Taxon: Euphorbia poissonii Pax **Family:** Euphorbiaceae

Common Name(s): candle plant **Synonym(s):** Euphorbia unispina N.E. Br.
Euphorbia venefica Trem.

Assessor: Chuck Chimera **Status:** Assessor Approved **End Date:** 18 Mar 2021

WRA Score: 3.0 **Designation:** L **Rating:** Low Risk

Keywords: Candelabriform Shrub, Spiny, Toxic Latex, Monoecious, Dehiscent Capsules

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	?
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)	y
401	Produces spines, thorns or burrs	y=1, n=0	y
402	Allelopathic		
403	Parasitic	y=1, n=0	n
404	Unpalatable to grazing animals	y=1, n=-1	y
405	Toxic to animals	y=1, n=0	y
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		

Qsn #	Question	Answer Option	Answer
410	Tolerates a wide range of soil conditions (or limestone conditions if not a volcanic island)	y=1, n=0	n
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		
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)		
702	Propagules dispersed intentionally by people	y=1, n=-1	y
703	Propagules likely to disperse as a produce contaminant		
704	Propagules adapted to wind dispersal		
705	Propagules water dispersed	y=1, n=-1	n
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	n
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] "Euphorbia poissonii latex is harvested from wild plants or from those planted near villages."

102	**Has the species become naturalized where grown?**	
	Source(s)	**Notes**
	WRA Specialist. (2021). Personal Communication	NA

103	**Does the species have weedy races?**	
	Source(s)	**Notes**
	WRA Specialist. (2021). 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	"Euphorbia poissonii occurs from southern Burkina Faso and Ghana east to Cameroon. It possibly also occurs in Guinea, Côte d'Ivoire and Mali."

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	"Euphorbia poissonii occurs on rocks and dry stony soils, usually in open woodland with grass, at 400–700 m altitude."
	Dave's Garden. (2021). Euphorbia Species - Euphorbia poissonii. https://davesgarden.com/guides/pf/go/63649/. [Accessed 17 Mar 2021]	"Hardiness: USDA Zone 10a: to -1.1 °C (30 °F)"

204	**Native or naturalized in regions with tropical or subtropical climates**	**y**

Qsn #	Question	Answer
	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	"Euphorbia poissonii occurs from southern Burkina Faso and Ghana east to Cameroon. It possibly also occurs in Guinea, Côte d'Ivoire and Mali."
	Imada, C. (2019). Hawaiian Naturalized Vascular Plants Checklist (February 2019 update). Bishop Museum Technical Report 69. Bishop Museum, Honolulu, HI	No evidence

205	Does the species have a history of repeated introductions outside its natural range?	?
	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	"In West Africa Euphorbia poissonii is sometimes planted in gardens as an ornamental plant or as a hedge around fields and graveyards. In Europe and the United States it is kept as a pot plant in succulent collections." [Unclear how often this is cultivated in an outdoor setting where it could potentially naturalize]
	Dave's Garden. (2021). Euphorbia Species - Euphorbia poissonii. https://davesgarden.com/guides/pf/go/63649/. [Accessed 17 Mar 2021]	"Regional This plant is said to grow outdoors in the following regions: Bonsall, California Vista, California(9 reports)"

301	Naturalized beyond native range	n
	Source(s)	**Notes**
	Imada, C. (2019). Hawaiian Naturalized Vascular Plants Checklist (February 2019 update). Bishop Museum Technical Report 69. Bishop Museum, Honolulu, HI	No evidence
	Randall, R.P. (2017). A Global Compendium of Weeds. 3rd Edition. Perth, Western Australia. R.P. Randall	No evidence

302	Garden/amenity/disturbance weed	n
	Source(s)	**Notes**
	Randall, R.P. (2017). A Global Compendium of Weeds. 3rd Edition. Perth, Western Australia. R.P. Randall	No evidence

