

<b>Taxon:</b> Rhopalostylis baueri	<b>Family:</b> Arecaceae
<b>Common Name(s):</b> Norfolk Island palm	<b>Synonym(s):</b> Areca baueri Hook. f. ex Lem. Eora baueri (H. Wendl. & Drude) O. F. Rhopalostylis cheesemanii Becc. ex

<b>Assessor:</b> No Assessor	<b>Status:</b> Assessor Approved	<b>End Date:</b>
<b>WRA Score:</b> -2.0	<b>Designation:</b> L	<b>Rating:</b> Low Risk

**Keywords:** Subtropical Palm, Unarmed, Shade-tolerant, Thicket-forming, 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	y
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		
403	Parasitic	y=1, n=0	n
404	Unpalatable to grazing animals	y=1, n=-1	n
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

Qsn #	Question	Answer Option	Answer
410	Tolerates a wide range of soil conditions (or limestone conditions if not a volcanic island)	y=1, n=0	y
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	y
603	Hybridizes naturally		
604	Self-compatible or apomictic		
605	Requires specialist pollinators	y=-1, n=0	n
606	Reproduction by vegetative fragmentation	y=1, n=-1	n
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	n
705	Propagules water dispersed	y=1, n=-1	n
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)		
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
	Dowe, J.L. 2010. Australian Palms: Biogeography, Ecology and Systematics. CSIRO Publishing, Collingwood, Australia	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: <a href="http://www.ars-grin.gov/">http://www.ars-grin.gov/</a> . [Accessed 30 Jul 2014]	"Native: AUSTRALASIA Australia: Australia - New South Wales [Norfolk Island] New Zealand: New Zealand - Kermadec Islands" [Norfolk Island sub-tropical climate is tempered by the surrounding sea. The climate of Norfolk Island is principally affected by the belt of high pressure systems which oscillate north and south over the Island annually.]
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: <a href="http://www.ars-grin.gov/">http://www.ars-grin.gov/</a> . [Accessed ]	
203	Broad climate suitability (environmental versatility)	n
	Source(s)	Notes
	Ellison, D. & Ellison, A. 2001. Cultivated Palms of the World. UNSW Press, Sydney, Australia	"Preferring a temperate to subtropical climate near the sea, it makes a good indoor container plant when small."
	Riffle, R.L. & Craft, P. 2003. An Encyclopedia of Cultivated Palms. Timber Press, Portland, OR.	"The species is hardy in zones 9b through 11 but only for the cooler Mediterranean climes; it refuses to grow in hot climates, although it is reportedly more tolerant to these conditions than is <i>R. sapida</i> ."

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: <a href="http://www.ars-grin.gov/">http://www.ars-grin.gov/</a> . [Accessed 30 Jul 2014]	"Native: AUSTRALASIA Australia: Australia - New South Wales [Norfolk Island] New Zealand: New Zealand - Kermadec Islands" [Norfolk Island sub-tropical climate is tempered by the surrounding sea. The climate of Norfolk Island is principally affected by the belt of high pressure systems which oscillate north and south over the Island annually.]

205	Does the species have a history of repeated introductions outside its natural range?	y
	Source(s)	Notes
	Palmpedia. 2014. <i>Rhopalostylis baueri</i> . <a href="http://www.palmpedia.net/wiki/Rhopalostylis_baueri">http://www.palmpedia.net/wiki/Rhopalostylis_baueri</a> . [Accessed 30 Jul 2014]	"The species is also grown outdoors in coastal California, Hawai'i, continental Portugal and Spain, the Canary Islands, and in parts of the Mediterranean basin (e.g., Palermo, Italy). "

301	Naturalized beyond native range	n
	Source(s)	Notes
	Meyer, J. Y., Lavergne, C., & Hodel, D. R. 2008. Time bombs in gardens: invasive ornamental palms in tropical islands, with emphasis on French Polynesia (Pacific Ocean) and the Mascarenes (Indian Ocean). <i>Palms</i> , 52(2): 71-83	No evidence
	Randall, R.P. 2012. A Global Compendium of Weeds. 2nd Edition. Department of Agriculture and Food, Western Australia	No evidence
	WRA Specialist. 2014. Personal Communication	No evidence of naturalization found

302	Garden/amenity/disturbance 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

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

Qsn #	Question	Answer
304	Environmental 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

