

Taxon: Dietes iridioides (L.) Sweet ex Klatt

Family: Iridaceae

Common Name(s): African iris
fortnight lily
morea iris

Synonym(s): Moraea iridioides L.

Assessor: Chuck Chimera

Status: Assessor Approved

End Date: 3 May 2022

WRA Score: 17.0

Designation: H(HPWRA)

Rating: High Risk

Keywords: Rhizomatous Herb, Weedy, Ornamental, Self-Seeds, Spreads Vegetatively

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)		
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)	n
304	Environmental weed		
305	Congeneric weed	n=0, y = 1*multiplier (see Appendix 2)	y
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	y
406	Host for recognized pests and pathogens	y=1, n=0	n
407	Causes allergies or is otherwise toxic to humans		
408	Creates a fire hazard in natural ecosystems		
409	Is a shade tolerant plant at some stage of its life cycle	y=1, n=0	y

Qsn #	Question	Answer Option	Answer
410	Tolerates a wide range of soil conditions (or limestone conditions if not a volcanic island)	y=1, n=0	y
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	y=1, n=0	n
602	Produces viable seed	y=1, n=-1	y
603	Hybridizes naturally		
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	y
607	Minimum generative time (years)	1 year = 1, 2 or 3 years = 0, 4+ years = -1	2
701	Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)	y=1, n=-1	y
702	Propagules dispersed intentionally by people	y=1, n=-1	y
703	Propagules likely to disperse as a produce contaminant	y=1, n=-1	y
704	Propagules adapted to wind dispersal	y=1, n=-1	y
705	Propagules water dispersed	y=1, n=-1	y
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)	y=1, n=-1	y
803	Well controlled by herbicides		
804	Tolerates, or benefits from, mutilation, cultivation, or fire	y=1, n=-1	y
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
	Goldblatt, P. (1981). Systematics, Phylogeny and Evolution of <i>Dietes</i> (Iridaceae). <i>Annals of the Missouri Botanical Garden</i> , 68(1), 132-153	" <i>Dietes iridioides</i> is the most widespread and common species of the genus, extending almost from the southern tip of Africa to Kenya." [No evidence of domestication]

102	Has the species become naturalized where grown?	
	Source(s)	Notes
	WRA Specialist. (2022). Personal Communication	NA

103	Does the species have weedy races?	
	Source(s)	Notes
	WRA Specialist. (2022). 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
	Goldblatt, P. (1981). Systematics, Phylogeny and Evolution of <i>Dietes</i> (Iridaceae). <i>Annals of the Missouri Botanical Garden</i> , 68(1), 132-153	"Distribution: evergreen forests, from the southern Cape near Riviersonderend throughout eastern southern Africa and northwards through Rhodesia, Malawi, Zambia, eastern Zaire, Tanzania, Uganda, to Kenya"

202	Quality of climate match data	High
	Source(s)	Notes
	Goldblatt, P. (1981). Systematics, Phylogeny and Evolution of <i>Dietes</i> (Iridaceae). <i>Annals of the Missouri Botanical Garden</i> , 68(1), 132-153	"Distribution: evergreen forests, from the southern Cape near Riviersonderend throughout eastern southern Africa and northwards through Rhodesia, Malawi, Zambia, eastern Zaire, Tanzania, Uganda, to Kenya"

203	Broad climate suitability (environmental versatility)	
	Source(s)	Notes
	Burke, D. (2005). <i>The Complete Burke's Backyard: The Ultimate Book of Fact Sheets</i> . Murdoch Books, Millers Point, Australia	"Climate: <i>Dietes</i> grows in most areas of Australia."
	Missouri Botanical Garden. (2022). <i>Dietes iridioides</i> . http://www.missouribotanicalgarden.org . [Accessed 2 May 2022]	"Zone: 9 to 11"
	Germishuizen, G. & Meyer, N.L. (eds). (2003). <i>Plants of southern Africa: an annotated checklist</i> . Strelitzia 14. National Botanical Institute, Pretoria	[Possibly. Elevation range in SA >1000 m] "Perennial. Herb, geophyte Ht 0.3–0.6 m. Alt 30–1828 m. LIM, M, S, KZN, WC, EC"

Qsn #	Question	Answer
	Goldblatt, P., & Manning, J. C. (2015). Two new subspecies of <i>Dietes</i> (Iridaceae: Iridoideae), <i>Dietes iridioides</i> subsp. <i>angolensis</i> from Angola and <i>Dietes bicolor</i> subsp. <i>armeniaca</i> from eastern South Africa, with notes and range extensions for <i>Dietes butcheriana</i> and <i>Dietes iridioides</i> . <i>Bothalia-African Biodiversity & Conservation</i> , 45(1): 1-6	[Reported to tolerate a broad range of growing conditions] "Three species of the genus, <i>D. bicolor</i> , <i>Dietes grandiflora</i> N.E.Br. and <i>D. iridioides</i> , are widely cultivated in parts of the world where the climate is suitable, both in gardens and in street and park plantings. They are valued for their drought resistance, tolerance of a range of growing conditions"

