TAXON: Adenia digitata (Harv.) Engl.

SCORE: *2.0*

RATING: Evaluate

Taxon: Adenia digitata (Harv.) Engl.

Family: Passifloraceae

Synonym(s):

Common Name(s): wild granadilla

Modecca digitata Harv.

Assessor: Chuck Chimera Status: Assessor Approved End Date: 7 Mar 2017

WRA Score: 2.0 Designation: EVALUATE Rating: Evaluate

Keywords: Tropical Herb, Poisonous, Tuberous, Climbing, Animal-Dispersed

Qsn #	Question	Answer Option	Answer
101	Is the species highly domesticated?	y=-3, n=0	n
102	Has the species become naturalized where grown?		
103	Does the species have weedy races?		
201	Species suited to tropical or subtropical climate(s) - If island is primarily wet habitat, then substitute "wet tropical" for "tropical or subtropical"	(0-low; 1-intermediate; 2-high) (See Appendix 2)	High
202	Quality of climate match data	(0-low; 1-intermediate; 2-high) (See Appendix 2)	High
203	Broad climate suitability (environmental versatility)	y=1, n=0	у
204	Native or naturalized in regions with tropical or subtropical climates	y=1, n=0	У
205	Does the species have a history of repeated introductions outside its natural range?	y=-2, ?=-1, n=0	У
301	Naturalized beyond native range	y = 1*multiplier (see Appendix 2), n= question 205	n
302	Garden/amenity/disturbance weed		
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		
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		
405	Toxic to animals	y=1, n=0	у
406	Host for recognized pests and pathogens		
407	Causes allergies or is otherwise toxic to humans	y=1, n=0	У
408	Creates a fire hazard in natural ecosystems		
409	Is a shade tolerant plant at some stage of its life cycle		
410	Tolerates a wide range of soil conditions (or limestone conditions if not a volcanic island)		

Qsn #	Question	Answer Option	Answer
411	Climbing or smothering growth habit	y=1, n=0	У
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	у
601	Evidence of substantial reproductive failure in native habitat	y=1, n=0	n
602	Produces viable seed	y=1, n=-1	У
603	Hybridizes naturally		
604	Self-compatible or apomictic	y=1, n=-1	n
605	Requires specialist pollinators		
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	У
703	Propagules likely to disperse as a produce contaminant		
704	Propagules adapted to wind dispersal	y=1, n=-1	n
705	Propagules water dispersed	y=1, n=-1	n
706	Propagules bird dispersed	y=1, n=-1	У
707	Propagules dispersed by other animals (externally)	y=1, n=-1	n
708	Propagules survive passage through the gut	y=1, n=-1	У
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)		

SCORE: *2.0*

Supporting Data:

Qsn #	Question	Answer
101	Is the species highly domesticated?	n
	Source(s)	Notes
	de Ruijter, A., 2007. Adenia digitata (Harv.) Engl. In: Schmelzer, G.H. & Gurib-Fakim, A. (Editors). PROTA (Plant Resources of Tropical Africa / Ressources végétales de l'Afrique tropicale), Wageningen, Netherlands	[No evidence of domestication] "Adenia digitata is collected, traded and grown as an ornamental by plant amateurs."
102	Has the species become naturalized where grown?	
	Source(s)	Notes
	WRA Specialist. 2017. Personal Communication	NA
103	Does the species have weedy races?	
	Source(s)	Notes
	WRA Specialist. 2017. Personal Communication	NA
201	Species suited to tropical or subtropical climate(s) - If island is primarily wet habitat, then substitute "wet tropical" for "tropical or subtropical"	High
	Source(s)	Notes
	USDA, ARS, Germplasm Resources Information Network. 2017. National Plant Germplasm System [Online Database]. http://www.ars-grin.gov/npgs/index.html. [Accessed 2 Mar 2017]	"Native: Africa East Tropical Africa: Tanzania South Tropical Africa: Angola; Malawi; Mozambique; Zambia; Zimbabwe Southern Africa: Botswana; South Africa - Gauteng, - KwaZulu-Natal, - Limpopo, - Mpumalanga, - North West; Swaziland"
202	Quality of climate match data	High
	Source(s)	Notes
	USDA, ARS, Germplasm Resources Information Network. 2017. National Plant Germplasm System [Online	

[Accessed 2 Mar 2017]

Database]. http://www.ars-grin.gov/npgs/index.html.

