Key Words: High Risk, Naturalized, Woody Climber, Ornamental, Bird-pollinated, Bird-dispersed

Family: ***Marcgraviaceae***

Taxon: ***Norantea guianensis***

Synonym: *Norantea guianensis var. japurensis (Mart.) (*
Norantea japurensis Mart.
Norantea paraensis Mart.

Common Name: red hot poker vine

Questionaire : current 20090513 **Assessor:** Chuck Chimera **Designation:** H(HPWRA)
Status: Assessor Approved **Data Entry Person:** Chuck Chimera **WRA Score** 7

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**	**y**
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**	**y**
302	**Garden/amenity/disturbance weed**	**n=0, y = 1*multiplier (see Appendix 2)**	
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**	
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**	
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**	
410	**Tolerates a wide range of soil conditions (or limestone conditions if not a volcanic island)**	**y=1, n=0**	

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**	
606	**Reproduction by vegetative fragmentation**	**y=1, n=-1**	
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**	
704	**Propagules adapted to wind dispersal**	**y=1, n=-1**	**n**
705	**Propagules water dispersed**	**y=1, n=-1**	
706	**Propagules bird dispersed**	**y=1, n=-1**	**y**
707	**Propagules dispersed by other animals (externally)**	**y=1, n=-1**	**n**
708	**Propagules survive passage through the gut**	**y=1, n=-1**	**y**
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: H(HPWRA) **WRA Score** 7

Supporting Data:

101	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	[Is the species highly domesticated? No evidence]
102	2012. WRA Specialist. Personal Communication.	NA
103	2012. WRA Specialist. Personal Communication.	NA
201	2012. Tropicos.org. Tropicos [Online Database]. Missouri Botanical Garden, http://www.tropicos.org/	[Species suited to tropical or subtropical climate(s) 2-High] Native to Brazil, Colombia, Costa Rica, Ecuador, French Guiana, Guyana, Suriname, Venezuela,
202	2012. Tropicos.org. Tropicos [Online Database]. Missouri Botanical Garden, http://www.tropicos.org/	[Quality of climate match data 2-High]
203	1977. Renteria. Norantea guianensis Aubl. Collection Number 31. Accession 2627667. Missouri Botanical Garden Herbarium. http://www.tropicos.org/Specimen/2873145	[Broad climate suitability (environmental versatility)? Yes] Elevation: 320 m [Collected in Colombia in an elevation range in excess of 1000 m, demonstrating environmental versatility]
203	1985. Gentry, A.H./Monsalve B.M. & et al.. Norantea guianensis Aubl. Collection Number 53105. Accession 3312156. Missouri Botanical Garden Herbarium. http://www.tropicos.org/Specimen/198146	[Broad climate suitability (environmental versatility)? Yes] "Santa Helena, above Topacio, edge of Los Farallones de Cali National Park. Trigonobalanus forest. Transect 6. " [Collected at 1970 m. Elevation range exceeds 1000 m throughout native range]
