

Family: *Cucurbitaceae*

Taxon: *Luffa cylindrica*

Synonym: *Luffa aegyptiaca* Mill.
Luffa pentandra Roxb.
Momordica cylindrica L.
Momordica luffa L.
Cucurbita luffa hort.

Common Name: smooth loofah
vegetable sponge
dishcloth gourd
rag gourd
sponge gourd

Questionnaire :	current 20090513	Assessor:	Assessor	Designation: H(HPWRA)
Status:	Assessor Approved	Data Entry Person:	Assessor	WRA Score 8
101	Is the species highly domesticated?		y=-3, n=0	y
102	Has the species become naturalized where grown?		y=1, n=-1	y
103	Does the species have weedy races?		y=1, n=-1	y
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)	Low
203	Broad climate suitability (environmental versatility)		y=1, n=0	y
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)	
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	n
402	Allelopathic		y=1, n=0	n
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	
406	Host for recognized pests and pathogens		y=1, n=0	y
407	Causes allergies or is otherwise toxic to humans		y=1, n=0	
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

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	y
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	y
604	Self-compatible or apomictic	y=1, n=-1	y
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	1
701	Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)	y=1, n=-1	
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	y
705	Propagules water dispersed	y=1, n=-1	
706	Propagules bird dispersed	y=1, n=-1	n
707	Propagules dispersed by other animals (externally)	y=1, n=-1	n
708	Propagules survive passage through the gut	y=1, n=-1	
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	y
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: H(HPWRA)

WRA Score 8

Supporting Data:

