Taxon: Picralima nitida (Stapf) T. Durand & H. Durand **Family:** Apocynaceae

Common Name(s): akuamma
ashanti
obéro

Synonym(s): Picralima klaineana Pierre
Picralima macrocarpa A.Chev.
Tabernaemontana nitida Stapf

Assessor: Chuck Chimera **Status:** Assessor Approved **End Date:** 25 Apr 2016

WRA Score: **-1.0** **Designation:** L **Rating:** Low Risk

Keywords: Tropical Tree, Toxic, Unarmed, Shade-Tolerant, Fleshy-Fruited

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	n
301	Naturalized beyond native range	y = 1*multiplier (see Appendix 2), n= question 205	n
302	Garden/amenity/disturbance weed	n=0, y = 1*multiplier (see Appendix 2)	n
303	Agricultural/forestry/horticultural weed	n=0, y = 2*multiplier (see Appendix 2)	n
304	Environmental weed	n=0, y = 2*multiplier (see Appendix 2)	n
305	Congeneric weed	n=0, y = 1*multiplier (see Appendix 2)	n
401	Produces spines, thorns or burrs	y=1, n=0	n
402	Allelopathic		
403	Parasitic	y=1, n=0	n
404	Unpalatable to grazing animals	y=1, n=-1	n
405	Toxic to animals		
406	Host for recognized pests and pathogens		
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	y

Qsn #	Question	Answer Option	Answer
410	Tolerates a wide range of soil conditions (or limestone conditions if not a volcanic island)		
411	Climbing or smothering growth habit	y=1, n=0	n
412	Forms dense thickets	y=1, n=0	n
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	n
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)		
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		
706	Propagules bird dispersed		
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**
	Schmelzer, G.H. & Gurib-Fakim, A. (Eds.). 2008. Plant Resources of Tropical Africa 11(1). Medicinal Plants 1. PROTA Foundation, Wageningen, Netherlands	[No evidence of domestication] "Picralima nitida occurs from Côte d'Ivoire east to Uganda and south to DR Congo and Cabinda (Angola)."

102	**Has the species become naturalized where grown?**	
	Source(s)	**Notes**
	WRA Specialist. 2016. Personal Communication	NA

103	**Does the species have weedy races?**	
	Source(s)	**Notes**
	WRA Specialist. 2016. 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**
	Schmelzer, G.H. & Gurib-Fakim, A. (Eds.). 2008. Plant Resources of Tropical Africa 11(1). Medicinal Plants 1. PROTA Foundation, Wageningen, Netherlands	"Picralima nitida occurs from Côte d'Ivoire east to Uganda and south to DR Congo and Cabinda (Angola)."

202	**Quality of climate match data**	**High**
	Source(s)	**Notes**
	Schmelzer, G.H. & Gurib-Fakim, A. (Eds.). 2008. Plant Resources of Tropical Africa 11(1). Medicinal Plants 1. PROTA Foundation, Wageningen, Netherlands	

203	**Broad climate suitability (environmental versatility)**	**n**
	Source(s)	**Notes**
	Schmelzer, G.H. & Gurib-Fakim, A. (Eds.). 2008. Plant Resources of Tropical Africa 11(1). Medicinal Plants 1. PROTA Foundation, Wageningen, Netherlands	"Picralima nitida is an understorey tree in rainforest, also in mature secondary forest and semi deciduous forest along river banks, up to 900 m altitude."

Qsn #	Question	Answer
204	**Native or naturalized in regions with tropical or subtropical climates**	**y**
	Source(s)	**Notes**
	Schmelzer, G.H. & Gurib-Fakim, A. (Eds.). 2008. Plant Resources of Tropical Africa 11(1). Medicinal Plants 1. PROTA Foundation, Wageningen, Netherlands	"Picralima nitida occurs from Côte d'Ivoire east to Uganda and south to DR Congo and Cabinda (Angola)."

