

Taxon: *Medinilla apoensis* C.B.Rob.

Family: Melastomataceae

Common Name(s): Philippine pink

Synonym(s):

Assessor: Chuck Chimera

Status: Assessor Approved

End Date: 11 Mar 2022

WRA Score: 7.0

Designation: H(HPWRA)

Rating: High Risk

Keywords: Tropical Epiphyte, House Plant, Shade-Tolerant, Flesh-Fruit, Bird-Dispersed

Qsn #	Question	Answer Option	Answer
101	Is the species highly domesticated?	y=-3, n=0	n
102	Has the species become naturalized where grown?		
103	Does the species have weedy races?		
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)	y
401	Produces spines, thorns or burrs	y=1, n=0	n
402	Allelopathic		
403	Parasitic	y=1, n=0	n
404	Unpalatable to grazing animals		
405	Toxic to animals	y=1, n=0	n
406	Host for recognized pests and pathogens		
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)		

Qsn #	Question	Answer Option	Answer
411	Climbing or smothering growth habit	y=1, n=0	n
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		
604	Self-compatible or apomictic		
605	Requires specialist pollinators		
606	Reproduction by vegetative fragmentation		
607	Minimum generative time (years)		
701	Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)		
702	Propagules dispersed intentionally by people	y=1, n=-1	y
703	Propagules likely to disperse as a produce contaminant		
704	Propagules adapted to wind dispersal	y=1, n=-1	n
705	Propagules water dispersed		
706	Propagules bird dispersed	y=1, n=-1	y
707	Propagules dispersed by other animals (externally)		
708	Propagules survive passage through the gut	y=1, n=-1	y
801	Prolific seed production (>1000/m ²)		
802	Evidence that a persistent propagule bank is formed (>1 yr)		
803	Well controlled by herbicides		
804	Tolerates, or benefits from, mutilation, cultivation, or fire		
805	Effective natural enemies present locally (e.g. introduced biocontrol agents)		

Supporting Data:

Qsn #	Question	Answer
101	Is the species highly domesticated?	n
	Source(s)	Notes
	Robinson, C.B. (1908). Alabastra Philippinensis, II. The Philippine Journal of Science: Botany Volume III No. 4: 175-218	[Not domesticated] "Type collected at an elevation of 1,1.150 ru on Mount Apo, District of Davao, :Mindanao, by H. S. Williams, no. 2569, in flower and fruit, April, 1005."

102	Has the species become naturalized where grown?	
	Source(s)	Notes
	WRA Specialist. (2022). Personal Communication	NA

103	Does the species have weedy races?	
	Source(s)	Notes
	WRA Specialist. (2022). Personal Communication	NA

201	Species suited to tropical or subtropical climate(s) - If island is primarily wet habitat, then substitute "wet tropical" for "tropical or subtropical"	High
	Source(s)	Notes
	POWO (2022). Plants of the World Online. Facilitated by the Royal Botanic Gardens, Kew. http://plantsoftheworldonline.org/ . [Accessed 9 Mar 2022]	"Medinilla apoensis C.B.Rob. This species is accepted, and its native range is Philippines (Mindanao)."
	Robinson, C.B. (1908). Alabastra Philippinensis, II. The Philippine Journal of Science: Botany Volume III No. 4: 175-218	"Type collected at an elevation of 1,950 m on Mount Apo, District of Davao, Mindanao"

202	Quality of climate match data	High
	Source(s)	Notes
	POWO (2022). Plants of the World Online. Facilitated by the Royal Botanic Gardens, Kew. http://plantsoftheworldonline.org/ . [Accessed 10 Mar 2022]	

Qsn #	Question	Answer
203	Broad climate suitability (environmental versatility)	n
	Source(s)	Notes
	The National Gardening Association. (2022). <i>Medinilla apoensis</i> . https://garden.org/plants/view/648418/Medinilla-apoensis/ . [Accessed 11 Mar 2022]	"Minimum cold hardiness: Zone 11 +4.4 °C (40 °F) to +7.2 °C (50 °F)"
	Pelser, P.B., J.F. Barcelona & D.L. Nickrent (eds.). 2011 onwards. Co's Digital Flora of the Philippines. www.philippineplants.org	[Elevation range <1000 m] " <i>Medinilla apoensis</i> C.B.Rob., PJS 3 c (1908) Bot. 207; --Merr., EPFP 3 (1923) 193; --Regalado, Blumea 40 (1995) 140. Endemic to the Philippines. MINDANAO: Misamis, Davao (Mt Apo). Mossy forests, 1500-1800(-2300)m."