Qsn #	Question	Answer
203	Broad climate suitability (environmental versatility)	у
	Source(s)	Notes
	Hyde, M.A., Wursten, B.T., Ballings, P. & Coates Palgrave, M. (2017). Flora of Zimbabwe: Species information: Adenia digitata. http://www.zimbabweflora.co.zw/speciesdata/species.php?species_id=141040. [Accessed 6 Mar 2017]	"Altitude range: (metres) 1060 - 1570 m"
	de Ruijter, A., 2007. Adenia digitata (Harv.) Engl. In: Schmelzer, G.H. & Gurib-Fakim, A. (Editors). PROTA (Plant Resources of Tropical Africa / Ressources végétales de l'Afrique tropicale), Wageningen, Netherlands	[Elevation range exceeds 1000 m, demonstrating environmental versatility] "Adenia digitata occurs in savanna, bushland, dry rocky o grassy localities, on termite mounds and along forest fringes, on stony, sandy, or clayish soils from sea-level up to 1850 m altitude."
204	Native or naturalized in regions with tropical or subtropical climates	у
	Source(s)	Notes
	USDA, ARS, Germplasm Resources Information Network. 2017. National Plant Germplasm System [Online Database]. http://www.ars-grin.gov/npgs/index.html. [Accessed 2 Mar 2017]	"Native: Africa East Tropical Africa: Tanzania South Tropical Africa: Angola; Malawi; Mozambique; Zambia; Zimbabwe Southern Africa: Botswana; South Africa - Gauteng, - KwaZulu-Natal, - Limpopo, - Mpumalanga, - North West; Swaziland"
205	Does the species have a history of repeated introductions outside its natural range?	у
	Source(s)	Notes
	de Ruijter, A., 2007. Adenia digitata (Harv.) Engl. In: Schmelzer, G.H. & Gurib-Fakim, A. (Editors). PROTA (Plant	"Because of its impressive tuber, which can be partly above ground,

205	Does the species have a history of repeated introductions outside its natural range?	у
	Source(s)	Notes
	de Ruijter, A., 2007. Adenia digitata (Harv.) Engl. In: Schmelzer, G.H. & Gurib-Fakim, A. (Editors). PROTA (Plant Resources of Tropical Africa / Ressources végétales de l'Afrique tropicale). Wageningen. Netherlands	"Because of its impressive tuber, which can be partly above ground, Adenia digitata is cultivated as an ornamental worldwide."

301	Naturalized beyond native range	n
	Source(s)	Notes
	Randall, R.P. (2017). A Global Compendium of Weeds. 3rd Edition. Perth, Western Australia. R.P. Randall	No evidence to date
	Wagner, W.L., Herbst, D.R.& Lorence, D.H. 2017. Flora of the Hawaiian Islands. Smithsonian Institution, Washington, D.C. http://botany.si.edu/. [Accessed 6 Mar 2017]	No evidence to date

302	Garden/amenity/disturbance weed	
	Source(s)	Notes
	Randall, R.P. (2017). A Global Compendium of Weeds. 3rd Edition. Perth, Western Australia. R.P. Randall	Listed as a weed. Impacts unspecified