204	Native or naturalized in regions with tropical or subtropical climates	y
	Source(s)	Notes
	Frohlich, D. & Lau, A. (2012). New plant records for the Hawaiian islands. <i>Bishop Museum Occasional Papers</i> 113: 27-54	" <i>Dietes iridioides</i> , a species used often as an accent plant in landscaping, has been found naturalizing on a ridgetop on O'ahu."
	Goldblatt, P. (1981). Systematics, Phylogeny and Evolution of <i>Dietes</i> (Iridaceae). <i>Annals of the Missouri Botanical Garden</i> , 68(1), 132-153	"Distribution: evergreen forests, from the southern Cape near Riviersonderend throughout eastern southern Africa and northwards through Rhodesia, Malawi, Zambia, eastern Zaire, Tanzania, Uganda, to Kenya"

205	Does the species have a history of repeated introductions outside its natural range?	y
	Source(s)	Notes
	Burke, D. (2005). <i>The Complete Burke's Backyard: The Ultimate Book of Fact Sheets</i> . Murdoch Books, Millers Point, Australia	" <i>Dietes iridioides</i> is readily available at nurseries."
	Randall, R.P. (2017). <i>A Global Compendium of Weeds</i> . 3rd Edition. Perth, Western Australia. R.P. Randall	"Major Pathway/s: Ornamental Dispersed by: Humans, Escapee References: Australia-CW-334, Australia-C-401, Australia-N-310, Australia-W-869, Australia-N-855, La Reunion-I-1321, Global-W-1324, Australia-E-1456, Global-CD-1611, New Zealand-U-2048, United States of America-N-2092, Australia-W-1977, India-W-1977."
	Staples, G.W. & Herbst, D.R. (2005). <i>A Tropical Garden Flora - Plants Cultivated in the Hawaiian Islands and Other Tropical Places</i> . Bishop Museum Press, Honolulu, HI	[Cultivated in the Hawaiian Islands] " <i>Dietes</i> is easily grown in Hawaii and thrives in any reasonably fertile, well-drained soil in partly shady sites; full sun is suitable only if ample moisture and protection from drying wind are available."

301	Naturalized beyond native range	y
	Source(s)	Notes
	Queensland Government. (2022). <i>Weeds of Australia</i> . <i>Dietes iridioides</i> . http://keyserver.lucidcentral.org . [Accessed 28 Apr 2022]	"This species has recently become locally naturalised in south-eastern South Australia. It is also sparingly naturalised south-eastern Queensland and southern Victoria, and possibly also naturalised in the coastal districts of central New South Wales."
	Murphy, M. (2022). Plant Pono Specialist. BIISC Early Detection Technician. personal communication. 28 April	[Hawaii island] "It is spreading like wildfire in Oceanview. It's almost impossible to pull up. It spreads vegetatively and by tiny wind-dispersed seeds. This is Oceanview's newest weed."

Qsn #	Question	Answer
	Ogle, C. C., & La Cock, G. D. (2019). Additional records and observations of monocotyledons naturalised or casual in Manawatu Ecological Region, New Zealand, 1980–2019. <i>Perspectives in Biosecurity</i> , 4, 6–32	[New Zealand Cultivation Escape] " <i>Dietes iridioides</i> (L.) Sweet fortnight lily, butterfly iris FIRST RECORD: AK 288158, B. Parris, 30 Mar 2004, Northland, Bay of Islands, Kerikeri, 21 James Kemp Place. ADDITIONAL RECORD: CHR 586890, C. C. Ogle 5140, I. Bell, J. Bell & R. C. Ogle, 22 Jun 2007, Whanganui, Bastia Hill, 115 Mount View Road. NOTES: Cultivation Escape. CHR 586890 comprised seedlings which were abundant under the base of a garden's internal hedge and in the adjoining open garden, up to 5 m from planted specimens. This species is often sold under the incorrect name of <i>D. grandiflora</i> ; the flowers are similar but <i>D. grandiflora</i> has erect leaves and flower stems compared with the lax leaves and decumbent flower stems of <i>D. iridioides</i> . The latter seems to self-establish more frequently than <i>D. grandiflora</i> . "Frequent self-seeding" was noted also by Parris for AK 288158, as well as being "proliferous at end and part way along flower stems". Potentially an invasive species in milder parts of New Zealand. In my own garden (CCO, personal observation), I have tried to pick all seed capsules and destroy them before seeds ripen." ... "The remaining 64 species we regard as being Casual. However, several of these Casual species are so well-established locally, and spreading, that they appear to be capable of being invasive on a wider scale, so becoming Naturalised in the future. These include <i>Cardiocrinum giganteum</i> , <i>Chimonobambusa marmorea</i> , <i>Dietes iridioides</i> , <i>Libertia chilensis</i> , <i>Melaspheerula graminea</i> , and an unidentified robust <i>Juncus</i> species."
	Frohlich, D. & Lau, A. (2012). New plant records for the Hawaiian islands. <i>Bishop Museum Occasional Papers</i> 113: 27–54	[Oahu] " <i>Dietes iridioides</i> , a species used often as an accent plant in landscaping, has been found naturalizing on a ridgetop on O'ahu. The description of this species from <i>A Tropical Garden Flora</i> : "Plant 1 to 2 feet tall; leaf blades linear to sword-shaped, 10 to 16 inches by 0.25 to 0.6 inches, veins not obvious. inflorescence scape bracts not obviously paired, 1 to 1.25 inches long, brownish. Flowers 1.5 to 2 (–4) inches, white with yellow blotch and beard on outer tepal, inner tepal white, tepal claws often orange-dotted; style branches bluish. Fruit ovoid-cylindrical, 0.8 to 1.2 inches long, rough-walled, furrowed, apex beaked." (Staples & Herbst 2005) Material examined. O'AHU: Wai'anae Mountains, Manuwai along eastern fence line of Manuwai fence, 2100 ft. Naturalized, forming a patch. Plant was sterile at field collection site- collected and grown until flowering at residence in Kahalu'u. Clumping herb, leaves less than 0.5 m long. outer tepals white with yellow-brown markings, inner tepals purple. Growing with <i>Metro sideros polymorpha</i> , <i>Grevillea robusta</i> , <i>Dodonaea viscosa</i> , <i>Clidemia hirta</i> , 15 Jun 2011, J. Beachy US Army 214."