204	Native or naturalized in regions with tropical or subtropical climates	y
	Source(s)	Notes
	POWO (2022). Plants of the World Online. Facilitated by the Royal Botanic Gardens, Kew. http://plantsoftheworldonline.org/ . [Accessed 9 Mar 2022]	" <i>Medinilla apoensis</i> C.B.Rob. This species is accepted, and its native range is Philippines (Mindanao)."
	Imada, C. (2019). Hawaiian Naturalized Vascular Plants Checklist (February 2019 update). Bishop Museum Technical Report 69. Bishop Museum, Honolulu, HI	No evidence as of publication date
	Randall, R.P. (2017). A Global Compendium of Weeds. 3rd Edition. Perth, Western Australia. R.P. Randall	No records of naturalization

205	Does the species have a history of repeated introductions outside its natural range?	n
	Source(s)	Notes
	Logee's Greenhouses. (2022). <i>Medinilla</i> 'Philippine Pink' (<i>Medinilla apoensis</i>). https://www.logees.com/medinilla-philippine-pink-medinilla-apoensis.html . [Accessed 10 Mar 2022]	"'Philippine Pink' is a rare medinilla not usually found in the trade."
	The National Gardening Association. (2022). <i>Medinilla apoensis</i> . https://garden.org/plants/view/648418/Medinilla-apoensis/ . [Accessed 11 Mar 2022]	Cultivated as an ornamental
	WRA Specialist. (2022). Personal Communication	No evidence of widespread introduction to date

301	Naturalized beyond native range	n
	Source(s)	Notes
	Imada, C. (2019). Hawaiian Naturalized Vascular Plants Checklist (February 2019 update). Bishop Museum Technical Report 69. Bishop Museum, Honolulu, HI	No evidence as of publication date
	Randall, R.P. (2017). A Global Compendium of Weeds. 3rd Edition. Perth, Western Australia. R.P. Randall	No records of naturalization

Qsn #	Question	Answer
302	Garden/amenity/disturbance weed	n
	Source(s)	Notes
	Randall, R.P. (2017). A Global Compendium of Weeds. 3rd Edition. Perth, Western Australia. R.P. Randall	No evidence
	CABI. (2022). Invasive Species Compendium. Wallingford, UK: CAB International. www.cabi.org/isc	No evidence to date

303	Agricultural/forestry/horticultural weed	n
	Source(s)	Notes
	Randall, R.P. (2017). A Global Compendium of Weeds. 3rd Edition. Perth, Western Australia. R.P. Randall	No evidence
	CABI. (2022). Invasive Species Compendium. Wallingford, UK: CAB International. www.cabi.org/isc	No evidence to date

304	Environmental weed	n
	Source(s)	Notes
	Randall, R.P. (2017). A Global Compendium of Weeds. 3rd Edition. Perth, Western Australia. R.P. Randall	No evidence
	CABI. (2022). Invasive Species Compendium. Wallingford, UK: CAB International. www.cabi.org/isc	No evidence to date

305	Congeneric weed	y
	Source(s)	Notes
	Hawaii Administrative Rules. (2022). Title 4. Department of Agriculture. Subtitle 6. Division of Plant Industry. Chapter 68 Noxious Weed Rules. https://hdoa.hawaii.gov/admin-rules/ . [Accessed 11 Mar 2022]	Medinilla venosa is listed as a noxious weed in the state of Hawaii