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Qsn #	Question	Answer
303	Agricultural/forestry/horticultural weed	n
	Source(s)	Notes
	Randall, R.P. (2017). A Global Compendium of Weeds. 3rd Edition. Perth, Western Australia. R.P. Randall	No evidence
	T	<u> </u>
304	Environmental weed	n
	Source(s)	Notes
	Randall, R.P. (2017). A Global Compendium of Weeds. 3rd Edition. Perth, Western Australia. R.P. Randall	No evidence
	1	
305	Congeneric weed	
	Source(s)	Notes
	Randall, R.P. (2017). A Global Compendium of Weeds. 3rd Edition. Perth, Western Australia. R.P. Randall	Adenia cissampeloides, Adenia gracilis, Adenia gummifera & Adenia wightiana listed as naturalized and/or weeds. Unable to verify impacts with references cited.
401	Produces spines, thorns or burrs	n
	Source(s)	Notes
	de Ruijter, A., 2007. Adenia digitata (Harv.) Engl. In: Schmelzer, G.H. & Gurib-Fakim, A. (Editors). PROTA (Plant Resources of Tropical Africa / Ressources végétales de l'Afrique tropicale), Wageningen, Netherlands	[No evidence] "Perennial climbing herb, usually dioecious, with a tuber up to 60 cm in diameter; stems annual, up to 3 m long. Leaves alternate, deeply (3–)5-cleft or -foliolate, orbicular in outline; stipules narrowly triangular, 1–3 mm long, withering; petiole 1–9 cm long; lobes or leaflets ovate to obovate or linear, sometimes deeply lobed, 1.5–15 cm \times 1–4(–7) cm, rounded to acute at apex, with glands at base."
402	Allelopathic	
	Source(s)	Notes
	WRA Specialist. 2017. Personal Communication	Unknown
403	Parasitic	n
	Source(s)	Notes
	de Ruijter, A., 2007. Adenia digitata (Harv.) Engl. In: Schmelzer, G.H. & Gurib-Fakim, A. (Editors). PROTA (Plant Resources of Tropical Africa / Ressources végétales de l'Afrique tropicale), Wageningen, Netherlands	"Perennial climbing herb, usually dioecious, with a tuber up to 60 cm in diameter" [Passifloraceae. No evidence]

	7	
Qsn #	Question	Answer
404	Unpalatable to grazing animals	
	Source(s)	Notes
	de Ruijter, A., 2007. Adenia digitata (Harv.) Engl. In: Schmelzer, G.H. & Gurib-Fakim, A. (Editors). PROTA (Plant Resources of Tropical Africa / Ressources végétales de l'Afrique tropicale), Wageningen, Netherlands	[Unknown. Related plant eaten by livestock] "Adenia repanda (Burch.) Engl. from section Paschanthus also occurs in southern Africa, from Angola east to Zimbabwe and south to South Africa, and is reported to be deadly poisonous to man. However, Adenia repanda is also reported to be greedily eaten by livestock."
405	Toxic to animals	у
100	Source(s)	Notes
	Quattrocchi, U. 2012. CRC World Dictionary of Medicinal and Poisonous Plants: Common Names, Scientific Names,	"Deadly poisonous, roots and fruits toxic to animals and humans, contain cyanogenic glycosides. Modeccin poisoning is a serious and
	Eponyms, Synonyms, and Etymology. CRC Press, Boca Raton, FL	potentially fatal event, modeccin resembles most closely volkensin, a ricin-like toxin."
	7	
406	Host for recognized pests and pathogens	
	Source(s)	Notes
	WRA Specialist. 2017. Personal Communication	Unknown
407	Causes allergies or is otherwise toxic to humans	у
	Source(s)	Notes
	de Ruijter, A., 2007. Adenia digitata (Harv.) Engl. In: Schmelzer, G.H. & Gurib-Fakim, A. (Editors). PROTA (Plant Resources of Tropical Africa / Ressources végétales de l'Afrique tropicale), Wageningen, Netherlands	"Adenia digitata is deadly poisonous. The Tswana people of Botswana have used the fruit for homicide. The fruit is also eaten or a root extract is drunk as a suicide poison. Accidental poisoning mainly occurs when the root of Adenia digitata is mistaken for edible tubers, particularly those of Coccinia species. Children are often poisoned as a result of eating the attractive fruit. In Botswana the root is rubbed into swellings or applied warm to treat knee swellings. To treat skin ailment, leprosy or ulcers, the Nyanja people of Malawi and Zambia rub the skin with boiled roots or a root decoction. The Venda people of South Africa apply a root decoction externally and also drink it to treat swollen legs."
	7	
408	Creates a fire hazard in natural ecosystems	
	Source(s)	Notes
	de Ruijter, A., 2007. Adenia digitata (Harv.) Engl. In: Schmelzer, G.H. & Gurib-Fakim, A. (Editors). PROTA (Plant Resources of Tropical Africa / Ressources végétales de l'Afrique tropicale), Wageningen, Netherlands	[Unknown. Occurs in dry habitats & could possibly serve as a fuel ladder into trees] "Adenia digitata occurs in savanna, bushland, dry rocky or grassy localities, on termite mounds and along forest fringes, on stony, sandy, or clayish soils from sea-level up to 1850 m altitude."
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409	Is a shade tolerant plant at some stage of its life cycle	
	Source(s)	Notes

