertilization, but autogamy or self-pollination occurs in some groups. [unknown for Rhipsalis baccifera]
605	2001. Anderson, E. F.. The cactus family. Timber Press, Portland, OR.	Flowers borne laterally in winter or spring, whitish, 5-10 mm (0.2-0.4 in) in diameter. [unspecialized flowers unlikely to require specialized pollinators]
605	2004. Cota-Sánchez, J. H.. Vivipary in the Cactaceae: Its taxonomic occurrence and biological significance. Flora. 199: 481-490.	Pollination syndrome: Insect
606	2001. Anderson, E. F.. The cactus family. Timber Press, Portland, OR.	No evidence of reproduction by vegetative fragmentation
606	2005. Faucon, P.. Mistletoe Cactus. Desert-Tropicals, http://www.desert-tropicals.com/Plants/Cactaceae/Rhipsalis_baccifera.html	Propagation: Cuttings, seeds [no evidence that this plant spreads by vegetative fragments]

607	2010. WRA Specialist. Personal Communication.	Unknown when <i>Rhipsalis</i> first flowers
701	2004. Gurib-Fakim, A. and T. Brendler. Medicinal and aromatic plants of Indian Ocean islands: Madagascar, Comoros, Seychelles and Mascarenes. medpharm Scientific Publishers, Stuttgart, Germany	Berry globular 3-5 mm in diameter, pearly white, green or pink, with gluey pulp. Seeds small, numerous, black or dark brown...Perhaps introduced by birds to the Mascarenes [no evidence of unintentional dispersal, but possible with gluey pulp]
702	2005. Zachos, E.. Tempting tropicals: 175 irresistible indoor plants. Timber Press, Portland, OR.	Grown ornamentally
703	2005. Staples, G. W. and D. R. Herbst. A Tropical Garden Flora. Plants Cultivated in the Hawaiian Islands and Other Tropical Places. Bishop Museum Press, Honolulu, HI.	No evidence that <i>Rhipsalis</i> contaminates produce
704	2004. Gurib-Fakim, A. and T. Brendler. Medicinal and aromatic plants of Indian Ocean islands: Madagascar, Comoros, Seychelles and Mascarenes. medpharm Scientific Publishers, Stuttgart, Germany	Berry globular 3-5 mm in diameter, pearly white, green or pink, with gluey pulp. Seeds small, numerous, black or dark brown [not adapted for wind dispersal]
705	2005. Staples, G. W. and D. R. Herbst. A Tropical Garden Flora. Plants Cultivated in the Hawaiian Islands and Other Tropical Places. Bishop Museum Press, Honolulu, HI.	globose, whitish or pinkish translucent berries about 0.25" in diameter that contain several black seeds [fleshy-fruited, no evidence that seeds are water dispersed]
706	2001. Nieder, J.. Epiphytes and canopy fauna of the Otonga rain forest (Ecuador). Books on Demand, Bonn, Germany	The berries of <i>Rhipsalis baccifera</i> are dispersed by birds.
706	2004. Gurib-Fakim, A. and T. Brendler. Medicinal and aromatic plants of Indian Ocean islands: Madagascar, Comoros, Seychelles and Mascarenes. medpharm Scientific Publishers, Stuttgart, Germany	Berry globular 3-5 mm in diameter, pearly white, green or pink, with gluey pulp. Seeds small, numerous, black or dark brown...Perhaps introduced by birds to the Mascarenes
706	2005. Cruz-Angon, A. and R. Greenburg. Are epiphytes important for birds in coffee plantations? An experimental assessment. Journal of Applied Ecology. 42: 150-159.	Epiphytes such as <i>Anthurium scandens</i> and <i>Rhipsalis baccifera</i> produce large quantities of fruits that are regularly consumed by resident tanagers and euphonias (i.e. common bushtanager, white-winged tanager and yellow-throated euphonia; Snow 1981). Fruit production of these epiphytes coincides with the birds' breeding season (April-September).
706	2005. Staples, G. W. and D. R. Herbst. A Tropical Garden Flora. Plants Cultivated in the Hawaiian Islands and Other Tropical Places. Bishop Museum Press, Honolulu, HI.	globose, whitish or pinkish translucent berries about 0.25" in diameter that contain several black seeds [fleshy-fruited]
707	2004. Gurib-Fakim, A. and T. Brendler. Medicinal and aromatic plants of Indian Ocean islands: Madagascar, Comoros, Seychelles and Mascarenes. medpharm Scientific Publishers, Stuttgart, Germany	Berry globular 3-5 mm in diameter, pearly white, green or pink, with gluey pulp. Seeds small, numerous, black or dark brown...Perhaps introduced by birds to the Mascarenes [no evidence of external dispersal, but possible with gluey pulp]
708	1999. Atsalis, S.. Diet of the Brown Mouse Lemur (<i>Microcebus rufus</i>) in Ranomafana National Park, Madagascar. International Journal of Primatology. 20: 193-229.	Table III. Quantity of fecal samples from <i>Microcebus rufus</i> containing fruits identified based on seed presence in the samples collected from Feb-93 to May-94 at Talatakey, RNP...Fruit in the fecal sample... <i>Rhipsalis baccifera</i> ...No. of fecal samples with the fruit seeds = 18;
708	2006. Gould, L. and M. L. Sauther. Lemurs: ecology and adaptation. Springer, New York	Table 2. Plants Consumed by mouse lemur species [list includes Fruits of <i>R. baccifera</i> , small seeds presumably adapted to survive consumption by birds and/or mammals]
801	2004. Gurib-Fakim, A. and T. Brendler. Medicinal and aromatic plants of Indian Ocean islands: Madagascar, Comoros, Seychelles and Mascarenes. medpharm Scientific Publishers, Stuttgart, Germany	Berry globular 3-5 mm in diameter, pearly white, green or pink, with gluey pulp. Seeds small, numerous, black or dark brown [although seeds small & numerous, no evidence that such high seed densities are produced]
802	2010. De La Rosa Manzano, E. and O. Briones. Germination Response of the Epiphytic Cactus <i>Rhipsalis baccifera</i> (J. S. Miller) Stearn to Different Light Conditions and Water Availability. International Journal of Plant Sciences. 171: 267-274.	Germination decreased gradually at low water potentials and with increased storage time. After storage for 1 yr, no seeds germinated...The viability of epiphyte seeds can be extremely short lived, and they apparently do not form seed banks

-
- 803 2010. WRA Specialist. Personal Communication. Unknown [no information on control of this species]
-
- 804 2001. Anderson, E. F.. The cactus family. Timber Press, Portland, OR. No evidence that *Rhipsalis* benefits from mutilation, or fire
-
- 805 2010. WRA Specialist. Personal Communication. Unknown whether natural enemies present locally
-