

Family: *Areaceae*

Taxon: *Eremospatha macrocarpa*

Synonym: *Eremospatha sapinii* De Wild.

Common Name: large-fruit rattan palm

Questionnaire :	current 20090513	Assessor:	Chuck Chimera	Designation:	EVALUATE
Status:	Assessor Approved	Data Entry Person:	Chuck Chimera	WRA Score	2
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		n
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)		
401	Produces spines, thorns or burrs		y=1, n=0		y
402	Allelopathic		y=1, n=0		
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		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		n
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	
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	y
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	
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	
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: EVALUATE

WRA Score 2

Supporting Data:

101	2012. Sunderland, T.C.H.. A taxonomic revision of the rattans of Africa (Arecaceae: Calamoideae). Phytotaxa. 51: 1-76.	[Is the species highly domesticated? No evidence]
102	2012. WRA Specialist. Personal Communication.	NA
103	2012. WRA Specialist. Personal Communication.	NA
201	2001. Sunderland, T.C.H.. Rattan resources and use in west and central Africa. Unasyuva. 205(52): 18-26.	[Species suited to tropical or subtropical climate(s) 2-High] "Rattans are widespread throughout West and Central Africa and are a common component of the forest flora. Some species have particularly large ranges; for example, <i>Laccosperma secundiflorum</i> and <i>Eremospatha macrocarpa</i> occur from Liberia to Angola, while <i>C. deërratus</i> occurs from the Gambia across to Kenya and southwards to Zambia."
201	2005. Bongers, F./Parren, M.P.E./Traore, D.. Forest Climbing Plants of West Africa: Diversity, Ecology and Management. CABI, Wallingford, UK	[Species suited to tropical or subtropical climate(s) 2-High] "...a very widespread and common species and is distributed from Senegal in West Africa through to the lowland forests of the Congo Basin."
202	2001. Sunderland, T.C.H.. Rattan resources and use in west and central Africa. Unasyuva. 205(52): 18-26.	[Quality of climate match data 2-High]
203	2012. Sunderland, T.C.H.. A taxonomic revision of the rattans of Africa (Arecaceae: Calamoideae). Phytotaxa. 51: 1-76.	[Broad climate suitability (environmental versatility)? Low elevation equatorial Africa] "Distribution:— <i>Eremospatha macrocarpa</i> is a very widespread and common species and is distributed from Senegal in West Africa through to the lowland forests of the Congo Basin."
204	2001. Sunderland, T.C.H.. Rattan resources and use in west and central Africa. Unasyuva. 205(52): 18-26.	[Native or naturalized in regions with tropical or subtropical climates? Yes] "Rattans are widespread throughout West and Central Africa and are a common component of the forest flora. Some species have particularly large ranges; for example, <i>Laccosperma secundiflorum</i> and <i>Eremospatha macrocarpa</i> occur from Liberia to Angola, while <i>C. deërratus</i> occurs from the Gambia across to Kenya and southwards to Zambia."
205	2003. Riffle, R.L./Craft, P.. An Encyclopedia of Cultivated Palms. Timber Press, Portland, OR.	[Does the species have a history of repeated introductions outside its natural range?] "None of the species seem to be in cultivation, and the genus is not well known even to taxonomists."
301	2012. Randall, R.P.. A Global Compendium of Weeds. 2nd Edition. Department of Agriculture and Food, Western Australia	[Naturalized beyond native range? No evidence]
302	2005. Pantanella, E.. The Silvicultural and Sustainable Management of Rattan Production Systems. BSc Thesis. Tuscia University, Viterbo, Italy	[Garden/amenity/disturbance weed? A disturbance adapted plant in its native range. Could become a disturbance weed if introduced elsewhere] "E. macrocarpa is a colonizer of heavy disturbed areas due to its high light-demanding nature and can withstand permanently flooded zones (Profizi, 2000)."
303	2012. Randall, R.P.. A Global Compendium of Weeds. 2nd Edition. Department of Agriculture and Food, Western Australia	[Agricultural/forestry/horticultural weed? No evidence]
304	2012. Randall, R.P.. A Global Compendium of Weeds. 2nd Edition. Department of Agriculture and Food, Western Australia	[Environmental weed? No evidence]
305	2012. Randall, R.P.. A Global Compendium of Weeds. 2nd Edition. Department of Agriculture and Food, Western Australia	[Congeneric weed? Possibly, but no specifics found] " <i>Eremospatha haullevilleana</i> De Wild. Arecaceae 1107 -I" ... "I - Invasive Species may have escaped from gardens, cultivation or both; source not specific but includes some crop and pasture species."
401	2003. Riffle, R.L./Craft, P.. An Encyclopedia of Cultivated Palms. Timber Press, Portland, OR.	[Produces spines, thorns or burrs? Yes] " <i>Eremospatha</i> is a genus of possibly 12 pinnate-leaved, clustering monoecious spiny climbing palms in wet tropical Africa." ... "Spines are confined to the leaf rachis, the margins of the leaflets,, and the cirri."