401	Produces spines, thorns or burrs	n
	Source(s)	Notes
	Robinson, C.B. (1908). Alabastra Philippinensis, II. The Philippine Journal of Science: Botany Volume III No. 4: 175-218	[No evidence] "A spreading bush 3 m high, setose at the nodes, but otherwise glabrous, the bark of the ultimate branches gray, terete, slightly striate and lenticellate; leaves home on petioles :5-8 mm long, the lamina coriaceous, bluish-green on the upper surface, elliptic or oblong, 10-20 cm long, 4.4-9.5 cm wide, acute and slightly decurrent at the base, shortly acuminate at the apex, 7-nervcd, the outer nerve of each side less conspicuous than the others: primary lateral veins on each side of the midrib about 20, evident on the upper surface, but not on the under surface."

Qsn #	Question	Answer
402	Allelopathic	
	Source(s)	Notes
	WRA Specialist. (2022). Personal Communication	Unknown. No evidence found

403	Parasitic	n
	Source(s)	Notes
	Robinson, C.B. (1908). <i>Alabastra Philippinensis</i> , II. The Philippine Journal of Science: Botany Volume III No. 4: 175-218	"A spreading bush 3 m high, setose at the nodes, but otherwise glabrous, the bark of the ultimate branches gray, terete, slightly striate and lenticellate" [No evidence]

404	Unpalatable to grazing animals	
	Source(s)	Notes
	Brian's Botanicals. (2022). <i>Medinilla apoensis</i> . https://www.briansbotanicals.net/product/medinilla-apoensis/ . [Accessed 11 Mar 2022]	"Grows as a bush or epiphytic like shrub" [Unknown. Epiphytic habit may protect from or minimize herbivore activity]

405	Toxic to animals	n
	Source(s)	Notes
	Botanic Gardens Department. (1898). Poisonous Plants of the Malay Peninsula. Agricultural Bulletin of the Malay Peninsula 8: 199-218	"Some of the <i>Medinillas</i> are acid, and allied plants often astringent, but I know of none with poisonous qualities."
	Quattrocchi, U. (2012). CRC World Dictionary of Medicinal and Poisonous Plants: Common Names, Scientific Names, Eponyms, Synonyms, and Etymology. CRC Press, Boca Raton, FL	No evidence. Some species with medicinal uses

406	Host for recognized pests and pathogens	
	Source(s)	Notes
	Maria, C., Ersebet, B., & Denisa, H. (2012). <i>Medinilla</i> : an exotic and attractive indoor plant with great value. Journal of Horticulture, Forestry and Biotechnology, 16(2), 9-12	[Generic pest of <i>Medinilla</i> species] "The greatest damage of this plant is red spider (<i>Tetranychus urticae</i>) that may be controlled by regular water sprinkling of leaves and using appropriate acaricides (Padan 50DP - 0.1%, Karate 2.5 EC - 0.04%; Sintox 40 EC - 0.1%; Nissorun 10WP - 0.03%; Danirun 11 EC - 0.06%). On the red spider attack, leaves turn yellow and the bottom of it is seen jotting veils. If the attack is high, the humidity must be increased, because the deficiency of humidity causes proliferation of mites."

407	Causes allergies or is otherwise toxic to humans	n
	Source(s)	Notes
	Botanic Gardens Department. (1898). Poisonous Plants of the Malay Peninsula. Agricultural Bulletin of the Malay Peninsula 8: 199-218	"Some of the <i>Medinillas</i> are acid, and allied plants often astringent, but I know of none with poisonous qualities."

