

Key Words: Evaluate; Naturalized; Ornamental; Fleshy drupe; Zoochorous

**Family:** *Areaceae*

**Taxon:** *Dypsis madagascariensis*

**Synonym:** *Chrysalidocarpus lucubensis* Becc.      **Common Name:** Malagasy Palm  
*Chrysalidocarpus madagascariensis* Becc. (b  
*Chrysalidocarpus madagascariensis* var. *lucu*

Questionnaire :	current 20090513	Assessor:	Chuck Chimera	Designation:	EVALUATE
Status:	Assessor Approved	Data Entry Person:	Chuck Chimera	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	y
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)	y
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)	
305	Congeneric weed			n=0, y = 1*multiplier (see Appendix 2)	
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	n
407	Causes allergies or is otherwise toxic to humans			y=1, n=0	y
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	y

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	n
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	
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	2008. Louppe, D./Oteng-Amoako, A.A./Brink, M.. Timbers 1: volume 7 of plant resources of tropical Africa. PROTA, Wageningen, Netherlands	[Is the species highly domesticated? No] No evidence
102	2012. WRA Specialist. Personal Communication.	NA
103	2012. WRA Specialist. Personal Communication.	NA
201	2008. Louppe, D./Oteng-Amoako, A.A./Brink, M.. Timbers 1: volume 7 of plant resources of tropical Africa. PROTA, Wageningen, Netherlands	[Species suited to tropical or subtropical climate(s) 2-High] "Dyopsis madagascariensis is endemic to northern and western Madagascar."
202	2008. Louppe, D./Oteng-Amoako, A.A./Brink, M.. Timbers 1: volume 7 of plant resources of tropical Africa. PROTA, Wageningen, Netherlands	[Quality of climate match data 2-High]
203	2003. Riffle, R.L./Craft, P.. An encyclopedia of cultivated palms. Timber Press, Portland, OR.	[Broad climate suitability (environmental versatility)? No] "This species is intolerant of cold and is adaptable only to zones 10b and 11."
203	2008. Louppe, D./Oteng-Amoako, A.A./Brink, M.. Timbers 1: volume 7 of plant resources of tropical Africa. PROTA, Wageningen, Netherlands	[Broad climate suitability (environmental versatility)? No] "Ecology - Dyopsis madagascariensis occurs in moist rainforest and semi-deciduous forest up to 650 m altitude. It can be found in drier forest than most other Dyopsis species, even in gullies and ravines in dry bushland."
204	2001. Ellison, D./Ellison, A.. Cultivated palms of the world. UNSW Press, Sydney.	[Native or naturalized in regions with tropical or subtropical climates? Yes] "Performing well in an open position in subtropical or tropical climates, this hardy plant tolerates dry conditions once established."
204	2008. Louppe, D./Oteng-Amoako, A.A./Brink, M.. Timbers 1: volume 7 of plant resources of tropical Africa. PROTA, Wageningen, Netherlands	[Native or naturalized in regions with tropical or subtropical climates? Yes] "Dyopsis madagascariensis is endemic to northern and western Madagascar."
205	2001. Ellison, D./Ellison, A.. Cultivated palms of the world. UNSW Press, Sydney.	[Does the species have a history of repeated introductions outside its natural range? Yes] "This widely cultivated species is native to Madagascar."
205	2008. Louppe, D./Oteng-Amoako, A.A./Brink, M.. Timbers 1: volume 7 of plant resources of tropical Africa. PROTA, Wageningen, Netherlands	[Does the species have a history of repeated introductions outside its natural range? Yes] "It is cultivated as an ornamental in many tropical countries."
301	2002. Svenning, J.C.. Non-native ornamental palms invade a secondary tropical forest in Panama. Palms. 46(2): 81-86.	[Naturalized beyond native range? Yes] "Outnumbering the native palms, eight species of exotic palms have invaded the forest." ... "Dyopsis madagascariensis occurs only in a small, peripheral area of the forest, but here has both juveniles and adults."