205	**Does the species have a history of repeated introductions outside its natural range?**	**n**
	Source(s)	**Notes**
	WRA Specialist. 2016. Personal Communication	No evidence of widespread cultivation outside native range

301	**Naturalized beyond native range**	**n**
	Source(s)	**Notes**
	Randall, R.P. 2012. A Global Compendium of Weeds. 2nd Edition. Department of Agriculture and Food, Western Australia	No evidence

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

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

Qsn #	Question	Answer
305	**Congeneric weed**	**n**
	Source(s)	**Notes**
	Leistner, O. A. (2005). Seed plants of southern tropical Africa: families and genera. South African National Biodiversity Institute, Report No. 26. SABONET, Pretoria	"Monotypic genus: Picralima nitida (Stapf) T. & H.Durand, trop. Africa; sthn trop. Afr.: Angola (Cabinda)."
	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**
	Schmelzer, G.H. & Gurib-Fakim, A. (Eds.). 2008. Plant Resources of Tropical Africa 11(1). Medicinal Plants 1. PROTA Foundation, Wageningen, Netherlands	[No evidence] "Shrub or tree up to 35 m tall, with white latex in all parts, glabrous; bole up to 60 cm in diameter; bark hard, brittle, pale to dark greyish black or brown, smooth to slightly rough or finely striped. Leaves opposite, simple and entire; stipules absent; petiole 1–2 cm long; blade elliptical to oblong, (5–)10–26 cm × 2–13 cm, base cuneate, apex abruptly acuminate, thickly papery to thinly leathery, pinnately veined with 14–23 pairs of lateral veins."

402	Allelopathic	
	Source(s)	**Notes**
	WRA Specialist. 2016. Personal Communication	Unknown

403	Parasitic	n
	Source(s)	**Notes**
	Schmelzer, G.H. & Gurib-Fakim, A. (Eds.). 2008. Plant Resources of Tropical Africa 11(1). Medicinal Plants 1. PROTA Foundation, Wageningen, Netherlands	"Shrub or tree up to 35 m tall" [Apocynaceae. No evidence]

404	Unpalatable to grazing animals	n
	Source(s)	**Notes**
	Klaus-Hügi, C., Klaus, G., Schmid, B., & König, B. (1999). Feeding ecology of a large social antelope in the rainforest. Oecologia, 119(1), 81-90	"The bongo (Tragelaphus eurycerus) is the largest forest-dwelling antelope of Africa." ... "Table 1 List of plants eaten by bongos, their relative availability, relative use in diet and Ivlev's index of selectivity (for definition see Methods) in the Dzanga National Park, Central African Republic." [Includes Picralima nitida]

405	Toxic to animals	
	Source(s)	**Notes**
	Schmelzer, G.H. & Gurib-Fakim, A. (Eds.). 2008. Plant Resources of Tropical Africa 11(1). Medicinal Plants 1. PROTA Foundation, Wageningen, Netherlands	"Acute toxicity tests in rats showed a dose-dependent acute intraperitoneal toxicity."

Qsn #	Question	Answer
	Hawaiian Tropical Plant Nursery. 2016. Medicinal and Ethobotanical Plants. http://www.hawaiiantropicalplants.com/medicinal.html. [Accessed 22 Apr 2016]	"The seeds have medicinal uses. Should be used only with the direction of an experienced herbalist or physician. Prolonged use may result in liver toxicity."
	Kuete, V. (2014). Toxicological Survey of African Medicinal Plants. Elsevier, London	[Toxic to humans] "Severe toxicity may cause symptoms that could be life-threatening, for example, irregular heartbeat, breathing distress, seizures, shock, or paralysis. Moderate toxicity may cause symptoms such as hallucinations, severe stomach irritation, agitation, or severe dermatitis. In mild toxicity, symptoms are generally not life-threatening in nature, such as nausea, vomiting, diarrhea, or skin rashes [162] . These findings show that the medicinal plants listed below can be classified among the above three categories of toxic agents. Among the plants mentioned in Table 7.1 , those that cause severe toxicity are mainly Dichapetalum baneri, Anacardium occidentale, Jatropha curcas, Picralima nirida,..."