305	Congeneric 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

401	Produces spines, thorns or burrs	n
	Source(s)	Notes
	Kubitzki, K. (ed.). 1998. The Families and genera of vascular plants. Volume IV. Flowering plants, Monocotyledons: Alismatanae and Commelinanae (except Gramineae). Springer-Verlag, Berlin, Heidelberg, New York	[Genus description] "Stem green to gray, leaf scars prominent. Crownshaft short, bulbous. Leaves ascending, somewhat arched, often twisted; petiole short, stout."
	Dowe, J.L. 2010. Australian Palms: Biogeography, Ecology and Systematics. CSIRO Publishing, Collingwood, Australia	[No evidence] "Stems to 18 m tall, to 15 cm dbh, enlarged at the base to 30 cm diam,; leaf scars prominent, raised, 1-3 cm wide; internodes to 12 cm long, at first green, ageing to grey; subsurface stem saxophone-shaped from initial geotrophic growth of seedlings. Leaves 9-12, 3-4 m long, ..."

402	Allelopathic	
	Source(s)	Notes
	WRA Specialist. 2014. Personal Communication	Unknown

403	Parasitic	n
	Source(s)	Notes
	USDA, ARS, National Genetic Resources Program. Germplasm Resources Information Network - (GRIN) [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland. URL: <a href="http://www.ars-grin.gov/">http://www.ars-grin.gov/</a> . [Accessed 30 Jul 2014]	Areaceae

404	Unpalatable to grazing animals	n
	Source(s)	Notes
	Parkes, J. P. 1984. Feral goats on Raoul Island II. Diet and notes on the flora. New Zealand Journal of Ecology, 7: 95-101	"Both the leaves and fruit of the Raoul Island nikau palm ( <i>Rhopalostylis baueri</i> var. <i>cheesemanii</i> ) were widely available to the goats." ... "The importance of the nikau fruit as a food is over-estimated by dry weight measurements as a large part of the fruit is woody, and presumably indigestible, endosperm."

Qsn #	Question	Answer
	Prebble, M., & Dowe, J. L. 2008. The late Quaternary decline and extinction of palms on oceanic Pacific islands. <i>Quaternary Science Reviews</i> , 27(27): 2546-2567	"Table 13 A selection of palm taxa (or close relatives) from oceanic Pacific islands showing recent population declines." ... "Rhopalostylis baueri ... Main cause of decline = Feral animal browsing and habitat clearance"

405	Toxic to animals	n
	Source(s)	Notes
	Parkes, J. P. 1984. Feral goats on Raoul Island II. Diet and notes on the flora. <i>New Zealand Journal of Ecology</i> , 7: 95-101	[No evidence of toxicity to goats] "Both the leaves and fruit of the Raoul Island nikau palm ( <i>Rhopalostylis baueri</i> var. <i>cheesemani</i> ) were widely available to the goats." ... "The importance of the nikau fruit as a food is over-estimated by dry weight measurements as a large part of the fruit is woody, and presumably indigestible, endosperm."
	Wagstaff, D.J. 2008. International poisonous plants checklist: an evidence-based reference. CRC Press, Boca Raton, FL	No evidence

406	Host for recognized pests and pathogens	n
	Source(s)	Notes
	SelecTree. 2014 "Rhopalostylis baueri Tree Record." 1995-2014. <a href="http://selectree.calpoly.edu/treedetail.lasso?rid=1280">http://selectree.calpoly.edu/treedetail.lasso?rid=1280</a> . [Accessed 31 Jul 2014]	"Pest & Disease: Resistant to Texas Root Rot. Susceptible to Pigeons "
	Braithwaite, M., Hill, C. F., Ganev, S., Pay, J. M., Pearson, H G., & Alexander, B. J. R. 2006. A survey of sub-tropical nursery plants for fungal diseases in Northland. <i>New Zealand Plant Protection</i> , 59: 132-136	"Table 2: New primary and secondary pest/host associations recorded during the 2003 and 2004 surveys." ... "Pest organism - <i>Glomerella cingulate</i> " ... "Host - <i>Agave</i> sp., <i>Aloe</i> sp., <i>Archontophoenix alexandrae</i> , <i>Archontophoenix</i> sp., <i>Brahea armata</i> , <i>Bromelia</i> sp., <i>Cordyline australis</i> , <i>Cycas kennedyana</i> , <i>Cycas revolute</i> , <i>Dioon spinulosum</i> , <i>Dracaena draco</i> , <i>Dracaena hookeriana</i> , <i>Dypsis baronii</i> , <i>Howea forsteriana</i> , <i>Jubaea chilensis</i> , <i>Livistona decipiens</i> , <i>Meryta sinclairii</i> , <i>Musa acuminata</i> , <i>Neodypsis decaryi</i> , <i>Neoregelia</i> sp., <i>Nidularium innocentii</i> , <i>Phoenix canariensis</i> , <i>Phoenix roebelinii</i> , <i>Phormium tenax</i> , <i>Psidium cattleianum</i> , <i>Psidium guajava</i> , <i>Ravenea rivularis</i> , <i>Rhopalostylis baueri</i> , <i>Solanum muricatum</i> , <i>Washingtonia robusta</i> , <i>Yucca elephantipes</i> , <i>Yucca filamentosa</i> "

