

Taxon: <i>Palisota pynaertii</i> De Wild.	Family: Commelinaceae
Common Name(s): <i>Palisota pynaertii</i> 'Elizabethae'	Synonym(s): <i>Palisota elizabethae</i> L. Gentil

Assessor: Chuck Chimera	Status: Assessor Approved	End Date: 5 Aug 2017
WRA Score: 6.0	Designation: L	Rating: Low Risk

Keywords: Herb, Rosette-Forming, Tropical, Ornamental, Bird-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	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		
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		
406	Host for recognized pests and pathogens	y=1, n=0	y
407	Causes allergies or is otherwise toxic to humans		
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)		

Qsn #	Question	Answer Option	Answer
411	Climbing or smothering growth habit	y=1, n=0	n
412	Forms dense thickets		
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		
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		
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	y=1, n=-1	n
705	Propagules water dispersed		
706	Propagules bird dispersed	y=1, n=-1	y
707	Propagules dispersed by other animals (externally)		
708	Propagules survive passage through the gut	y=1, n=-1	y
801	Prolific seed production (>1000/m ²)		
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
	WRA Specialist. 2017. Personal Communication	No evidence of domestication in genus
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 Aug 2017]	Native: Africa West-Central Tropical Africa: Zaire
202	Quality of climate match data	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 Aug 2017]	
203	Broad climate suitability (environmental versatility)	n
	Source(s)	Notes
	Kubitzki, K. (ed.). 1998. The Families and genera of vascular plants. Volume IV. Flowering plants, Monocotyledons: Alismatanae and Commelinanae (except Gramineae). Springer-Verlag, Berlin, Heidelberg, New York	"About 18 spp., Africa, in forest understory and disturbed situations, usually growing in shade."
	OnlinePlantGuide.com. 2017. <i>Palisota barberi</i> . http://www.onlineplantguide.com/Plant-Details/3909/ . [Accessed 3 Aug 2017]	"Hardiness Zone: 9, 10, 11" [Related taxon grows in zones with tropical\subtropical climates]
	NParks Flora&FaunaWeb. 2017. <i>Palisota pynaertii</i> 'Elizabethae'. https://florafaunaweb.nparks.gov.sg/ . [Accessed 3 Aug 2017]	"Preferred Climate Zone : Tropical"

Qsn #	Question	Answer
204	Native or naturalized in regions with tropical or subtropical climates	y
	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 Aug 2017]	"Native: Africa West-Central Tropical Africa: Zaire"

205	Does the species have a history of repeated introductions outside its natural range?	n
	Source(s)	Notes
	WRA Specialist. 2017. Personal Communication	No evidence to date

301	Naturalized beyond native range	n
	Source(s)	Notes
	Shigematsu, K. 2017. Research Associate. Harold L. Lyon Arboretum. Pers. comm. 01 August	"this species is related to the weedy <i>Palisota barteri</i> , and produces many red berries also. Until recently, it had been in deep shade and not doing well, but now that it is in more sun, it produces many red berries." [Possibly exhibiting early signs of naturalization]
	Randall, R.P. (2017). A Global Compendium of Weeds. 3rd Edition. Perth, Western Australia. R.P. Randall	No evidence
	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 3 Aug 2017]	No evidence to date

302	Garden/amenity/disturbance weed	n
	Source(s)	Notes
	Nursery & Garden Industry Australia. 2009. Grow Me Instead - A Guide for Gardeners in Queensland Wet Tropics. http://www.growmeinstead.com.au/ . [Accessed 3 Aug 2017]	"Other superior selections include; • <i>Palisota elizabethae</i> • <i>Ajuga australis</i> – Native Bugle" [No evidence. Recommended as alternative to invasive plants <i>Tradescantia fluminensis</i> & <i>Tradescantia zebrina</i>]
	Randall, R.P. (2017). A Global Compendium of Weeds. 3rd Edition. Perth, Western Australia. R.P. Randall	No evidence, but limited information outside native range