401	2012. Sunderland, T.C.H.. A taxonomic revision of the rattans of Africa (Arecaceae: Calamoideae). Phytotaxa. 51: 1-76.	[Produces spines, thorns or burrs? Yes] "Leaves on mature stems sessile, up to 3.5 m long; rachis 1–1.5 m long, abaxially rounded, adaxially flattened, becoming trapezoid then rounded in cross-section distally, armed along the margins with inequidistant, reflexed thorns, becoming sparsely armed distally, underside of rachis with sparse light brown indumentum; cirrus 1.2–2 m long, unarmed; leaflets, up to 25 pairs on each side of the rachis, linear–lanceolate, abruptly contracted at the base, irregularly and narrowly praemorse at apex, 22–35 cm long × 2–2.5 cm broad at the widest point, concolorous, with 5–7 inconspicuous transverse veinlets 1–2 mm apart, armed along the margins with inequidistant, curved, forward-facing brown tan spines; lowermost leaflets, smaller than the rest, linear–ovate, reflexed and laxly clasping the stem; acanthophylls ca.3 cm long, parallel to cirrus."
402	2012. WRA Specialist. Personal Communication.	[Allelopathic? Unknown]
403	2012. Sunderland, T.C.H.. A taxonomic revision of the rattans of Africa (Arecaceae: Calamoideae). Phytotaxa. 51: 1-76.	[Parasitic? No] Arecaceae
404	1985. Burkill, H.M.. <i>Eremospatha macrocarpa</i> (Mann & Wendl.) Wendl. [family Palmae]. Entry from The useful plants of west tropical Africa, Vol 4. http://plants.jstor.org/upwta/4_603	[Unpalatable to grazing animals? No] "Uses" [Includes Agri-horticulture: fodder]
405	2002. Sunderland, T.C.H./Profizi, J.-P.. New Research on African Rattans. Proceedings No. 9. INBAR, Beijing, China	[Toxic to animals? No evidence]
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	2001. Sunderland, T.C.H.. Rattan resources and use in west and central Africa. <i>Unasylva</i> . 205(52): 18-26.	[Causes allergies or is otherwise toxic to humans? No evidence]
407	2008. Wagstaff, D.J.. International poisonous plants checklist: an evidence-based reference. CRC Press, Boca Raton, FL	[Causes allergies or is otherwise toxic to humans? No evidence]
408	1988. Steentoft, M.. Flowering Plants in West Africa. Cambridge University Press, Cambridge, UK	[Creates a fire hazard in natural ecosystems? No evidence] " <i>Eremospatha</i> (Gr. Single spathe) is represented by 2 species of forest rattans, and the much commoner <i>E. macrocarpa</i> , in freshwater swamp forest."
408	2008. Kouassi, K.I./Barot, S./Gignoux, J./Bi, I.A.Z.. Demography and life history of two rattan species, <i>Eremospatha macrocarpa</i> and <i>Laccosperma secundiflorum</i> , in Côte d'Ivoire. <i>Journal of Tropical Ecology</i> . 24: 493-503.	[Creates a fire hazard in natural ecosystems? No evidence]
409	2005. Bongers, F./Parren, M.P.E./Traore, D.. Forest Climbing Plants of West Africa: Diversity, Ecology and Management. CABI, Wallingford, UK	[Is a shade tolerant plant at some stage of its life cycle? No] "This species is extremely light demanding, occurring naturally in gap vegetation and forest margins."
409	2012. Sunderland, T.C.H.. A taxonomic revision of the rattans of Africa (Arecaceae: Calamoideae). Phytotaxa. 51: 1-76.	[Is a shade tolerant plant at some stage of its life cycle? No] "This species is extremely light demanding, occurring naturally in gap vegetation and forest margins. As a result of this, in common with other members of the genus, <i>E. macrocarpa</i> responds extremely well to selective logging activities and is a common component of regrowth vegetation."
410	2009. Kouakou, K.L./Bi, I.A.Z./Abessika, Y.G./Kouakou, T.H./Baudoin, J.-P.. Rapid seedlings regeneration from seeds and vegetative propagation with sucker and rhizome of <i>Eremospatha macrocarpa</i> (Mann & Wendl.) Wendl and <i>Laccosperma secundiflorum</i> (P. Beauv.	[Tolerates a wide range of soil conditions?] "Two rattan species, <i>L. secundiflorum</i> and <i>E. macrocarpa</i> , widely used in crafts and industry throughout tropical Africa, were used for this study. Offsets were collected on several tufts of rattan growing in a sandy clay soil in a primary rain forest"
411	2003. Riffle, R.L./Craft, P.. An Encyclopedia of Cultivated Palms. Timber Press, Portland, OR.	[Climbing or smothering growth habit? Yes] " <i>Eremospatha</i> is a genus of possibly 12 pinnate-leaved, clustering monoecious spiny climbing palms in wet tropical Africa."