407	Causes allergies or is otherwise toxic to humans	n
	Source(s)	Notes
	SelecTree. 2014 "Rhopalostylis baueri Tree Record." 1995-2014. <a href="http://selectree.calpoly.edu/treedetail.lasso?rid=1280">http://selectree.calpoly.edu/treedetail.lasso?rid=1280</a> . [Accessed 31 Jul 2014]	"Health Hazard: None Known"
	Wagstaff, D.J. 2008. International poisonous plants checklist: an evidence-based reference. CRC Press, Boca Raton, FL	No evidence

408	Creates a fire hazard in natural ecosystems	n
	Source(s)	Notes

Qsn #	Question	Answer
	Pintaud, J. C. 2005. <i>Rhopalostylis baueri</i> on Norfolk Island. <i>Palms</i> , 49(2): 92-96	[Unlikely. Does not naturally occur in fire prone habitats] "The species is found throughout the island. At low elevations, it is mostly found in shaded and humid gullies, where it grows among tree ferns. Further up in the hills, it becomes a dominant component of the forest (Dowe 1989)."

409	Is a shade tolerant plant at some stage of its life cycle	y
	Source(s)	Notes
	SelecTree. 2014 "Rhopalostylis baueri Tree Record." 1995-2014. <a href="http://selectree.calpoly.edu/treedetail.lasso?rid=1280">http://selectree.calpoly.edu/treedetail.lasso?rid=1280</a> . [Accessed 31 Jul 2014]	"Exposure: Partial Shade to Full Shade "
	Riffle, R.L.& Craft, P. 2003. <i>An Encyclopedia of Cultivated Palms</i> . Timber Press, Portland, OR.	"In trees exposed to the sun, they (leaves) are stiff and erect, with regularly and closely spaced, narrowly elliptical, light green, 2- to 3-foot-long, stiff and long-tipped leaflets that grow from the rachis at a slight angle to create a slightly V-shaped leaf. Palms grown in shadier conditions have slightly more spreading leaves with more lax and pendent leaflets." ... "The palm flourishes in partial shade or full sun if not too exposed to drying winds, which make a mess of its beauty."
	Pintaud, J. C. 2005. <i>Rhopalostylis baueri</i> on Norfolk Island. <i>Palms</i> , 49(2): 92-96	"The species is found throughout the island. At low elevations, it is mostly found in shaded and humid gullies, where it grows among tree ferns. Further up in the hills, it becomes a dominant component of the forest (Dowe 1989)."

410	Tolerates a wide range of soil conditions (or limestone conditions if not a volcanic island)	y
	Source(s)	Notes
	Riffle, R.L.& Craft, P. 2003. <i>An Encyclopedia of Cultivated Palms</i> . Timber Press, Portland, OR.	"It prefers a slightly acidic, moist, and fast-draining soil but seems able to adapt to several types if they have some humus"
	SelecTree. 2014 "Rhopalostylis baueri Tree Record." 1995-2014. <a href="http://selectree.calpoly.edu/treedetail.lasso?rid=1280">http://selectree.calpoly.edu/treedetail.lasso?rid=1280</a> . [Accessed 31 Jul 2014]	"Soil Type: Clay, Loam or Sand Soil pH: Neutral to Highly Alkaline "