101	2011. Achigan-Dako, E.G./N'danikou, S./Vodouhê, R.S.. <i>Luffa cylindrica</i> (L.) M.Roem. [Internet] Record from PROTA4U. Brink, M. & Achigan-Dako, E.G. (Editors). PROTA (Plant Resources of Tropical Africa, Wageningen, Netherlands http://www.prota4u.org/search .	[Is the species highly domesticated? Yes] <i>Luffa cylindrica</i> is widely distributed in the tropics and subtropics, as a cultivated and naturalized plant. Its cultivation is of ancient origin and it is hard to determine whether the native home is Africa or Asia. The plant occurs wild in West Africa, but this is often believed to be a result of escape from cultivation, as the plant is known as 'white people's sponge' in several communities in the region." ... "In Guinea and Côte d'Ivoire edible cultivars are grown. Edible forms have also been developed in India and the Philippines where the plant is commonly cultivated. In India and China a type of curry is prepared with the fruit which is peeled, sliced and fried. In Japan the fruits are eaten fresh or sliced and dried to be eaten later. The leaves are also eaten as a vegetable." ... "Within <i>Luffa cylindrica</i> cultivated and wild forms are distinguished: – Smooth Loofah Group (synonym: var. <i>aegyptiaca</i>): the large-fruited, less bitter, cultivated forms, with different cultivars for the production of the best sponge or the best vegetable. – var. <i>leiocarpa</i> (Naudin) Heiser & Schilling: the wild forms occurring in Asia."
102	2011. Achigan-Dako, E.G./N'danikou, S./Vodouhê, R.S.. <i>Luffa cylindrica</i> (L.) M.Roem. [Internet] Record from PROTA4U. Brink, M. & Achigan-Dako, E.G. (Editors). PROTA (Plant Resources of Tropical Africa, Wageningen, Netherlands http://www.prota4u.org/search .	[Has the species become naturalized where grown? Yes] " <i>Luffa cylindrica</i> is widely distributed in the tropics and subtropics, as a cultivated and naturalized plant."
103	2011. BioNET-EAFRINE. Keys and Fact Sheets - <i>Luffa cylindrica</i> (Vegetable Sponge Gourd). http://keys.lucidcentral.org/keys/v3/eafrinet/weeds/key/weeds/Media/Html/Luffa_cylindrica_%28Vegetable_Sponge_Gourd%29.htm [Accessed 17 May 2013]	[Does the species have weedy races? Yes] " <i>Luffa cylindrica</i> is naturalised in parts of Kenya and Tanzania and invasive in parts of Uganda (A.B.R. Witt pers. obs.)." ... "This species is capable of invading disturbed areas."
201	2011. Achigan-Dako, E.G./N'danikou, S./Vodouhê, R.S.. <i>Luffa cylindrica</i> (L.) M.Roem. [Internet] Record from PROTA4U. Brink, M. & Achigan-Dako, E.G. (Editors). PROTA (Plant Resources of Tropical Africa, Wageningen, Netherlands http://www.prota4u.org/search .	[Species suited to tropical or subtropical climate(s) 2-High] " <i>Luffa cylindrica</i> is widely distributed in the tropics and subtropics, as a cultivated and naturalized plant."
202	2011. Achigan-Dako, E.G./N'danikou, S./Vodouhê, R.S.. <i>Luffa cylindrica</i> (L.) M.Roem. [Internet] Record from PROTA4U. Brink, M. & Achigan-Dako, E.G. (Editors). PROTA (Plant Resources of Tropical Africa, Wageningen, Netherlands http://www.prota4u.org/search .	[Quality of climate match data 0-Low] "Its cultivation is of ancient origin and it is hard to determine whether the native home is Africa or Asia."
203	2011. Achigan-Dako, E.G./N'danikou, S./Vodouhê, R.S.. <i>Luffa cylindrica</i> (L.) M.Roem. [Internet] Record from PROTA4U. Brink, M. & Achigan-Dako, E.G. (Editors). PROTA (Plant Resources of Tropical Africa, Wageningen, Netherlands http://www.prota4u.org/search .	[Broad climate suitability (environmental versatility)? Yes] " <i>Luffa cylindrica</i> persists in old cultivations and near dwellings, frequently becoming naturalized in forest, woodland, bushland, thicket and grassland, from sea-level up to 1500(–1800) m altitude." [Elevation range in tropical latitudes exceeds 1000 m, demonstrating environmental versatility] ... "In cultivation the crop grows well in tropical regions. In temperate regions it is suitable for summer growing conditions."
203	2012. Silva, M.W.K.P./Ranil, R.H.G./Fonseka, R.M.. <i>Luffa cylindrica</i> (L.) M. Roemer (Sponge Gourd-Niyam wetakolu): An Emerging High Potential Underutilized Cucurbit. <i>Tropical Agricultural Research</i> . 23(2): 186-191.	[Broad climate suitability (environmental versatility)? Yes] "It tolerates a wide range of climatic and soil conditions, although excessive rainfall during flowering and fruiting period can cause damage to the yield (Bal et al., 2004)."
204	2011. Achigan-Dako, E.G./N'danikou, S./Vodouhê, R.S.. <i>Luffa cylindrica</i> (L.) M.Roem. [Internet] Record from PROTA4U. Brink, M. & Achigan-Dako, E.G. (Editors). PROTA (Plant Resources of Tropical Africa, Wageningen, Netherlands http://www.prota4u.org/search .	[Native or naturalized in regions with tropical or subtropical climates? Yes] " <i>Luffa cylindrica</i> is widely distributed in the tropics and subtropics, as a cultivated and naturalized plant."
205	2011. Achigan-Dako, E.G./N'danikou, S./Vodouhê, R.S.. <i>Luffa cylindrica</i> (L.) M.Roem. [Internet] Record from PROTA4U. Brink, M. & Achigan-Dako, E.G. (Editors). PROTA (Plant Resources of Tropical Africa, Wageningen, Netherlands http://www.prota4u.org/search .	[Does the species have a history of repeated introductions outside its natural range? Yes] "...widely distributed in the tropics and subtropics, as a cultivated and naturalized plant."

