Taxon: Allamanda blanchetii **Family:** Apocynaceae

Common Name(s): purple allamanda **Synonym(s):** Allamanda violacea Gardner &

Assessor: Assessor **Status:** Assessor Approved **End Date:** 24 Oct 2014

WRA Score: 4.0 **Designation:** EVALUATE **Rating:** Evaluate

Keywords: Scrambling Shrub, Toxic Sap, Ornamental, Suckering, Wind-Dispersed, Rarely Seeding

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	y
301	Naturalized beyond native range	y = 1*multiplier (see Appendix 2), n= question 205	y
302	Garden/amenity/disturbance weed		
303	Agricultural/forestry/horticultural weed	n=0, y = 2*multiplier (see Appendix 2)	n
304	Environmental weed		
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	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		
409	Is a shade tolerant plant at some stage of its life cycle	y=1, n=0	n
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	y
412	Forms dense thickets		
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	y=1, n=-1	n
605	Requires specialist pollinators	y=-1, n=0	n
606	Reproduction by vegetative fragmentation	y=1, n=-1	y
607	Minimum generative time (years)	1 year = 1, 2 or 3 years = 0, 4+ years = -1	>3
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		
706	Propagules bird dispersed	y=1, n=-1	n
707	Propagules dispersed by other animals (externally)	y=1, n=-1	n
708	Propagules survive passage through the gut	y=1, n=-1	n
801	Prolific seed production (>1000/m2)	y=1, n=-1	n
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**
	Staples, G.W. & Herbst, D.R. 2005. A Tropical Garden Flora - Plants Cultivated in the Hawaiian Islands and Other Tropical Places. Bishop Museum Press, Honolulu, HI	No evidence

102	**Has the species become naturalized where grown?**	
	Source(s)	**Notes**
	WRA Specialist. 2014. Personal Communication	NA

103	**Does the species have weedy races?**	
	Source(s)	**Notes**
	WRA Specialist. 2014. 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**
	USDA, ARS, National Genetic Resources Program. Germplasm Resources Information Network - (GRIN) [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland. URL: http://www.ars-grin.gov/. [Accessed 23 Oct 2014]	"Native: SOUTHERN AMERICA Brazil: Brazil - Alagoas, Bahia, Maranhao, Paraiba, Pernambuco, Piaui, Rio Grande do Norte"

202	**Quality of climate match data**	**High**
	Source(s)	**Notes**
	USDA, ARS, National Genetic Resources Program. Germplasm Resources Information Network - (GRIN) [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland. URL: http://www.ars-grin.gov/. [Accessed 23 Oct 2014]	"Native: SOUTHERN AMERICA Brazil: Brazil - Alagoas, Bahia, Maranhao, Paraiba, Pernambuco, Piaui, Rio Grande do Norte"

203	**Broad climate suitability (environmental versatility)**	**n**
	Source(s)	**Notes**
	Gilman, E.F. 2007. Allamanda violacea Purple Allamanda. FPS 32. University of Florida IFAS Extension, Gainesville, FL. http://edis.ifas.ufl.edu. [Accessed 23 Oct 2014]	"USDA hardiness zones: 9B through 11"
	Tropicos.org. 2014. Tropicos [Online Database]. Missouri Botanical Garden. http://www.tropicos.org/. [Accessed 23 Oct 2014]	[Collected across an elevation range <1000 m] Collected from 300 m - 1010 m

Qsn #	Question	Answer
204	**Native or naturalized in regions with tropical or subtropical climates**	**y**
	Source(s)	**Notes**
	USDA, ARS, National Genetic Resources Program. Germplasm Resources Information Network - (GRIN) [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland. URL: http://www.ars-grin.gov/. [Accessed 23 Oct 2014]	"Native: SOUTHERN AMERICA Brazil: Brazil - Alagoas, Bahia, Maranhao, Paraiba, Pernambuco, Piaui, Rio Grande do Norte Naturalized: AUSTRALASIA Australia: Australia - Queensland"