411	Climbing or smothering growth habit	n
	Source(s)	Notes
	Palmpedia. 2014. <i>Rhopalostylis baueri</i> . <a href="http://www.palmpedia.net/wiki/Rhopalostylis_baueri">http://www.palmpedia.net/wiki/Rhopalostylis_baueri</a> . [Accessed 30 Jul 2014]	" <i>Rhopalostylis baueri</i> reaches 12 m or more in height. The pinnate leaves are 3 to 4 m long, on a stout, erect petiole (leafstem) approximately 20 cm long. The crownshaft is 50-60 cm long. The inflorescence is 30 50 cm long and has from 50 to 60 fairly stout branches. "

412	Forms dense thickets	y
	Source(s)	Notes

Qsn #	Question	Answer
	Pintaud, J. C. 2005. <i>Rhopalostylis baueri</i> on Norfolk Island. <i>Palms</i> , 49(2): 92-96	"3. A dense, monospecific stand of <i>Rhopalostylis baueri</i> , showing good regeneration. The numerous scars, almost without internodes on the larger trees, suggest a very slow growth rate." ... "Locally it even forms pure stands, as do many other Pacific islands palms. However, contrary to other species such as <i>Kentiopsis oliviformis</i> and <i>Satakentia liukuensis</i> (Pintaud & Hodel 1998, Pintaud & Setoguchi 1999), <i>Rhopalostylis baueri</i> does reproduce well within the stands, as individuals of all sizes can be seen (Fig. 3)."
	Parkes, J. P. 1984. Feral goats on Raoul Island II. Diet and notes on the flora. <i>New Zealand Journal of Ecology</i> , 7: 95-101	"Dense stands of young palms are widespread in the wetter forests (Fig. 3), and the ground beneath adult palms is often littered with fallen fruit."
	Mueller-Dombois, D. & Fosberg, F. R. 1998. <i>Vegetation of the tropical Pacific islands</i> . Springer-Verlag, New York, NY	"In the same layer also occurs the endemic palm <i>Rhopalostylis baueri</i> (Norfolk palm), often in aggregations."

<b>501</b>	<b>Aquatic</b>	<b>n</b>
	<b>Source(s)</b>	<b>Notes</b>
	Palmpedia. 2014. <i>Rhopalostylis baueri</i> . <a href="http://www.palmpedia.net/wiki/Rhopalostylis_baueri">http://www.palmpedia.net/wiki/Rhopalostylis_baueri</a> . [Accessed 30 Jul 2014]	Arecaceae [Terrestrial]

<b>502</b>	<b>Grass</b>	<b>n</b>
	<b>Source(s)</b>	<b>Notes</b>
	USDA, ARS, National Genetic Resources Program. Germplasm Resources Information Network - (GRIN) [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland. URL: <a href="http://www.ars-grin.gov/">http://www.ars-grin.gov/</a> . [Accessed 30 Jul 2014]	Arecaceae

<b>503</b>	<b>Nitrogen fixing woody plant</b>	<b>n</b>
	<b>Source(s)</b>	<b>Notes</b>
	USDA, ARS, National Genetic Resources Program. Germplasm Resources Information Network - (GRIN) [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland. URL: <a href="http://www.ars-grin.gov/">http://www.ars-grin.gov/</a> . [Accessed 30 Jul 2014]	Arecaceae

<b>504</b>	<b>Geophyte (herbaceous with underground storage organs -- bulbs, corms, or tubers)</b>	<b>n</b>
	<b>Source(s)</b>	<b>Notes</b>
	Palmpedia. 2014. <i>Rhopalostylis baueri</i> . <a href="http://www.palmpedia.net/wiki/Rhopalostylis_baueri">http://www.palmpedia.net/wiki/Rhopalostylis_baueri</a> . [Accessed 30 Jul 2014]	" <i>Rhopalostylis baueri</i> reaches 12 m or more in height. The pinnate leaves are 3 to 4 m long, on a stout, erect petiole (leafstem) approximately 20 cm long. The crownshaft is 50-60 cm long. The inflorescence is 30 50 cm long and has from 50 to 60 fairly stout branches."



