

Family: *Arecaceae*

Taxon: *Areca triandra*

Synonym: *Areca alicae* W. Hill ex F. Muell.

Common Name Australian areca palm
wild areca palm
buring utan

Questionnaire :	current 20090513	Assessor:	Patti Clifford	Designation: EVALUATE
Status:	Assessor Approved	Data Entry Person:	Patti Clifford	WRA Score 5
101	Is the species highly domesticated?		y=-3, n=0	n
102	Has the species become naturalized where grown?		y=1, n=-1	
103	Does the species have weedy races?		y=1, n=-1	
201	Species suited to tropical or subtropical climate(s) - If island is primarily wet habitat, then substitute "wet tropical" for "tropical or subtropical"		(0-low; 1-intermediate; 2-high) (See Appendix 2)	High
202	Quality of climate match data		(0-low; 1-intermediate; 2-high) (See Appendix 2)	High
203	Broad climate suitability (environmental versatility)		y=1, n=0	n
204	Native or naturalized in regions with tropical or subtropical climates		y=1, n=0	y
205	Does the species have a history of repeated introductions outside its natural range?		y=-2, ?=-1, n=0	n
301	Naturalized beyond native range		y = 1*multiplier (see Appendix 2), n= question 205	y
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	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	
409	Is a shade tolerant plant at some stage of its life cycle		y=1, n=0	y
410	Tolerates a wide range of soil conditions (or limestone conditions if not a volcanic island)		y=1, n=0	n

411	Climbing or smothering growth habit	y=1, n=0	n
412	Forms dense thickets	y=1, n=0	
501	Aquatic	y=5, n=0	n
502	Grass	y=1, n=0	n
503	Nitrogen fixing woody plant	y=1, n=0	n
504	Geophyte (herbaceous with underground storage organs -- bulbs, corms, or tubers)	y=1, n=0	n
601	Evidence of substantial reproductive failure in native habitat	y=1, n=0	n
602	Produces viable seed	y=1, n=-1	y
603	Hybridizes naturally	y=1, n=-1	
604	Self-compatible or apomictic	y=1, n=-1	
605	Requires specialist pollinators	y=-1, n=0	n
606	Reproduction by vegetative fragmentation	y=1, n=-1	y
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	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	n
705	Propagules water dispersed	y=1, n=-1	y
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	
805	Effective natural enemies present locally (e.g. introduced biocontrol agents)	y=-1, n=1	

Designation: EVALUATE

WRA Score **5**

Supporting Data:

101	2010. WRA Specialist. Personal Communication.	No evidence.
201	2010. USDA, ARS, National Genetic Resources Program. Germplasm Resources Information Network (GRIN) [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland http://www.ars-grin.gov/cgi-bin/npgs/html/index.pl	Native: China; Bangladesh; India; Cambodia; Laos; Thailand; Vietnam; Indonesia - Java, Kalimantan, Moluccas, Sumatra; Malaysia; Philippines.
202	2010. USDA, ARS, National Genetic Resources Program. Germplasm Resources Information Network (GRIN) [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland http://www.ars-grin.gov/cgi-bin/npgs/html/index.pl	Native: China; Bangladesh; India; Cambodia; Laos; Thailand; Vietnam; Indonesia - Java, Kalimantan, Moluccas, Sumatra; Malaysia; Philippines.
203	2009. Henderson, A.. Palms of Southern Asia. Princeton University Press,	Lowland to montane forest, up to 1500 m.
203	2010. Dave's Garden. PlantFiles: Palm Areca triandra Areca triandra. Dave's Garden, http://davesgarden.com/guides/pf/go/66294/	USDA Hardiness zones: 10a-11.
204	2010. USDA, ARS, National Genetic Resources Program. Germplasm Resources Information Network (GRIN) [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland http://www.ars-grin.gov/cgi-bin/npgs/html/index.pl	Native: China; Bangladesh; India; Cambodia; Laos; Thailand; Vietnam; Indonesia - Java, Kalimantan, Moluccas, Sumatra; Malaysia; Philippines.
205	2010. WRA Specialist. Personal Communication.	No evidence of repeated introductions.
301	2002. Svenning, J.C.. Non-native ornamental palms invade a secondary tropical forest in Panama. Palms. 46: 81-86. http://si-pddr.si.edu/dspace/bitstream/10088/1704/1/Svenning_Palms_2002.pdf	Areca triandra is naturalized in Panama.
302	2007. Randall, R.P.. Global Compendium of Weeds. http://www.hear.org/gcw/	No evidence.
303	2007. Randall, R.P.. Global Compendium of Weeds. http://www.hear.org/gcw/	No evidence.
304	2002. Svenning, J.C.. Non-native ornamental palms invade a secondary tropical forest in Panama. Palms. 46: 81-86. http://si-pddr.si.edu/dspace/bitstream/10088/1704/1/Svenning_Palms_2002.pdf	"Ptychosperma macarthurii and Areca triandra are abundant as seedlings, juveniles, and adults in the western half of the forest and sometimes completely dominate the understory." [no evidence of control or impact]
305	2007. Randall, R.P.. Global Compendium of Weeds. http://www.hear.org/gcw/	No evidence.
401	2009. Henderson, A.. Palms of Southern Asia. Princeton University Press,	No spines, burrs, thorns.
402	2010. WRA Specialist. Personal Communication.	Unknown.
403	2009. Henderson, A.. Palms of Southern Asia. Princeton University Press,	Arecaceae.
404	2010. WRA Specialist. Personal Communication.	Unknown.
405	2007. Palm Haven. Areca triandra. Palm-trees.org, http://palm-trees.org/	Used for animal feed.
406	2010. WRA Specialist. Personal Communication.	Unknown.
407	2009. Henderson, A.. Palms of Southern Asia. Princeton University Press,	Seeds are used as a substitute for A. catechu.
408	2010. WRA Specialist. Personal Communication.	Unknown.