406	Host for recognized pests and pathogens	
	Source(s)	**Notes**
	WRA Specialist. 2016. Personal Communication	Unknown

407	Causes allergies or is otherwise toxic to humans	y
	Source(s)	**Notes**
	Kuete, V. (2014). Toxicological Survey of African Medicinal Plants. Elsevier, London	[Toxic to humans] "Severe toxicity may cause symptoms that could be life-threatening, for example, irregular heartbeat, breathing distress, seizures, shock, or paralysis. Moderate toxicity may cause symptoms such as hallucinations, severe stomach irritation, agitation, or severe dermatitis. In mild toxicity, symptoms are generally not life-threatening in nature, such as nausea, vomiting, diarrhea, or skin rashes [162] . These findings show that the medicinal plants listed below can be classified among the above three categories of toxic agents. Among the plants mentioned in Table 7.1 , those that cause severe toxicity are mainly Dichapetalum baneri, Anacardium occidentale, Jatropha curcas, Picralima nirida,..."

408	Creates a fire hazard in natural ecosystems	n
	Source(s)	**Notes**
	Schmelzer, G.H. & Gurib-Fakim, A. (Eds.). 2008. Plant Resources of Tropical Africa 11(1). Medicinal Plants 1. PROTA Foundation, Wageningen, Netherlands	[No evidence, & unlikely in rainforest habitat] "Picralima nitida is an understorey tree in rainforest, also in mature secondary forest and semi deciduous forest along river banks, up to 900 m altitude."

409	Is a shade tolerant plant at some stage of its life cycle	y
	Source(s)	**Notes**
	Gbadamosi. A. E. (2013). Influence of Shading on the Early Seedling Growth of Picralima nitida (Stapf). Scottish Journal of Arts, Social Sciences and Scientific Studies 8(II): 54-63	"P. nitida seedlings responded well in terms of growth and development to reduced light intensity, thus it is a shade tolerant species which can be used as an agroforestry species."

Qsn #	Question	Answer
	Schmelzer, G.H. & Gurib-Fakim, A. (Eds.). 2008. Plant Resources of Tropical Africa 11(1). Medicinal Plants 1. PROTA Foundation, Wageningen, Netherlands	[Understory tree. Presumably shade-tolerant] "Picralima nitida is an understorey tree in rainforest, also in mature secondary forest and semi deciduous forest along river banks, up to 900 m altitude."

410	Tolerates a wide range of soil conditions (or limestone conditions if not a volcanic island)	
	Source(s)	**Notes**
	Hawaiian Tropical Plant Nursery. 2016. Medicinal and Ethobotanical Plants. http://www.hawaiiantropicalplants.com/medicinal.html. [Accessed 25 Apr 2016]	"Plants grow well in Hawaii. Prefers a slightly acidic soil."

411	Climbing or smothering growth habit	n
	Source(s)	**Notes**
	Schmelzer, G.H. & Gurib-Fakim, A. (Eds.). 2008. Plant Resources of Tropical Africa 11(1). Medicinal Plants 1. PROTA Foundation, Wageningen, Netherlands	"Shrub or tree up to 35 m tall"

412	Forms dense thickets	n
	Source(s)	**Notes**
	Schmelzer, G.H. & Gurib-Fakim, A. (Eds.). 2008. Plant Resources of Tropical Africa 11(1). Medicinal Plants 1. PROTA Foundation, Wageningen, Netherlands	"Picralima nitida is an understorey tree in rainforest, also in mature secondary forest and semi deciduous forest along river banks, up to 900 m altitude." [No evidence]
	Chapman, J. D., & Chapman, H. M. (2001). The Forests of Taraba and Adamawa States, Nigeria. An Ecological Account and Plant Species Checklist. Department of Plant and Microbial Sciences, University of Canterbury, Christchurch, New Zealand	[No evidence] "In Kurmin Nya (Wurkam River) the most common trees were Ricinodendron heudelotii, Picralima nitida and Pterygota macrocarpa." ... "Picralima nitida (Stapf) T. Durand & H. Durand JDC SR, Alt: 229m, site: Gangumi F.R., form: T, Habitat: Forest. Notes: Understory tree. Recorded at Gangumi and also Kurmin Nya, Wurkam"