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

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

Qsn #	Question	Answer
305	**Congeneric weed**	**y**
	Source(s)	**Notes**
	Weber, E. (2017). Invasive Plant Species of the World, 2nd Edition: A Reference Guide to Environmental Weeds. CABI Publishing, Wallingford, UK	[Euphorbia esula] "Leafy spurge has become one of the worst invaders in northern America causing both ecological and economic damage."
	Randall, R.P. (2017). A Global Compendium of Weeds. 3rd Edition. Perth, Western Australia. R.P. Randall	Numerous Euphorbia species have become invasive weeds

401	**Produces spines, thorns or burrs**	**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	"Monoecious, candelabriform shrub up to 2 m tall; branches cylindrical, 3–3.5(–4) cm in diameter, silvery grey, covered with prominent rounded tubercles and horny spine shields up to 8 mm in diameter, grey, with 1 spine on young plants or spine rudimentary, with white latex. Leaves arranged spirally at stem apex in 8–10 ranks, simple and entire, soon falling; stipules, if present, modified into small spines, soon falling"

402	**Allelopathic**	
	Source(s)	**Notes**
	WRA Specialist. (2021). Personal Communication	Unknown. No evidence found

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	"Monoecious, candelabriform shrub up to 2 m tall" [Euphorbiaceae. No evidence]

404	**Unpalatable to grazing animals**	**y**
	Source(s)	**Notes**
	The National Gardening Association. (2021).Euphorbia (Euphorbia poissonii). https://garden.org/plants/view/118509/Euphorbia-Euphorbia-poissonii/. [Accessed 17 Mar 2021]	"Resistances: Deer Resistant Rabbit Resistant Squirrels Toxicity: Other: All members of the genus Euphorbia produce a milky sap called latex that is toxic and can range from a mild irritant to very poisonous."
	Schmelzer, G.H. & Gurib-Fakim, A. (Eds.). 2008. Plant Resources of Tropical Africa 11(1). Medicinal Plants 1. PROTA Foundation, Wageningen, Netherlands	[Toxicity and spines likely render plants unpalatable] "The latex of Euphorbia poissonii is very caustic and toxic, and very irritating to the skin and mucous membranes." … "Monoecious, candelabriform shrub up to 2 m tall; branches cylindrical, –3.5(–4) cm in diameter, silvery grey, covered with prominent rounded tubercles and horny spine shields up to 8 mm in diameter, grey, with 1 spine on young plants or spine rudimentary, with white latex."

405	**Toxic to animals**	**y**

Qsn #	Question	Answer
	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	"Throughout West Africa the latex is used as fish poison. A piece of stem is mixed with the seeds of Strophanthus to prepare arrow poison. In Nigeria the latex is said to be added sometimes to tobacco snuff to increase its pungency. The Hausa people use the latex on cereals to catch guinea fowl. The latex is also used in bait to kill rodents and birds, and is used for removing hairs from hides. The latex is applied as glue on branches to capture birds. The latex is highly poisonous when added to food, drinking water and kola nuts, and in Nigeria homicides are sometimes committed through Euphorbia poissonii poisoning. "

406	Host for recognized pests and pathogens	
	Source(s)	**Notes**
	Planting Man. (2021). Euphorbia poissonii – Succulent plants. https://plantingman.com/euphorbia-poissonii-succulent-plants/. [Accessed 17 Mar 2021]	"Pests and Diseases: Euphorbia poissonii may be susceptible to mealy bugs, scale insects, occasionally spider mites."

407	Causes allergies or is otherwise toxic to humans	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	"The latex of Euphorbia poissonii is very caustic and toxic, and very irritating to the skin and mucous membranes. It can cause blindness when in contact with the eyes. Despite its toxicity, it is used medicinally. In Nigeria a few drops of latex are applied to Guinea-worm sores and to skin papilloma. A few drops of latex with sugar cane or in palm wine or soup are taken as a purgative. In Cameroon the latex extracted from the leaves is applied to treat lumbago. It is also placed in a carious tooth to relieve toothache or to help to loosen the tooth and render extraction easier."