205	**Does the species have a history of repeated introductions outside its natural range?**	**y**
	Source(s)	**Notes**
	Staples, G.W. & Herbst, D.R. 2005. A Tropical Garden Flora - Plants Cultivated in the Hawaiian Islands and Other Tropical Places. Bishop Museum Press, Honolulu, HI	"A. blanchetii has been introduced to other tropical areas (including Africa) and is occasionally cultivated in Hawaii."
	McCormack, G. 2007. Cook Islands Biodiversity Database, Version 2007.2. Cook Islands Natural Heritage Trust, Rarotonga. http://cookislands.bishopmuseum.org. [Accessed 23 Oct 2014]	"COOK ISLANDS STATUS: Introduced - Recent, Not naturalised; Land, lowlands"
	Acevedo-Rodríguez, P. & Strong, M.T. 2012. Catalogue of Seed Plants of the West Indies. Smithsonian Contributions to Botany 98. Smithsonian Institution Scholarly Press, Washington, D.C.	"Distribution: Cultivated in Puerto Rico and Lesser Antilles (Saba); native to Brazil."
	Randall, R.P. 2007. The introduced flora of Australia and its weed status. CRC for Australian Weed Management, Glen Osmond, Australia	"This plant has naturalized somewhere in Australia."

301	**Naturalized beyond native range**	**y**
	Source(s)	**Notes**
	Randall, R.P. 2007. The introduced flora of Australia and its weed status. CRC for Australian Weed Management, Glen Osmond, Australia	"Allamanda blanchetii A.DC. Apocynaceae Weed - N - 1A - 2A" [There is a reference to this plant as a weed somewhere in the world. This plant has naturalized somewhere in Australia.This plant has been recorded as a weed of the natural environment. This plant has been recorded as escaping from cultivation.]
	Acevedo-Rodríguez, P. 2005. Vines and Climbing Plants of Puerto Rico and the Virgin Islands. Contributions from the United States National Herbarium Volume 51: 1-483. Smithsonian Institution, Washington, D.C.	"Allamanda blanchetii DC., with a purple corolla, is often cultivated in Puerto Rico and the Virgin Islands, but apparently it has not become naturalized."
	McCormack, G. 2007. Cook Islands Biodiversity Database, Version 2007.2. Cook Islands Natural Heritage Trust, Rarotonga. http://cookislands.bishopmuseum.org. [Accessed 23 Oct 2014]	"COOK ISLANDS STATUS: Introduced - Recent, Not naturalised; Land, lowlands"

Qsn #	Question	Answer
	Liogier, A.H. & Martorell, L.F. 2000. Flora of Puerto Rico and adjacent islands: a systematic synopsis. Second Edition Revised. La Editorial, UPR, San Juan, Puerto Rico	"Cultivated and persistent in moist and wet districts, Puerto Rico; a native to Brazil, cultivated in the tropics."
	Connor, R.A. 2008. Anguilla Invasive Species strategy (2008) draft. Department of Environment, Anguilla, WI	"XV. Invasive Species in Anguilla The following list provides an overview of the known invasive species that are found throughout Anguilla: " [Includes Allamanda blanchetii. No impacts specified]
	Imada, C. 2012. Hawaiian Native and Naturalized Vascular Plants Checklist (December 2012 update). Bishop Musem Technical Report 60. Bishop Musem, Honolulu, HI	No evidence in Hawaiian Islands

302	Garden/amenity/disturbance weed	
	Source(s)	**Notes**
	WRA Specialist. 2014. Personal Communication	Unknown. See unsubtantiated references 1 in question 3.01

303	Agricultural/forestry/horticultural weed	n
	Source(s)	**Notes**
	Randall, R.P. 2012. A Global Compendium of Weeds. 2nd Edition. Department of Agriculture and Food, Western Australia	No evidence

304	Environmental weed	
	Source(s)	**Notes**
	Connor, R.A. 2008. Anguilla Invasive Species strategy (2008) draft. Department of Environment, Anguilla, WI	"XV. Invasive Species in Anguilla The following list provides an overview of the known invasive species that are found throughout Anguilla: " [Includes Allamanda blanchetii. No impacts specified]
	Randall, R.P. 2007. The introduced flora of Australia and its weed status. CRC for Australian Weed Management, Glen Osmond, Australia	[Unable to verify or determine negative impacts] "Allamanda blanchetii A.DC. Apocynaceae ? Weed - N - 1A - 2A" [There is a reference to this plant as a weed somewhere in the world. This plant has naturalized somewhere in Australia.This plant has been recorded as a weed of the natural environment. This plant has been recorded as escaping from cultivation.]