302	Garden/amenity/disturbance weed	y
	Source(s)	Notes
	Murphy, M. (2022). Plant Pono Specialist. BIISC Early Detection Technician. personal communication. 28 April	"It is spreading like wildfire in Oceanview. It's almost impossible to pull up. It spreads vegetatively and by tiny wind-dispersed seeds. This is Oceanview's newest weed."
	Burke, D. (2005). <i>The Complete Burke's Backyard: The Ultimate Book of Fact Sheets</i> . Murdoch Books, Millers Point, Australia	"One of the great things about <i>Dietes</i> 1s it's virtually indestructible. A great choice for lazy gardeners!" [Traits could contribute to invasiveness in landscaping or elsewhere]

Qsn #	Question	Answer
	Queensland Government. (2022). Weeds of Australia. <i>Diets iridioides</i> . http://keyserver.lucidcentral.org . [Accessed 2 May 2022]	[A potential environmental weed. Here classified as a weed of unspecified impacts] "Wild iris (<i>Diets iridioides</i>) is regarded as a potential environmental weed or a "sleeper weed" in many parts of southern Australia. It has been reported from urban bushland in the Hornsby Plateau region to the north of Sydney Harbour and also from remnant patches of native woodlands in the Maranoa Gardens in suburban Melbourne."
	Dave's Garden. (2022). <i>Diets</i> Species, African Iris, Cape Iris, Fortnight Lily, Morea Lily, Wild Iris - <i>Diets iridioides</i> . https://davesgarden.com/guides/pf/go/572/ . [Accessed 2 May 2022]	[Reported as a garden/landscaping weed] "On Jun 9, 2012, humanbackhoe from Lincoln, CA wrote: This plant is very invasive. Read rosevilles comment but I did not want to work in mud, so instead I used a 14lb. digging pry bar with a 4x4 block to work up the root ball going around the base. However there are a lot of runners. Does anyone know how to erraticate the runners, will round up do it?" ... "On May 12, 2010, CAwinediva from Anaheim, CA wrote: 2 years ago I planted a few seeds from a pod I found. Now these have invaded all our flower beds. Between roses, iris and other plants. They are very hard to remove, though we will try the method mentioned above, using an ax. They are really pretty when they bloom, and that's fairly often here in So. Cal. But I would NEVER plant those seeds again!!!" ... "On Jul 11, 2003, astanton from Anaheim, CA (Zone 10b) wrote: In Southern California, this plant is extremely weedy; completely out of control. It evades every single bush--roses and Bird of Paradise included--and starts its growth in the middle of the bush, which makes it very difficult, if not impossible, so remove it. I have rose bushes with five or six <i>Diets</i> growing through it! Very invasive plant."

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] "References: Australia-CW-334, Australia-C-401, Australia-N-310, Australia-W-869, Australia-N-855, La Reunion-I-1321, Global-W-1324, Australia-E-1456, Global-CD-1611, New Zealand-U-2048, United States of America-N-2092, Australia-W-1977, India-W-1977."
	Queensland Government. (2022). Weeds of Australia. <i>Diets iridioides</i> . http://keyserver.lucidcentral.org . [Accessed 2 May 2022]	[No evidence] "Wild iris (<i>Diets iridioides</i>) is regarded as a potential environmental weed or a "sleeper weed" in many parts of southern Australia. It has been reported from urban bushland in the Hornsby Plateau region to the north of Sydney Harbour and also from remnant patches of native woodlands in the Maranoa Gardens in suburban Melbourne."

304	Environmental weed	
	Source(s)	Notes
	Queensland Government. (2022). Weeds of Australia. <i>Diets iridioides</i> . http://keyserver.lucidcentral.org . [Accessed 28 Apr 2022]	"Wild iris (<i>Diets iridioides</i>) is regarded as a potential environmental weed or a "sleeper weed" in many parts of southern Australia. It has been reported from urban bushland in the Hornsby Plateau region to the north of Sydney Harbour and also from remnant patches of native woodlands in the Maranoa Gardens in suburban Melbourne."