Engi	•	
Qsn #	Question	Answer
	Desert Tropicals. 2017. Adenia digitata. http://www.desert- tropicals.com/Plants/Passifloraceae/Adenia_digitata.html. [Accessed 6 Mar 2017]	"Sun Exposure: Full sun to light shade"
	Bihrmann's Caudiciforms. 2017. Adenia digitata. http://www.bihrmann.com/caudiciforms/subs/ade-dig- sub.asp. [Accessed 6 Mar 2017]	"Sun: Maximum"
410	Tolerates a wide range of soil conditions (or limestone conditions if not a volcanic island)	
	Source(s)	Notes
	de Ruijter, A., 2007. Adenia digitata (Harv.) Engl. In: Schmelzer, G.H. & Gurib-Fakim, A. (Editors). PROTA (Plant Resources of Tropical Africa / Ressources végétales de l'Afrique tropicale), Wageningen, Netherlands	"on stony, sandy, or clayish soils from sea-level up to 1850 m altitude."
	Useful Tropical Plants Database. 2017. Adenia digitata. http://tropical.theferns.info/viewtropical.php?id=Adenia +digitata. [Accessed 6 Mar 2017]	"Succeeds in a sunny to lightly shaded position and a well-drained soil"
411	Climbing or smothering growth habit	у
	Source(s)	Notes
	de Ruijter, A., 2007. Adenia digitata (Harv.) Engl. In: Schmelzer, G.H. & Gurib-Fakim, A. (Editors). PROTA (Plant Resources of Tropical Africa / Ressources végétales de l'Afrique tropicale), Wageningen, Netherlands	"Perennial climbing herb, usually dioecious, with a tuber up to 60 cm in diameter; stems annual, up to 3 m long."
412	Forms dense thickets	n
	Source(s)	Notes
	de Ruijter, A., 2007. Adenia digitata (Harv.) Engl. In: Schmelzer, G.H. & Gurib-Fakim, A. (Editors). PROTA (Plant Resources of Tropical Africa / Ressources végétales de l'Afrique tropicale), Wageningen, Netherlands	"Perennial climbing herb occurs in savanna, bushland, dry rocky or grassy localities, on termite mounds and along forest fringes" [No evidence]
501	Aquatic	n
	Source(s)	Notes
	de Ruijter, A., 2007. Adenia digitata (Harv.) Engl. In: Schmelzer, G.H. & Gurib-Fakim, A. (Editors). PROTA (Plant	[Terrestrial] "Adenia digitata occurs in savanna, bushland, dry rocky or grassy localities, on termite mounds and along forest fringes, on

l'Afrique tropicale), Wageningen, Netherlands

Engl		
Qsn #	Question	Answer
502	Grass	n
	Source(s)	Notes
	USDA, ARS, Germplasm Resources Information Network. 2017. National Plant Germplasm System [Online Database]. http://www.ars-grin.gov/npgs/index.html. [Accessed 2 Mar 2017]	Family: Passifloraceae Subfamily: Passifloroideae Tribe: Passifloreae
503	Nitrogen fixing woody plant	n
	Source(s)	Notes
	USDA, ARS, Germplasm Resources Information Network. 2017. National Plant Germplasm System [Online Database]. http://www.ars-grin.gov/npgs/index.html. [Accessed 2 Mar 2017]	Family: Passifloraceae Subfamily: Passifloroideae Tribe: Passifloreae
504	Geophyte (herbaceous with underground storage organs bulbs, corms, or tubers)	у
	Source(s)	Notes
	de Ruijter, A., 2007. Adenia digitata (Harv.) Engl. In: Schmelzer, G.H. & Gurib-Fakim, A. (Editors). PROTA (Plant Resources of Tropical Africa / Ressources végétales de l'Afrique tropicale), Wageningen, Netherlands	[Tuberous] "Perennial climbing herb, usually dioecious, with a tuber up to 60 cm in diameter"
601	Evidence of substantial reproductive failure in native habitat	n
	Source(s)	Notes
	de Ruijter, A., 2007. Adenia digitata (Harv.) Engl. In: Schmelzer, G.H. & Gurib-Fakim, A. (Editors). PROTA (Plant Resources of Tropical Africa / Ressources végétales de l'Afrique tropicale), Wageningen, Netherlands	"Adenia digitata is widely distributed and hence not threatened with genetic erosion."
602	Produces viable seed	у
	Source(s)	Notes
	de Ruijter, A., 2007. Adenia digitata (Harv.) Engl. In: Schmelzer, G.H. & Gurib-Fakim, A. (Editors). PROTA (Plant Resources of Tropical Africa / Ressources végétales de l'Afrique tropicale), Wageningen, Netherlands	"Fruit a stalked ovoid to ellipsoid capsule 3–5.5(–7.5) cm \times 2–4 cm, smooth, orange to yellow when ripe, many-seeded. Seeds ovoid to ellipsoid, flattened, 6–8 mm \times 4.5–6.5 mm \times 3 mm, brown, pitted."
	Useful Tropical Plants Database. 2017. Adenia digitata. http://tropical.theferns.info/viewtropical.php?id=Adenia +digitata. [Accessed 6 Mar 2017]	"Propagation Seed"
		T
603	Hybridizes naturally	
	Source(s)	Notes
	WRA Specialist. 2017. Personal Communication	Unknown. No evidence found