301	2011. Achigan-Dako, E.G./N'danikou, S./Vodouhè, R.S.. <i>Luffa cylindrica</i> (L.) M.Roem. [Internet] Record from PROTA4U. Brink, M. & Achigan-Dako, E.G. (Editors). PROTA (Plant Resources of Tropical Africa, Wageningen, Netherlands http://www.prota4u.org/search .	[Naturalized beyond native range? Yes] " <i>Luffa cylindrica</i> is widely distributed in the tropics and subtropics, as a cultivated and naturalized plant."
302	1978. Woodson, Jr., R.E./Schery, R.W./Wunderlin, R.P.. Flora of Panama. Part IX. Family 182. Cucurbitaceae. <i>Annals of the Missouri Botanical Garden</i> . 65(1): 285-366.	[Garden/amenity/disturbance weed?] "...spontaneous after cultivation and naturalized in Panama as well as other parts of the New World tropics. It usually is found along roadsides, in thickets, and near habitations at low elevations." [Listed as <i>L. aegyptiaca</i> , a synonym for <i>L. cylindrica</i>]
302	2011. BioNET-EAFRINE. Keys and Fact Sheets - <i>Luffa cylindrica</i> (Vegetable Sponge Gourd). http://keys.lucidcentral.org/keys/v3/eafrinet/weeds/key/weeds/Media/Html/Luffa_cylindrica_%28Vegetable_Sponge_Gourd%29.htm [Accessed 17 May 2013]	[Garden/amenity/disturbance weed? Yes] " <i>Luffa cylindrica</i> is naturalised in parts of Kenya and Tanzania and invasive in parts of Uganda (A.B.R. Witt pers. obs.)." ... "This species is capable of invading disturbed areas."
303	1996. Neuwinder, H.D.. African ethnobotany: poisons and drugs : chemistry, pharmacology, toxicology. CRC Press, Boca Raton, FL	[Agricultural/forestry/horticultural weed? Possibly] "A weed of cultivated crops and wasteland near the homestead."
303	2013. Sanney, J.A./Mather, J.. Protecting Kosrae's Upland Forest. Biodiversity Conservation Lessons Learned Technical Series 26. CEPF/CI-Pacific, Apia, Samoa	[Agricultural/forestry/horticultural weed? No] "Occasionally established, especially in secondary forest, roadside locations in forested areas. Does not seem to be an aggressive invader." ... "Most publications record this plant as introduced to Kosrae; another suggests that it may be native. Uncertain effects on long-term native regeneration." ... "Unlikely to require management, except where it is not wanted in garden or agroforestry areas."
304	2013. WRA Specialist. Personal Communication.	[Environmental weed? No] A disturbance weed or cultivation escape
305	2012. Randall, R.P.. A Global Compendium of Weeds. 2nd Edition. Department of Agriculture and Food, Western Australia	[Congeneric weed? Insufficient evidence to answer Yes or No for these taxa] " <i>Luffa acutangula</i> = U - Casual Alien; W - Weed" [Reference cited only lists this species as naturalized. Insufficient evidence to classify as a weed]. " <i>Luffa operculata</i> = W - Weed" [Impacts unspecified] " <i>Luffa sepium</i> = N - Naturalised"