301	2007. McCormack, G.. Cook Islands Biodiversity Database, Version 2007.2.. Cook Islands Natural Heritage Trust, Rarotonga <a href="http://cookislands.bishopmuseum.org">http://cookislands.bishopmuseum.org</a>	[Naturalized beyond native range? No evidence from Cook Islands] "COOK ISLANDS STATUS: Introduced - Recent, Not naturalised; Land, lowlands"
301	2008. Louppe, D./Oteng-Amoako, A.A./Brink, M.. Timbers 1: volume 7 of plant resources of tropical Africa. PROTA, Wageningen, Netherlands	[Naturalized beyond native range? Yes] "Locally it has become naturalized, e.g. in Panama."
301	2008. Meyer, J-Y./Lavergne, C./Hodel, D. R.. Time Bombs in Gardens: Invasive Ornamental Palms in Tropical Islands, with Emphasis on French Polynesia (Pacific Ocean) and the Mascarenes (Indian Ocean). Palms. 52: 71-83.	[Naturalized beyond native range? Yes] "Guérin observed the <i>Lucuba</i> palm ( <i>Dyopsis madagascariensis</i> ) naturalized in wet, low elevation secondary forests of the Opunohu Valley, Moorea (Society Islands) in the 1980s from a 1971 introduction. More recently Meyer observed this species naturalized in the Vaianae and Maharepa valleys of Moorea up to 400 m elevation in secondary and wet primary forests (Fig. 3). It is noteworthy that this species (under the name <i>Chrysalidocarpus lucubensis</i> ) is also noted to be locally naturalized in low-elevation rain forest in Mauritius (Lorence & Sussman 1986) and in peripheral area of a secondary tropical forest in Panama (Svenning 2002)."
302	2008. Meyer, J-Y./Lavergne, C./Hodel, D. R.. Time Bombs in Gardens: Invasive Ornamental Palms in Tropical Islands, with Emphasis on French Polynesia (Pacific Ocean) and the Mascarenes (Indian Ocean). Palms. 52: 71-83.	[Garden/amenity/disturbance weed? Yes] "The eradication of <i>Dyopsis madagascariensis</i> in the island of Moorea (French Polynesia) still seems possible before dense stands are formed or before individuals are found at higher elevation and on steep slopes." [Demonstrating the potential to become an environmental weed and recommended for eradication by local ecologists]

303	2007. Randall, R.P.. Global Compendium of Weeds - Index [Online Database]. <a href="http://www.hear.org/gcw/">http://www.hear.org/gcw/</a>	[Agricultural/forestry/horticultural weed? No] No evidence
304	2008. Meyer, J-Y./Lavergne, C./Hodel, D. R.. 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: 71-83.	[Environmental weed? Possibly] "The eradication of <i>Dypsis madagascariensis</i> in the island of Moorea (French Polynesia) still seems possible before dense stands are formed or before individuals are found at higher elevation and on steep slopes." [Demonstrating the potential to become an environmental weed and recommended for eradication by local ecologists]
305	2008. Meyer, J-Y./Lavergne, C./Hodel, D. R.. 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: 71-83.	[Congeneric weed? Potentially] "Seedlings and saplings of the golden cane palm <i>D. lutescens</i> , a very popular palm used for hedges in the gardens of Mauritius and La Réunion, have been observed in a streambed near Saint-Leu (J. Hivert and C. Fontaine, pers. comm. 2006). Frugivorous birds or water have probably dispersed the fruits from a garden down to the valley bottom." ... "However, two of these are reported and known as invasive ( <i>D. lutescens</i> and <i>R. regia</i> ), and the other two are already naturalized in tropical regions or islands ( <i>A. cunninghamiana</i> and <i>S. romanzoffiana</i> )." [Clearly able to naturalize, but impacts unspecified in this publication]
401	2008. Louppe, D./Oteng-Amoako, A.A./Brink, M.. <i>Timbers 1: volume 7 of plant resources of tropical Africa</i> . PROTA, Wageningen, Netherlands	[Produces spines, thorns or burrs? No] "Palms up to 18 m tall with solitary trunk or 2-4 trunks clustering in clumps, up to 30 cm in diameter; crown shaft green, white waxy. Leaves 7-12 in the crown, arranged spirally, tristichous, pinnately compound; sheath up to 65 cm long, petiole up to 40 cm long, rachis 160-310 cm long; leaflets (30-)88-126(-177) on each sides of the rachis, in groups of 2-6, mid-green, with drooping tips, basal leaflets up to 120 cm long, median leaflets up to 95 cm long, upper leaflets up to 40 cm long."