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

Qsn #	Question	Answer
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

305	Congeneric weed	
	Source(s)	Notes
	Herbst, D.R., Staples, G.W. & Imada, C.T. (2004). New Hawaiian plant records for 2002-2003. Bishop Museum Occasional Papers 78: 3-12	[Naturalized. Potentially invasive] "This herbaceous, shade-loving species has been cultivated as an ornamental on O'ahu since the early 1950s and has now begun to escape from cultivation in at least two widely separated locations, both near botanical gardens. Plants were found scattered in shady understory on steep slopes above planted areas in the Lyon Arboretum; the Waimea Arboretum voucher was collected from the humus-filled crotch of a monkeypod tree about eight feet above the ground. The fleshy, bright red fruit may be attractive to rats or birds, which are effectively dispersing the seeds from plantings into surrounding areas (D. Orr, pers. comm.). <i>Palisota</i> was not included in the list of potentially invasive species of cultivated plants in Hawai'i (Staples et al., 2000), but it should be monitored closely for its potential to invade shady, mesic forest habitats."
	Randall, R.P. (2017). A Global Compendium of Weeds. 3rd Edition. Perth, Western Australia. R.P. Randall	<i>Palisota hirsute</i> cited as a potential agricultural weed. Impacts unspecified

401	Produces spines, thorns or burrs	n
	Source(s)	Notes
	Kubitzki, K. (ed.). 1998. The Families and genera of vascular plants. Volume IV. Flowering plants, Monocotyledons: Alismatanae and Commelinanae (except Gramineae). Springer-Verlag, Berlin, Heidelberg, New York	[Generic description. No evidence] "Perennial herbs, generally medium- to large-sized, mostly rosettes or herbaceous shrubs, leaves alternate or in pseudowhorls, lamina petiolate; inflorescences terminal, terminal and axillary, or all axillary, pedunculate, thyriform; flowers slightly zygomorphic, bisexual and male"

402	Allelopathic	
	Source(s)	Notes
	WRA Specialist. 2017. Personal Communication	Unknown

403	Parasitic	n
	Source(s)	Notes
	Kubitzki, K. (ed.). 1998. The Families and genera of vascular plants. Volume IV. Flowering plants, Monocotyledons: Alismatanae and Commelinanae (except Gramineae). Springer-Verlag, Berlin, Heidelberg, New York	"Perennial herbs, generally medium- to large-sized, mostly rosettes or herbaceous shrubs" [Commelinaceae. No evidence]

404	Unpalatable to grazing animals	

Qsn #	Question	Answer
	Source(s)	Notes
	Caldecott, J. O., & Miles, L. (Eds.). (2005). World Atlas of Great Apes and Their Conservation. University of California Press, Berkeley and Los Angeles, CA	[Palatable to gorillas] "Outside fruiting seasons, more fibrous vegetative matter is eaten, including shoots, young leaves, and bark. In the absence of preferred foods, western gorillas eat leaves, bark, low-quality herbs such as <i>Palisota</i> (Commelinaceae) and <i>Aframomum</i> , and less-favored fruit such as <i>Duboscia</i> (Tiliaceae) and <i>Klainedoxa</i> (Simaroubaceae)."
	Obua, B. E., McAlbert, F. U., Okoro, B. O., & Efenie, S. (2012). Survey of the diversity of forage Plants used in feeding Pigs in smallholder farms in Southeastern Nigeria. Int'l Journal of Agric. and Rural Dev, 15(3), 1310-1316	[Pigs have low preference for related species <i>Palisota hirsute</i>] "Among the forage plants, pigs had moderate preference for <i>Musa</i> species, <i>Talinium triangulare</i> , <i>Tridax procumbens</i> <i>Arachids hypogea</i> , <i>Calopogonium mucunoides</i> , <i>Centrosema pubescens</i> , <i>Pueraria phaseoloides</i> , <i>Costus afer</i> , <i>Syndrella nodiflora</i> and <i>Eurphorbia heterophylla</i> but they had low preference for others like <i>Palisota hirsuta</i> and <i>Vernonia amygdalina</i> (bitter leaf) but especially foliage obtained from tree species such as mango, cabbage tree and hog plum (Table 1)"