204	2012. Tropicos.org. Tropicos [Online Database]. Missouri Botanical Garden, http://www.tropicos.org/	[Native or naturalized in regions with tropical or subtropical climates? Yes] Native to Brazil, Colombia, Costa Rica, Ecuador, French Guiana, Guyana, Suriname, Venezuela
204	2012. USDA ARS National Genetic Resources Program. Germplasm Resources Information Network - (GRIN). http://www.ars-grin.gov/cgi-bin/npgs/html/index.pl	[Native or naturalized in regions with tropical or subtropical climates? Yes] "SOUTHERN AMERICA Caribbean: Trinidad and Tobago Northern South America: French Guiana; Guyana; Suriname; Venezuela Brazil: Brazil - Amapa, Amazonas, Maranhao, Mato Grosso, Para, Rondonia, Roraima Western South America: Bolivia; Colombia; Ecuador; Peru"
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? No] "One member of the family is sometimes grown in Hawaii's gardens as an oddity; others can be found in botanical gardens."
205	2010. Dressler, S.. Marcgraviaceae. In: Milliken, W., Klitgård, B. & Baracat, A. Neotropikey - Interactive key and information resources for flowering plants of the Neotropics. www.kew.org/neotropikey	[Does the species have a history of repeated introductions outside its natural range? No] "Native and endemic to the Neotropics, Norantea guianensis sometimes cultivated in countries outside its range (e.g. Jamaica, Costa Rica, Trinidad)."
301	2007. Hall, K.A.L.. Early Detection Roadside Surveys of Selected Species on the Island of Kauai, Hawaii. Kaua`i Invasive Species Committee, Lihue, HI http://www.hear.org/kisc/pdfs/2007kiscroadsidesurvey.pdf	[Naturalized beyond native range? Yes] "Norantea guianensis" … "Status - N= naturalized"
301	2012. Parker, J.. BIISC Early Detection Botanist. Pers. Comm. 25 July 2012.	[Naturalized beyond native range? Yes] "Another one that popped up on our radar recently is Norantea guianensis (Red hot poker). We saw this one spreading in Leilani subdivision in Puna. With neighbors complaining about its weediness and lots of fruit on the vines." … "There were several small green seeds, maybe a couple millimeters long and a millimeter wide."
302	2012. Parker, J.. BIISC Early Detection Botanist. Pers. Comm. 25 July 2012.	[Garden/amenity/disturbance weed? Potentially] "We saw this one spreading in Leilani subdivision in Puna. With neighbors complaining about its weediness and lots of fruit on the vines."
303	2007. Randall, R.P.. Global Compendium of Weeds - Index. http://www.hear.org/gcw/	[Agricultural/forestry/horticultural weed?? No evidence]
304	2007. Randall, R.P.. Global Compendium of Weeds - Index. http://www.hear.org/gcw/	[Environmental weed? No evidence]