402	2008. Louppe, D./Oteng-Amoako, A.A./Brink, M.. <i>Timbers 1: volume 7 of plant resources of tropical Africa</i> . PROTA, Wageningen, Netherlands	[Allelopathic? Unknown] No evidence of allelopathy reported
403	2008. Louppe, D./Oteng-Amoako, A.A./Brink, M.. <i>Timbers 1: volume 7 of plant resources of tropical Africa</i> . PROTA, Wageningen, Netherlands	[Parasitic? No] "Palms up to 18 m tall with solitary trunk or 2-4 trunks clustering in clumps, up to 30 cm in diameter; crown shaft green, white waxy." [Arecaceae]
404	2008. Louppe, D./Oteng-Amoako, A.A./Brink, M.. <i>Timbers 1: volume 7 of plant resources of tropical Africa</i> . PROTA, Wageningen, Netherlands	[Unpalatable to grazing animals? Unknown] "The palm heart is an excellent vegetable and the fruits are edible." [Palatability of foliage not reported]
405	2000. Lewis, C.E./Zona, S.. A survey of cyanogenesis in palms (Arecaceae). <i>Biochemical Systematics and Ecology</i> . 28: 219-228.	[Toxic to animals? No] "We did not corroborate Herbert's (1922) report of cyanogenesis in the leaves of <i>Adonidia merrillii</i> , <i>Cocos nucifera</i> , <i>Dypsis madagascariensis</i> , <i>Ptychosperma macarthurii</i> , or <i>Roystonea regia</i> ."
405	2008. Wagstaff, D.J.. <i>International poisonous plants checklist: an evidence-based reference</i> . CRC Press, Boca Raton, FL	[Toxic to animals? No] No evidence
406	2003. Riffle, R.L./Craft, P.. <i>An encyclopedia of cultivated palms</i> . Timber Press, Portland, OR.	[Host for recognized pests and pathogens? No] No evidence
406	2005. Staples, G.W./Herbst, D.R.. <i>A Tropical Garden Flora - Plants Cultivated in the Hawaiian Islands and Other Tropical Places</i> . Bishop Museum Press, Honolulu, HI	[Host for recognized pests and pathogens? No] No evidence
406	2008. Louppe, D./Oteng-Amoako, A.A./Brink, M.. <i>Timbers 1: volume 7 of plant resources of tropical Africa</i> . PROTA, Wageningen, Netherlands	[Host for recognized pests and pathogens? No] No evidence
407	2008. Louppe, D./Oteng-Amoako, A.A./Brink, M.. <i>Timbers 1: volume 7 of plant resources of tropical Africa</i> . PROTA, Wageningen, Netherlands	[Causes allergies or is otherwise toxic to humans? No] "In Madagascar the wood is commonly used for floorboards of houses. The palm heart is an excellent vegetable and the fruits are edible. The palm is an attractive ornamental." [Multiple uses with no evidence of hazards or risks]
407	2008. Wagstaff, D.J.. <i>International poisonous plants checklist: an evidence-based reference</i> . CRC Press, Boca Raton, FL	[Causes allergies or is otherwise toxic to humans? No] No evidence
408	2008. Louppe, D./Oteng-Amoako, A.A./Brink, M.. <i>Timbers 1: volume 7 of plant resources of tropical Africa</i> . PROTA, Wageningen, Netherlands	[Creates a fire hazard in natural ecosystems? No] "Ecology - <i>Dypsis madagascariensis</i> occurs in moist rainforest and semi-deciduous forest up to 650 m altitude. It can be found in drier forest than most other <i>Dypsis</i> species, even in gullies and ravines in dry bushland." [No evidence]

409	2003. Riffle, R.L./Craft, P.. An encyclopedia of cultivated palms. Timber Press, Portland, OR.	[Is a shade tolerant plant at some stage of its life cycle? Possibly No] "It relished full sun and is drought tolerant but looks and grows much better with regular and adequate moisture."