501	Aquatic	n
	Source(s)	**Notes**
	Schmelzer, G.H. & Gurib-Fakim, A. (Eds.). 2008. Plant Resources of Tropical Africa 11(1). Medicinal Plants 1. PROTA Foundation, Wageningen, Netherlands	[Terrestrial] 'Picralima nitida is an understorey tree in rainforest, also in mature secondary forest and semi deciduous forest along river banks, up to 900 m altitude."

502	Grass	n
	Source(s)	**Notes**
	USDA, ARS, Germplasm Resources Information Network, 2016. National Plant Germplasm System [Online Database]. http://www.ars-grin.gov/npgs/index.html. [Accessed 18 Apr 2016]	Family: Apocynaceae Subfamily: Rauvolfioideae Tribe: Hunterieae

503	Nitrogen fixing woody plant	n

Qsn #	Question	Answer
	Source(s)	**Notes**
	USDA, ARS, Germplasm Resources Information Network, 2016. National Plant Germplasm System [Online Database]. http://www.ars-grin.gov/npgs/index.html. [Accessed 18 Apr 2016]	Apocynaceae

504	**Geophyte (herbaceous with underground storage organs -- bulbs, corms, or tubers)**	**n**
	Source(s)	**Notes**
	Schmelzer, G.H. & Gurib-Fakim, A. (Eds.). 2008. Plant Resources of Tropical Africa 11(1). Medicinal Plants 1. PROTA Foundation, Wageningen, Netherlands	"Shrub or tree up to 35 m tall, with white latex in all parts, glabrous; bole up to 60 cm in diameter; bark hard, brittle, pale to dark greyish black or brown, smooth to slightly rough or finely striped."

601	**Evidence of substantial reproductive failure in native habitat**	**n**
	Source(s)	**Notes**
	Schmelzer, G.H. & Gurib-Fakim, A. (Eds.). 2008. Plant Resources of Tropical Africa 11(1). Medicinal Plants 1. PROTA Foundation, Wageningen, Netherlands	"Picralima nitida is a common species of the African forest zone, and is not threatened by genetic erosion. However, in some areas with a high human population pressure, the species has become scarce because of its use as medicinal plant or timber."

602	**Produces viable seed**	**y**
	Source(s)	**Notes**
	Schmelzer, G.H. & Gurib-Fakim, A. (Eds.). 2008. Plant Resources of Tropical Africa 11(1). Medicinal Plants 1. PROTA Foundation, Wageningen, Netherlands	"Propagation and planting: There are about 300–400 Picralima seeds/kg."

603	**Hybridizes naturally**	**n**
	Source(s)	**Notes**
	Leistner, O. A. (2005). Seed plants of southern tropical Africa: families and genera. South African National Biodiversity Institute, Report No. 26. SABONET, Pretoria	"Monotypic genus: Picralima nitida (Stapf) T. & H.Durand, trop. Africa; sthn trop. Afr.: Angola (Cabinda)." [No evidence of hybridization with other genera]

Qsn #	Question	Answer
604	**Self-compatible or apomictic**	
	Source(s)	**Notes**
	Schmelzer, G.H. & Gurib-Fakim, A. (Eds.). 2008. Plant Resources of Tropical Africa 11(1). Medicinal Plants 1. PROTA Foundation, Wageningen, Netherlands	[Unknown] "Flowers bisexual, regular, 5-merous, fragrant or not, open during the day; pedicel 2–20 mm long; sepals almost free, imbricate, broadly ovate to almost orbicular, 5–7 mm long; corolla with fleshy cylindrical tube 25–45 mm long, hairy inside and narrowed below the insertion of the stamens, often greenish, lobes ovate, 14–30 mm × 6–10 mm, apex obtuse, spreading or erect, white to yellow; stamens inserted above the middle of the corolla tube, included, anthers ovate, 3–4 mm long; ovary superior, consisting of 2 separate carpels, united at the extreme base by a disk-like thickening, style slender, 5–7 mm long, pistil head with an oblong basal part and a filiform stigmoid apex up to 1.5 mm long."