Qsn #	Question	Answer
	Quattrocchi, U. (2012). CRC World Dictionary of Medicinal and Poisonous Plants: Common Names, Scientific Names, Eponyms, Synonyms, and Etymology. CRC Press, Boca Raton, FL	No evidence. Some species with medicinal uses

408	Creates a fire hazard in natural ecosystems	n
	Source(s)	Notes
	Regalado Jr., J. C. (1995). Revision of Philippine <i>Medinilla</i> (Melastomataceae). <i>Blumea</i> , 40(1), 113-193	"Habitat-In mossy forests at 1500-1800(-2300) m altitude." [No evidence and unlikely due to habit and wet habitat]

409	Is a shade tolerant plant at some stage of its life cycle	y
	Source(s)	Notes
	Logee's Greenhouses. (2022). <i>Medinilla</i> 'Philippine Pink' (<i>Medinilla apoensis</i>). https://www.logees.com/medinilla-philippine-pink-medinilla-apoensis.html . [Accessed 10 Mar 2022]	"Morning sun is acceptable but not hot afternoon sun. It can also be grown in a shady location outside."

410	Tolerates a wide range of soil conditions (or limestone conditions if not a volcanic island)	
	Source(s)	Notes
	Regalado Jr., J. C. (1995). Revision of Philippine <i>Medinilla</i> (Melastomataceae). <i>Blumea</i> , 40(1), 113-193	"Epiphytic glabrous shrub 3- 4 m high." [As an epiphyte, soil type may be irrelevant to establishment]
	The National Gardening Association. (2022). <i>Medinilla apoensis</i> . https://garden.org/plants/view/648418/Medinilla-apoensis/ . [Accessed 11 Mar 2022]	"Soil pH Preferences: Moderately acid (5.6 – 6.0) Slightly acid (6.1 – 6.5) Neutral (6.6 – 7.3)"

411	Climbing or smothering growth habit	n
	Source(s)	Notes
	Regalado Jr., J. C. (1995). Revision of Philippine <i>Medinilla</i> (Melastomataceae). <i>Blumea</i> , 40(1), 113-193	"Epiphytic glabrous shrub 3- 4 m high. Branches terete, bark yellowish brown, branchlets subterete to angled but not winged, 5 mm in diameter; nodes setose, the bristles greyish, 7 mm long, deciduous with age." [Epiphytic, but not climbing or smothering]

412	Forms dense thickets	n
	Source(s)	Notes
	Regalado Jr., J. C. (1995). Revision of Philippine <i>Medinilla</i> (Melastomataceae). <i>Blumea</i> , 40(1), 113-193	"Epiphytic glabrous shrub 3- 4 m high." ... "Habitat-In mossy forests at 1500-1800(-2300) m altitude." [No evidence. Primarily epiphytic, small shrub]

Qsn #	Question	Answer
501	Aquatic	n
	Source(s)	Notes
	Regalado Jr., J. C. (1995). Revision of Philippine <i>Medinilla</i> (Melastomataceae). <i>Blumea</i> , 40(1), 113-193	"Epiphytic glabrous shrub 3- 4 m high."
502	Grass	n
	Source(s)	Notes
	Regalado Jr., J. C. (1995). Revision of Philippine <i>Medinilla</i> (Melastomataceae). <i>Blumea</i> , 40(1), 113-193	Melastomataceae
503	Nitrogen fixing woody plant	n
	Source(s)	Notes
	Regalado Jr., J. C. (1995). Revision of Philippine <i>Medinilla</i> (Melastomataceae). <i>Blumea</i> , 40(1), 113-193	Melastomataceae
504	Geophyte (herbaceous with underground storage organs -- bulbs, corms, or tubers)	n
	Source(s)	Notes
	Regalado Jr., J. C. (1995). Revision of Philippine <i>Medinilla</i> (Melastomataceae). <i>Blumea</i> , 40(1), 113-193	"Epiphytic glabrous shrub 3- 4 m high."
601	Evidence of substantial reproductive failure in native habitat	n
	Source(s)	Notes
	Pelser, P.B., J.F. Barcelona & D.L. Nickrent (eds.). 2011 onwards. Co's Digital Flora of the Philippines. www.philippineplants.org	" <i>Medinilla apoensis</i> C.B.Rob., PJS 3 c (1908) Bot. 207; --Merr., EPFP 3 (1923) 193; --Regalado, <i>Blumea</i> 40 (1995) 140. Endemic to the Philippines. MINDANAO: Misamis, Davao (Mt Apo). Mossy forests, 1500-1800(-2300)m." [No evidence, but limited distribution]
602	Produces viable seed	y
	Source(s)	Notes
	Robinson, C.B. (1908). <i>Alabastra Philippinensis</i> , II. The Philippine Journal of Science: Botany Volume III No. 4: 175-218	"fruit subglobose, 7 mm in diameter, rimmed at the top by the persistent calyx, attached by a pseudostalk now attaining a length of 7 mm and a pedicel attaining 9 mm, 5-celled, with numerous seeds; seeds concavo-convex in outline, 0.7 mm long, 0.5 mm wide, the testa white."
603	Hybridizes naturally	
	Source(s)	Notes
	WRA Specialist. (2022). Personal Communication	Unknown. Artificial hybrids produced in cultivation from other <i>Medinilla</i> species