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	"Euphorbia poissonii occurs on rocks and dry stony soils, usually in open woodland with grass, at 400–700 m altitude." [No evidence]

409	Is a shade tolerant plant at some stage of its life cycle	
	Source(s)	**Notes**
	Planting Man. (2021). Euphorbia poissonii – Succulent plants. https://plantingman.com/euphorbia-poissonii-succulent-plants/. [Accessed 17 Mar 2021]	"It prefers full to partial sunlight."
	The National Gardening Association. (2021).Euphorbia (Euphorbia poissonii). https://garden.org/plants/view/118509/Euphorbia-Euphorbia-poissonii/. [Accessed]	"Sun Requirements: Full Sun Full Sun to Partial Shade"

Qsn #	Question	Answer
410	**Tolerates a wide range of soil conditions (or limestone conditions if not a volcanic island)**	**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	"Euphorbia poissonii occurs on rocks and dry stony soils"
	Planting Man. (2021). Euphorbia poissonii – Succulent plants. https://plantingman.com/euphorbia-poissonii-succulent-plants/. [Accessed 17 Mar 2021]	"It grows well in well-draining, gritty soil or cactus potting mix. They are not particular about soil pH, but they cannot tolerate wet 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	"Monoecious, candelabriform shrub up to 2 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	"Euphorbia poissonii occurs on rocks and dry stony soils, usually in open woodland with grass, at 400–700 m altitude." [No evidence]
	Arbonnier, M. (2004). Trees, Shrubs and Lianas of West African Dry Zones. CTA, Wageningen, The Netherlands	"Irregular distribution, locally common and gregarious." [Gregarious suggests plants occur in clusters, but no indication that they form dense stands that exclude other vegetation]

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] "Euphorbia poissonii occurs on rocks and dry stony soils, usually in open woodland with grass, at 400–700 m altitude."

502	Grass	n
	Source(s)	**Notes**
	USDA, Agricultural Research Service, National Plant Germplasm System. (2021). Germplasm Resources Information Network (GRIN-Taxonomy). National Germplasm Resources Laboratory, Beltsville, Maryland. https://npgsweb.ars-grin.gov/. [Accessed 17 Mar 2021]	Family: Euphorbiaceae Subfamily: Euphorbioideae Tribe: Euphorbieae Subtribe: Euphorbiinae

Qsn #	Question	Answer
503	**Nitrogen fixing woody plant**	**n**
	Source(s)	**Notes**
	USDA, Agricultural Research Service, National Plant Germplasm System. (2021). Germplasm Resources Information Network (GRIN-Taxonomy). National Germplasm Resources Laboratory, Beltsville, Maryland. https://npgsweb.ars-grin.gov/. [Accessed 17 Mar 2021]	Family: Euphorbiaceae Subfamily: Euphorbioideae Tribe: Euphorbieae Subtribe: Euphorbiinae

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	"Monoecious, candelabriform shrub up to 2 m tall"

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	"Euphorbia poissonii has a relatively large area of distribution and is locally common. Therefore it is not likely to be threatened by genetic erosion. Trade in all succulent Euphorbia spp. is controlled under CITES appendix 2."

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	"Euphorbia poissonii can be propagated by seed or by stem cuttings."

603	**Hybridizes naturally**	
	Source(s)	**Notes**
	WRA Specialist. (2021). Personal Communication	Unknown. No evidence found

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	[Monoecious. Unknown, but possible] "Flowers unisexual; male flowers sessile, perianth absent, stamen shortly exserted, red; female flowers with curved pedicel 5–12 mm long in fruit, perianth 3 -lobed, ovary superior, glabrous, 3-celled, styles 3."
	Faboyede, A. O. (2015). Biosystematic studies in the genus euphorbia L. in Nigeria, PhD Dissertation. University of Lagos	[Unknown. Self-compatibility documented in E. hyssopifolia, E. heterophylla and E. hirta.] "Fruit sets were observed in all the bagged inflorescences. These were taken as indication of self compatibility. The seeds were allowed to dry and planted inside petri- dishes lined with cotton wool pre- soaked in distilled water. This was done to determine the viability of the seeds. Germination was observed in all the petri- dishes."