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? Potentially] "It is tolerant of dry conditions but appreciates deep, rich soil, plenty of water, and full to filtered sun."
409	2012. Dave's Gardern. PlantFiles: Malagasy Palm - <i>Dypsis madagascariensis</i> . <a href="http://davesgarden.com/guides/pf/go/59662/">http://davesgarden.com/guides/pf/go/59662/</a>	[Is a shade tolerant plant at some stage of its life cycle? Possibly] "Sun Exposure: Sun to Partial Shade"
409	2012. Desert Tropicals. <i>Dypsis madagascariensis</i> . Faucon, P., <a href="http://www.desert-tropicals.com/Palm/Dypsis_madagascariensis.html">http://www.desert-tropicals.com/Palm/Dypsis_madagascariensis.html</a>	[Is a shade tolerant plant at some stage of its life cycle? Possibly] "Sun Requirements: Full sun to light shade"
409	2012. Gray, M.. Palms: <i>Dypsis madagascariensis</i> . PACSOA (Palm and Cycad Society of Australia), <a href="http://www.pacsoa.org.au/palms/Dypsis/madagascariensis.html">http://www.pacsoa.org.au/palms/Dypsis/madagascariensis.html</a>	[Is a shade tolerant plant at some stage of its life cycle Potentially] "Sunny, well drained position."
410	2003. Riffle, R.L./Craft, P.. An encyclopedia of cultivated palms. Timber Press, Portland, OR.	[Tolerates a wide range of soil conditions? Yes] "It seems not particular about soil types as long as it is well drained."
411	2008. Louppe, D./Oteng-Amoako, A.A./Brink, M.. Timbers 1: volume 7 of plant resources of tropical Africa. PROTA, Wageningen, Netherlands	[Climbing or smothering growth habit? No] "Palms up to 18 m tall with solitary trunk or 2-4 trunks clustering in clumps, up to 30 cm in diameter; crown shaft green, white waxy."
412	2008. Meyer, J.-Y./Lavergne, C./Hodel, D. R.. Time Bombs in Gardens: Invasive Ornamental Palms in Tropical Islands, with Emphasis on French Polynesia (Pacific Ocean) and the Mascarenes (Indian Ocean). Palms. 52: 71-83.	[Forms dense thickets? Possibly] "The eradication of <i>Dypsis madagascariensis</i> in the island of Moorea (French Polynesia) still seems possible before dense stands are formed or before individuals are found at higher elevation and on steep slopes." [No evidence to date, but concerns that dense thickets may form.]
501	2008. Louppe, D./Oteng-Amoako, A.A./Brink, M.. Timbers 1: volume 7 of plant resources of tropical Africa. PROTA, Wageningen, Netherlands	[Aquatic? No] "Palms up to 18 m tall with solitary trunk or 2-4 trunks clustering in clumps, up to 30 cm in diameter; crown shaft green, white waxy." [Terrestrial]
502	2008. Louppe, D./Oteng-Amoako, A.A./Brink, M.. Timbers 1: volume 7 of plant resources of tropical Africa. PROTA, Wageningen, Netherlands	[Grass? No] Areaceae
503	2008. Louppe, D./Oteng-Amoako, A.A./Brink, M.. Timbers 1: volume 7 of plant resources of tropical Africa. PROTA, Wageningen, Netherlands	[Nitrogen fixing woody plant? No] Areaceae
504	2008. Louppe, D./Oteng-Amoako, A.A./Brink, M.. Timbers 1: volume 7 of plant resources of tropical Africa. PROTA, Wageningen, Netherlands	[Geophyte (herbaceous with underground storage organs -- bulbs, corms, or tubers)? No] "Palms up to 18 m tall with solitary trunk or 2-4 trunks clustering in clumps, up to 30 cm in diameter; crown shaft green, white waxy. Leaves 7-12 in the crown, arranged spirally, tristichous, pinnately compound; sheath up to 65 cm long, petiole up to 40 cm long, rachis 160-310 cm long; leaflets (30-188-126(-177)) on each side of the rachis, in groups of 2-6, mid-green, with drooping tips, basal leaflets up to 120 cm long, median leaflets up to 95 cm long, upper leaflets up to 40 cm long."