405	Toxic to animals	
	Source(s)	Notes
	Neuwinger, H.D. 1996. African Ethnobotany: Poisons and Drugs : Chemistry, Pharmacology, Toxicology. CRC Press, Boca Raton, FL	[Unknown for <i>P. pynaertii</i>] The genus <i>Palisota</i> is the only representative of the Commelinaceae to be known as a hunting poison ingredient: <i>P. hirsuta</i> in Gabon, Liberia and the lorry Coast, <i>P. alopecurus</i> in the Central African Republic and <i>P. barteri</i> (?) in Zaire." ... <i>Palisota</i> species, as all the Commelinaceae, are chemically and toxicologically still unknown."

406	Host for recognized pests and pathogens	y
	Source(s)	Notes
	Hill, D. S. 2008. Pests of Crops in Warmer Climates and Their Control. Springer Science + Business Media, New York	" <i>Pentalonia nigronervosa</i> ... Banana Aphid ... Hosts (main). Bananas (<i>Musa</i> spp.) (alternative). Alpina, Heliconia, Colocasia spp.; <i>Costus</i> , <i>Zingiber</i> , <i>Palisota</i> , and tomato" ... "Pest status Important as the vector of Bunchy Top Disease, which is serious in Asiatic banana-growing areas, and three other virus diseases."

407	Causes allergies or is otherwise toxic to humans	
	Source(s)	Notes
	Neuwinger, H.D. 1996. African Ethnobotany: Poisons and Drugs : Chemistry, Pharmacology, Toxicology. CRC Press, Boca Raton, FL	[Unknown for <i>P. pynaertii</i>] The genus <i>Palisota</i> is the only representative of the Commelinaceae to be known as a hunting poison ingredient: <i>P. hirsuta</i> in Gabon, Liberia and the lorry Coast, <i>P. alopecurus</i> in the Central African Republic and <i>P. barteri</i> (?) in Zaire." ... <i>Palisota</i> species, as all the Commelinaceae, are chemically and toxicologically still unknown."

408	Creates a fire hazard in natural ecosystems	n
	Source(s)	Notes

Qsn #	Question	Answer
	Kubitzki, K. (ed.). 1998. The Families and genera of vascular plants. Volume IV. Flowering plants, Monocotyledons: Alismatanae and Commelinanae (except Gramineae). Springer-Verlag, Berlin, Heidelberg, New York	"Perennial herbs, generally medium- to large-sized, mostly rosettes or herbaceous shrubs" ... "Africa, in forest understory and disturbed situations, usually growing in shade." [No evidence in genus]
409	Is a shade tolerant plant at some stage of its life cycle	y
	Source(s)	Notes
	Kubitzki, K. (ed.). 1998. The Families and genera of vascular plants. Volume IV. Flowering plants, Monocotyledons: Alismatanae and Commelinanae (except Gramineae). Springer-Verlag, Berlin, Heidelberg, New York	"About 18 spp., Africa, in forest understory and disturbed situations, usually growing in shade."
	Shigematsu, K. 2017. Research Associate. Harold L. Lyon Arboretum. Pers. comm. 01 August	"Until recently, it had been in deep shade and not doing well, but now that it is in more sun, it produces many red berries." [Tolerates shade, but reproduces more vigorously in areas with higher light levels]
410	Tolerates a wide range of soil conditions (or limestone conditions if not a volcanic island)	
	Source(s)	Notes
	WRA Specialist. 2017. Personal Communication	Soil requirements unknown
411	Climbing or smothering growth habit	n
	Source(s)	Notes
	Kubitzki, K. (ed.). 1998. The Families and genera of vascular plants. Volume IV. Flowering plants, Monocotyledons: Alismatanae and Commelinanae (except Gramineae). Springer-Verlag, Berlin, Heidelberg, New York	[Generic description. No evidence] "Perennial herbs, generally medium- to large-sized, mostly rosettes or herbaceous shrubs, leaves alternate or in pseudowhorls, lamina petiolate; inflorescences terminal, terminal and axillary, or all axillary, pedunculate, thyriform; flowers slightly zygomorphic, bisexual and male"
412	Forms dense thickets	
	Source(s)	Notes
	WRA Specialist. 2017. Personal Communication	Unknown
501	Aquatic	n
	Source(s)	Notes
	NParks Flora&FaunaWeb. 2017. <i>Palisota pynaertii</i> 'Elizabethae'. https://florafaunaweb.nparks.gov.sg/ . [Accessed 3 Aug 2017]	"Native Habitat: Terrestrial"