Qsn #	Question	Answer
601	Evidence of substantial reproductive failure in native habitat	n
	Source(s)	Notes
	Mueller-Dombois, D. & Fosberg, F. R. 1998. Vegetation of the tropical Pacific islands. Springer-Verlag, New York, NY	"Likewise, endemic tree ferns and the unique Norfolk plam ( <i>Rhopalostylis baueri</i> ) are today still of wide distribution in moist depressional sites throughout Norfolk Island."
	Pintaud, J. C. 2005. <i>Rhopalostylis baueri</i> on Norfolk Island. <i>Palms</i> , 49(2): 92-96	" <i>Rhopalostylis baueri</i> does reproduce well within the stands, as individuals of all sizes can be seen ... "

602	Produces viable seed	y
	Source(s)	Notes
	Palmpedia. 2014. <i>Rhopalostylis baueri</i> . <a href="http://www.palmpedia.net/wiki/Rhopalostylis_baueri">http://www.palmpedia.net/wiki/Rhopalostylis_baueri</a> . [Accessed 30 Jul 2014]	"Easily grown from fresh seed. Seed should be soaked in water to remove flesh and then sown over a damp peat/coarse sand mix and left in a shaded spot (ideally in a mister) and ignored."
	Ellison, D. & Ellison, A. 2001. <i>Cultivated Palms of the World</i> . UNSW Press, Sydney, Australia	"It is propagated from seeds, which are reasonable easy to obtain and germinate in 2 to 4 months."

603	Hybridizes naturally	
	Source(s)	Notes
	Palmpedia. 2014. <i>Rhopalostylis baueri</i> x <i>sapida</i> . <a href="http://www.palmpedia.net/wiki/Rhopalostylis_baueri_x_sapida">http://www.palmpedia.net/wiki/Rhopalostylis_baueri_x_sapida</a> . [Accessed 31 Jul 2014]	[Hybridization possible] " <i>Rhopalostylis baueri</i> is endemic to Kermadec Is., Norfolk Is., and <i>Rhopalostylis sapida</i> to Chatham Is., New Zealand North, New Zealand South" ... "This plant is suspected of being a <i>R. baueri</i> x <i>sapida</i> hybrid, Glenn Tucker's garden, Cardiff by the Sea, CA."

604	Self-compatible or apomictic	
	Source(s)	Notes
	SelecTree. 2014 "Rhopalostylis baueri Tree Record." 1995-2014. <a href="http://selecttree.calpoly.edu/treedetail.lasso?rid=1280">http://selecttree.calpoly.edu/treedetail.lasso?rid=1280</a> . [Accessed 31 Jul 2014]	"Flowers: White Has perfect flowers (male and female parts in each flower)."
	Henderson, A. 1986. A review of pollination studies in the Palmae. <i>The Botanical Review</i> , 52(3): 221-259	[Unknown, but protandry may limit possibility for self-pollination] "This genus is monoecious, protandrous, and has unisexual flowers in triads" [male parts (anthers) becomes mature before the female ones (stigma)]

Qsn #	Question	Answer
605	Requires specialist pollinators	n
	Source(s)	Notes
	Henderson, A. 1986. A review of pollination studies in the Palmae. The Botanical Review, 52(3): 221-259	[No evidence] "This genus is monoecious, protandrous, and has unisexual flowers in triads. Esler (1969) reported on pollination in New Zealand. Staminate anthesis took place immediately after exposure from the bracts. Swarms of insects, mostly flies, were attracted by the stigmatic fluid of the pistillode. After seven days most staminate flowers had fallen. Seven days later pistillate anthesis began. Many insects were attracted by an exudate on the ovary just below the stigmas."
606	Reproduction by vegetative fragmentation	n
	Source(s)	Notes
	Ellison, D. & Ellison, A. 2001. Cultivated Palms of the World. UNSW Press, Sydney, Australia	[No evidence] "It is propagated from seeds, which are reasonable easy to obtain and germinate in 2 to 4 months."
607	Minimum generative time (years)	>3
	Source(s)	Notes
	SelecTree. 2014 "Rhopalostylis baueri Tree Record." 1995-2014. <a href="http://selectree.calpoly.edu/treedetail.lasso?rid=1280">http://selectree.calpoly.edu/treedetail.lasso?rid=1280</a> . [Accessed 31 Jul 2014]	"Height: 50 feet Growth Rate: 24 Inches per Season Longevity: 50 to 150 years "
	Pintaud, J. C. 2005. <i>Rhopalostylis baueri</i> on Norfolk Island. <i>Palms</i> , 49(2): 92-96	[Presumably >4 years] "Another noteworthy feature is the very high number of rings on the trunks of adult palms, without evident internodes, which indicates a very slow growth, as reported for <i>R. sapida</i> in natural stands in New Zealand (Enright 1985)."
701	Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)	n
	Source(s)	Notes
	New Zealand Plant Conservation Network. 2014. Flora Details - <i>Rhopalostylis baueri</i> . <a href="http://www.nzpcn.org.nz/flora_details.aspx?ID=670">http://www.nzpcn.org.nz/flora_details.aspx?ID=670</a> . [Accessed 31 Jul 2014]	[Unlikely. Fruits & seeds lack means of external attachment] "Fruit c. 13 × 12 mm, subglobose to globose brick-red. Seed almost spherical, tightly invested in pale fawn endocarp which is marked by several vascular strands curving ± obliquely from hilum and only a few running longitudinally; hilum a broad band from the slightly flattened chalazal area to a pronounced papilla beside the micropyle."
702	Propagules dispersed intentionally by people	y
	Source(s)	Notes
	Balick, M.J. & Beck, H.T. 1990. Useful Palms of the World. Columbia University Press, New York	"Other ornamental species are listed: <i>Rhopalostylis baueri</i> "
	Wong, M. 2006. Palms for Hawaii Landscapes. Landscape L-19. College of Tropical Agriculture and Human Resources, Honolulu, HI	"The following palm species can be used to portray a strong "tropical" theme:" [ <i>Rhopalostylis baueri</i> ]