401	2011. Achigan-Dako, E.G./N'danikou, S./Vodouhè, R.S.. <i>Luffa cylindrica</i> (L.) M.Roem. [Internet] Record from PROTA4U. Brink, M. & Achigan-Dako, E.G. (Editors). PROTA (Plant Resources of Tropical Africa, Wageningen, Netherlands http://www.prota4u.org/search .	[Produces spines, thorns or burrs? No] "Monoecious, annual, climbing or trailing herb up to 15 m long, stem 5-angled, finely hairy; tendrils 2–6-fid. Leaves alternate, simple; stipules absent; petiole up to 15 cm long; blade ovate in outline, 6–25 cm × 6–27 cm, palmately 3–7-lobed with triangular or ovate lobes, cordate at the base, lobes acute or subacute and apiculate at the apex, margin sinuate-dentate, scabrous, dark green, palmately veined."
402	2000. Yu, J.Q./Shou, S.Y./Qian, Y.R./Zhu, Z.J./Hu, W.H.. Autotoxic potential of cucurbit crops. <i>Plant and Soil</i> . 223: 147-151.	[Allelopathic? No] "Soil sickness is often observed in cucurbit crops such as <i>Citrullus lanatus</i> , <i>Cucumis melo</i> and <i>Cucumis sativus</i> , but not in cucurbit crops such as <i>Cucurbita moschata</i> , <i>Lagenaria leucantha</i> and <i>Luffa cylindrica</i> . Results showed that root aqueous extracts of <i>Citrullus lanatus</i> , <i>Cucumis melo</i> and <i>Cucumis sativus</i> were autotoxic, but those of <i>Cucurbita moschata</i> , <i>Momordica charantia</i> and <i>Luffa cylindrica</i> were less autotoxic to the radicle elongation of respective species."
403	2011. Achigan-Dako, E.G./N'danikou, S./Vodouhè, R.S.. <i>Luffa cylindrica</i> (L.) M.Roem. [Internet] Record from PROTA4U. Brink, M. & Achigan-Dako, E.G. (Editors). PROTA (Plant Resources of Tropical Africa, Wageningen, Netherlands http://www.prota4u.org/search .	[Parasitic? No] "Monoecious, annual, climbing or trailing herb up to 15 m long..." [Cucurbitaceae]
404	2009. Konwar, P./Saikia, M.K./Saikia, P.K.. Abundance of food plant species and food habits of <i>Rhinoceros unicornis</i> Linn. Pobitora Wildlife Sanctuary, Assam, India. <i>Journal of Threatened Taxa</i> , 1(9), 457-460.. 1(9): 457-460.	[Unpalatable to grazing animals? No] "The rhino consumes 11 cultivated crops and vegetables, viz., <i>Ricinus communis</i> , <i>Oryza sativa</i> , <i>Solanum melongena</i> , <i>Lycopersicon esculentum</i> , <i>Solanum tuberosum</i> , <i>Brassica nigra</i> , <i>Luffa cylindrica</i> , <i>Luffa acutangula</i> , <i>Cucurbita moschata</i> , <i>Cucumis sativus</i> and <i>Ipomoea batatas</i> etc." [Unspecified part consumed by rhinos]
404	2010. Feedipedia. <i>Luffa</i> (<i>Luffa aegyptiaca</i>). http://www.feedipedia.org/node/626 [Accessed 23 May 2013]	[Unpalatable to grazing animals? No] "Oilseed and forage from leaves. The latter are apparently quite palatable."
405	2011. Achigan-Dako, E.G./N'danikou, S./Vodouhè, R.S.. <i>Luffa cylindrica</i> (L.) M.Roem. [Internet] Record from PROTA4U. Brink, M. & Achigan-Dako, E.G. (Editors). PROTA (Plant Resources of Tropical Africa, Wageningen, Netherlands http://www.prota4u.org/search .	[Toxic to animals?] "The bitter and toxic seedcake is unsuitable as feed for cattle, but can be used as fertilizer given that it is rich in N and P." ... "The seed contains various triterpene saponins, some of them highly toxic." {Possibly, if seeds were consumed in sufficient quantities]