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 Aug 2017]	Family: Commelinaceae Subfamily: Commelinoideae Tribe: Tradescantieae Subtribe: Palisotinae

503	Nitrogen fixing woody plant	n
	Source(s)	Notes
	Kubitzki, K. (ed.). 1998. The Families and genera of vascular plants. Volume IV. Flowering plants, Monocotyledons: Alismatanae and Commelinanae (except Gramineae). Springer-Verlag, Berlin, Heidelberg, New York	Family: Commelinaceae Subfamily: Commelinoideae Tribe: Tradescantieae Subtribe: Palisotinae

504	Geophyte (herbaceous with underground storage organs -- bulbs, corms, or tubers)	n
	Source(s)	Notes
	Kubitzki, K. (ed.). 1998. The Families and genera of vascular plants. Volume IV. Flowering plants, Monocotyledons: Alismatanae and Commelinanae (except Gramineae). Springer-Verlag, Berlin, Heidelberg, New York	"Perennial herbs, generally medium- to large-sized, mostly rosettes or herbaceous shrubs"

601	Evidence of substantial reproductive failure in native habitat	
	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 3 Aug 2017]	"Native: Africa West-Central Tropical Africa: Zaire" [Status in native range unknown]

602	Produces viable seed	y
	Source(s)	Notes
	NParks Flora&FaunaWeb. 2017. <i>Palisota pynaertii</i> 'Elizabethae'. https://florafaunaweb.nparks.gov.sg/ . [Accessed 3 Aug 2017]	"Propagation Method: Seed, Division"
	Shigematsu, K. 2017. Research Associate. Harold L. Lyon Arboretum. Pers. comm. 01 August	"Until recently, it had been in deep shade and not doing well, but now that it is in more sun, it produces many red berries."

603	Hybridizes naturally	
	Source(s)	Notes

Qsn #	Question	Answer
	Faden, R. (1995). <i>Palisota flagelliflora</i> (Commelinaceae), a New Species from Cameroon with a Unique Habit. <i>Novon</i> , 5(3), 246-251	[Unknown for <i>P. pynaertii</i> . Hybridization may occur in genus] "Bos 3877 approached <i>Palisota lagopus</i> Mildbraed in robustness and peduncle pubescence, differing most obviously by its longer, axillary, sympodial flowering shoot with several inflorescences and longer, spirally contorted fruiting pedicels. Its somewhat intermediacy between this species and <i>P. flagelliflora</i> suggested a possible hybrid origin, but it could just as readily represent an undescribed species or a form of <i>P. flagelliflora</i> ."

604	Self-compatible or apomictic	
	Source(s)	Notes
	Owens, S. J. (1981). Self-incompatibility in the Commelinaceae. <i>Annals of Botany</i> , 47(5), 567-581	[Unknown for <i>Palisota pynaertii</i>] "This paper reports on a survey of self-incompatibility in 110 species of 22 genera in the family Commelinaceae. Genera from both tribes, Tradescantieae and Commelineae are included. Fifty five species were found to be self-incompatible, 50 species self-compatible, and five species comprised individuals which were self-incompatible and individuals which were self-compatible. This variability and its possible evolutionary significance are discussed. Self-incompatible species had actinomorphic flowers and the majority of these were in the Tradescantieae. Species with zygomorphic flowers which were more commonly found in the Commelineae were self-compatible. The ubiquitous presence of binucleate pollen grains supports previous data that self-incompatibility is of the gametophytic type. The site of pollen tube arrest, however, was on the stigma at or near the base of the stigma papilla cells. There were two exceptions to this viz. an unnamed <i>Dichorisandra</i> species and <i>Siderasis fuscata</i> where pollen tube arrest was stylar. The significance of these data to taxonomy also receives comment."