Qsn #	Question	Answer
703	Propagules likely to disperse as a produce contaminant	n
	Source(s)	Notes
	New Zealand Plant Conservation Network. 2014. Flora Details - <i>Rhopalostylis baueri</i> . <a href="http://www.nzpcn.org.nz/flora_details.aspx?ID=670">http://www.nzpcn.org.nz/flora_details.aspx?ID=670</a> . [Accessed 31 Jul 2014]	[Fruits & seeds are relatively large, & unlikely to become a produce contaminant] "Fruit c. 13 × 12 mm, subglobose to globose brick-red. Seed almost spherical, tightly invested in pale fawn endocarp which is marked by several vascular strands curving ± obliquely from hilum and only a few running longitudinally; hilum a broad band from the slightly flattened chalazal area to a pronounced papilla beside the micropyle"

704	Propagules adapted to wind dispersal	n
	Source(s)	Notes
	New Zealand Plant Conservation Network. 2014. Flora Details - <i>Rhopalostylis baueri</i> . <a href="http://www.nzpcn.org.nz/flora_details.aspx?ID=670">http://www.nzpcn.org.nz/flora_details.aspx?ID=670</a> . [Accessed 31 Jul 2014]	[Fleshy-fruited. No adaptations for wind dispersal] "Fruit c. 13 × 12 mm, subglobose to globose brickred. Seed almost spherical, tightly invested in pale fawn endocarp which is marked by several vascular strands curving ± obliquely from hilum and only a few running longitudinally; hilum a broad band from the slightly flattened chalazal area to a pronounced papilla beside the micropyle"

705	Propagules water dispersed	n
	Source(s)	Notes
	Eagle, M. K. 2001. Quaternary <i>Rhopalostylis</i> (Palmae) from Raoul Island, Kermadec Group. <i>New Zealand Natural Sciences</i> , 26: 21-32	" <i>Rhopalostylis</i> seeds are not recorded floating."

706	Propagules bird dispersed	y
	Source(s)	Notes
	New Zealand Plant Conservation Network. 2014. Flora Details - <i>Rhopalostylis baueri</i> . <a href="http://www.nzpcn.org.nz/flora_details.aspx?ID=670">http://www.nzpcn.org.nz/flora_details.aspx?ID=670</a> . [Accessed 31 Jul 2014]	"Fruit c. 13 × 12 mm, subglobose to globose brickred. Seed almost spherical, tightly invested in pale fawn endocarp which is marked by several vascular strands curving ± obliquely from hilum and only a few running longitudinally; hilum a broad band from the slightly flattened chalazal area to a pronounced papilla beside the micropyle"
	West, C.J. 2011. Consideration of rat impacts on weeds prior to rat and cat eradication on Raoul Island, Kermadecs. Pp. 244-247 In: Veitch, C. R.; Clout, M. N. and Towns, D. R. (eds.). <i>Island invasives: eradication and management</i> . IUCN, Gland, Switzerland	"Reintroduction of fruit pigeons ( <i>Hemiphaga novaeseelandiae</i> ) which previously occurred on Raoul, will add to the suite of dispersers of larger fruited native plants, such as the palm <i>Rhopalostylis baueri</i> ."
	Palmpedia. 2014. <i>Rhopalostylis baueri</i> . <a href="http://www.palmpedia.net/wiki/Rhopalostylis_baueri">http://www.palmpedia.net/wiki/Rhopalostylis_baueri</a> . [Accessed 30 Jul 2014]	[Presumably adapted for frugivore dispersal] "The fruits are green at first, turning a bright red when ripe, and are a favorite food of the endangered Norfolk Island Parakeet."