305	2004. Kubitzki, K. (ed.). The Families and genera of vascular plants. Volume VI. Flowering plants, Dicotyledons: Celastrales, Oxalidales, Rosales, Cornales, Ericales. Springer-Verlag, Berlin, Heidelberg, New York	[Congeneric weed? No evidence] "Two spp., N South America and S Brazil, Bolivia."
401	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	[Produces spines, thorns or burrs? No] "A woody climber with alternate, leathery, elliptic to obovate leaves, 4-6" x 2-3.25", it bears terminal racemes to 4' long consisting of red-orange flowers, mostly hidden among similarly colored nectar-producing tubular appendages open at the top; those appendages (modified bracts) make up the visible bulk of the inflorescence."
402	2012. WRA Specialist. Personal Communication.	[Allelopathic? Unknown]
403	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	[Parasitic? No] "A woody climber with alternate, leathery, elliptic to obovate leaves…" [No evidence of parasitism in the Marcgraviaceae]
404	1999. Julien-LaferrieÁre, D.. Foraging strategies and food partitioning in the neotropical frugivorous mammals Caluromys philander and Potos flavus. Journal of Zoology. 247: 71-80.	[Unpalatable to grazing animals? Unknown, but flowers consumed by mammals] "The bare-tailed woolly opossum, Caluromys philander, and the kinkajou, Potos ¯flavus, are two syntopic neotropical nocturnal, arboreal and frugivorous mammals." … "Caluromys philander exploited the flowers of nine species, whereas P. flavus exploited only two plant species for flowers"
405	1999. Julien-LaferrieÁre, D.. Foraging strategies and food partitioning in the neotropical frugivorous mammals Caluromys philander and Potos flavus. Journal of Zoology. 247: 71-80.	[Toxic to animals? No evidence] "The bare-tailed woolly opossum, Caluromys philander, and the kinkajou, Potos flavus, are two syntopic neotropical nocturnal, arboreal and frugivorous mammals." … "Caluromys philander exploited the flowers of nine species, whereas P. flavus exploited only two plant species for flowers"
405	2008. Wagstaff, D.J.. International poisonous plants checklist: an evidence-based reference. CRC Press, Boca Raton, FL	[Toxic to animals? No Evidence]
406	2012. WRA Specialist. Personal Communication.	[Host for recognized pests and pathogens? Unknown]
407	2010. NParks Flora&FaunaWeb. Norantea guianensis Aubl.. National Parks Board, Singapore https://florafaunaweb.nparks.gov.sg/special-pages/plant-detail.aspx?id=1460	[Causes allergies or is otherwise toxic to humans? No evidence. Medicinal uses] "Bark or wood cut into pieces and boiled in water for 1 hour, and the bright red tea drunk as treatment for diarrhoea and vomiting. Leaves used in bath or rubbed against body as fever remedy."
408	2012. WRA Specialist. Personal Communication.	[Creates a fire hazard in natural ecosystems? No evidence] Possible that this woody climber could act as a fuel ladder, but no evidence that this plant is part of or contributes to a fire prone ecosystem.
409	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	[Is a shade tolerant plant at some stage of its life cycle? Possibly] "It can thrive in hot, dry conditions in full sun or in moist, protected sites in partial shade;"
409	2012. Dave's Gardern. PlantFiles: Red Hot Poker Vine, Red Popcorn Vine - Norantea guianensis. http://davesgarden.com/guides/pf/go/141731/	[Is a shade tolerant plant at some stage of its life cycle? Possibly No] "Sun Exposure: Full Sun"
410	2012. Dave's Gardern. PlantFiles: Red Hot Poker Vine, Red Popcorn Vine - Norantea guianensis. http://davesgarden.com/guides/pf/go/141731/	[Tolerates a wide range of soil conditions? Unknown] "Soil pH requirements: 5.6 to 6.0 (acidic) 6.1 to 6.5 (mildly acidic)"
411	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	[Climbing or smothering growth habit? Yes] "A woody climber with alternate, leathery, elliptic to obovate leaves, 4-6" x 2-3.25", it bears terminal racemes to 4' long consisting of red-orange flowers,…"
412	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	[Forms dense thickets? No] "A woody climber with alternate, leathery, elliptic to obovate leaves, 4-6" x 2-3.25", it bears terminal racemes to 4' long consisting of red-orange flowers,…"
501	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	[Aquatic? No] Terrestrial vine
502	2012. Tropicos.org. Tropicos [Online Database]. Missouri Botanical Garden, http://www.tropicos.org/	[Grass? No] Marcgraviaceae