605	Requires specialist pollinators	n
	Source(s)	Notes
	Evans, T. M., Sytsma, K. J., Faden, R. B., & Givnish, T. J. (2003). Phylogenetic relationships in the Commelinaceae: II. A cladistics analysis of rbcl sequences and morphology. <i>Systematic Botany</i> , 28(2), 270-292	"Flowers in the Commelinaceae are visited by a wide range of insect pollinators, and the androecium has been highly modified in some genera for the attraction of pollinators (Faden 1991, 1992, 2000). Because there is no nectar reward for pollinators, modifications of the stamens (i.e., large, showy antherodes; filament hairs) may be deceptive mechanisms to attract insects (Vogel 1978; Faden 1992)."

606	Reproduction by vegetative fragmentation	
	Source(s)	Notes
	NParks Flora&FaunaWeb. 2017. <i>Palisota pynaertii</i> 'Elizabethae'. https://florafaunaweb.nparks.gov.sg/ . [Accessed 5 Aug 2017]	"Propagation Method : Seed, Division" [Potentially Yes. Other genera of Commelinaceae reproduce from vegetative fragments]

607	Minimum generative time (years)	

Qsn #	Question	Answer
	Source(s)	Notes
	NParks Flora&FaunaWeb. 2017. <i>Palisota pynaertii</i> 'Elizabethae'. https://florafaunaweb.nparks.gov.sg/ . [Accessed 5 Aug 2017]	"Propagation Method : Seed, Division" [Unknown]

701	Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)	
	Source(s)	Notes
	Kubitzki, K. (ed.). 1998. The Families and genera of vascular plants. Volume IV. Flowering plants, Monocotyledons: Alismatanae and Commelinanae (except Gramineae). Springer-Verlag, Berlin, Heidelberg, New York	"The berries of <i>Palisota</i> and berrylike fruits of <i>Pollia</i> , a few species of <i>Commelina</i> , and <i>Tradescantia zanoniana</i> are probably endozoochorous." ... "fruits berries, trilobular, indehiscent, orange to red or blue to black, locules 1-6-seeded." [Unknown if seeds are small enough to adhere to shoes, equipment or vehicles in mud]

702	Propagules dispersed intentionally by people	y
	Source(s)	Notes
	NParks Flora&FaunaWeb. 2017. <i>Palisota pynaertii</i> 'Elizabethae'. https://florafaunaweb.nparks.gov.sg/ . [Accessed 3 Aug 2017]	"Desirable Plant Features: Ornamental Foliage, Ornamental Form"

703	Propagules likely to disperse as a produce contaminant	
	Source(s)	Notes
	WRA Specialist. 2017. Personal Communication	Unknown

704	Propagules adapted to wind dispersal	n
	Source(s)	Notes
	Kubitzki, K. (ed.). 1998. The Families and genera of vascular plants. Volume IV. Flowering plants, Monocotyledons: Alismatanae and Commelinanae (except Gramineae). Springer-Verlag, Berlin, Heidelberg, New York	"The berries of <i>Palisota</i> and berrylike fruits of <i>Pollia</i> , a few species of <i>Commelina</i> , and <i>Tradescantia zanoniana</i> are probably endozoochorous." ... "fruits berries, trilobular, indehiscent, orange to red or blue to black, locules 1-6-seeded."