Qsn #	Question	Answer
305	Congeneric weed	y
	Source(s)	Notes
	Nursery & Garden Industry Australia. (2009). Grow Me Instead - Dietes species. http://www.growmeinstead.com.au/plant/dietes-species.aspx . [Accessed 2 May 2022]	"Dietes are spreading, strappy leaved plants native to South Africa. They belong to the Iris family, and produce an abundance of cream or white iris like flowers on long stems for most of the year. They grow extremely well in Australian conditions and have now become invasive in various regions throughout Western Australia." ... "HOW IT SPREADS - Dietes produce numerous seed pods which contain an abundance of seeds. Each seed can remain viable in the soil for an extended period of time and can readily germinate under most conditions."
	Queensland Government. (2022). Weeds of Australia. <i>Dietes grandiflora</i> . https://keyserver.lucidcentral.org/weeds/data/media/html/dietes_grandiflora.htm . [Accessed 2 May 2022]	"Large wild iris (<i>Dietes grandiflora</i>) is regarded as an environmental weed in Western Australia and as a potential environmental weed New South Wales (particularly in the wider Sydney and Blue Mountains region). Though it is currently not very widely naturalised, it is showing invasive tendencies and is thought to pose a threat to natural habitats. For example, it has been reported to have spread from garden plantings or dumped garden waste into Jarrah-Marri forest in south-western Western Australia."
	Sydney Weeds Network. (2022). Wild Iris - <i>Dietes bicolor</i> , <i>Dietes iridioides</i> . https://sydneyweeds.org.au/weeds/wild-iris/ . [Accessed 2 May 2022]	[<i>Dietes bicolor</i> regarded as weedy ornamental plants of gardens, requiring active management] "A recent addition to weed lists in Sydney, these plants need active management in all gardens. This may be as simple as actively removing spent flower stalks prior to seed set, or as comprehensive as complete removal from gardens."

401	Produces spines, thorns or burrs	n
	Source(s)	Notes
	Goldblatt, P. (1981). Systematics, Phylogeny and Evolution of <i>Dietes</i> (Iridaceae). <i>Annals of the Missouri Botanical Garden</i> , 68(1), 132-153	[No evidence] "Plants (15-)30-60 cm high. Leaves 25-40(-60) mm long, 6-15(-25) mm wide, linear-ensiform. Stem bearing short leaves below, and sheathing, bractlike leaves above, irregularly branching; stem bracts 25-30 mm long, often dry and brownish; old inflorescences often producing long stolons which bear a fan of leaves distally that eventually root. Spathes 35-50(-55) mm long, the outer ca. 1/2 the inner, obtuse-emarginate at the apex. Flowers white with yellow nectar guides on the outer tepals, the claws of the outer and often the inner tepals orange dotted, the style branches blue or white, flushed with blue; outer tepals 24-35 mm long, the claw ca. 16 mm long, heavily ciliate in midline, papillate, the limb spreading to recurved, 12-16 mm wide; inner tepals 24-28 mm long, 9-12 mm wide, spreading- recurved. Filaments 5-9 mm long, free or united or contiguous in the lower 3 mm; anthers 3-6 mm long. Ovary 8-15 mm long, lightly ridged; style 2-3 mm long, the branches 7-9 mm long, 4-6 mm wide; crests ca. 5 mm long. Capsule ovoid-cylindric, usually rostrate, 20-30 mm long, 14 mm in diameter."

402	Allelopathic	
	Source(s)	Notes
	WRA Specialist. (2022). Personal Communication	Unknown. No evidence found

Qsn #	Question	Answer
403	Parasitic	n
	Source(s)	Notes
	Goldblatt, P. (1981). Systematics, Phylogeny and Evolution of <i>Dietes</i> (Iridaceae). <i>Annals of the Missouri Botanical Garden</i> , 68(1), 132-153	"Plants (15-)30-60 cm high" [Iridaceae. No evidence]

404	Unpalatable to grazing animals	
	Source(s)	Notes
	Radebe, C. (2007). <i>Dietes iridioides</i> . PlantZAfrica. SANBI. http://pza.sanbi.org/dietes-iridioides . [Accessed 2 May 2022]	"Ground rhizomes are ingredients in tonics for goats (Hulme 1954)." [Palatability of foliage not addressed]
	The National Gardening Association. (2022). Cape Iris (<i>Dietes iridioides</i>). https://garden.org/plants/view/76275/Cape-Iris-Dietes-iridioides/ . [Accessed 2 May 2022]	"Resistances: Deer Resistant"
	WRA Specialist. (2022). Personal Communication	May be unpalatable to deer. Palatability to other browsing or grazing animals unknown.