605	**Requires specialist pollinators**	**n**
	Source(s)	**Notes**
	Schmelzer, G.H. & Gurib-Fakim, A. (Eds.). 2008. Plant Resources of Tropical Africa 11(1). Medicinal Plants 1. PROTA Foundation, Wageningen, Netherlands	[No evidence] "Flowers bisexual, regular, 5-merous, fragrant or not, open during the day; pedicel 2–20 mm long; sepals almost free, imbricate, broadly ovate to almost orbicular, 5–7 mm long; corolla with fleshy cylindrical tube 25–45 mm long, hairy inside and narrowed below the insertion of the stamens, often greenish, lobes ovate, 14–30 mm × 6–10 mm, apex obtuse, spreading or erect, white to yellow; stamens inserted above the middle of the corolla tube, included, anthers ovate, 3–4 mm long; ovary superior, consisting of 2 separate carpels, united at the extreme base by a disk-like thickening, style slender, 5–7 mm long, pistil head with an oblong basal part and a filiform stigmoid apex up to 1.5 mm long." ... "The flowers are visited by insects during sunny days."

606	**Reproduction by vegetative fragmentation**	**n**
	Source(s)	**Notes**
	Gbadamosi, A. E. (2014). Vegetative Propagation of the Medicinal Plant Picralima Nitida (Stapf). International Journal of Pure and Applied Sciences and Technology, 23 (1), 13-27	[Can be propagated artificially by vegetative means] "Conclusively, P.nitida stem cutting which had 50cm2 leaf area treated with 0.1g/L IBA and inserted in sand were found to root and callused optimally while vegetative characteristics of rooted cuttings were optimum in mixture of sand and sawdust. The successful rooting of P.nitida is an important step forward in the integration of the species into agro ecosystem; the combination of factors seemed to favour optimum rooting of the species. Also, the rooted cuttings sprouted well within 16 weeks and ready for seedlings establishment. Therefore, it is recommended that for optimum vegetative propagation of P.nitida cuttings with leaf area of 50cm2 treated with 0.1g/L IBA be inserted in mixture of sand/saw dust for a period of 16weeks."
	Schmelzer, G.H. & Gurib-Fakim, A. (Eds.). 2008. Plant Resources of Tropical Africa 11(1). Medicinal Plants 1. PROTA Foundation, Wageningen, Netherlands	[No evidence] "Propagation and planting" There are about 300–400 Picralima seeds/kg."

607	**Minimum generative time (years)**	

Qsn #	Question	Answer
	Source(s)	**Notes**
	WRA Specialist. 2016. Personal Communication	Unknown

701	**Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)**	**n**
	Source(s)	**Notes**
	Schmelzer, G.H. & Gurib-Fakim, A. (Eds.). 2008. Plant Resources of Tropical Africa 11(1). Medicinal Plants 1. PROTA Foundation, Wageningen, Netherlands	[No evidence. Fruits & seeds relatively large & lack means of external attachment] "Fruits consisting of 2 free obovoid to ellipsoid follicles 11–20 cm long, smooth, apex rounded, yellow to orange, 2-valved, several- to many-seeded. Seeds obliquely ovate, obovate to oblong, flattened, 2.5–4.5 cm long, smooth, brown to orange, embedded in soft white to orange pulp." ... "Fruits of Picralima nitida are eaten by elephants, which disperse the seeds."