705	Propagules water dispersed	
	Source(s)	Notes
	Kubitzki, K. (ed.). 1998. The Families and genera of vascular plants. Volume IV. Flowering plants, Monocotyledons: Alismatanae and Commelinanae (except Gramineae). Springer-Verlag, Berlin, Heidelberg, New York	"The berries of <i>Palisota</i> and berrylike fruits of <i>Pollia</i> , a few species of <i>Commelina</i> , and <i>Tradescantia zanoniana</i> are probably endozoochorous." ... "fruits berries, trilobular, indehiscent, orange to red or blue to black, locules 1-6-seeded." [Unknown if seeds or vegetative fragments may be secondarily dispersed by water]

Qsn #	Question	Answer
706	Propagules bird dispersed	y
	Source(s)	Notes
	Kubitzki, K. (ed.). 1998. The Families and genera of vascular plants. Volume IV. Flowering plants, Monocotyledons: Alismatanae and Commelinanae (except Gramineae). Springer-Verlag, Berlin, Heidelberg, New York	"The berries of Palisota and berrylike fruits of Pollia, a few species of Commelina, and Tradescantia zanoniana are probably endozoochorous." ... "fruits berries, trilobular, indehiscent, orange to red or blue to black, locules 1-6-seeded." [Presumably Yes]

707	Propagules dispersed by other animals (externally)	
	Source(s)	Notes
	Kubitzki, K. (ed.). 1998. The Families and genera of vascular plants. Volume IV. Flowering plants, Monocotyledons: Alismatanae and Commelinanae (except Gramineae). Springer-Verlag, Berlin, Heidelberg, New York	"The berries of Palisota and berrylike fruits of Pollia, a few species of Commelina, and Tradescantia zanoniana are probably endozoochorous." ... "fruits berries, trilobular, indehiscent, orange to red or blue to black, locules 1-6-seeded." [Unknown if seeds are small enough to adhere to fur or feet in mud]

708	Propagules survive passage through the gut	y
	Source(s)	Notes
	Kubitzki, K. (ed.). 1998. The Families and genera of vascular plants. Volume IV. Flowering plants, Monocotyledons: Alismatanae and Commelinanae (except Gramineae). Springer-Verlag, Berlin, Heidelberg, New York	"The berries of Palisota and berrylike fruits of Pollia, a few species of Commelina, and Tradescantia zanoniana are probably endozoochorous." ... "fruits berries, trilobular, indehiscent, orange to red or blue to black, locules 1-6-seeded." [Presumably Yes]

801	Prolific seed production (>1000/m ²)	
	Source(s)	Notes
	Shigematsu, K. 2017. Research Associate. Harold L. Lyon Arboretum. Pers. comm. 01 August	"Until recently, it had been in deep shade and not doing well, but now that it is in more sun, it produces many red berries." [Densities unknown]

802	Evidence that a persistent propagule bank is formed (>1 yr)	
	Source(s)	Notes
	Royal Botanic Gardens Kew. (2017) Seed Information Database (SID). Version 7.1. Available from: http://data.kew.org/sid/ . [Accessed 5 Aug 2017]	Unknown. 0 records found.

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.

Qsn #	Question	Answer
804	Tolerates, or benefits from, mutilation, cultivation, or fire	
	Source(s)	Notes
	NParks Flora&FaunaWeb. 2017. <i>Palisota pynaertii</i> 'Elizabethae'. https://florafaunaweb.nparks.gov.sg/ . [Accessed 5 Aug 2017]	"Propagation Method : Seed, Division" [Unknown. Other genera of Commelinaceae tolerate cutting & fragmentation]

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

Summary of Risk Traits:

High Risk / Undesirable Traits

- Thrives in tropical climates
- Other species may be weedy
- Other species may have toxic properties
- Shade tolerant
- Reproduces by seeds
- Seeds dispersed by birds & intentionally by people
- Limited ecological information reduces 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)
- Certain species palatable to animals
- Ornamental

Second Screening Results for Herbs or Low Stature Shrubby Life Forms

(A) Reported as a weed of cultivated lands? No evidence to date
Outcome = Accept (Low Risk)