<u>Engl.</u>		
Qsn #	Question	Answer
604	Self-compatible or apomictic	n
	Source(s)	Notes
	Useful Tropical Plants Database. 2017. Adenia digitata. http://tropical.theferns.info/viewtropical.php?id=Adenia +digitata. [Accessed 6 Mar 2017]	"A dioecious species, both male and female forms need to be grown if fruit and seed are required."
	de Ruijter, A., 2007. Adenia digitata (Harv.) Engl. In: Schmelzer, G.H. & Gurib-Fakim, A. (Editors). PROTA (Plant Resources of Tropical Africa / Ressources végétales de l'Afrique tropicale), Wageningen, Netherlands	"Perennial climbing herb, usually dioecious, with a tuber up to 60 cm in diameter"
605	Requires specialist pollinators	<u> </u>
	Source(s)	Notes
	30uice(s)	"Flowers usually unisexual, regular, 5-merous; pedicel up to 3 cm
	de Ruijter, A., 2007. Adenia digitata (Harv.) Engl. In: Schmelzer, G.H. & Gurib-Fakim, A. (Editors). PROTA (Plant Resources of Tropical Africa / Ressources végétales de l'Afrique tropicale), Wageningen, Netherlands	long, jointed about halfway; calyx tube about as long as lobes; petals free, included in calyx, usually toothed; male flowers up to 2.5 cm long, filaments of stamens fused in lower half and anthers curved inward and clinging together, ovary rudimentary; female flowers up to 2 cm long, ovary superior, ovoid to oblong, styles 3, fused at base, stigmas kidney-shaped, stamens rudimentary."
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606	Reproduction by vegetative fragmentation	n
	Source(s)	Notes
	Useful Tropical Plants Database. 2017. Adenia digitata. http://tropical.theferns.info/viewtropical.php?id=Adenia +digitata. [Accessed 6 Mar 2017]	"Propagation Seed"
607	Minimum generative time (years)	
	Source(s)	Notes
	de Ruijter, A., 2007. Adenia digitata (Harv.) Engl. In: Schmelzer, G.H. & Gurib-Fakim, A. (Editors). PROTA (Plant Resources of Tropical Africa / Ressources végétales de l'Afrique tropicale), Wageningen, Netherlands	"Perennial climbing herb, usually dioecious, with a tuber up to 60 cm in diameter; stems annual, up to 3 m long." [Annual stems, but plant perennial. Time to reproductive maturity unknown]
701	Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)	n
	Source(s)	Notes
	de Ruijter, A., 2007. Adenia digitata (Harv.) Engl. In: Schmelzer, G.H. & Gurib-Fakim, A. (Editors). PROTA (Plant Resources of Tropical Africa / Ressources végétales de l'Afrique tropicale), Wageningen, Netherlands	"Fruit a stalked ovoid to ellipsoid capsule 3–5.5(-7.5) cm \times 2–4 cm, smooth, orange to yellow when ripe, many-seeded. Seeds ovoid to ellipsoid, flattened, 6–8 mm \times 4.5–6.5 mm \times 3 mm, brown, pitted." [No evidence. No means of external attachment]
702	Propagules dispersed intentionally by people	у
702	Source(s)	Notes