305	Congeneric weed	y
	Source(s)	**Notes**

Qsn #	Question	Answer
	Queensland Government. 2011. Weeds of Australia - Yellow allamanda - Allamanda cathartica. http://keyserver.lucidcentral.org/weeds/data/03030800-0b07-490a 8d04-0605030c0f01/media/Html/Allamanda_cathartica.htm. [Accessed 23 Oct 2014]	"Yellow allamanda (Allamanda cathartica) is regarded as an environmental weed in northern Queensland. It is one of a number of exotic ornamental vines that have become invasive in this region after escaping from garden plantings. This species was first recorded as naturalised in Queensland in 1945. By 1992, it was recognised as a weed of roadsides in the wet tropics region of northern Queensland, but it was not then considered to be a high priority environmental weed. However, yellow allamanda (Allamanda cathartica) has continued to spread and is now widely naturalised in the rainforests of northern and central Queensland. It is now considered to be quite invasive in several National Parks in far northern Queensland and is common along roadsides between Silkwood and Tully. It also invades well-drained soils on the fringes of rainforests and paperbark swamps. In fact, yellow allamanda (Allamanda cathartica) was recently ranked among the top 25 species on a prioritised list of weeds of the wet and dry tropics regions in northern Queensland. It is also listed as a priority weed in the Far North Queensland Natural Resource Management region, is a locally declared plant in Cardwell Shire, is regarded as an "undesirable plant" in the wet tropics World Heritage Area, and is thought to be adversely impacting upon natural systems in the Townsville City area. This species also grows along creeks and roadsides, and in disturbed natural vegetation, in northern Western Australia. It was first recorded as naturalised in this state in 1993 and is also locally naturalised on creeklines on Koolan Island. Though it is not yet listed as naturalised in the Northern Territory, yellow allamanda (Allamanda cathartica) is also regarded as a potential weed in Aboriginal lands in the Northern Land Council area."

401	Produces spines, thorns or burrs	n
	Source(s)	**Notes**
	Staples, G.W. & Herbst, D.R. 2005. A Tropical Garden Flora - Plants Cultivated in the Hawaiian Islands and Other Tropical Places. Bishop Museum Press, Honolulu, HI	"Shrub or scrambler 6-15 feet high, suckering from roots; branchlets pubescent. Leaves in whorls of 3-5, sessile; blades narrowly elliptic, 1.75-4.5 x 0.7-2.2 inches, pubescent above, underside pilose, especially on main veins."

402	Allelopathic	
	Source(s)	**Notes**
	Fujii, Y., Parvez, S. S., Parvez, M., Ohmae, Y., & Iida, O. 2003. Screening of 239 medicinal plant species for allelopathic activity using the sandwich method. Weed Biology and Management, 3(4): 233-241	[Unknown for A. blanchetii. Allamanda cathartica may possess allelopathic properties]
	WRA Specialist. 2014. Personal Communication	Unknown

Qsn #	Question	Answer
403	**Parasitic**	**n**
	Source(s)	**Notes**
	Staples, G.W. & Herbst, D.R. 2005. A Tropical Garden Flora - Plants Cultivated in the Hawaiian Islands and Other Tropical Places. Bishop Museum Press, Honolulu, HI	"Shrub or scrambler 6-15 feet high..." [Apocynaceae]

404	Unpalatable to grazing animals	
	Source(s)	**Notes**
	Dave's Garden. 2014. PlantFiles: Violet Allamanda - Allamanda blanchetii. http://davesgarden.com/guides/pf/go/55059/. [Accessed 23 Oct 2014]	[Toxic sap would probably deter browsing] "Danger: All parts of plant are poisonous if ingested" ... "This plant is resistant to deer"