601	2008. Louppe, D./Oteng-Amoako, A.A./Brink, M.. Timbers 1: volume 7 of plant resources of tropical Africa. PROTA, Wageningen, Netherlands	[Evidence of substantial reproductive failure in native habitat? No] "The felling intensity of <i>Dypsis madagascariensis</i> trees is locally high, but usually only mature trees are cut, which gives them some time to reproduce by seed. In many areas, regeneration is fair."
602	2001. Ellison, D./Ellison, A.. Cultivated palms of the world. UNSW Press, Sydney.	[Produces viable seed? Yes] "Mature fruit is green with a purple tinge and fresh seed germinates readily in 3 to 4 months."
602	2008. Louppe, D./Oteng-Amoako, A.A./Brink, M.. Timbers 1: volume 7 of plant resources of tropical Africa. PROTA, Wageningen, Netherlands	[Produces viable seed? Yes] "Management. Pre-soaking of seeds in water for 3 days promotes germination, which starts in 2 weeks. The germination rate is up to 90%. Growth is fast, with seedlings about 120 cm tall after one year."

603	2008. Louppe, D./Oteng-Amoako, A.A./Brink, M.. Timbers 1: volume 7 of plant resources of tropical Africa. PROTA, Wageningen, Netherlands	[Hybridizes naturally? Unknown] "Dypsis comprises about 140 species, all endemic to Madagascar except 2 occurring in the Comoros and 1 on Pemba Island."
604	2003. Rudall, P.J./Abranson, K./Dransfield, J./Baker, W.. Floral anatomy in <i>Dypsis</i> (Arecaceae–Areceae): a case of complex synorganization and stamen reduction. Botanical Journal of the Linnean Society. 143: 115–133.	[Self-compatible or apomictic? Unknown]
605	1994. Zomlefer, W.B.. Guide to Flowering Plant Families. The University of North Carolina Press, Chapel Hill & London	[Requires specialist pollinators? No] "Although early monographers assumed that many palms were anemophilous, the flowers actually are predominantly entomophilous. Common insect vectors include beetles, Hymenoptera, and flies; bats and hummingbirds also have been noted (Henderson 1986)."
605	2003. Rudall, P.J./Abranson, K./Dransfield, J./Baker, W.. Floral anatomy in <i>Dypsis</i> (Arecaceae–Areceae): a case of complex synorganization and stamen reduction. Botanical Journal of the Linnean Society. 143: 115–133.	[Requires specialist pollinators? No] "Female (pistillate) flowers in <i>Dypsis</i> are syncarpous, normally pseudomonomerous (as in many other Arecoideae), and possess septal nectaries that effectively delimit the carpel margins and indicate insect pollination." ... "Although very few observations have been made on pollinators of <i>Dypsis</i> , several factors are indicative of animal pollination, probably by small insects."
605	2008. Louppe, D./Oteng-Amoako, A.A./Brink, M.. Timbers 1: volume 7 of plant resources of tropical Africa. PROTA, Wageningen, Netherlands	[Requires specialist pollinators? No] "Flowers unisexual, 3-merous; male flowers with 6 stamens and a rudimentary pistil; female flowers with superior, apparently 1-celled ovary and rudimentary stamens." [Flowers not specialized]
606	2008. Louppe, D./Oteng-Amoako, A.A./Brink, M.. Timbers 1: volume 7 of plant resources of tropical Africa. PROTA, Wageningen, Netherlands	[Reproduction by vegetative fragmentation? No] "The felling intensity of <i>Dypsis madagascariensis</i> trees is locally high, but usually only mature trees are cut, which gives them some time to reproduce by seed. In many areas, regeneration is fair." [No evidence]
607	2008. Louppe, D./Oteng-Amoako, A.A./Brink, M.. Timbers 1: volume 7 of plant resources of tropical Africa. PROTA, Wageningen, Netherlands	[Minimum generative time (years)? Unknown] "Growth is fast, with seedlings about 120 cm tall after one year. They are then ready to plant out."