411	2005. Bongers, F./Parren, M.P.E./Traore, D.. Forest Climbing Plants of West Africa: Diversity, Ecology and Management. CABI, Wallingford, UK	[Climbing or smothering growth habit? Yes] "Clustering species of rattan with stems up to 50 m long, 10-18 mm in diameter; juvenile leaves strongly bifid, adult leaflets linear lanceolate, lowermost leaflets ovoid and only laxly clasping the sheath."
412	2012. Sunderland, T.C.H.. A taxonomic revision of the rattans of Africa (Arecaceae: Calamoideae). Phytotaxa. 51: 1-76.	[Forms dense thickets? Unknown] "This species is extremely light demanding, occurring naturally in gap vegetation and forest margins." [Other Eremospatha species grow in thickets]
501	2005. Bongers, F./Parren, M.P.E./Traore, D.. Forest Climbing Plants of West Africa: Diversity, Ecology and Management. CABI, Wallingford, UK	[Aquatic? No] "This species occurs more commonly in terra firma forest, and is rarely encountered in swamp forest."
502	2012. Sunderland, T.C.H.. A taxonomic revision of the rattans of Africa (Arecaceae: Calamoideae). Phytotaxa. 51: 1-76.	[Grass? No] Arecaceae
503	2012. Sunderland, T.C.H.. A taxonomic revision of the rattans of Africa (Arecaceae: Calamoideae). Phytotaxa. 51: 1-76.	[Nitrogen fixing woody plant? No] Arecaceae
504	2012. Sunderland, T.C.H.. A taxonomic revision of the rattans of Africa (Arecaceae: Calamoideae). Phytotaxa. 51: 1-76.	[Geophyte (herbaceous with underground storage organs -- bulbs, corms, or tubers)? No] "Clustered slender to moderate palm climbing to 50–75 m, rarely to 150 m."
601	2002. Sunderland, T.C.H./Profizi, J.-P.. New Research on African Rattans. Proceedings No. 9. INBAR, Beijing, China	[Evidence of substantial reproductive failure in native habitat? No] "Some species, such as <i>Laccosperma secundiflorum</i> and <i>Eremospatha macrocarpa</i> , have large ranges and occur from Liberia to Angola, whilst <i>Calamus deerratus</i> is particularly widely distributed and occurs from the Gambia, across to Kenya and southwards to Zambia." ... "Table 2. The conservation status of African rattan species" [<i>E. macrocarpa</i> : IUCN Category = Not threatened]
602	2009. Kouakou, K.L./Bi, I.A.Z./Abessika, Y.G./Kouakou, T.H./Baudoin, J.-P.. Rapid seedlings regeneration from seeds and vegetative propagation with sucker and rhizome of <i>Eremospatha macrocarpa</i> (Mann & Wendl.) Wendl and <i>Laccosperma secundiflorum</i> (P. Beauv.	[Produces viable seed? Yes] "After 9 months (270 days) in nursery, only treatments 5 and 7 reached 90% of germination for <i>E. macrocarpa</i> . Seeds were still germinating at a slow rate and germination test was stopped 270 days after sowing (DAS) for <i>E. macrocarpa</i> ."
602	2012. Sunderland, T.C.H.. A taxonomic revision of the rattans of Africa (Arecaceae: Calamoideae). Phytotaxa. 51: 1-76.	[Produces viable seed? Yes] "Fruit at maturity 1–seeded, rarely 2–seeded, ± cylindrical, 2.2–2.6 cm long × 1–1.5 cm wide, with 17–24 rows of vertical scales. Seed compressed, 1.8–2 cm long × 1.4–1.8 cm wide × 1 cm thick, flattened on one side or with a shallow depression, embryo lateral, raised, opposite the flattened side."
603	2012. Sunderland, T.C.H.. A taxonomic revision of the rattans of Africa (Arecaceae: Calamoideae). Phytotaxa. 51: 1-76.	[Hybridizes naturally? Unknown] "Distribution:— <i>Eremospatha</i> is represented by eleven species confined to the lowland (<1,000m) forest areas of West Africa and the Congo basin with outliers in Uganda, Tanzania and Zambia."
604	1995. Monermyo, A.B.. Profiles and Pan-African Distributions of the Rattan Species (Calamoideae) Recorded in Nigeria. Principes. 39(4): 197-209.	[Self-compatible or apomictic? Unknown] "Laterally borne inflorescences with hermaphrodite flowers, buff yellow in color and very fragrant."
604	1995. Williams, J.T./Rao, I.V.R./Rao, A.N. (eds.). Genetic Enhancement of Bamboo and Rattan. Report of an Expert Consultation held at Los Banos, Philippines, 8-11 May 1995. INBAR / Scenario Publications, Noida, India	[Self-compatible or apomictic? Possibly Yes] "Ability to form seed in most rattans and bamboos allows selfing and selfed lines are valuable."
604	2001. Sunderland, T.C.H.. Rattan resources and use in west and central Africa. Unasylva. 205(52): 18-26.	[Self-compatible or apomictic?] "For example, the genera <i>Eremospatha</i> and <i>Laccosperma</i> have pairs of hermaphroditic flowers, a feature unique within the Palmae (Uhl and Dransfield, 1987; Baker et al., 1999)."
605	1997. Sunderland, T.C.H.. <i>Eremospatha macrocarpa</i> (G. Mann & H. Wendl.) H. Wendl. Collection Number 1881. Missouri Botanical Garden Herbarium. http://www.tropicos.org/Specimen/2323706	[Requires specialist pollinators? Possibly] "Inflorescence in axils, ca. 3 m from stem apex, with first order branches only, rachis branches erect, curved, presenting flowers upwards. Flowers cream in bud, white at anthesis, brown after pollination; all three stages sweet-scented. Flower opening trilete, very small, probably pollinated by thrips."
606	2008. Kouassi, K.I./Barot, S./Gignoux, J./Bi, I.A.Z.. Demography and life history of two rattan species, <i>Eremospatha macrocarpa</i> and <i>Laccosperma secundiflorum</i> , in Côte d'Ivoire. Journal of Tropical Ecology. 24: 493-503.	[Reproduction by vegetative fragmentation? Yes] "Pleioanthic clonal palm species such as <i>E. macrocarpa</i> are potentially immortal, especially when they produce many ramets." ... "Consequently, since <i>E. macrocarpa</i> individuals produce more ramets than <i>L. secundiflorum</i> individuals, this suggests the existence of a trade-off between sexual and vegetative reproduction."