Qsn #	Question	Answer
604	Self-compatible or apomictic	
	Source(s)	Notes
	Renner, S. (1989). A Survey of Reproductive Biology in Neotropical Melastomataceae and Memecylaceae. <i>Annals of the Missouri Botanical Garden</i> , 76(2), 496-518	[A variety of mating systems documented in family] "In the Neotropics, the Melastomataceae and Memecylaceae comprise over 3,000 species in 106 genera. Pollination observations have been reported for 126 species in 35 genera of Melastomataceae and for four species in one genus of Memecylaceae. Genetic self-incompatibility has been found in 22 Melastomataceae species, self-compatibility in 25 species. A single Memecylaceae species tested is self-compatible. Agamospermy is known in 19 New World and some Old World species of Melastomataceae."
	Quakenbush, P. J. (2018). Pollination, mating system, phenology and characterisation of <i>Medinilla multiflora</i> Merr (Melastomataceae) on Mt. Makiling, Philippines. <i>Sibbaldia: the Journal of Botanic Garden Horticulture</i> , 16: 121-139	[Unknown. Self-compatibility documented in a related species] "results showed a mixed mating system in <i>Medinilla multiflora</i> where it both out-crossed and was self-compatible."

605	Requires specialist pollinators	
	Source(s)	Notes
	Regalado Jr., J. C. (1995). Revision of Philippine <i>Medinilla</i> (Melastomataceae). <i>Blumea</i> , 40(1), 113-193	"Flowers 5-merous. Hypanthia campanulate, 4 mm long, 3 mm wide, glabrous, pink, denticulate. Petals ovate, 7 mm long, 5 mm wide, membranous, glabrous, pink to red. Stamens equal; filaments flattened, 2 mm long; anthers stout, 2.5-3 mm long." [Pollinators unknown]
	Stein, B. A., & Tobe, H. (1989). Floral Nectaries in Melastomataceae and Their Systematic and Evolutionary Implications. <i>Annals of the Missouri Botanical Garden</i> , 76 (2), 519-531	" <i>Medinilla</i> . The Old World genus <i>Medinilla</i> includes certain species that morphologically appear to be good candidates for bird pollination. We examined anatomically one such species, <i>Medinilla fachsioides</i> Gardn., but found the stamina! vasculature to be unexceptional. Subsequent to this, however, we found cultivated material of <i>M. magnifica</i> Lindl. at the Berlin Botanical Garden to secrete nectar from the petal tips. Anatomical investigations of this very unique nectar secretion method are currently under way (Tobe et al., in prep)."