405	Toxic to animals	y
	Source(s)	Notes
	Florgeous. (2020). Fortnight Lily (<i>Dietes iridioides</i>): How to Grow and Care. updated November 12, 2020. https://florgeous.com/fortnight-lily/ . [Accessed 3 May 2022]	"Are Fortnight Lilies Poisonous? Although not highly toxic, certain parts of the fortnight lily are poisonous to people and most animals. Ingesting parts of the fortnight lily plant can cause stomach pain, vomiting, and other unpleasant symptoms, but it is rarely life-threatening unless a copious amount is consumed."
	The National Gardening Association. (2022). Cape Iris (<i>Dietes iridioides</i>). https://garden.org/plants/view/76275/Cape-Iris-Dietes-iridioides/ . [Accessed 2 May 2022]	"Toxicity: Roots are poisonous" [Possibly, but unknown how likely animals would be to consume or contact roots]

406	Host for recognized pests and pathogens	n
	Source(s)	Notes
	Florgeous. (2020). Fortnight Lily (<i>Dietes iridioides</i>): How to Grow and Care. updated November 12, 2020. https://florgeous.com/fortnight-lily/ . [Accessed 3 May 2022]	"For the most part, fortnight lilies are fairly resistant to most pests and diseases and can generally fight away any that do come along. However, when caring for your fortnight lilies, there are a few pests and diseases to keep an eye out for just to make sure your plants are staying in tip-top shape."
	Missouri Botanical Garden. (2022). <i>Dietes iridioides</i> . http://www.missouribotanicalgarden.org . [Accessed 2 May 2022]	"No serious insect or disease problems. Crown root, root rot and rust may occur. Scale and nematodes."
	Victorian Resources Online. (2022). <i>Dietes</i> (<i>Dietes iridioides</i>). http://vro.agriculture.vic.gov.au . [Accessed 3 May 2022]	"The plants seldom fall prey to serious pests and diseases (GAMA 2009). <i>Dietes</i> genus of 6 species, "pests and diseases, trouble free" (Brickell 1996). Little or no host."

407	Causes allergies or is otherwise toxic to humans	

Qsn #	Question	Answer
	Source(s)	Notes
	Florgeous. (2020). Fortnight Lily (<i>Dietes iridioides</i>): How to Grow and Care. updated November 12, 2020. https://florgeous.com/fortnight-lily/ . [Accessed 3 May 2022]	"Are Fortnight Lilies Poisonous? Although not highly toxic, certain parts of the fortnight lily are poisonous to people and most animals. Ingesting parts of the fortnight lily plant can cause stomach pain, vomiting, and other unpleasant symptoms, but it is rarely life-threatening unless a copious amount is consumed. It is a good idea to watch children and pets that are around your fortnight lilies to ensure they don't eat the plants. For some, handling fortnight lilies can cause skin irritation, especially if the plant is cut open. This minor irritation generally goes away after a short amount of time, and washing your hands well may speed up the process."
	The National Gardening Association. (2022). Cape Iris (<i>Dietes iridioides</i>). https://garden.org/plants/view/76275/Cape-Iris-Dietes-iridioides/ . [Accessed 3 May 2022]	"Toxicity: Roots are poisonous" [Possibly, but unknown how likely animals would be to consume or contact roots]
	Quattrocchi, U. (2012). CRC World Dictionary of Medicinal and Poisonous Plants: Common Names, Scientific Names, Eponyms, Synonyms, and Etymology. CRC Press, Boca Raton, FL	[Medicinal uses] "Rhizome infusion for dysentery, hypertension. Veterinary medicine, rhizome tonic for goats. Magic, ritual, good luck charm."

408	Creates a fire hazard in natural ecosystems	
	Source(s)	Notes
	Victorian Resources Online. (2022). <i>Dietes</i> (<i>Dietes iridioides</i>). http://vro.agriculture.vic.gov.au . [Accessed 3 May 2022]	" <i>Dietes</i> "will thrive in semi-shade as well as full sun, often where little else will grow" (Pienaar 1984). Could create a minor change to either frequency or intensity of fire risk."
	Florgeous. (2020). Fortnight Lily (<i>Dietes iridioides</i>): How to Grow and Care. updated November 12, 2020. https://florgeous.com/fortnight-lily/ . [Accessed 3 May 2022]	"If you live in an area that is prone to fire outbreaks, the fortnight lily may be a good option for your landscaping. The fortnight lily is considered a fire-resistant flower. Although not fire-proof, the fortnight lily can withstand the environment that comes along with fire such as high temperatures and smoke."
	Behm, A. L. (2003). Flammability of native understory species in pine flatwood and hardwood hammock ecosystems. MSc Thesis. University of Florida, Gainesville, FL	[Possibly no] "Table 1-1. Common and scientific names of plants listed as appropriate for firewise landscaping according to two extension publications in Florida" [Includes <i>Dietes iridioides</i>]

409	Is a shade tolerant plant at some stage of its life cycle	y
	Source(s)	Notes
	Goldblatt, P., & Manning, J. C. (2015). Two new subspecies of <i>Dietes</i> (Iridaceae: Iridoideae), <i>Dietes iridioides</i> subsp. <i>angolensis</i> from Angola and <i>Dietes bicolor</i> subsp. <i>armeniaca</i> from eastern South Africa, with notes and range extensions for <i>Dietes butcheriana</i> and <i>Dietes iridioides</i> . <i>Bothalia-African Biodiversity & Conservation</i> , 45 (1): 1-6	" <i>Dietes iridioides</i> (L.) Sweet ex Klatt: This is the most widespread species of the genus, extending from forested valleys of the Riviersonderend Mountains in the Western Cape, South Africa, northward through wooded habitats in eastern southern Africa, Mozambique and Zimbabwe into Tanzania, Kenya and Uganda. The species occurs in shady habitats under bush or in evergreen forest."
	Powrie, F. (1998). <i>Grow South African Plants</i> . National Botanical Institute, Kirstenbosch	" <i>Dietes iridioides</i> . Iris-like flowers white and mauve with yellow markings, will grow in shade, evergreen, sow in spring."