406	2011. Achigan-Dako, E.G./N'danikou, S./Vodouhê, R.S.. <i>Luffa cylindrica</i> (L.) M.Roem. [Internet] Record from PROTA4U. Brink, M. & Achigan-Dako, E.G. (Editors). PROTA (Plant Resources of Tropical Africa, Wageningen, Netherlands http://www.prota4u.org/search .	[Host for recognized pests and pathogens? Yes] "A number of common cucurbit diseases and pests are also found in <i>Luffa cylindrica</i> cultivation. These include powdery mildew, downy mildew, pumpkin flies and red spider mite. For instance several species of pumpkin flies (including <i>Bactrocera depressa</i> and <i>Bactrocera scutellata</i>) attack the immature fruit. These dark brown insects penetrate the fruit skin and the tissue around the puncture mark dries and becomes darker and slightly sunken."
407	2011. Achigan-Dako, E.G./N'danikou, S./Vodouhê, R.S.. <i>Luffa cylindrica</i> (L.) M.Roem. [Internet] Record from PROTA4U. Brink, M. & Achigan-Dako, E.G. (Editors). PROTA (Plant Resources of Tropical Africa, Wageningen, Netherlands http://www.prota4u.org/search .	[Causes allergies or is otherwise toxic to humans? Potentially] "The seed contains various triterpene saponins, some of them highly toxic." [Could cause poisoning if seeds are ingested]
408	2011. Achigan-Dako, E.G./N'danikou, S./Vodouhê, R.S.. <i>Luffa cylindrica</i> (L.) M.Roem. [Internet] Record from PROTA4U. Brink, M. & Achigan-Dako, E.G. (Editors). PROTA (Plant Resources of Tropical Africa, Wageningen, Netherlands http://www.prota4u.org/search .	[Creates a fire hazard in natural ecosystems? No] " <i>Luffa cylindrica</i> persists in old cultivations and near dwellings, frequently becoming naturalized in forest, woodland, bushland, thicket and grassland, from sea level up to 1500(–1800) m altitude." [No evidence. Climbing vines could presumably act as fuel ladders in natural ecosystems, but no evidence of increased fire hazards or flammability was found in the existing literature]
409	2013. Sanney, J.A./Mather, J.. Protecting Kosrae's Upland Forest. Biodiversity Conservation Lessons Learned Technical Series 26. CEPF/CI-Pacific, Apia, Samoa	[Is a shade tolerant plant at some stage of its life cycle? Yes] "Bottle gourd (<i>Luffa cylindrica</i>): Currently bottle gourd does not infest the proposed protection area, but is found in the agro-forestry area adjacent to the landowner's house. It is a shade tolerant plant."
410	2004. Joshi, B.K./Hari, B.K.C./Tiwari, R.K./Ghale, M./Sthapit, B.R./Upadhyay, M.P.. Descriptors for sponge gourd (<i>Luffa cylindrica</i>). NARC, LIBIRD and IPGRI, Kathmandu, Nepal/Rome, Italy	[Tolerates a wide range of soil conditions? Yes] "It also grows well in green house and will grow on many soil types hut well drained sandy barns are preferred."
410	2012. Silva, M.W.K.P./Ranil, R.H.G./Fonseka, R.M.. <i>Luffa cylindrica</i> (L.) M. Roemer (Sponge Gourd-Niyam wetakolu): An Emerging High Potential Underutilized Cucurbit. Tropical Agricultural Research. 23(2): 186-191.	[Tolerates a wide range of soil conditions? Yes] "It tolerates a wide range of climatic and soil conditions, although excessive rainfall during flowering and fruiting period can cause damage to the yield (Bal et al., 2004)."
411	2011. Achigan-Dako, E.G./N'danikou, S./Vodouhê, R.S.. <i>Luffa cylindrica</i> (L.) M.Roem. [Internet] Record from PROTA4U. Brink, M. & Achigan-Dako, E.G. (Editors). PROTA (Plant Resources of Tropical Africa, Wageningen, Netherlands http://www.prota4u.org/search .	[Climbing or smothering growth habit? Yes] "Monoecious, annual, climbing or trailing herb up to 15 m long, stem 5-angled, finely hairy; tendrils 2–6-fid."
412	2011. Achigan-Dako, E.G./N'danikou, S./Vodouhê, R.S.. <i>Luffa cylindrica</i> (L.) M.Roem. [Internet] Record from PROTA4U. Brink, M. & Achigan-Dako, E.G. (Editors). PROTA (Plant Resources of Tropical Africa, Wageningen, Netherlands http://www.prota4u.org/search .	[Forms dense thickets? No] "Monoecious, annual, climbing or trailing herb up to 15 m long, stem 5-angled, finely hairy; tendrils 2–6 fid."
501	2011. Achigan-Dako, E.G./N'danikou, S./Vodouhê, R.S.. <i>Luffa cylindrica</i> (L.) M.Roem. [Internet] Record from PROTA4U. Brink, M. & Achigan-Dako, E.G. (Editors). PROTA (Plant Resources of Tropical Africa, Wageningen, Netherlands http://www.prota4u.org/search .	[Aquatic? No] Terrestrial
502	2011. Achigan-Dako, E.G./N'danikou, S./Vodouhê, R.S.. <i>Luffa cylindrica</i> (L.) M.Roem. [Internet] Record from PROTA4U. Brink, M. & Achigan-Dako, E.G. (Editors). PROTA (Plant Resources of Tropical Africa, Wageningen, Netherlands http://www.prota4u.org/search .	Grass? No] Cucurbitaceae
503	2011. Achigan-Dako, E.G./N'danikou, S./Vodouhê, R.S.. <i>Luffa cylindrica</i> (L.) M.Roem. [Internet] Record from PROTA4U. Brink, M. & Achigan-Dako, E.G. (Editors). PROTA (Plant Resources of Tropical Africa, Wageningen, Netherlands http://www.prota4u.org/search .	[Nitrogen fixing woody plant? No] Cucurbitaceae