405	Toxic to animals	y
	Source(s)	**Notes**
	Knight, A. 2007. A Guide to Poisonous House and Garden Plants. CRC Press, Boca Raton, FL	"Allamanda is a common plant in many warm temperate and tropical gardens, and as such has the potential for causing poisoning in animals that eat the plant."
	Sena Filho, J. G., Pontual, K. A. Q., Ferreira, C. P., Florencio, D. C., & Xavier, H. S. 2007. Ornamental plants in Southern Brazil with toxic potential for companion animals. Pp. 55-57 in Panter, K. E., K. E.;Wierenga, T. L.;& Pfister, J. A. (eds.). Poisonous Plants: Global Research and Solutions. CABI, Wallingford, UK	"Cases of intoxication of pets were investigated by personal visits to residences, including homes, yards, apartments and common garden areas, in Rio Grande do Sul, Brazil, from 1998 to 2002 to determine the presence of poisonous plants. The plant species most commonly observed in cases of intoxication of pets (i.e. companion animals) were: Dieffenbachia picta [D. maculata], Sansevieria trifasciata, Allamanda cathartica, A. blanchettii, Euphorbia milii, E. pulcherrima, Lantana camara, Philodendron bipinnatifidum and Brugmansia suaveolens. This information will be useful to educate the public about the potential dangers of some common household plants to companion animals."
	Araújo, L. D. A. D., Quirino, Z. G. M., & Machado, I. C. 2011. Fenologia reprodutiva, biologia floral e polinização de Allamanda blanchetii, uma Apocynaceae endêmica da Caatinga. Brazilian Journal of Botany, 34(2), 211-222	"The reproductive phenology, floral biology, pollination mechanism and breeding system of Allamanda blanchetii A.DC. were studied in natural populations in the Almas Farm, Paraíba, Brazil. Allamanda blanchetii is a shrubby species, endemic of the Caatinga, flowering from February to July, with peak in March-April. The fruiting followed the flowering and continued until September. The tubular flowers are pink, their strong herkogamy preventing self pollination. The pollen grains are deposited in the upper side of the style head (non-receptive region), still in the pre anthesis phase (dehiscent anther), characterizing a secondary pollen presentation. The flowers produce an average of 36.6 µL of nectar, that is the only resource to the floral visitors. Allamanda blanchetii is self incompatible and the results suggest a late-acting self-incompatibility mechanism."

Qsn #	Question	Answer
406	**Host for recognized pests and pathogens**	**n**
	Source(s)	**Notes**
	Gilman, E.F. 2007. Allamanda violacea Purple Allamanda. FPS 32. University of Florida IFAS Extension, Gainesville, FL. http://edis.ifas.ufl.edu. [Accessed 23 Oct 2014]	"No pests or diseases are of major concern except for nematodes. Purple Allamanda is only occasionally bothered by scale and mites."

407	**Causes allergies or is otherwise toxic to humans**	**y**
	Source(s)	**Notes**
	Agra, M. D. F., Baracho, G. S., Nurit, K., Basílio, I. J. L. D., & Coelho, V. P. M. 2007. Medicinal and poisonous diversity of the flora of "Cariri Paraibano", Brazil. Journal of Ethnopharmacology, 111(2), 383-395	"As laxative, emetic and cathartic"
	Tobar Vargas, A., Gavio, B., & Fernández Alonso, J. L. 2013. New records of plants for San Andres and Old Providence islands (International Biosphere Reserve Seaflower), Caribbean Colombia. Check List 9(6): 1361–1366	"The species Allamanda blanchetii, Aglaonema commutatum and Cnidoscolus chayamansa are toxic if consumed, while Allamanda blanchetii produces a latex which may irritate the skin upon contact."

408	**Creates a fire hazard in natural ecosystems**	
	Source(s)	**Notes**
	WRA Specialist. 2014. Personal Communication	Unknown

409	**Is a shade tolerant plant at some stage of its life cycle**	**n**
	Source(s)	**Notes**
	Whistler, W.A. 2000. Tropical Ornamentals: A Guide. Timber Press, Portland, OR	"Fertile, moist, but well-drained soils in partially shaded places are preferred."
	Gilman, E.F. 2007. Allamanda violacea Purple Allamanda. FPS 32. University of Florida IFAS Extension, Gainesville, FL. http://edis.ifas.ufl.edu. [Accessed 23 Oct 2014]	"Light requirement: plant grows in full sun"
	Staples, G.W. & Herbst, D.R. 2005. A Tropical Garden Flora - Plants Cultivated in the Hawaiian Islands and Other Tropical Places. Bishop Museum Press, Honolulu, HI	"Purple allamanda does best in partially shaded locations where its flowers and foliage will not fade, rather than in full sun preferred by other allamandas."