Qsn #	Question	Answer
	Staples, G.W. & Herbst, D.R. (2005). A Tropical Garden Flora - Plants Cultivated in the Hawaiian Islands and Other Tropical Places. Bishop Museum Press, Honolulu, HI	"Dietes is easily grown in Hawaii and thrives in any reasonably fertile, well-drained soil in partly shady sites; full sun is suitable only if ample moisture and protection from drying wind are available."
	Burke, D. (2005). The Complete Burke's Backyard: The Ultimate Book of Fact Sheets. Murdoch Books, Millers Point, Australia	"Grow in full sun or part shade."
	Ella, G. (2005). Gap regeneration in the Tsitsikamma forest (Easter Cape, South Africa): the effect of gap size and origin. MSc Thesis, Stellenbosch University, Stellenbosch	[Colonizes shadier boundaries of forest gaps] "It appeared that herbaceous species such as <i>Dietes iridioides</i> and <i>Schoenoxiphium</i> sp. that are shorter than ferns were growing closer to the gap boundaries where it was shadier than in the middle of the gaps. Therefore, it is suggested that those herbaceous species are more shade tolerant than the ferns."

410	Tolerates a wide range of soil conditions (or limestone conditions if not a volcanic island)	y
	Source(s)	Notes
	Staples, G.W. & Herbst, D.R. (2005). A Tropical Garden Flora - Plants Cultivated in the Hawaiian Islands and Other Tropical Places. Bishop Museum Press, Honolulu, HI	"Dietes is easily grown in Hawaii and thrives in any reasonably fertile, well-drained soil in partly shady sites; full sun is suitable only if ample moisture and protection from drying wind are available."
	PlantMaster. (2022). <i>Dietes iridioides</i> African Iris. https://plantmaster.com/plants/eplant.php?plantnum=24368 . [Accessed 2 May 2022]	"Soil Type - Unparticular"
	Radebe, C. (2007). <i>Dietes iridioides</i> . PlantZAfrica. SANBI. http://pza.sanbi.org/dietes-iridioides . [Accessed 2 May 2022]	Soil type: Loam"

411	Climbing or smothering growth habit	n
	Source(s)	Notes
	Goldblatt, P. (1981). Systematics, Phylogeny and Evolution of <i>Dietes</i> (Iridaceae). <i>Annals of the Missouri Botanical Garden</i> , 68(1), 132-153	"Plants (15-)30-60 cm high. Leaves 25-40(-60) mm long, 6-15(-25) mm wide, linear-ensiform. Stem bearing short leaves below, and sheathing, bractlike leaves above, irregularly branching; stem bracts 25-30 mm long, often dry and brownish; old inflorescences often producing long stolons which bear a fan of leaves distally that eventually root."

412	Forms dense thickets	
	Source(s)	Notes
	Mucina, L., & Rutherford, M. (eds) (2006). The vegetation of South Africa, Lesotho and Swaziland. <i>Strelitzia</i> 19. South African National Biodiversity Institute, Pretoria	Unknown. No evidence from native range

Qsn #	Question	Answer
501	Aquatic	n
	Source(s)	Notes
	Goldblatt, P. (1981). Systematics, Phylogeny and Evolution of <i>Dietes</i> (Iridaceae). <i>Annals of the Missouri Botanical Garden</i> , 68(1), 132-153	[Terrestrial] "Distribution: evergreen forests, from the southern Cape near Riviersonderend throughout eastern southern Africa and northwards through Rhodesia, Malawi, Zambia, eastern Zaire, Tanzania, Uganda, to Kenya"

502	Grass	n
	Source(s)	Notes
	USDA, Agricultural Research Service, National Plant Germplasm System. (2022). Germplasm Resources Information Network (GRIN-Taxonomy). National Germplasm Resources Laboratory, Beltsville, Maryland. https://npgsweb.ars-grin.gov/ . [Accessed 29 Apr 2022]	Family: Iridaceae Subfamily: Iridoideae Tribe: Irideae

503	Nitrogen fixing woody plant	n
	Source(s)	Notes
	USDA, Agricultural Research Service, National Plant Germplasm System. (2022). Germplasm Resources Information Network (GRIN-Taxonomy). National Germplasm Resources Laboratory, Beltsville, Maryland. https://npgsweb.ars-grin.gov/ . [Accessed 29 Apr 2022]	Family: Iridaceae Subfamily: Iridoideae Tribe: Irideae

504	Geophyte (herbaceous with underground storage organs -- bulbs, corms, or tubers)	n
	Source(s)	Notes
	Goldblatt, P. (1981). Systematics, Phylogeny and Evolution of <i>Dietes</i> (Iridaceae). <i>Annals of the Missouri Botanical Garden</i> , 68(1), 132-153	" <i>Dietes</i> has a thick, tough, fibrous to woody creeping rhizome which persists for several years. It bears a fan of equitant leaves at its apex. Side branches are produced from lateral buds which grow eventually to form new plants, initially grouped in a clump with the original plant."