607	2008. Kouassi, K.I./Barot, S./Gignoux, J./Bi, I.A.Z.. Demography and life history of two rattan species, <i>Eremospatha macrocarpa</i> and <i>Laccosperma secundiflorum</i> , in Côte d'Ivoire. <i>Journal of Tropical Ecology</i> . 24: 493-503.	[Minimum generative time (years)? 9+] "The growth to the adult stage occurred earlier in <i>E. macrocarpa</i> than in <i>L. secundiflorum</i> ..." ... "mean time to reach the adult stage, 9.2 y, 14.3 y..."
701	2012. Sunderland, T.C.H.. A taxonomic revision of the rattans of Africa (Arecaceae: Calamoideae). <i>Phytotaxa</i> . 51: 1-76.	[Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)? No evidence. Unlikely as fruits & seeds lack means of external attachment] "Fruit at maturity 1-seeded, rarely 2-seeded, ± cylindrical, 2.2–2.6 cm long × 1–1.5 cm wide, with 17–24 rows of vertical scales. Seed compressed, 1.8–2 cm long × 1.4–1.8 cm wide × 1 cm thick, flattened on one side or with a shallow depression, embryo lateral, raised, opposite the flattened side."
702	2003. Riffle, R.L./Craft, P.. An Encyclopedia of Cultivated Palms. Timber Press, Portland, OR.	[Propagules dispersed intentionally by people? Possibly No] "None of the species seem to be in cultivation, and the genus is not well known even to taxonomists."
703	2012. WRA Specialist. Personal Communication.	[Propagules likely to disperse as a produce contaminant? No evidence]
704	2003. Hardesty, B.D./Parker, V.T.. Community Seed Rain Patterns and a Comparison to Adult Community Structure in a West African Tropical Forest. <i>Plant Ecology</i> . 164(1): 49-64.	[Propagules adapted to wind dispersal? No] "Table A1. All taxa present in the seed rain, March 1996–February 1997. Family, name, dispersal mode, total number of seeds, and percent each species represents of total seed rain included." ... " <i>Eremospatha macrocarpa</i> - Disp. Mode* = NWD (non-wind, predominantly vertebrate dispersed)
704	2012. Sunderland, T.C.H.. A taxonomic revision of the rattans of Africa (Arecaceae: Calamoideae). <i>Phytotaxa</i> . 51: 1-76.	[Propagules adapted to wind dispersal? No] "Fruit at maturity 1-seeded, rarely 2-seeded, ± cylindrical, 2.2–2.6 cm long × 1–1.5 cm wide, with 17–24 rows of vertical scales. Seed compressed, 1.8–2 cm long × 1.4–1.8 cm wide × 1 cm thick, flattened on one side or with a shallow depression, embryo lateral, raised, opposite the flattened side."
705	1985. Burkill, H.M.. <i>Eremospatha macrocarpa</i> (Mann & Wendl.) Wendl. [family Palmae]. Entry from <i>The useful plants of west tropical Africa</i> , Vol 4. http://plants.jstor.org/upwta/4_603	[Propagules water dispersed? Possibly dispersed by water as well as birds] "A climbing palm with polished, ringed stems to 50 m long; in swamp-forest; from Sierra Leone to W Cameroons."
705	2001. Sunderland, T.C.H.. Rattan resources and use in west and central Africa. <i>Unasyva</i> . 205(52): 18-26.	[Propagules water dispersed? Possibly. Occurs in flooded zones] "The distribution of <i>Eremospatha macrocarpa</i> and <i>Laccosperma secundiflorum</i> in the field shows that these two species are found in permanently flooded zones even at the end of the dry season."