410	**Tolerates a wide range of soil conditions (or limestone conditions if not a volcanic island)**	
	Source(s)	**Notes**
	Gilman, E.F. 2007. Allamanda violacea Purple Allamanda. FPS 32. University of Florida IFAS Extension, Gainesville, FL. http://edis.ifas.ufl.edu. [Accessed 23 Oct 2014]	"Soil tolerances: occasionally wet; acidic; slightly alkaline; clay; sand; loam"
	Learn 2 Grow. 2014. Allamanda blanchetii. http://www.learn2grow.com/plants/allamanda-blanchetii/. [Accessed 23 Oct 2014]	"They require full sun and fertile, well-drained, acidic soil for best growth."

411	**Climbing or smothering growth habit**	**y**

Qsn #	Question	Answer
	Source(s)	**Notes**
	Rauch, F.D. & Weissich, P.R. 2000. Plants for Tropical Landscapes: A Gardener's Guide. University of Hawaii Press, Honolulu, HI	"A sprawling evergreen Brazilian species, this plant grows to 6 feet high in full sun and moist soils and produces flowers in summer and fall."
	Staples, G.W. & Herbst, D.R. 2005. A Tropical Garden Flora - Plants Cultivated in the Hawaiian Islands and Other Tropical Places. Bishop Museum Press, Honolulu, HI	"Shrub or scrambler 6-15 feet high, suckering from roots; branchlets pubescent. Leaves in whorls of 3-5, sessile; blades narrowly elliptic, 1.75-4.5 x 0.7-2.2 inches, pubescent above, underside pilose, especially on main veins."

412	**Forms dense thickets**	
	Source(s)	**Notes**
	WRA Specialist. 2014. Personal Communication	Unknown

501	**Aquatic**	**n**
	Source(s)	**Notes**
	Staples, G.W. & Herbst, D.R. 2005. A Tropical Garden Flora - Plants Cultivated in the Hawaiian Islands and Other Tropical Places. Bishop Museum Press, Honolulu, HI	[Terrestrial] "Shrub or scrambler 6-15 feet high, suckering from roots..."

502	**Grass**	**n**
	Source(s)	**Notes**
	USDA, ARS, National Genetic Resources Program. Germplasm Resources Information Network - (GRIN) [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland. URL: http://www.ars-grin.gov/. [Accessed 23 Oct 2014]	Apocynaceae

503	**Nitrogen fixing woody plant**	**n**
	Source(s)	**Notes**
	USDA, ARS, National Genetic Resources Program. Germplasm Resources Information Network - (GRIN) [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland. URL: http://www.ars-grin.gov/. [Accessed 23 Oct 2014]	Apocynaceae

504	**Geophyte (herbaceous with underground storage organs -- bulbs, corms, or tubers)**	**n**
	Source(s)	**Notes**
	Staples, G.W. & Herbst, D.R. 2005. A Tropical Garden Flora - Plants Cultivated in the Hawaiian Islands and Other Tropical Places. Bishop Museum Press, Honolulu, HI	"Shrub or scrambler 6-15 feet high, suckering from roots; branchlets pubescent."

601	**Evidence of substantial reproductive failure in native habitat**	**n**

Qsn #	Question	Answer
	Source(s)	**Notes**
	Araújo, L. D. A. D., Quirino, Z. G. M., & Machado, I. C. 2011. Fenologia reprodutiva, biologia floral e polinização de Allamanda blanchetii, uma Apocynaceae endêmica da Caatinga. Brazilian Journal of Botany, 34(2), 211-222	[No evidence] "The reproductive phenology, floral biology, pollination mechanism and breeding system of Allamanda blanchetii A.DC. were studied in natural populations in the Almas Farm, Paraíba, Brazil. Allamanda blanchetii is a shrubby species, endemic of the Caatinga, flowering from February to July, with peak in March-April. The fruiting followed the flowering and continued until September."