601	Evidence of substantial reproductive failure in native habitat	n
	Source(s)	Notes
	Goldblatt, P. (1981). Systematics, Phylogeny and Evolution of <i>Dietes</i> (Iridaceae). <i>Annals of the Missouri Botanical Garden</i> , 68(1), 132-153	"Flowering time: sporadic during spring and summer, blooming earliest in areas of winter rainfall. Distribution: evergreen forests, from the southern Cape near Riviersonderend throughout eastern southern Africa and northwards through Rhodesia, Malawi, Zambia, eastern Zaire, Tanzania, Uganda, to Kenya; Fig. 5. <i>Dietes iridioides</i> is the most widespread and common species of the genus, extending almost from the southern tip of Africa to Kenya."

602	Produces viable seed	y
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Qsn #	Question	Answer
	Source(s)	Notes
	Inkson, T., Smith, M. & Strachan, I. (2018). Garden Escapes & Other Weeds in Bushland and Reserves. A responsible gardening guide for the Sydney Region. Sydney Weeds Committees	"Dispersal: Seed is spread by water, humans, contaminated soil (earthmoving equipment, car tyres etc) and garden refuse dumping."
	Radebe, C. (2007). <i>Dietes iridioides</i> . PlantZAfrica. SANBI. http://pza.sanbi.org/dietes-iridioides . [Accessed 3 May 2022]	"Fruit is a capsule, oval shaped and it disintegrates to release black seeds." ... " <i>Dietes iridioides</i> will tolerate both wind and frost, and seeds itself freely."
	Burke, D. (2005). <i>The Complete Burke's Backyard: The Ultimate Book of Fact Sheets</i> . Murdoch Books, Millers Point, Australia	"Propagate by seed or by division of established clumps."
	Ogle, C. C., & La Cock, G. D. (2019). Additional records and observations of monocotyledons naturalised or casual in Manawatu Ecological Region, New Zealand, 1980–2019. <i>Perspectives in Biosecurity</i> , 4, 6–32	"Frequent self-seeding" was noted also by Parris for AK 288158, as well as being "proliferous at end and part way along flower stems". Potentially an invasive species in milder parts of New Zealand. In my own garden (CCO, personal observation), I have tried to pick all seed capsules and destroy them before seeds ripen."

603	Hybridizes naturally	
	Source(s)	Notes
	Goldblatt, P. (1981). Systematics, Phylogeny and Evolution of <i>Dietes</i> (Iridaceae). <i>Annals of the Missouri Botanical Garden</i> , 68(1), 132-153	[Possibly. Hybridization documented] " <i>Dietes robinsoniana</i> , counted from unvouchered seed obtained from the Royal Botanic Gardens, Kew, also has $2n = 20$, as does a hybrid <i>D. robinsoniana</i> x <i>D. iridioides</i> raised by M. Bousard, Verdun, France (Goldblatt, 1979)."

604	Self-compatible or apomictic	y
	Source(s)	Notes
	Radebe, C. (2007). <i>Dietes iridioides</i> . PlantZAfrica. SANBI. http://pza.sanbi.org/dietes-iridioides . [Accessed 29 Apr 2022]	"The plant can self-pollinate when the flower closes, bringing the male flower and female flower parts together. Bees and other insects also pollinate the flowers."

605	Requires specialist pollinators	n
	Source(s)	Notes
	Kubitzki, K. (ed.). (1998). <i>The Families and genera of vascular plants. Volume III. Flowering plants, Monocotyledons: Liliaceae (except Orchidaceae)</i> . Springer-Verlag, Berlin, Heidelberg, New York	"Although the pollination ecology of Iridaceae is extremely diverse (e.g. Vogel 1954), it seems likely that pollination by bees is ancestral." ... "The radially symmetric flowers of most Iridoideae are pollinated by bees." [<i>Dietes iridioides</i> in Subfamily Iridoideae]
	Radebe, C. (2007). <i>Dietes iridioides</i> . PlantZAfrica. SANBI. http://pza.sanbi.org/dietes-iridioides . [Accessed 3 May 2022]	"The plant can self-pollinate when the flower closes, bringing the male flower and female flower parts together. Bees and other insects also pollinate the flowers."

606	Reproduction by vegetative fragmentation	y
	Source(s)	Notes

Qsn #	Question	Answer
	Goldblatt, P. (1981). Systematics, Phylogeny and Evolution of <i>Dietes</i> (Iridaceae). <i>Annals of the Missouri Botanical Garden</i> , 68(1), 132-153	" <i>Dietes</i> has a thick, tough, fibrous to woody creeping rhizome which persists for several years. It bears a fan of equitant leaves at its apex. Side branches are produced from lateral buds which grow eventually to form new plants, initially grouped in a clump with the original plant." ... "old inflorescences often producing long stolons which bear a fan of leaves distally that eventually root."
	Sydney Weeds Network. (2022). Wild Iris - <i>Dietes bicolor</i> , <i>Dietes iridioides</i> . https://sydneyweeds.org.au/weeds/wild-iris/ . [Accessed 2 May 2022]	"Roots: Rhizomatous and fibrous, will re-shoot from any rootstock left in soil."