606	Reproduction by vegetative fragmentation	
	Source(s)	Notes
	The National Gardening Association. (2022). <i>Medinilla apoensis</i> . https://garden.org/plants/view/648418/Medinilla-apoensis/ . [Accessed 11 Mar 2022]	"Propagation: Other methods: Cuttings: Stem" [Propagated from cuttings. Stem fragments could probably root if dispersed to an appropriate site]

607	Minimum generative time (years)	
	Source(s)	Notes
	WRA Specialist. (2022). Personal Communication	Unknown

701	Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)	

Qsn #	Question	Answer
	Source(s)	Notes
	Regalado Jr., J. C. (1995). Revision of Philippine <i>Medinilla</i> (Melastomataceae). <i>Blumea</i> , 40(1), 113-193	"The fruit in <i>Medinilla</i> is a berry which may have a thin or thick pericarp. The seeds are small (less than 1 mm) and numerous (50 to 100 per fruit), embedded in a pulpy mass within locules. The fruits are initially green, then turning red to purplish black when mature. Birds are most likely to eat the fruits and disperse the seeds." ... "Epiphytic glabrous shrub 3- 4 m high." [The small seed size may allow for transport into suitable semi-epiphytic sites, as has happened with other small-seeded members of the Melastomataceae]

702	Propagules dispersed intentionally by people	y
	Source(s)	Notes
	Brian's Botanicals. (2022). <i>Medinilla apoensis</i> . https://www.briansbotanicals.net/product/medinilla-apoensis/ . [Accessed 10 Mar 2022]	" <i>Medinilla apoensis</i> a less known species with larger light pink flowers. Grows as a bush or epiphytic like shrub. One of the more unusual plants to see growing mounted up. Plants sold in 3 to 4 inch pots. " [Sold online]

703	Propagules likely to disperse as a produce contaminant	
	Source(s)	Notes
	WRA Specialist. (2022). Personal Communication	Unknown. Possibly yes, as the seeds could be deposited on tree fern trunks. Other <i>Medinilla</i> have been spread on tree fern logs which are sold for orchid growers.

704	Propagules adapted to wind dispersal	n
	Source(s)	Notes
	Regalado Jr., J. C. (1995). Revision of Philippine <i>Medinilla</i> (Melastomataceae). <i>Blumea</i> , 40(1), 113-193	"The fruit in <i>Medinilla</i> is a berry which may have a thin or thick pericarp. The seeds are small (less than 1 mm) and numerous (50 to 100 per fruit), embedded in a pulpy mass within locules. The fruits are initially green, then turning red to purplish black when mature. Birds are most likely to eat the fruits and disperse the seeds."

705	Propagules water dispersed	
	Source(s)	Notes
	Regalado Jr., J. C. (1995). Revision of Philippine <i>Medinilla</i> (Melastomataceae). <i>Blumea</i> , 40(1), 113-193	"Habitat-In mossy forests at 1500-1800(-2300) m altitude." [Bird-dispersed epiphyte, but water could secondarily disperse seeds onto moss cover logs, rocks, or other quasi-epiphytic sites]

706	Propagules bird dispersed	y
	Source(s)	Notes

Qsn #	Question	Answer
	Regalado Jr., J. C. (1995). Revision of Philippine <i>Medinilla</i> (Melastomataceae). <i>Blumea</i> , 40(1), 113-193	"The fruit in <i>Medinilla</i> is a berry which may have a thin or thick pericarp. The seeds are small (less than 1 mm) and numerous (50 to 100 per fruit), embedded in a pulpy mass within locules. The fruits are initially green, then turning red to purplish black when mature. Birds are most likely to eat the fruits and disperse the seeds. No field observations on seed dispersal and germination are known. The fact that many species are locally endemic indicates that seed dispersal is limited to short distances." ... "Fruits subglobose, 7 mm in diameter; stalks 9 mm long."

707	Propagules dispersed by other animals (externally)	
	Source(s)	Notes
	Regalado Jr., J. C. (1995). Revision of Philippine <i>Medinilla</i> (Melastomataceae). <i>Blumea</i> , 40(1), 113-193	"The fruit in <i>Medinilla</i> is a berry which may have a thin or thick pericarp. The seeds are small (less than 1 mm) and numerous (50 to 100 per fruit), embedded in a pulpy mass within locules. The fruits are initially green, then turning red to purplish black when mature. Birds are most likely to eat the fruits and disperse the seeds." ... "Epiphytic glabrous shrub 3- 4 m high." [As a bird-dispersed epiphyte, seeds are primarily deposited on trees, but small seed size may facilitate dispersal into "semi-epiphytic" sites such as mossy rocks, logs etc. on the feet or fur of animals. Such dispersal has occurred with other small-seeded Melastomataceae in the Hawaiian Islands]