602	Produces viable seed	y
	Source(s)	**Notes**
	Top Tropicals. 2014. Allamanda blanchetii, Allamanda violacea Cherry Jubilee. http://toptropicals.com/catalog/uid/allamanda_cherry.htm. [Accessed 23 Oct 2014]	"Allamanda can be propagated by cuttings, air-layers, and seeds. Seeds come up in 3 – 6 weeks. They should be kept in a light, warm place, in moist but not wet soil."
	Whistler, W.A. 2000. Tropical Ornamentals: A Guide. Timber Press, Portland, OR	"Fruit a spiny, subglobose capsule, infrequently formed in cultivation."
	Dave's Garden. 2014. PlantFiles: Violet Allamanda - Allamanda blanchetii. http://davesgarden.com/guides/pf/go/55059/. [Accessed 23 Oct 2014]	"Propagation Methods: ... From seed; direct sow outdoors in fall" ... "On Jun 16, 2004, jbhew from Nixon, TX wrote: ... The one left on the plant just recently turned brown and popped open this week to expose about 14 seeds. I would like to know how to plant these seeds and if others have experienced the same thing with their Allamanda's."

603	Hybridizes naturally	
	Source(s)	**Notes**
	Subtropical Gardening. 2013. Allamanda (Pt3) pp. 64-66 by Arno King.http://www.stgmagazine.com.au/issue_5_preview/iss5_supp1.htm. [Accessed 23 Oct 2014]	[Possibly Yes] "For years people have tried to hybridise allamandas but this has proved near impossible. Allamanda cathartica fails to set seed in most countries due to lack of a pollinator and complex pollination mechanisms. Recently, many new hybrids of allamanda have been introduced into cultivation. These plants appear to be similar to both A. blanchetii and A.cathartica 'Hendersonii'. It is said that these hybrids occurred by chance when both species were grown side by side, seed being set on A. blanchetii. Nong Nooch Botanic Gardens in Thailand has a very large collection of these plants and many are making their way into Australian gardens."

604	Self-compatible or apomictic	n
	Source(s)	**Notes**
	East, E. M. 1940. The distribution of self-sterility in the flowering plants. Proceedings of the American Philosophical Society 82: 449-518	"In my own experiinents, Allamanda Blanchetii ADC., A. cathartica L. var. grandiflora (Larn.) Rafill, and A. cathartica L. var. Hendersonii (Bull) Rafill, proved to be self-sterile, though seeding when crossed."
	Fryxell, P. A. 1957. Mode of reproduction of higher plants. The Botanical Review, 23(3): 135-233	"Self-incompatible"

605	Requires specialist pollinators	n

Qsn #	Question	Answer
	Source(s)	**Notes**
	Araújo, L. D. A. D., Quirino, Z. G. M., & Machado, I. C. 2011. Fenologia reprodutiva, biologia floral e polinização de Allamanda blanchetii, uma Apocynaceae endêmica da Caatinga. Brazilian Journal of Botany, 34(2), 211-222	"The floral attributes are compatible with the melittophilous and psychophilous syndromes. In fact, the observed pollinators were the bee Eulaema nigrita Lepeletier, as main pollinator, and four species of butterflies, which act as secondary pollinators. The occurrence of strong herkogamy, secondary pollen presentation and self-incompatibility mechanism indicates high degree of specialization of pollination and breeding systems of A. blanchetii."
	Agostini, K. & Sazima, M. 2003. Plantas ornamentais e seus recursos para abelhas no campus da Universidade Estadual de Campinas, estado de São Paulo, Brasil. Bragantia 62: 335-343	Apis mellifera and Xylocopa frontalis pollinated A. blanchetii in a floristic and phenological study or ornamental, arboreal and shrubby species on the campus of the Universidade Estadual de Campinas, São Paulo.

606	Reproduction by vegetative fragmentation	y
	Source(s)	**Notes**
	Staples, G.W. & Herbst, D.R. 2005. A Tropical Garden Flora - Plants Cultivated in the Hawaiian Islands and Other Tropical Places. Bishop Museum Press, Honolulu, HI	"Over time A. blanchetii begins to sucker profusely and can become a problem in the garden."