707

Engl		
Qsn #	Question	Answer
	de Ruijter, A., 2007. Adenia digitata (Harv.) Engl. In: Schmelzer, G.H. & Gurib-Fakim, A. (Editors). PROTA (Plant Resources of Tropical Africa / Ressources végétales de l'Afrique tropicale), Wageningen, Netherlands	"Adenia digitata is collected, traded and grown as an ornamental by plant amateurs."
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703	Propagules likely to disperse as a produce contaminant	
	Source(s)	Notes
	Randall, R.P. (2017). A Global Compendium of Weeds. 3rd Edition. Perth, Western Australia. R.P. Randall	"Major Pathway/s: Contaminant, Crop, Ornamental" [Listed as a contaminant, but unable to find supporting evidence to confirm]
704	Duamagulas adopted to using dispersal	
704	Propagules adapted to wind dispersal	n
	Source(s)	Notes
	de Ruijter, A., 2007. Adenia digitata (Harv.) Engl. In: Schmelzer, G.H. & Gurib-Fakim, A. (Editors). PROTA (Plant Resources of Tropical Africa / Ressources végétales de l'Afrique tropicale), Wageningen, Netherlands	"Fruit a stalked ovoid to ellipsoid capsule 3–5.5(–7.5) cm \times 2–4 cm, smooth, orange to yellow when ripe, many-seeded. Seeds ovoid to ellipsoid, flattened, 6–8 mm \times 4.5–6.5 mm \times 3 mm, brown, pitted."
	T	T
705	Propagules water dispersed	n
	Source(s)	Notes
	de Ruijter, A., 2007. Adenia digitata (Harv.) Engl. In: Schmelzer, G.H. & Gurib-Fakim, A. (Editors). PROTA (Plant Resources of Tropical Africa / Ressources végétales de l'Afrique tropicale), Wageningen, Netherlands	[Not in riparian areas & fruit adapted for zoochory] "Fruit a stalked ovoid to ellipsoid capsule 3–5.5(–7.5) cm × 2–4 cm, smooth, orange to yellow when ripe, many-seeded. Seeds ovoid to ellipsoid, flattened, 6–8 mm × 4.5–6.5 mm × 3 mm, brown, pitted." "Adenia digitata occurs in savanna, bushland, dry rocky or grassy localities, on termite mounds and along forest fringes, on stony, sandy, or clayish soils from sea-level up to 1850 m altitude."
706	Propagules bird dispersed	У
	Source(s)	Notes
	Kubitzki, K., Bayer, C. 7 Stevens, P.F. 2007. The families and genera of vascular plants: Volume IX. Flowering Plants. Eudicots. Springer-Verlag, Berlin, Heidelberg, New York	"Dispersal. A wide variety of animals disperse Passifloraceae seeds, including birds, bats, monkeys, and insects. Very few fruits are so hard-shelled that rodents or long time of decay are needed to expose the seeds of fallen fruits." [Family description]
	de Ruijter, A., 2007. Adenia digitata (Harv.) Engl. In: Schmelzer, G.H. & Gurib-Fakim, A. (Editors). PROTA (Plant Resources of Tropical Africa / Ressources végétales de l'Afrique tropicale), Wageningen, Netherlands	"Fruit a stalked ovoid to ellipsoid capsule 3–5.5(–7.5) cm × 2–4 cm, smooth, orange to yellow when ripe, many-seeded. Seeds ovoid to ellipsoid, flattened, 6–8 mm × 4.5–6.5 mm × 3 mm, brown, pitted."
	Louw, W. J. (1951). An Ecological Account of the Vegetation of the Potchefstroom Area. Government Printer, Pretoria, South Africa.	"The fruit is oblong or roundish, about 1 1/2 inches long and 1 inch in diameter with a firm skin which is yellow or orange when ripe. The fruit is composed of three partly hollow compartments containing a number of seeds which are embedded in a soft, pulpy substance. The fruits are attractive, especially to children, and are said to have a pleasant flavour, but several deaths are known to have occurred as a result of the fruits having been eaten."
		Υ

Propagules dispersed by other animals (externally)