702	**Propagules dispersed intentionally by people**	**y**
	Source(s)	**Notes**
	Hawaiian Tropical Plant Nursery. 2016. Medicinal and Ethobotanical Plants. http://www.hawaiiantropicalplants.com/medicinal.html. [Accessed 22 Apr 2016]	Sold online

703	**Propagules likely to disperse as a produce contaminant**	**n**
	Source(s)	**Notes**
	Schmelzer, G.H. & Gurib-Fakim, A. (Eds.). 2008. Plant Resources of Tropical Africa 11(1). Medicinal Plants 1. PROTA Foundation, Wageningen, Netherlands	[No evidence. Unlikely, as fruits & seeds are relatively large] "Fruits consisting of 2 free obovoid to ellipsoid follicles 11–20 cm long, smooth, apex rounded, yellow to orange, 2-valved, several- to many-seeded. Seeds obliquely ovate, obovate to oblong, flattened, 2.5–4.5 cm long, smooth, brown to orange, embedded in soft white to orange pulp." ... "Fruits of Picralima nitida are eaten by elephants, which disperse the seeds."

704	**Propagules adapted to wind dispersal**	**n**
	Source(s)	**Notes**
	Schmelzer, G.H. & Gurib-Fakim, A. (Eds.). 2008. Plant Resources of Tropical Africa 11(1). Medicinal Plants 1. PROTA Foundation, Wageningen, Netherlands	"Fruits consisting of 2 free obovoid to ellipsoid follicles 11–20 cm long, smooth, apex rounded, yellow to orange, 2-valved, several- to many-seeded. Seeds obliquely ovate, obovate to oblong, flattened, 2.5–4.5 cm long, smooth, brown to orange, embedded in soft white to orange pulp." ... "Fruits of Picralima nitida are eaten by elephants, which disperse the seeds."

705	**Propagules water dispersed**	
	Source(s)	**Notes**

Qsn #	Question	Answer
	Schmelzer, G.H. & Gurib-Fakim, A. (Eds.). 2008. Plant Resources of Tropical Africa 11(1). Medicinal Plants 1. PROTA Foundation, Wageningen, Netherlands	[Occurs along rivers. Buoyancy of fruit unknown] "Fruits consisting of 2 free obovoid to ellipsoid follicles 11–20 cm long, smooth, apex rounded, yellow to orange, 2-valved, several- to many-seeded. Seeds obliquely ovate, obovate to oblong, flattened, 2.5–4.5 cm long, smooth, brown to orange, embedded in soft white to orange pulp." ... "Picralima nitida is an understorey tree in rainforest, also in mature secondary forest and semi-deciduous forest along river banks, up to 900 m altitude."

706	Propagules bird dispersed	
	Source(s)	**Notes**
	Schmelzer, G.H. & Gurib-Fakim, A. (Eds.). 2008. Plant Resources of Tropical Africa 11(1). Medicinal Plants 1. PROTA Foundation, Wageningen, Netherlands	[Unknown. Fruits & seeds large & unlikely to be dispersed by avifauna in the Hawaiian Islands, with the possible exception of larger game birds] "Fruits consisting of 2 free obovoid to ellipsoid follicles 11–20 cm long, smooth, apex rounded, yellow to orange, 2-valved, several- to many-seeded. Seeds obliquely ovate, obovate to oblong, flattened, 2.5–4.5 cm long, smooth, brown to orange, embedded in soft white to orange pulp." ... "Fruits of Picralima nitida are eaten by elephants, which disperse the seeds."

707	Propagules dispersed by other animals (externally)	n
	Source(s)	**Notes**
	Schmelzer, G.H. & Gurib-Fakim, A. (Eds.). 2008. Plant Resources of Tropical Africa 11(1). Medicinal Plants 1. PROTA Foundation, Wageningen, Netherlands	[Internally dispersed] "Fruits consisting of 2 free obovoid to ellipsoid follicles 11–20 cm long, smooth, apex rounded, yellow to orange, 2-valved, several- to many-seeded. Seeds obliquely ovate, obovate to oblong, flattened, 2.5–4.5 cm long, smooth, brown to orange, embedded in soft white to orange pulp. " ... "Fruits of Picralima nitida are eaten by elephants, which disperse the seeds." [Internally dispersed]

