Family: ***Araliaceae***

Taxon: ***Polyscias cumingiana***

Synonym: *Aralia filicifolia C. Moore ex E. Fourn.*
Arthrophyllum pinnatum (Lam.) C. B. Clarke
Nothopanax pinnatus (Lam.) Miq.
Panax pinnatus Lam.
Paratropia cumingiana C. Presl (basionym)
Polyscias filicifolia (C. Moore ex E. Fourn.) l
Polyscias rumphiana Harms

Common Name: fern-leaf aralia

Questionaire : current 20090513 **Assessor:** Patti Clifford **Designation:** EVALUATE
Status: Assessor Approved **Data Entry Person:** Patti Clifford **WRA Score** 3

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**	**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**	
403	**Parasitic**	**y=1, n=0**	**n**
404	**Unpalatable to grazing animals**	**y=1, n=-1**	
405	**Toxic to animals**	**y=1, n=0**	
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**	**n**
412	**Forms dense thickets**	**y=1, n=0**	**y**
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**	
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**	**n**
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**	**n**
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**	**y**
805	**Effective natural enemies present locally (e.g. introduced biocontrol agents)**	**y=-1, n=1**	

Designation: EVALUATE **WRA Score** 3

Supporting Data:

101	2010. WRA Specialist. Personal Communication.	No evidence of domestication that reduces invasive characteristics.
201	2011. USDA, ARS, National Genetic Resources Program. Germplasm Resources Information Network (GRIN) [Online Database Index]. National Germplasm Resources Laboratory, Beltsville, Maryland. http://www.ars-grin.gov/cgi-bin/npgs/html/index.pl	Native range: Indonesia - Irian Jaya, Moluccas; Malaysia; Papua New Guinea; Philippines; New Caledonia
202	2011. USDA, ARS, National Genetic Resources Program. Germplasm Resources Information Network (GRIN) [Online Database Index]. National Germplasm Resources Laboratory, Beltsville, Maryland. http://www.ars-grin.gov/cgi-bin/npgs/html/index.pl	Native range: Indonesia - Irian Jaya, Moluccas; Malaysia; Papua New Guinea; Philippines; New Caledonia
203	1989. Lowry, P.P.. A revision of Araliaceae from Vanuatu. Bulletin of the Museum of Natural History. 2: 117-155.	"Polyscias cumingiana appears to be widely cultivated throughout Malesia and the Southwest Pacific. According to Philipson (1979) this species also forms part of the indigenous vegetation in at least much of Malesia, where it occurs in rain forest and secondary vegetation from low elevations occasionally to 1700 m. The true native range of P. cumingiana is however, unknown. In Vanuatu, P. cumingiana occurs only at low elevation, from sea level to about 150 m, and always as a cultivated plant in and around towns and villages."
204	2011. USDA, ARS, National Genetic Resources Program. Germplasm Resources Information Network (GRIN) [Online Database Index]. National Germplasm Resources Laboratory, Beltsville, Maryland. http://www.ars-grin.gov/cgi-bin/npgs/html/index.pl	Native range: Indonesia - Irian Jaya, Moluccas; Malaysia; Papua New Guinea; Philippines; New Caledonia
205	2010. WRA Specialist. Personal Communication.	No evidence of repeated introductions outside its native range.
301	2010. WRA Specialist. Personal Communication.	No evidence of naturalization.
302	2007. Randall, R.. Global compendium of weeds Polyscias cumingiana (Araliaceae). http://www.hear.org/gcw/species/polyscias_cumingiana/	No evidence of weediness.
303	2007. Randall, R.. Global compendium of weeds Polyscias cumingiana (Araliaceae). http://www.hear.org/gcw/species/polyscias_cumingiana/	No evidence of being an agriculture/forestry/horticulture weed.
304	2007. Randall, R.. Global compendium of weeds Polyscias cumingiana (Araliaceae). http://www.hear.org/gcw/species/polyscias_cumingiana/	No evidence of being an environmental weed.
305	2010. WRA Specialist. Personal Communication.	No evidence of congeneric weed. Although the Global Compendium of Weeds states that some species in this genera are natualized and that Polyscias sambucifolia is an environmental weed. [no evidence of impact or control efforts]
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	No spines, thorns, burrs.
402	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	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	Not parasitic.
404	2010. WRA Specialist. Personal Communication.	Unknown.
405	2010. WRA Specialist. Personal Communication.	Unknown.