Engl	•	
Qsn #	Question	Answer
QSII#		
	Source(s) de Ruijter, A., 2007. Adenia digitata (Harv.) Engl. In: Schmelzer, G.H. & Gurib-Fakim, A. (Editors). PROTA (Plant Resources of Tropical Africa / Ressources végétales de l'Afrique tropicale), Wageningen, Netherlands	"Fruit a stalked ovoid to ellipsoid capsule 3–5.5(–7.5) cm × 2–4 cm, smooth, orange to yellow when ripe, many-seeded. Seeds ovoid to ellipsoid, flattened, 6–8 mm × 4.5–6.5 mm × 3 mm, brown, pitted."
708	Propagules survive passage through the gut	у
	Source(s)	Notes
	Kubitzki, K., Bayer, C. 7 Stevens, P.F. 2007. The families and genera of vascular plants: Volume IX. Flowering Plants. Eudicots. Springer-Verlag, Berlin, Heidelberg, New York	[Presumably Yes] "Dispersal. A wide variety of animals disperse Passifloraceae seeds, including birds, bats, monkeys, and insects. Very few fruits are so hard-shelled that rodents or long time of decay are needed to expose the seeds of fallen fruits." [Family description]
801	Prolific seed production (>1000/m2)	T
	Source(s)	Notes
	de Ruijter, A., 2007. Adenia digitata (Harv.) Engl. In: Schmelzer, G.H. & Gurib-Fakim, A. (Editors). PROTA (Plant Resources of Tropical Africa / Ressources végétales de l'Afrique tropicale), Wageningen, Netherlands	[Seed densities unknown] "Fruit a stalked ovoid to ellipsoid capsule 3–5.5(–7.5) cm × 2–4 cm, smooth, orange to yellow when ripe, many-seeded. Seeds ovoid to ellipsoid, flattened, 6–8 mm × 4.5–6.5 mm × 3 mm, brown, pitted."
		T
802	Evidence that a persistent propagule bank is formed (>1 yr)	
	Source(s)	Notes
	Baskin, C.C. & Baskin, J.M. 2014. Seeds Ecology, Biogeography, and Evolution of Dormancy and Germination. Second Edition. Academic Press, San Francisco, CA	Unknown for Adenia digitata. Adenia macrophylla seeds described as Non-Dormant
803	Well controlled by herbicides	
	Source(s)	Notes
	WRA Specialist. 2017. Personal Communication	Unknown. No information on herbicide efficacy or chemical control of this species
804	Tolerates, or benefits from, mutilation, cultivation, or fire	<u>, </u>
004	Source(s)	Notes
	de Ruijter, A., 2007. Adenia digitata (Harv.) Engl. In: Schmelzer, G.H. & Gurib-Fakim, A. (Editors). PROTA (Plant Resources of Tropical Africa / Ressources végétales de l'Afrique tropicale), Wageningen, Netherlands	"Perennial climbing herb, usually dioecious, with a tuber up to 60 cm in diameter; stems annual, up to 3 m long." [Unknown. May be able to resprout from tuber]

Qsn #	Question	Answer
805	Effective natural enemies present locally (e.g. introduced biocontrol agents)	
	Source(s)	Notes
	WRA Specialist. 2017. Personal Communication	Unknown

SCORE: 2.0

RATING: Evaluate

Summary of Risk Traits:

High Risk / Undesirable Traits

- Elevation range exceeds 1000 m, demonstrating environmental versatility
- Thrives in tropical climates
- · Poisonous to animals & humans
- Climbing habit (potential to smother or overtop other vegetation)
- Tuberous roots
- · Reproduces by seeds
- Seeds presumably dispersed by animals (although fruit reportedly toxic) & intentionally by people
- Limited ecological information may reduce accuracy of risk prediction

Low Risk Traits

- No reports of invasiveness or naturalization, but one unconfirmed report of weediness
- Unarmed (no spines, thorns, or burrs)
- · Ornamental & medicinal uses, despite toxicity
- Dioecious
- Not reported to spread vegetatively

Second Screening Results for Vines & Lianas

- (A) Reported as a weed of cultivated lands?> Possibly. One unconfirmed report of weediness
- (B) Unpalatable to grazers Or known to form dense stands?> Palatability unknown. Toxic, but other species consumed by cattle
- (C) Shade tolerant or known to form dense stands?> Possibly shade tolerant.
- (D) Bird- Or clearly wind- dispersed?> Possibly bird-dispersed

Outcome = Evaluate