701	2008. Louppe, D./Oteng-Amoako, A.A./Brink, M.. Timbers 1: volume 7 of plant resources of tropical Africa. PROTA, Wageningen, Netherlands	[Propagules likely to be dispersed unintentionally? No] "Fruit an obovoid to ellipsoid drupe 1-1.5 cm x 0.5-1 cm, 1-seeded. Seed narrowly ellipsoid, c. 1 cm long; endosperm uniform." [Adapted for consumption and internal dispersal]
702	2008. Louppe, D./Oteng-Amoako, A.A./Brink, M.. Timbers 1: volume 7 of plant resources of tropical Africa. PROTA, Wageningen, Netherlands	[Propagules dispersed intentionally by people? Yes] "It is cultivated as an ornamental in many tropical countries."
703	2008. Louppe, D./Oteng-Amoako, A.A./Brink, M.. Timbers 1: volume 7 of plant resources of tropical Africa. PROTA, Wageningen, Netherlands	[Propagules likely to disperse as a produce contaminant? No] "Fruit an obovoid to ellipsoid drupe 1-1.5 cm x 0.5-1 cm, 1-seeded. Seed narrowly ellipsoid, c. 1 cm long; endosperm uniform." [Unlikely. No evidence, and fruits and seeds relatively large]
704	2008. Louppe, D./Oteng-Amoako, A.A./Brink, M.. Timbers 1: volume 7 of plant resources of tropical Africa. PROTA, Wageningen, Netherlands	[Propagules adapted to wind dispersal? No] "Fruit an obovoid to ellipsoid drupe 1-1.5 cm x 0.5-1 cm, 1-seeded. Seed narrowly ellipsoid, c. 1 cm long; endosperm uniform."
705	2008. Meyer, J-Y./Lavergne, C./Hodel, D. R.. Time Bombs in Gardens: Invasive Ornamental Palms in Tropical Islands, with Emphasis on French Polynesia (Pacific Ocean) and the Mascarenes (Indian Ocean). Palms. 52: 71-83.	[Propagules water dispersed? Possibly] "Seedlings and saplings of the golden cane palm <i>D. lutescens</i> , a very popular palm used for hedges in the gardens of Mauritius and La Réunion, have been observed in a streambed near Saint-Leu (J. Hivert and C. Fontaine, pers. comm. 2006). Frugivorous birds or water have probably dispersed the fruits from a garden down to the valley bottom."
706	2008. Louppe, D./Oteng-Amoako, A.A./Brink, M.. Timbers 1: volume 7 of plant resources of tropical Africa. PROTA, Wageningen, Netherlands	[Propagules bird dispersed? Presumably Yes] "Fruit an obovoid to ellipsoid drupe 1-1.5 cm x 0.5-1 cm, 1-seeded. Seed narrowly ellipsoid, c. 1 cm long; endosperm uniform." [Fleshy-fruited, so potentially consumed or moved by birds and other vertebrates]
706	2008. Meyer, J-Y./Lavergne, C./Hodel, D. R.. Time Bombs in Gardens: Invasive Ornamental Palms in Tropical Islands, with Emphasis on French Polynesia (Pacific Ocean) and the Mascarenes (Indian Ocean). Palms. 52: 71-83.	[Propagules bird dispersed? Yes] "The small fleshy fruits (ca. 1 cm in diameter) of <i>Dypsis madagascariensis</i> and <i>Licuala grandis</i> might be dispersed over long distances by frugivorous birds, such as the common myna ( <i>Acridotheres tristis</i> ), introduced in the early 1900s in Tahiti and found at lower elevations, and the red-vented bulbul ( <i>Pycnonotus cafer</i> ), introduced in the 1970s and found at higher elevation (up to 2000 m), but also by the endemic fruit dove <i>Ptilinopus purpuratus</i> , which is a generalist frugivorous wild pigeon found in mid-elevation rain forests in the Society Islands."