708	Propagules survive passage through the gut	y
	Source(s)	Notes
	Regalado Jr., J. C. (1995). Revision of Philippine <i>Medinilla</i> (Melastomataceae). <i>Blumea</i> , 40(1), 113-193	"The fruit in <i>Medinilla</i> is a berry which may have a thin or thick pericarp. The seeds are small (less than 1 mm) and numerous (50 to 100 per fruit), embedded in a pulpy mass within locules. The fruits are initially green, then turning red to purplish black when mature. Birds are most likely to eat the fruits and disperse the seeds. No field observations on seed dispersal and germination are known. The fact that many species are locally endemic indicates that seed dispersal is limited to short distances." ... "Fruits subglobose, 7 mm in diameter; stalks 9 mm long."

801	Prolific seed production (>1000/m2)	
	Source(s)	Notes
	Regalado Jr., J. C. (1995). Revision of Philippine <i>Medinilla</i> (Melastomataceae). <i>Blumea</i> , 40(1), 113-193	"The fruit in <i>Medinilla</i> is a berry which may have a thin or thick pericarp. The seeds are small (less than 1 mm) and numerous (50 to 100 per fruit), embedded in a pulpy mass within locules." [Densities unknown]
	Robinson, C.B. (1908). <i>Alabastra Philippinensis</i> , II. The Philippine Journal of Science: Botany Volume III No. 4: 175-218	[Small-seeded. Densities unknown] "fruit subglobose, 7 mm in diameter, rimmed at the top by the persistent calyx, attached by a pseudostalk now attaining a length of 7 mm and a pedicel attaining 9 mm, 5-celled, with numerous seeds; seeds concavo-convex in outline, 0.7 mm long, 0.5 mm wide, the testa white."

Qsn #	Question	Answer
802	Evidence that a persistent propagule bank is formed (>1 yr)	
	Source(s)	Notes
	Royal Botanic Gardens Kew. (2022) Seed Information Database (SID). Version 7.1. http://data.kew.org/sid/ . [Accessed 11 Mar 2022]	Unknown. Other <i>Medinilla</i> species have orthodox seeds

803	Well controlled by herbicides	
	Source(s)	Notes
	WRA Specialist. (2022). Personal Communication	Unknown. No information on herbicide efficacy or chemical control of this species. Epiphytic habit may make herbicide application difficult, and result in non-target effects

804	Tolerates, or benefits from, mutilation, cultivation, or fire	
	Source(s)	Notes
	The National Gardening Association. (2022). <i>Medinilla apoensis</i> . https://garden.org/plants/view/648418/Medinilla-apoensis/ . [Accessed]	"Propagation: Cuttings: Stem" [Unknown. May be able to regrow after cutting]

805	Effective natural enemies present locally (e.g. introduced biocontrol agents)	
	Source(s)	Notes
	WRA Specialist. (2022). Personal Communication	Unknown. Four other <i>Medinilla</i> species are currently documented as naturalized in the Hawaiian Islands, and natural enemies have not been documented to limit their spread

Summary of Risk Traits:

High Risk / Undesirable Traits

- Thrives in tropical climates
- Other *Medinilla* species have become invasive
- Shade-tolerant
- Reproduces by seeds
- Seeds dispersed by birds and intentionally by people
- Small seed size may facilitate accidental dispersal
- Gaps in biological and ecological information may reduce accuracy of risk prediction

Low Risk Traits

- No reports of invasiveness or naturalization, but limited evidence of cultivation outside native range
- Unarmed (no spines, thorns, or burrs)
- Non-toxic
- Ornamental value
- Grows predominantly as an epiphyte, and any potential impacts may be limited to competition with the native epiphytic biota of a region (i.e. unlikely to transform the fundamental structure of an ecosystem)