406	2010. WRA Specialist. Personal Communication.	Unknown.
407	1995. Kambuou, R.N.. Papua New Guinea: country report to the FAO international technical conference on plant genetic resources.	"Valanguar originated from the Pacific area and now widely distributed as far as Europe. The exact number of species exist and utilised in the country is not known but there is certainly a great genetic variation in this crop. Five edible species have been recorded by French (1986) in the New Britain and New Ireland areas namely; Polyscias cumingiana (Presl) F. Vill., P. fruticosa (L) Harms., P. macgillivrayi (Seem) Harms., P. scutellaria (Burm.f.) Fosb. and P. verticillata Stone."
408	2010. WRA Specialist. Personal Communication.	No evidence of fire hazard.
409	2010. WRA Specialist. Personal Communication.	Unknown.
410	2010. WRA Specialist. Personal Communication.	Unknown.
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	Shrub.
412	2007. Walter, A., Lebot, V.. Gardens of Oceania Issue 122 of ACIAR monograph series. IRD Editions, http://books.google.com/books?id=SMYkLkV4iyEC&pg=PT175&dq=polyscias+cumingiana&hl=en&ei=8IttTfKEL5K6sQON3oSuBQ&sa=X&oi=book_result&ct=result&resnum=3&ved=0	"The plants are cultivated everywhere, planted in hedges in the villages, on the low walls of the irrigated taro pits and around the gardens. They are propagated by cuttings and with continual pruning they come to form thick barriers of vegetation around the villages and large thickets close to the houses."
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	Terrestrial.
502	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	Araliaceae.
503	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	Araliaceae.
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	Shrub.
601	2010. WRA Specialist. Personal Communication.	No evidence.
602	2010. WRA Specialist. Personal Communication.	Unknown.
603	2010. WRA Specialist. Personal Communication.	Unknown.
604	2010. WRA Specialist. Personal Communication.	Unknown.
606	2007. Walter, A., Lebot, V.. Gardens of Oceania Issue 122 of ACIAR monograph series. IRD Editions, http://books.google.com/books?id=SMYkLkV4iyEC&pg=PT175&dq=polyscias+cumingiana&hl=en&ei=8IttTfKEL5K6sQON3oSuBQ&sa=X&oi=book_result&ct=result&resnum=3&ved=0	"The plants are cultivated everywhere, planted in hedges in the villages, on the low walls of the irrigated taro pits and around the gardens. They are propagated by cuttings and with continual pruning they come to form thick barriers of vegetation around the villages and large thickets close to the houses."
607	2010. WRA Specialist. Personal Communication.	Unknown.
701	2010. WRA Specialist. Personal Communication.	Unknown. [this species is grown as hedges around villages in its native region - see 8.04]

702	1989. Lowry, P.P.. A revision of Araliaceae from Vanuatu. Bulletin of the Museum of Natural History. 2: 117-155.	"Polyscias cumingiana appears to be widely cultivated throughout Malesia and the Southwest Pacific. According to Philipson (1979) this species also forms part of the indigenous vegetation in at least much of Malesia, where it occurs in rain forest and secondary vegetation from low elevations occasionally to 1700 m. The true native range of P. cumingiana is however, unknown. In Vanuatu, P. cumingiana occurs only at low elevation, from sea level to about 150 m, and always as a cultivated plant in and around towns and villages."
703	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	No evidence of produce contamination.
704	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	Fruit a drupe [no adaptation for wind dispersal].
705	2010. WRA Specialist. Personal Communication.	Unknown.
706	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	Fruit a drupe.
707	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	Fruit a drupe [no means of external attachment].
708	2005. Staples, G.W./Herbst, D.R.. A Tropical Garden Flora - Plants Cultivated in the Hawaiian Islands and Other Tropical Places. Bishop Museum Press, Honolulu, HI	Fruit a drupe. [genus level description]
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	Fruit a drupe. Ovary 2-3 celled, ovule 1 per cell [genus description]
802	2010. WRA Specialist. Personal Communication.	Unknown.
803	2010. WRA Specialist. Personal Communication.	Unknown.
804	2007. Walter, A., Lebot, V.. Gardens of Oceania Issue 122 of ACIAR monograph series. IRD Editions, http://books.google.com/books?id=SMYkLkV4iyEC&pg=PT175&dq=polyscias+cumingiana&hl=en&ei=8IttTfKEL5K6sQON3oSuBQ&sa=X&oi=book_result&ct=result&resnum=3&ved=0	"The plants are cultivated everywhere, planted in hedges in the villages, on the low walls of the irrigated taro pits and around the gardens. They are propagated by cuttings and with continual pruning they come to form thick barriers of vegetation around the villages and large thickets close to the houses."
805	2010. WRA Specialist. Personal Communication.	Unknown.