707	2008. Louppe, D./Oteng-Amoako, A.A./Brink, M.. Timbers 1: volume 7 of plant resources of tropical Africa. PROTA, Wageningen, Netherlands	[Propagules dispersed by other animals (externally)? No] "Fruit an obovoid to ellipsoid drupe 1-1.5 cm x 0.5-1 cm, 1-seeded. Seed narrowly ellipsoid, c. 1 cm long; endosperm uniform." [Possible, but unlikely. Adapted for consumption and internal dispersal]
708	2001. Birkinshaw, C.. Fruit Characteristics of Species Dispersed by the Black Lemur ( <i>Eulemur macaco</i> ) in the Lokobe Forest, Madagascar. <i>Biotropica</i> . 33(3): 478-486.	[Propagules survive passage through the gut? Yes] "Table 1. Fruit characteristics of species closely associated with black lemur seed dispersal (group 1 species_ and not closely associated with black lemur seed dispersal (group 2 species)." ... [Dypsis madagascariensis placed into Group 2 with the following description "Seed swallowed by the black lemur and defecated visibly undamaged, but fruit also eaten by other potential zoochores."
708	2008. Louppe, D./Oteng-Amoako, A.A./Brink, M.. Timbers 1: volume 7 of plant resources of tropical Africa. PROTA, Wageningen, Netherlands	[Propagules survive passage through the gut? Presumably Yes] "The fruits of <i>Dypsis madagascariensis</i> are eaten by lemurs, which disperse the seeds."
801	2008. Louppe, D./Oteng-Amoako, A.A./Brink, M.. Timbers 1: volume 7 of plant resources of tropical Africa. PROTA, Wageningen, Netherlands	[Prolific seed production (>1000/m <sup>2</sup> )? Unlikely] "Fruit an obovoid to ellipsoid drupe 1-1.5 cm x 0.5-1 cm, 1-seeded. Seed narrowly ellipsoid, c. 1 cm long; endosperm uniform." [Fruits 1-seeded, and relatively large]
802	2004. Meerow, A.W.. Palm Seed Germination - BUL274. University of Florida IFAS Ext., Ft. Lauderdale, FL <a href="http://edis.ifas.ufl.edu">http://edis.ifas.ufl.edu</a>	[Evidence that a persistent propagule bank is formed (>1 yr)? Unknown] "Seeds of some palms generally remain viable for only 2-3 weeks (e.g., <i>latan</i> palms, <i>Latania</i> spp.), while others may retain viability for over a year ( <i>areca</i> , <i>Dypsis lutescens</i> ) if stored properly (Broschat & Donselman, 1986)." [Unknown for <i>D. madagascariensis</i> ]
803	2012. WRA Specialist. Personal Communication.	[Well controlled by herbicides? Unknown] No information on herbicide efficacy or chemical control of this species
804	2008. Louppe, D./Oteng-Amoako, A.A./Brink, M.. Timbers 1: volume 7 of plant resources of tropical Africa. PROTA, Wageningen, Netherlands	[Tolerates, or benefits from, mutilation, cultivation, or fire? Unknown] "Palms up to 18 m tall with solitary trunk or 2-4 trunks clustering in clumps, up to 30 cm in diameter;" [Suckering may be part of natural growth form]
804	2012. Central Florida Palm & Cycad Society. <i>Dypsis madagascariensis</i> . <a href="http://50.57.99.44/ms/observations/show_all/details.html?pid=218">http://50.57.99.44/ms/observations/show_all/details.html?pid=218</a>	[Tolerates, or benefits from, mutilation, cultivation, or fire? Possibly] "This <i>Dypsis</i> is semi cold hardy. The suckering form will resprout from the roots. " [Unknown if plant actually resprouts, or just sends up root suckers as part of natural growth form]
805	2012. WRA Specialist. Personal Communication.	[Effective natural enemies present locally (e.g. introduced biocontrol agents)? Unknown] No evidence