503	2012. Tropicos.org. Tropicos [Online Database]. Missouri Botanical Garden, http://www.tropicos.org/	[Nitrogen fixing woody plant? No] Marcgraviaceae
504	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	[Geophyte (herbaceous with underground storage organs -- bulbs, corms, or tubers)? No] "A woody climber with alternate, leathery, elliptic to obovate leaves, 4-6" x 2-3.25", it bears terminal racemes to 4' long consisting of red-orange flowers, mostly hidden among similarly colored nectar-producing tubular appendages open at the top; those appendages (modified bracts) make up the visible bulk of the inflorescence."
601	2010. Dressler, S.. Marcgraviaceae. In: Milliken, W., Klitgård, B. & Baracat, A. Neotropikey - Interactive key and information resources for flowering plants of the Neotropics. www.kew.org/neotropikey	[Evidence of substantial reproductive failure in native habitat? No evidence]
602	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	[Produces viable seed? See Parker 2012] "The fruit is a dehiscent capsule containing many tiny seeds, but it does not form here." [Recent observations from Hawaii Island contradict this assertion]
602	2012. Parker, J.. BIISC Early Detection Botanist. Pers. Comm. 25 July 2012.	[Produces viable seed? Yes] "Another one that popped up on our radar recently is Norantea guianensis (Red hot poker). We saw this one spreading in Leilani subdivision in Puna. With neighbors complaining about its weediness and lots of fruit on the vines." … "There were several small green seeds, maybe a couple millimeters long and a millimeter wide." [Field observations contradict Staples and Herbst (2005)]
603	2004. Kubitzki, K. (ed.). The Families and genera of vascular plants. Volume VI. Flowering plants, Dicotyledons: Celastrales, Oxalidales, Rosales, Cornales, Ericales. Springer-Verlag, Berlin, Heidelberg, New York	[Hybridizes naturally? Unknown] "Two spp., N South America and S Brazil, Bolivia."
604	1970. Woodson, Jr.; R.E./Schery, R.W./DeRoon, A.C.. Flora of Panama. Part VI. Family 121. Marcgraviaceae. Annals of the Missouri Botanical Garden. 57(1): 29-50.	[Self-compatible or apomictic? Unknown] "Pollination by birds and bats as well as self fertilization have been reported in this family"
604	1981. Cronquist, A.. An Integrated System of Classification of Flowering Plants. Columbia University Press, New York	[Self-compatible or apomictic? Unknown] "Flowers in terminal, often pendulous racemes, spikes, or umbels, perfect, regular, hypogynous, often pollinated by hummingbirds, but sometimes self-pollinated and even cleistogamous; some of the bracts of the inflorescence (usually associated with sterile flowers) strongly modified into pitcher-like, saccate, spurred or hooded, hollow, nectariferous structures" [Family description]
604	2010. NParks Flora&FaunaWeb. Norantea guianensis Aubl.. National Parks Board, Singapore https://florafaunaweb.nparks.gov.sg/special-pages/plant-detail.aspx?id=1460	[Self-compatible or apomictic? Unknown] "Flower & Plant Sexuality: Bisexual Flowers"
605	1965. Neal, M.C. In Gardens of Hawaii. Bishop Museum Press, Honolulu, HI	[Requires specialist pollinators? Possibly Yes] "The long, narrow, reddish inflorescence bears many small flowers, accompanied by little, nectar-bearing, ovoid appendages, open at the top, which in the native South American forests attract small birds and result in cross-pollination." [Apparently adapted for bird-pollination. Ability to set seed on Hawaii Island suggests that the local avifauna, or possibly insects, are effectively pollinating this species.]
605	1971. Snow, B.K./Snow, D.W.. The Feeding Ecology of Tanagers and Honeycreepers in Trinidad. The Auk. 88(2): 291-322.	[Requires specialist pollinators? Possibly] "The vine Norantea., a significant source of nectar for the Purple, Red-legged, and Green Honeycreepers, was only recorded twice for the Bananaquit, and not at all for the Blue Dacnis, which suggests that their bills are too short for probing into this flower's long corolla."
605	2005. Lens, F./Dressler, S./Vinckier, S./Janssens, S./Dessein, S./Van Evelghem, L./Smets, E.. Palynological Variation in Balsaminoid Ericales. I. Marcgraviaceae. Annals of Botany. 96: 1047–1060.	[Requires specialist pollinators? Possibly. Bird-pollinated] "Although detailed flower ecological studies are lacking in the family, it seems as if quite a range of pollinators interact with the approx. 130 species. Vogel (1990) proposed five pollination syndromes. According to the literature and our own field observations, one could assume: flies or bees in Ruyschia, butterflies and hawk moths in Souroubea, birds in Marcgravia, Norantea, Sarcopera and Schwartzia brasiliensis, and bats (or also hawk moths) in most Schwartzia species, Marcgraviastrum, and Marcgravia (Sazima and Sazima, 1980; Sazima et al., 1993; Tschapka and von Helversen, 1999; Machado and Lopes, 2000; Dressler and Tschapka, 2002; Dressler, 2004; Tschapka et al., in press). Thus, it seems appropriate to search for a correlation between the palynological diversity and different pollinators."