504	2011. Achigan-Dako, E.G./N'danikou, S./Vodouhê, R.S.. <i>Luffa cylindrica</i> (L.) M.Roem. [Internet] Record from PROTA4U. Brink, M. & Achigan-Dako, E.G. (Editors). PROTA (Plant Resources of Tropical Africa, Wageningen, Netherlands http://www.prota4u.org/search .	[Geophyte (herbaceous with underground storage organs -- bulbs, corms, or tubers)? No] "Monoecious, annual, climbing or trailing herb up to 15 m long, stem 5-angled, finely hairy; tendrils 2–6-fid. Leaves alternate, simple; stipules absent; petiole up to 15 cm long; blade ovate in outline, 6–25 cm × 6–27 cm, palmately 3–7-lobed with triangular or ovate lobes, cordate at the base, lobes acute or subacute and apiculate at the apex, margin sinuate-dentate, scabrous, dark green, palmately veined."
601	2011. Achigan-Dako, E.G./N'danikou, S./Vodouhê, R.S.. <i>Luffa cylindrica</i> (L.) M.Roem. [Internet] Record from PROTA4U. Brink, M. & Achigan-Dako, E.G. (Editors). PROTA (Plant Resources of Tropical Africa, Wageningen, Netherlands http://www.prota4u.org/search .	[Evidence of substantial reproductive failure in native habitat? No] No evidence
602	2011. Achigan-Dako, E.G./N'danikou, S./Vodouhê, R.S.. <i>Luffa cylindrica</i> (L.) M.Roem. [Internet] Record from PROTA4U. Brink, M. & Achigan-Dako, E.G. (Editors). PROTA (Plant Resources of Tropical Africa, Wageningen, Netherlands http://www.prota4u.org/search .	[Produces viable seed? Yes] " <i>Luffa cylindrica</i> is self-compatible and natural propagation is by seed."
603	2011. Achigan-Dako, E.G./N'danikou, S./Vodouhê, R.S.. <i>Luffa cylindrica</i> (L.) M.Roem. [Internet] Record from PROTA4U. Brink, M. & Achigan-Dako, E.G. (Editors). PROTA (Plant Resources of Tropical Africa, Wageningen, Netherlands http://www.prota4u.org/search .	[Hybridizes naturally? Yes] " <i>Luffa cylindrica</i> hybridises with other species of the genus, but in most cases hybrids show a great reduction in fertility or even sterility. Hybrids of <i>Luffa cylindrica</i> and <i>Luffa acutangula</i> are found in cultivation. These are bitter and inedible, but suitable for the production of sponges."
604	2011. Achigan-Dako, E.G./N'danikou, S./Vodouhê, R.S.. <i>Luffa cylindrica</i> (L.) M.Roem. [Internet] Record from PROTA4U. Brink, M. & Achigan-Dako, E.G. (Editors). PROTA (Plant Resources of Tropical Africa, Wageningen, Netherlands http://www.prota4u.org/search .	[Self-compatible or apomictic? Yes] " <i>Luffa cylindrica</i> is self-compatible and natural propagation is by seed."
605	2011. Achigan-Dako, E.G./N'danikou, S./Vodouhê, R.S.. <i>Luffa cylindrica</i> (L.) M.Roem. [Internet] Record from PROTA4U. Brink, M. & Achigan-Dako, E.G. (Editors). PROTA (Plant Resources of Tropical Africa, Wageningen, Netherlands http://www.prota4u.org/search .	[Requires specialist pollinators? No] "Flowers open in the early morning. Pollination is by insects."
606	2011. Achigan-Dako, E.G./N'danikou, S./Vodouhê, R.S.. <i>Luffa cylindrica</i> (L.) M.Roem. [Internet] Record from PROTA4U. Brink, M. & Achigan-Dako, E.G. (Editors). PROTA (Plant Resources of Tropical Africa, Wageningen, Netherlands http://www.prota4u.org/search .	[Reproduction by vegetative fragmentation? No] "Propagation is by seed."
607	2011. Achigan-Dako, E.G./N'danikou, S./Vodouhê, R.S.. <i>Luffa cylindrica</i> (L.) M.Roem. [Internet] Record from PROTA4U. Brink, M. & Achigan-Dako, E.G. (Editors). PROTA (Plant Resources of Tropical Africa, Wageningen, Netherlands http://www.prota4u.org/search .	[Minimum generative time (years)? 1] "Monoecious, annual, climbing or trailing herb up to 15 m long" [Annual]
701	1978. Woodson, Jr., R.E./Schery, R.W./Wunderlin, R.P.. Flora of Panama. Part IX. Family 182. Cucurbitaceae. Annals of the Missouri Botanical Garden. 65(1): 285-366.	[Propagules likely to be dispersed unintentionally? Probably Yes] "It usually is found along roadsides, in thickets, and near habitations at low elevations." [Seeds may be moved in soil along roads, or may merely be colonizing disturbed roadside areas. However, fruit & seeds are relatively large and lack means of external attachment]
702	2011. Achigan-Dako, E.G./N'danikou, S./Vodouhê, R.S.. <i>Luffa cylindrica</i> (L.) M.Roem. [Internet] Record from PROTA4U. Brink, M. & Achigan-Dako, E.G. (Editors). PROTA (Plant Resources of Tropical Africa, Wageningen, Netherlands http://www.prota4u.org/search .	[Propagules dispersed intentionally by people? Yes] "...widely distributed in the tropics and subtropics, as a cultivated and naturalized plant."
703	2011. Achigan-Dako, E.G./N'danikou, S./Vodouhê, R.S.. <i>Luffa cylindrica</i> (L.) M.Roem. [Internet] Record from PROTA4U. Brink, M. & Achigan-Dako, E.G. (Editors). PROTA (Plant Resources of Tropical Africa, Wageningen, Netherlands http://www.prota4u.org/search .	[Propagules likely to disperse as a produce contaminant? No] "Seeds lenticular, broadly elliptical in outline, compressed, 10–15 mm × 6–11 mm × 2–3 mm, smooth, dull black, with a narrow, membranous wing-like border."