607	Minimum generative time (years)	>3
	Source(s)	**Notes**
	Dave's Garden. 2014. PlantFiles: Violet Allamanda - Allamanda blanchetii. http://davesgarden.com/guides/pf/go/55059/. [Accessed 23 Oct 2014]	[Starting producing seeds at 4 years] "On Jun 16, 2004, jbhew from Nixon, TX wrote: ... I have three plants that are 4 years old, this last fall before putting them in my greenhouse in october, I noticed there were spike covered large oval pods on two plants. I cut one off and left the other on the plant. The one left on the plant just recently turned brown and popped open this week to expose about 14 seeds."

701	Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)	n
	Source(s)	**Notes**
	WRA Specialist. 2014. Personal Communication	Seeds, if produced, lack means of external attachment & are unlikely to be accidentally dispersed

702	Propagules dispersed intentionally by people	y
	Source(s)	**Notes**
	Staples, G.W. & Herbst, D.R. 2005. A Tropical Garden Flora - Plants Cultivated in the Hawaiian Islands and Other Tropical Places. Bishop Museum Press, Honolulu, HI	"A. blanchetii has been introduced to other tropical areas (including Africa) and is occasionally cultivated in Hawaii."

703	Propagules likely to disperse as a produce contaminant	n
	Source(s)	**Notes**

Qsn #	Question	Answer
	Staples, G.W. & Herbst, D.R. 2005. A Tropical Garden Flora - Plants Cultivated in the Hawaiian Islands and Other Tropical Places. Bishop Museum Press, Honolulu, HI	[Not grown with produce. Unlikely to become a contaminant of other plants] "Fruits are capsules, prickly. Seeds flat, circular narrowly winged around margin."

704	Propagules adapted to wind dispersal	y
	Source(s)	**Notes**
	Araújo, L. D. A. D., Quirino, Z. G. M., & Machado, I. C. 2011. Fenologia reprodutiva, biologia floral e polinização de Allamanda blanchetii, uma Apocynaceae endêmica da Caatinga. Brazilian Journal of Botany, 34(2), 211-222	"O fato do período de frutificação se estender um pouco mais do que o da floração, coincidindo com o início da estação seca, bem como o fato do fruto levar muito tempo para se desenvolver e entrar em estágio de maturação, resulta na estratégia reprodutiva de dispersar suas sementes anemocóricas na época seca." [Translation: The fact that the fruiting period extend slightly more than the flowering , coinciding with the beginning of the dry season and the fact the fruit take a long time to develop and get into stage of maturation , results in reproductive strategy of dispersing its wind dispersed seeds in the dry season .]

705	Propagules water dispersed	
	Source(s)	**Notes**
	Kimmel, T. M., do Nascimento, L. M., Piechowski, D., Sampaio, E. V., Nogueira Rodal, M. J., & Gottsberger, G. 2010. Pollination and seed dispersal modes of woody species of 12 year-old secondary forest in the Atlantic Forest region of Pernambuco, NE Brazil. Flora-Morphology, Distribution, Functional Ecology of Plants, 205(8): 540-547	[Unlikely] "Table 1 Total number of fertile and infertile individuals, diameter groups, pollination and dispersal modes o fwoody species occurring in two capoeiras, Usina Sao Jose´ , Zonada Mata, state of Pernambuco" [Allamanda blanchetii - Disp - anem = anemochory. Wind dispersed]

706	Propagules bird dispersed	n
	Source(s)	**Notes**
	Kimmel, T. M., do Nascimento, L. M., Piechowski, D., Sampaio, E. V., Nogueira Rodal, M. J., & Gottsberger, G. 2010. Pollination and seed dispersal modes of woody species of 12 year-old secondary forest in the Atlantic Forest region of Pernambuco, NE Brazil. Flora-Morphology, Distribution, Functional Ecology of Plants, 205(8): 540-547	[Not fleshy fruited] "Disp = dispersal modes: anem = anemochory"

707	Propagules dispersed by other animals (externally)	n
	Source(s)	**Notes**
	Staples, G.W. & Herbst, D.R. 2005. A Tropical Garden Flora - Plants Cultivated in the Hawaiian Islands and Other Tropical Places. Bishop Museum Press, Honolulu, HI	[No means of external attachment] "Seeds flat, circular narrowly winged around margin."