605	2012. Dave's Gardern. PlantFiles: Red Hot Poker Vine, Red Popcorn Vine - Norantea guianensis. http://davesgarden.com/guides/pf/go/141731/	[Requires specialist pollinators? Unknown] "This plant is attractive to bees, butterflies and/or birds"
606	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	[Reproduction by vegetative fragmentation? Unknown] "Red-hot poker is easily propagated by 12" long semi-woody cuttings placed under mist." [Trailing habit may make vegetative spread possible under certain conditions or moist environments]
607	2012. WRA Specialist. Personal Communication.	[Minimum generative time (years)? Unknown]
701	2012. WRA Specialist. Personal Communication.	[Propagules likely to be dispersed unintentionally? Unknown]
702	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 dispersed intentionally by people? Yes] "Introduced here from the Panama Canal Zone by William B. Storey in 1951, N. guianensis makes an attractive ornamental that can be trimmed as a hedge or allowed to mound or to sprawl on a fence or trellis."
702	2010. NParks Flora&FaunaWeb. Norantea guianensis Aubl.. National Parks Board, Singapore https://florafaunaweb.nparks.gov.sg/special-pages/plant-detail.aspx?id=1460	[Propagules dispersed intentionally by people? Yes] "Ornamental Flowers, Ornamental Foliage"
704	2010. NParks Flora&FaunaWeb. Norantea guianensis Aubl.. National Parks Board, Singapore https://florafaunaweb.nparks.gov.sg/special-pages/plant-detail.aspx?id=1460	[Propagules adapted to wind dispersal? No] "Fruit Type : Fleshy Fruit (Non-Accessory Fruit: Berry)"
705	2008. Holst, B.K.. Exploring for Botanical Gold in Venezuela's Lost World. The Tropical Dispatch. 35(2): 3-5.	[Propagules water dispersed? Unknown] "A beautiful liana collected along the river banks (Norantea guianensis)." [Possible that seeds may be moved by water]
706	1970. Woodson, Jr.; R.E./Schery, R.W./DeRoon, A.C.. Flora of Panama. Part VI. Family 121. Marcgraviaceae. Annals of the Missouri Botanical Garden. 57(1): 29-50.	[Propagules bird dispersed? Yes] "Fruit capsular, loculicidally and septifragously dehiscent from the base (or indehiscent?), the pericarp more or less woody or coriaceous, mesocarp pulpy; seeds few to numerous, with a shiny woody reticulate testa; endosperm scanty or lacking; embryo straight." [Family Description] "Fruit subglobose, apiculate through the persistent style and stigma; seeds shining, reticulate." [Genus Norantea]
706	2008. Lefevre, K.L.. The influence of human disturbance on avian frugivory and seed dispersal in a neotropical rainforest. PhD Dissertation. University of Toronto, Toronto	[Propagules bird dispersed? Yes] "Appendix 2A. Fruiting plants of the lower montane rainforest of Tobago, West Indies (2003 and 2004 dry seasons)" [Norantea guianensis - Dispersal = bird]
706	2010. NParks Flora&FaunaWeb. Norantea guianensis Aubl.. National Parks Board, Singapore https://florafaunaweb.nparks.gov.sg/special-pages/plant-detail.aspx?id=1460	[Propagules bird dispersed? Yes] "Fruits are globuse berries that split open to expose seeds embedded in brightly-coloured fleshy pulp, probably dispersed by animals."
707	2010. NParks Flora&FaunaWeb. Norantea guianensis Aubl.. National Parks Board, Singapore https://florafaunaweb.nparks.gov.sg/special-pages/plant-detail.aspx?id=1460	[Propagules dispersed by other animals (externally)? No] "Fruits are globose berries that split open to expose seeds embedded in brightly-coloured fleshy pulp, probably dispersed by animals." [Adapted for internal dispersal]
708	2008. Lefevre, K.L.. The influence of human disturbance on avian frugivory and seed dispersal in a neotropical rainforest. PhD Dissertation. University of Toronto, Toronto	[Propagules survive passage through the gut? Presumably Yes] "Appendix 2A. Fruiting plants of the lower montane rainforest of Tobago, West Indies (2003 and 2004 dry seasons)" [Norantea guianensis - Dispersal = bird]
801	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	[Prolific seed production (>1000/m2)? Unknown] "The fruit is a dehiscent capsule containing many tiny seeds, but it does not form here." [Reported to be producing numerous fruits and seeds on Hawaii Island. J. Parker, pers. comm. 2012]
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. WRA Specialist. Personal Communication.	[Tolerates, or benefits from, mutilation, cultivation, or fire? Unknown]
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

- Naturalized on Hawaii Island and Kauai
- Thrives in tropical climates
- Broad elevation range (collected over a range in excess of 1000 m)
- Climbing and/or smothering habit
- Bird-dispersed seeds

Low Risk / Desirable Traits

- Despite ability to spread, no negative impacts have been documented to date (i.e. no history of weediness elsewhere)
- Unarmed (no spines, thorns or burrs)
- Possibly bird-pollinated which may limit fruit production & seed set in areas
- Landscaping and ornamental value