704	2011. Achigan-Dako, E.G./N'danikou, S./Vodouhê, R.S.. <i>Luffa cylindrica</i> (L.) M.Roem. [Internet] Record from PROTA4U. Brink, M. & Achigan-Dako, E.G. (Editors). PROTA (Plant Resources of Tropical Africa, Wageningen, Netherlands http://www.prota4u.org/search .	[Propagules adapted to wind dispersal? Yes] "Seeds lenticular, broadly elliptical in outline, compressed, 10–15 mm x 6–11 mm x 2–3 mm, smooth, dull black, with a narrow, membranous wing-like border." ... "At maturity, the operculum of the fruit opens and frees the seeds which are carried by wind, though not over long distances."
705	2009. Schaefer, H./Heibl, C./Renner, S.S.. Gourds Afloat: A Dated Phylogeny Reveals an Asian Origin of the Gourd Family (Cucurbitaceae) and Numerous Oversea Dispersal Events. <i>Proceedings of the Royal Society: Biological Sciences</i> . 276(1658): 843-851.	[Propagules water dispersed? Possibly Yes] "The fruit is dry with fibrous tissue and probably well adapted to floating (Ridley 1930)." [Fruit may float, but current literature states seeds are gravity and wind-dispersed for short distances]
706	2011. Moura, F.D.B.P./Duarte, J.M.M./Lemos, R.P.D.L.. Floristic composition and dispersal syndromes at an urban remnant from the Atlantic forest in Brazilian Northeast. <i>Acta Scientiarum. Biological Sciences</i> . 33(4): 471-478.	[Propagules bird dispersed? No] "Table 1. Floristic list, reproductive phenology and dispersal syndromes of species from the Municipal Park of Maceió, Alagoas State." [<i>Luffa cylindrica</i> = autochoric. autochoric - autodispersal by explosion or gravity]
707	2011. Achigan-Dako, E.G./N'danikou, S./Vodouhê, R.S.. <i>Luffa cylindrica</i> (L.) M.Roem. [Internet] Record from PROTA4U. Brink, M. & Achigan-Dako, E.G. (Editors). PROTA (Plant Resources of Tropical Africa, Wageningen, Netherlands http://www.prota4u.org/search .	[Propagules dispersed by other animals (externally)? No] "Seeds lenticular, broadly elliptical in outline, compressed, 10–15 mm x 6–11 mm x 2–3 mm, smooth, dull black, with a narrow, membranous wing-like border." ... "At maturity, the operculum of the fruit opens and frees the seeds which are carried by wind, though not over long distances."
708	2011. Achigan-Dako, E.G./N'danikou, S./Vodouhê, R.S.. <i>Luffa cylindrica</i> (L.) M.Roem. [Internet] Record from PROTA4U. Brink, M. & Achigan-Dako, E.G. (Editors). PROTA (Plant Resources of Tropical Africa, Wageningen, Netherlands http://www.prota4u.org/search .	[Propagules survive passage through the gut? Unknown] "The young fruit is eaten fresh or cooked as a vegetable, but it has to be picked before the fibrous vascular bundles harden and before the purging compounds develop." [Young fruit are consumed by people, and possibly animals, but unknown whether seeds would survive intact]