708	Propagules survive passage through the gut	n
	Source(s)	**Notes**

Qsn #	Question	Answer
	Kimmel, T. M., do Nascimento, L. M., Piechowski, D., Sampaio, E. V., Nogueira Rodal, M. J., & Gottsberger, G. 2010. Pollination and seed dispersal modes of woody species of 12 year-old secondary forest in the Atlantic Forest region of Pernambuco, NE Brazil. Flora-Morphology, Distribution, Functional Ecology of Plants, 205(8): 540-547	[Wind-dispersed. No evidence of consumption or internal dispersal]

801	Prolific seed production (>1000/m2)	n
	Source(s)	**Notes**
	Whistler, W.A. 2000. Tropical Ornamentals: A Guide. Timber Press, Portland, OR	"Fruit a spiny, subglobose capsule, infrequently formed in cultivation."
	McCormack, G. 2007. Cook Islands Biodiversity Database, Version 2007.2. Cook Islands Natural Heritage Trust, Rarotonga. http://cookislands.bishopmuseum.org. [Accessed 23 Oct 2014]	"FRUIT rare, spherical with spines."
	Staples, G.W. & Herbst, D.R. 2005. A Tropical Garden Flora - Plants Cultivated in the Hawaiian Islands and Other Tropical Places. Bishop Museum Press, Honolulu, HI	[Genus Description] "Most species do not fruit in Hawaii and are thus propagated vegetatively." [Species Description] "Propagation is usually from cuttings."
	Dave's Garden. 2014. PlantFiles: Violet Allamanda - Allamanda blanchetii. http://davesgarden.com/guides/pf/go/55059/. [Accessed 23 Oct 2014]	[Rarely produces seed]"On Sep 28, 2013, robertbgillies from Volcan Panama wrote: ... It has an interesting rather large prickly green seedpod but most of the flowers don't form a seedpod."

802	Evidence that a persistent propagule bank is formed (>1 yr)	
	Source(s)	**Notes**
	Baskin, C.C. & Baskin, J.M. 2014. Seeds Ecology, Biogeography, and Evolution of Dormancy and Germination. Second Edition. Academic Press, San Francisco, CA	Unknown. No information on genus

803	Well controlled by herbicides	
	Source(s)	**Notes**
	WRA Specialist. 2014. Personal Communication	Unknown. No information on herbicide efficacy or chemical control of this species

804	Tolerates, or benefits from, mutilation, cultivation, or fire	
	Source(s)	**Notes**
	Whistler, W.A. 2000. Tropical Ornamentals: A Guide. Timber Press, Portland, OR	"Without pruning it can become quite scraggly since it is halfway between a vine and a shrub."
	Mathias, M.E.. 1985. Flowering Plants in the Landscape. University of California Press, Berkeley and Los Angeles, CA	[Allamanda violacea is a synonym of Allamanda blanchetii] "Allamanda violacea ... It is a scandent shrub, not as rampant as A. cathartica, and can be easily pruned to remain as a shrub."

Qsn #	Question	Answer
805	**Effective natural enemies present locally (e.g. introduced biocontrol agents)**	
	Source(s)	**Notes**
	WRA Specialist. 2014. Personal Communication	Unknown

Summary of Risk Traits:

High Risk / Undesirable Traits
• Thrives in tropical climates
• Naturalized in Australia & possibly Antigua, West Indies
• Reported as a weed in Australia & Antigua, West Indies, but no negative impacts described
• Other Allamanda species have become invasive
• Sap toxic to animals and people
• Toxic sap likely reduces palatability
• Scrambling, potentially smothering, growth habit
• Seeds, when produced, dispersed by wind & intentionally by people
• Suckers profusely (can become problematic in gardens)
• Tolerates repeated pruning

Low Risk Traits
• Unarmed (no spines, thorns or burrs)
• Ornamental
• Self-incompatible
• Reaches maturity in 4+ years (but able to spread vegetatively)
• Limited seed set in cultivation makes long-distance or accidental dispersal unlikely

Second Screening Results for Tree/tree-like shrubs
(A) Shade tolerant or known to form dense stands?> Possibly shade tolerant. Able to grow in partial shade
(B) Wind-dispersed?> Yes. Seeds, when produced, are dispersed by wind
(C) Life cycle < 4 years? No. 4+ years to maturity
Outcome = Evaluate Further