605	**Requires specialist pollinators**	**n**
	Source(s)	**Notes**
	Kubitzki, K. (ed.). (2014). The Families and Genera of Vascular Plants. Vol. XI. Flowering Plants. Eudicots: Malpighiales. Springer, New York	"Euphorbs with fully pseudanthial inflorescences have either "normal" unisexual flowers (Dalechampia, Pera) or highly reduced unisexual flowers united in a cyathium (Euphorbia and relatives in Euphorbieae). In the latter case the staminate flowers are reduced to a single stamen and the pistillate flowers to a single pistil, with perianth absent in both cases. In both situations, pollinators visit the clusters of flowers as if they were a single flower hence, application of the term pseudanthium (false flower) or blossom. Pollination of euphorbs with pseudanthial inflorescences is often highly generalized."
	Zomlefer, W.B. 1994. Guide to Flowering Plant Families. The University of North Carolina Press, Chapel Hill & London	"Most euphorbs easily attract pollinators (mostly flies) with the nectar secreted by the extrastaminal disc or glands"
	Schmelzer, G.H. & Gurib-Fakim, A. (Eds.). 2008. Plant Resources of Tropical Africa 11(1). Medicinal Plants 1. PROTA Foundation, Wageningen, Netherlands	"The flowers are much visited by bees and other insects." … "Flowers unisexual; male flowers sessile, perianth absent, stamen shortly exserted, red; female flowers with curved pedicel 5–12 mm long in fruit, perianth 3-lobed, ovary superior, glabrous, 3-celled, styles 3."

606	**Reproduction by vegetative fragmentation**	**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	"Euphorbia poissonii can be propagated by seed or by stem cuttings. Stem cuttings should be at least 20 cm long and preferably cut from the base of a branch where the cut surface is woody. After cutting they should be allowed to dry for at least 2 weeks for a callus to form on the cut end." [Propagation methods give no indication that plants will spread vegetatively]

Qsn #	Question	Answer
607	**Minimum generative time (years)**	
	Source(s)	**Notes**
	The National Gardening Association. (2021).Euphorbia (Euphorbia poissonii). https://garden.org/plants/view/118509/Euphorbia-Euphorbia-poissonii/. [Accessed 17 Mar 2021]	"Slow growing, with a marked seasonal pattern of new growth only in the summer and fall." [Exact age to maturity unknown, but presumably greater than 1 year based on anecdotal observation and shrubby stature]

701	**Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)**	
	Source(s)	**Notes**
	The National Gardening Association. (2021).Euphorbia (Euphorbia poissonii). https://garden.org/plants/view/118509/Euphorbia-Euphorbia-poissonii/. [Accessed 17 Mar 2021]	"Fruit: Pops open explosively when ripe"
	WRA Specialist. (2021). Personal Communication	Unknown but not likely. Some Euphorbia species transported in soil attached to vehicles, footwear, or equipment

702	**Propagules dispersed intentionally by people**	**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	"Euphorbia poissonii is also traded on the internet as an ornamental plant."

703	**Propagules likely to disperse as a produce contaminant**	
	Source(s)	**Notes**
	The National Gardening Association. (2021).Euphorbia (Euphorbia poissonii). https://garden.org/plants/view/118509/Euphorbia-Euphorbia-poissonii/. [Accessed 17 Mar 2021]	"Fruit: Pops open explosively when ripe" [Theoretically possible if cultivated with other plants, but no evidence found to date]

704	**Propagules adapted to wind dispersal**	
	Source(s)	**Notes**
	The National Gardening Association. (2021).Euphorbia (Euphorbia poissonii). https://garden.org/plants/view/118509/Euphorbia-Euphorbia-poissonii/. [Accessed 17 Mar 2021]	"Fruit: Pops open explosively when ripe"
	Kubitzki, K. (ed.). (2014). The Families and Genera of Vascular Plants. Vol. XI. Flowering Plants. Eudicots: Malpighiales. Springer, New York	"The typical Euphorbiaceous fruit (upon drying) dehisces explosively into three 1- or 2-seeded merocarps (cocci)." [Possible that wind, if seeds are produced, would aid in dispersal distance and direction]