409	2010. Dave's Garden. PlantFiles: Palm Areca triandra Areca triandra. Dave's Garden, http://davesgarden.com/guides/pf/go/66294/	Light shade, partial to full shade.
410	2003. Riffle, R. L./Craft, P.. An encyclopedia of cultivated palms. Timber Press, Portland, OR.	A. triandra needs a rich, hummus-laden, friable soil with unimpeded drainage.
411	2009. Henderson, A.. Palms of Southern Asia. Princeton University Press,	Palm
412	2010. WRA Specialist. Personal Communication.	Unknown.
501	2009. Henderson, A.. Palms of Southern Asia. Princeton University Press,	Palm.
502	2009. Henderson, A.. Palms of Southern Asia. Princeton University Press,	Arecaceae.
503	2009. Henderson, A.. Palms of Southern Asia. Princeton University Press,	Arecaceae.
504	2009. Henderson, A.. Palms of Southern Asia. Princeton University Press,	Palm.
601	2010. WRA Specialist. Personal Communication.	No evidence.
602	2010. Dave's Garden. PlantFiles: Palm Areca triandra Areca triandra. Dave's Garden, http://davesgarden.com/guides/pf/go/66294/	Propagate from seed.
603	2010. WRA Specialist. Personal Communication.	Unknown.
605	2010. WRA Specialist. Personal Communication.	Unknown.
606	2007. Kaewkrom, P./Thummikkaphong, S./Somnountad, T.. Population ecology of some important palm species in Phetchabun Province. Kasetsart Journal. 41: 407-413.	A. triandra produce clusters of stems and propagate vegetatively.
607	2008. Riffle, R. L.. Timber Press Pocket Guide to Palms. Timber Press, Portland, OR.	Growth rate medium to fast.
701	2010. WRA Specialist. Personal Communication.	Not grown in heavily trafficked areas.
702	2010. J.D. Anderson Nursery. Areca triandra - Triandra Palm - Live Palm. http://www.palmnuts.net/servlet/the-195/Areca-triandra--dsh--Triandra/Detail	J.D. Anderson Nursery has A. triandra for sale. They are located in California.
702	2010. Jungle Music Palms and Cycads. Areca triandra, trunk. http://www.junglemusic.net/careandcommon.asp?species=Areca%20triandra	Jungle Music has A. triandra for sale. They do not ship internationally. The nursery is in California.
703	2010. WRA Specialist. Personal Communication.	No evidence of produce contamination.
704	2009. Henderson, A.. Palms of Southern Asia. Princeton University Press,	Fruit a berry. [no adaptation for wind dispersal]
705	2009. Henderson, A.. Palms of Southern Asia. Princeton University Press,	Habit is variable from steep mountain slopes to margins of fast flowing rivers.
706	2009. Henderson, A.. Palms of Southern Asia. Princeton University Press,	Fruits ellipsoid to ovoid, to 2.5 cm long and 1.5 cm diameter, red.
707	2009. Henderson, A.. Palms of Southern Asia. Princeton University Press,	Fruit ellipsoid to ovoid. [no mechanism for attachment].
708	2009. Henderson, A.. Palms of Southern Asia. Princeton University Press,	Fruit a red berry.
801	2010. WRA Specialist. Personal Communication.	Based on images of A.triandra, the seed production is not >1,000 m2
802	2010. WRA Specialist. Personal Communication.	Unknown.

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- 803 2010. WRA Specialist. Personal Communication. Unknown.
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- 804 2007. Kaewkrom, P./Thummikkaphong, S./Somnountad, T.. Population ecology of some important palm species in Phetchabun Province. Kasetsart Journal. 41: 407-413. A. triandra produce clusters of stems and propagate vegetatively.
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- 805 2010. WRA Specialist. Personal Communication. Unknown.
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