801	2011. Achigan-Dako, E.G./N'danikou, S./Vodouhê, R.S.. <i>Luffa cylindrica</i> (L.) M.Roem. [Internet] Record from PROTA4U. Brink, M. & Achigan-Dako, E.G. (Editors). PROTA (Plant Resources of Tropical Africa, Wageningen, Netherlands http://www.prota4u.org/search .	[Prolific seed production (>1000/m ²)? No] "Seeds lenticular, broadly elliptical in outline, compressed, 10–15 mm x 6–11 mm x 2–3 mm, smooth, dull black, with a narrow, membranous wing-like border."
802	1985. Ellis, R.H./Hong, T.D./Roberts, E.H.. Handbook of Seed Technology for Genebanks - Volume II. Compendium of Specific Germination Information and Test Recommendations. International Board for Plant Genetic Resources, Rome	[Evidence that a persistent propagule bank is formed (>1 yr)? Possibly] "Alternating temperatures and light can promote seed germination in <i>L. cylindrica</i> (2). Consequently it is assumed that seed dormancy can prevent germination."
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)? Possibly] "Storage Behaviour: Orthodox"
803	2009. Englberger, K.. Invasive weeds of Pohnpei: A guide for identification and public awareness. Conservation Society of Pohnpei, Kolonia, FM	[Well controlled by herbicides? Yes] "Triclopyr (Garlon 4) and glyphosate (Roundup) can be used"
804	2011. Achigan-Dako, E.G./N'danikou, S./Vodouhê, R.S.. <i>Luffa cylindrica</i> (L.) M.Roem. [Internet] Record from PROTA4U. Brink, M. & Achigan-Dako, E.G. (Editors). PROTA (Plant Resources of Tropical Africa, Wageningen, Netherlands http://www.prota4u.org/search .	[Tolerates, or benefits from, mutilation, cultivation, or fire? Possibly] "Side branches are best pruned to promote growth of the main stem, and not more than 20–25 fruits per stem should be allowed to grow." [Unknown if plants would tolerate heavy pruning]
805	2013. WRA Specialist. Personal Communication.	[Effective natural enemies present locally (e.g. introduced biocontrol agents)? Unknown]

Summary of Risk Traits

High Risk / Undesirable Traits

- Widely distributed in the tropics and subtropics, as a cultivated and naturalized plant.
- Thrives in tropical climates
- Broad climate suitability and elevation range (>1000 m)
- Weed of disturbed and abandoned sites
- Seeds may be toxic to animals and people
- Host of pests and pathogens
- Climbing and possibly smothering habit
- Shade tolerant & grows on many soil types
- Self-compatible
- Reaches maturity quickly (<1 year)
- Seeds dispersed intentionally by people as well as by gravity and wind (short distances)

Low Risk / Desirable Traits

- Long history of cultivation. Certain cultivars may be less weedy
- Young fruit and leaves are edible
- Fibrous interior used as a rough cloth or sponge
- Relatively large fruits and seeds may limit dispersal potential
- Herbicides may provide effective control