705	**Propagules water dispersed**	**n**
	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	"Euphorbia poissonii occurs on rocks and dry stony soils, usually in open woodland with grass, at 400–700 m altitude." [Unlikely. Does not occur in riparian habitats, although rainfall and overland water flow could theoretically move seeds]
	The National Gardening Association. (2021).Euphorbia (Euphorbia poissonii). https://garden.org/plants/view/118509/Euphorbia-Euphorbia-poissonii/. [Accessed 17 Mar 2021]	"Fruit: Pops open explosively when ripe"

706	Propagules bird dispersed	n
	Source(s)	**Notes**
	The National Gardening Association. (2021).Euphorbia (Euphorbia poissonii). https://garden.org/plants/view/118509/Euphorbia-Euphorbia-poissonii/. [Accessed 17 Mar 2021]	"Fruit: Pops open explosively when ripe"
	Schmelzer, G.H. & Gurib-Fakim, A. (Eds.). 2008. Plant Resources of Tropical Africa 11(1). Medicinal Plants 1. PROTA Foundation, Wageningen, Netherlands	[Not fleshy-fruited] "Fruit a deeply 3-lobed capsule 5–6 mm in diameter, lobes almost globose, glabrous, 3-seeded. Seeds ovoid, c. 2 mm long, smooth, pale grey with a few darker markings."

707	Propagules dispersed by other animals (externally)	n
	Source(s)	**Notes**
	The National Gardening Association. (2021).Euphorbia (Euphorbia poissonii). https://garden.org/plants/view/118509/Euphorbia-Euphorbia-poissonii/. [Accessed 17 Mar 2021]	"Fruit: Pops open explosively when ripe"

708	Propagules survive passage through the gut	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	"Fruit a deeply 3-lobed capsule 5–6 mm in diameter, lobes almost globose, glabrous, 3-seeded. Seeds ovoid, c. 2 mm long, smooth, pale grey with a few darker markings. " [Unlikely. No evidence that capsules are consumed or seeds are internally dispersed]
	The National Gardening Association. (2021).Euphorbia (Euphorbia poissonii). https://garden.org/plants/view/118509/Euphorbia-Euphorbia-poissonii/. [Accessed 17 Mar 2021]	"Fruit: Pops open explosively when ripe"

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	[Numbers unknown] "Fruit a deeply 3-lobed capsule 5–6 mm in diameter, lobes almost globose, glabrous, 3-seeded. Seeds ovoid, c. 2 mm long, smooth, pale grey with a few darker markings. "

802	Evidence that a persistent propagule bank is formed (>1 yr)	

Qsn #	Question	Answer
	Source(s)	**Notes**
	WRA Specialist. (2021). Personal Communication	Unknown

803	**Well controlled by herbicides**	
	Source(s)	**Notes**
	WRA Specialist. (2021). 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. (2021). Personal Communication	Unknown

805	**Effective natural enemies present locally (e.g. introduced biocontrol agents)**	
	Source(s)	**Notes**
	WRA Specialist. (2021). Personal Communication	Unknown

Summary of Risk Traits:

High Risk / Undesirable Traits
• Grows, and could spread, in arid tropical climates
• Other Euphorbia species are invasive
• Spiny branches
• Unpalatable to browsing/grazing animals
• Caustic and toxic latex
• Reproduces by seeds
• Dispersed by explosively dehiscent capsules
• Gaps in biological and ecological information may reduce accuracy of risk prediction

Low Risk Traits
• No reports of invasiveness or naturalization, but limited evidence of widespread introduction outside native range
• Grows best in high light (dense shade may limit ability to spread)
• Not reported to spread vegetatively

Second Screening Results for Tree/tree-like shrubs

(A) Shade tolerant or known to form dense stands?> No. Not known to form dense stands. Grows in full sun to partial shade
(B) Bird or clearly Wind-dispersed?> No. Dispersed by dehiscent capsules
Outcome = Accept (Low Risk)