706	1998. Whitney, K.D./Fogiel, M.K./Lamperti, A.M./Holbrook, K.M./Stauffer, D.J./Hardesty, B.D./Parker, V.T./Smith, T.B.. Seed dispersal by <i>Ceratogymna</i> hornbills in the Dja Reserve, Cameroon. <i>Journal of Tropical Ecology</i> . 14: 351-371.	[Propagules bird dispersed? Yes] "Another group of hornbill-dispersed species, including the rattans <i>Laccosperma secundiflorum</i> and <i>Eremospatha macrocarpa</i> , the oil palm <i>Elaeis guineensis</i> , and the raphia palm <i>Raphia monbuttorum</i> , are non-timber forest products used extensively within Central Africa."
706	2008. Royal Botanic Gardens Kew. Seed Information Database (SID). Version 7.1. http://data.kew.org/sid/	[Propagules bird dispersed? Yes] "Seed Dispersal: Animal; Diaspore is eaten intentionally; Direct or experimental observation; (Zona, 2001); Birds.; <i>Ceratogymna atrata</i> ; Diaspore=fruit. The fruit is fleshy/juicy."
707	2001. Sunderland, T.C.H.. Rattan resources and use in west and central Africa. <i>Unasyva</i> . 205(52): 18-26.	[Propagules dispersed by other animals (externally)? Possibly. "The seeds of most rattans in Africa are dispersed predominantly by hornbills (Whitney et al., 1998). However, primates, especially drills (<i>Mandrillus leucophaeus</i>), mandrills (<i>Mandrillus sphinx</i>), chimpanzees (<i>Pan troglodytes</i>) and gorillas (<i>Gorilla gorilla</i>), as well as elephants, are also key dispersal agents (White and Abernethy, 1997; Sunderland, 2000). The seeds are often scattered far from the mother plant. Some additional, although limited, dispersal results from predation and caching by rodents. Interestingly, significant germination also occurs near parent plants through natural fruit fall, particularly in areas where overhunting has led to a significant decline in animals to disperse the seeds." [Possible that scatter hoarding seed predators, such as introduced rodents, or omnivores such as mongoose may carry fruits away and disperse seeds without ingesting them]
708	1998. Whitney, K.D./Fogiel, M.K./Lamperti, A.M./Holbrook, K.M./Stauffer, D.J./Hardesty, B.D./Parker, V.T./Smith, T.B.. Seed dispersal by <i>Ceratogymna</i> hornbills in the Dja Reserve, Cameroon. <i>Journal of Tropical Ecology</i> . 14: 351-371.	[Propagules survive passage through the gut? Presumably Yes] "Another group of hornbill-dispersed species, including the rattans <i>Laccosperma secundiflorum</i> and <i>Eremospatha macrocarpa</i> , the oil palm <i>Elaeis guineensis</i> , and the raphia palm <i>Raphia monbuttorum</i> , are non-timber forest products used extensively within Central Africa."
801	2012. Sunderland, T.C.H.. A taxonomic revision of the rattans of Africa (Arecaceae: Calamoideae). <i>Phytotaxa</i> . 51: 1-76.	[Prolific seed production (>1000/m ²)? Probably Not. Relatively large, mostly single-seeded fruit] "Fruit at maturity 1-seeded, rarely 2-seeded, ± cylindrical, 2.2–2.6 cm long × 1–1.5 cm wide, with 17–24 rows of vertical scales. Seed compressed, 1.8–2 cm long × 1.4–1.8 cm wide × 1 cm thick, flattened on one side or with a shallow depression, embryo lateral, raised, opposite the flattened side."