707	Propagules dispersed by other animals (externally)	n
	Source(s)	Notes

Qsn #	Question	Answer
	New Zealand Plant Conservation Network. 2014. Flora Details - <i>Rhopalostylis baueri</i> . <a href="http://www.nzpcn.org.nz/flora_details.aspx?ID=670">http://www.nzpcn.org.nz/flora_details.aspx?ID=670</a> . [Accessed 31 Jul 2014]	[Rats may externally disperse seeds & cache them for consumption, but the majority of seeds are presumably destroyed] "On Norfolk, while common it occupies a very reduced range in the centre of that island. There the species is threatened to some extent by rats which eat the fruit and germinating seedlings."

708	Propagules survive passage through the gut	Y
	Source(s)	Notes
	New Zealand Plant Conservation Network. 2014. Flora Details - <i>Rhopalostylis baueri</i> . <a href="http://www.nzpcn.org.nz/flora_details.aspx?ID=670">http://www.nzpcn.org.nz/flora_details.aspx?ID=670</a> . [Accessed 31 Jul 2014]	[Presumably yes, if dispersed by frugivores] "Fruit c. 13 × 12 mm, subglobose to globose brickred. Seed almost spherical, tightly invested in pale fawn endocarp which is marked by several vascular strands curving ± obliquely from hilum and only a few running longitudinally; hilum a broad band from the slightly flattened chalazal area to a pronounced papilla beside the micropyle"

801	Prolific seed production (>1000/m2)	
	Source(s)	Notes
	Pintaud, J. C. 2005. <i>Rhopalostylis baueri</i> on Norfolk Island. <i>Palms</i> , 49(2): 92-96	[Unknown if seed production reaches such high densities, but relatively large fruit & seed size suggests no] "Locally it even forms pure stands, as do many other Pacific islands palms. However, contrary to other species such as <i>Kentiopsis oliviformis</i> and <i>Satakentia liukuensis</i> (Pintaud & Hodel 1998, Pintaud & Setoguchi 1999), <i>Rhopalostylis baueri</i> does reproduce well within the stands, as individuals of all sizes can be seen (Fig. 3)."

802	Evidence that a persistent propagule bank is formed (>1 yr)	
	Source(s)	Notes
	Palmpedia. 2014. <i>Rhopalostylis baueri</i> . <a href="http://www.palmpedia.net/wiki/Rhopalostylis_baueri">http://www.palmpedia.net/wiki/Rhopalostylis_baueri</a> . [Accessed 30 Jul 2014]	"Fruit may take up to a year to germinate."
	Royal Botanic Gardens Kew. 2008. Seed Information Database (SID). Version 7.1. <a href="http://data.kew.org/sid/">http://data.kew.org/sid/</a> . [Accessed 31 Jul 2014]	"Storage Behaviour: No data available for species. Of 1 known taxa of genus <i>Rhopalostylis</i> , 100.00% Orthodox(p/?)"

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

Qsn #	Question	Answer
804	Tolerates, or benefits from, mutilation, cultivation, or fire	
	Source(s)	Notes
	New Zealand Plant Conservation Network. 2014. Flora Details - <i>Rhopalostylis baueri</i> . <a href="http://www.nzpcn.org.nz/flora_details.aspx?ID=670">http://www.nzpcn.org.nz/flora_details.aspx?ID=670</a> . [Accessed 31 Jul 2014]	"Plants resent root disturbance so they should be planted in a sheltered semi-shaded site and then left alone."

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

- Grows in subtropical to Mediterranean climates
- Shade tolerant
- Forms dense stands in native range
- Tolerates many soil types
- Seeds dispersed by birds & intentionally by people

## Low Risk Traits

- No reports of invasiveness or naturalization
- Unarmed (no spines, thorns or burrs)
- Palatable to grazing animals
- Ornamental
- Not reported to spread vegetatively
- Slow growing and long time to reproductive maturity
- Seeds unlikely to be inadvertently dispersed