Qsn #	Question	Answer
708	**Propagules survive passage through the gut**	**y**
	Source(s)	**Notes**
	Gautier-Hion, A., Duplantier, J. M., Quris, R., Feer, F., Sourd, C., Decoux, J. P.,Dubost, G., Emmons, L., Erard, C., Hecketsweiler, P., Moungazi, A., Roussilhon, C. & Moungazi, A. (1985). Fruit characters as a basis of fruit choice and seed dispersal in a tropical forest vertebrate community. Oecologia, 65(3), 324-337.	"Elephants are certainly one of the major terrestrial dispersers and some plant species may primarily depend on them for dispersal. Piles of old elephant dung are commonly covered with vigorous seedlings that have sprouted from seeds that have passed through the animal, complete with fertilizer. Some huge fruits for which elephants would seem the only possible dispersers could conceivably also be eaten by the largest primates - apes and mandrills (e.g. Picraliina nitida or Strychnos aculeata)." ... "Appendix 2. List of plant species whose fruit are eaten by the vertebrate community" [Picralima nitida dispersed by small rodents, large rodents, & elephants]
	Schmelzer, G.H. & Gurib-Fakim, A. (Eds.). 2008. Plant Resources of Tropical Africa 11(1). Medicinal Plants 1. PROTA Foundation, Wageningen, Netherlands	"Fruits consisting of 2 free obovoid to ellipsoid follicles 11–20 cm long, smooth, apex rounded, yellow to orange, 2-valved, several- to many-seeded. Seeds obliquely ovate, obovate to oblong, flattened, 2.5–4.5 cm long, smooth, brown to orange, embedded in soft white to orange pulp." ... "Fruits of Picralima nitida are eaten by elephants, which disperse the seeds."

801	**Prolific seed production (>1000/m2)**	
	Source(s)	**Notes**
	Schmelzer, G.H. & Gurib-Fakim, A. (Eds.). 2008. Plant Resources of Tropical Africa 11(1). Medicinal Plants 1. PROTA Foundation, Wageningen, Netherlands	"Seeds obliquely ovate, obovate to oblong, flattened, 2.5–4.5 cm long, smooth, brown to orange, embedded in soft white to orange pulp." [Unlikely. Seeds relatively large]

802	**Evidence that a persistent propagule bank is formed (>1 yr)**	
	Source(s)	**Notes**
	Gbadamosi, A. E. (2013). Germination Biology of Picralima nitida (Stapf) under Pretreatments. Greener Journal of Biological Sciences 3(1): 13-20	[Longevity of seed bank unknown] "Seeds of P. nitida soaked in hot water and allowed to cool down did not germinate as well as those soaked in primarily recycled H_2SO_4 for 10mins in both locations. Although, P. nitida exhibited seed coat dormancy, it was clear that the seed coat could not withstand a long duration of treatment. Treatment with concentrated and primarily recycled acid gave lower percentage germination with increased duration of treatment."

803	**Well controlled by herbicides**	
	Source(s)	**Notes**
	WRA Specialist. 2016. Personal Communication	Unknown. No information on herbicide efficacy or chemical control of this species

804	**Tolerates, or benefits from, mutilation, cultivation, or fire**	
	Source(s)	**Notes**
	WRA Specialist. 2016. Personal Communication	Unknown

Qsn #	Question	Answer
805	**Effective natural enemies present locally (e.g. introduced biocontrol agents)**	
	Source(s)	**Notes**
	WRA Specialist. 2016. Personal Communication	Unknown

Summary of Risk Traits:

High Risk / Undesirable Traits
• Thrives in tropical climates
• Toxic
• Shade-tolerant
• Reproduces by seeds
• Seeds dispersed by large vertebrates & intentionally by people
• Limited ecological information minimizes accuracy of risk prediction

Low Risk Traits
• No reports of invasiveness or naturalization, but no evidence of widespread introduction outside native range
• Unarmed (no spines, thorns or burrs)
• Palatable despite reports of toxicity
• Ornamental
• Not reported to spread vegetatively
• Large fruits & seeds minimize risk of accidental dispersal