802	2008. Royal Botanic Gardens Kew. Seed Information Database (SID). Version 7.1. http://data.kew.org/sid/	[Evidence that a persistent propagule bank is formed (>1 yr)? Unknown]
802	2009. Kouakou, K.L./Bi, I.A.Z./Abessika, Y.G./Kouakou, T.H./Baudoin, J.-P.. Rapid seedlings regeneration from seeds and vegetative propagation with sucker and rhizome of <i>Eremospatha macrocarpa</i> (Mann & Wendl.) Wendl and <i>Laccosperma secundiflorum</i> (P. Beauv.	[Evidence that a persistent propagule bank is formed (>1 yr)? Unknown] "In our case, the inhibitor effect observed could be explained by the fact that <i>L. secundiflorum</i> and <i>E. macrocarpa</i> have recalcitrant seeds which were damaged by the chilling (Hong and Ellis, 1997)."
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

- Thrives in tropical climates
- A colonizer of heavy disturbed areas
- Armed along the margins with inequidistant, reflexed thorns
- Spiny climbing palm
- Fleshy-fruits adapted for bird and mammal dispersal

Low Risk / Desirable Traits

- No reports of naturalization or invasiveness elsewhere in the world
- Will only grow in warm, tropical climates
- Non-toxic
- Light demanding (shade intolerant)
- Reaches maturity in 9+ years