607	Minimum generative time (years)	2
	Source(s)	Notes
	Victorian Resources Online. (2022). <i>Dietes</i> (<i>Dietes iridioides</i>). http://vro.agriculture.vic.gov.au . [Accessed 3 May 2022]	"Time to reproductive maturity? In the 2nd or 3rd year they flower (ONSE 2009). 2-5 years to reach sexual maturity."

701	Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)	y
	Source(s)	Notes
	Sydney Weeds Network. (2022). Wild Iris - <i>Dietes bicolor</i> , <i>Dietes iridioides</i> . https://sydneyweeds.org.au/weeds/wild-iris/ . [Accessed 2 May 2022]	"Dispersal: Seed is spread by water, humans, contaminated soil (earthmoving equipment, car tyres etc) and garden refuse dumping."

702	Propagules dispersed intentionally by people	y
	Source(s)	Notes
	Burke, D. (2005). <i>The Complete Burke's Backyard: The Ultimate Book of Fact Sheets</i> . Murdoch Books, Millers Point, Australia	" <i>Dietes iridioides</i> is readily available at nurseries."
	Goldblatt, P., & Manning, J. C. (2015). Two new subspecies of <i>Dietes</i> (Iridaceae: Iridoideae), <i>Dietes iridioides</i> subsp. <i>angolensis</i> from Angola and <i>Dietes bicolor</i> subsp. <i>armeniaca</i> from eastern South Africa, with notes and range extensions for <i>Dietes butcheriana</i> and <i>Dietes iridioides</i> . <i>Bothalia-African Biodiversity & Conservation</i> , 45 (1): 1-6	"Three species of the genus, <i>D. bicolor</i> , <i>Dietes grandiflora</i> N.E.Br. and <i>D. iridioides</i> , are widely cultivated in parts of the world where the climate is suitable, both in gardens and in street and park plantings."
	Staples, G.W. & Herbst, D.R. (2005). <i>A Tropical Garden Flora - Plants Cultivated in the Hawaiian Islands and Other Tropical Places</i> . Bishop Museum Press, Honolulu, HI	[Cultivated in the Hawaiian Islands] " <i>Dietes</i> is easily grown in Hawaii and thrives in any reasonably fertile, well-drained soil in partly shady sites; full sun is suitable only if ample moisture and protection from drying wind are available."

Qsn #	Question	Answer
703	Propagules likely to disperse as a produce contaminant	y
	Source(s)	Notes
	Sydney Weeds Network. (2022). Wild Iris - <i>Dietes bicolor</i> , <i>Dietes iridioides</i> . https://sydneyweeds.org.au/weeds/wild-iris/ . [Accessed 2 May 2022]	"Dispersal: Seed is spread by water, humans, contaminated soil (earthmoving equipment, car tyres etc) and garden refuse dumping." [Could become a seed contaminant in soil and potted plants growing in vicinity]

704	Propagules adapted to wind dispersal	y
	Source(s)	Notes
	Murphy, M. (2022). Plant Pono Specialist. BIISC Early Detection Technician. personal communication. 28 April	"It spreads vegetatively and by tiny wind-dispersed seeds."
	Goldblatt, P. (1981). Systematics, Phylogeny and Evolution of <i>Dietes</i> (Iridaceae). <i>Annals of the Missouri Botanical Garden</i> , 68(1), 132-153	[Capsule dehiscence is variable. Most seeds may be gravity dispersed, but wind may also facilitate localized dispersal] "According to Obermeyer, the capsule of <i>D. grandiflora</i> is fully dehiscent, but in <i>D. iridioides</i> the capsules lie on the ground and decay but do not split. My own experience is contrary; I have observed <i>D. iridioides</i> in cultivation and in the field and have noted mature capsules splitting at least to the midline (Fig. 2B). Collections from the southern Cape also have partly dehiscent capsules. Most collections from elsewhere in Africa have capsules closed or split only near the apex, and it seems that there is some degree of variation in this character in <i>D. iridioides</i> ."
	Goldblatt, P. & Manning, J. C. (2008). <i>The Iris Family: Natural History & Classification</i> . Timber Press, Portland, OR	[Family traits] "Seed dispersal has not been investigated in any detail in the Iridaceae, but it is evident that genera vary in their seed form and associated adaptations for dispersal, although specializations for seed dispersal in most members of the family are limited. The globose to angular seeds of most genera apparently simply fall to the ground. Here they may be gathered by ants or small mammals and so dispersed short distances to nests or storage sites. Wind is a much more efficient means of seed dispersal, however; and numerous species and genera have fruits or seeds adapted for this mode of dispersal, particularly in semiarid southwestern Africa."

705	Propagules water dispersed	y
	Source(s)	Notes
	Sydney Weeds Network. (2022). Wild Iris - <i>Dietes bicolor</i> , <i>Dietes iridioides</i> . https://sydneyweeds.org.au/weeds/wild-iris/ . [Accessed 29 Apr 2022]	"Dispersal: Seed is spread by water, humans, contaminated soil (earthmoving equipment, car tyres etc) and garden refuse dumping."
	Goldblatt, P. (1996). <i>Flora of Tropical East Africa - Iridaceae</i> . A.A. Balkema, Rotterdam, Netherlands	[Distribution along streams suggests seeds and/or rhizome fragments may be moved by water] "HAB. Mostly in evergreen forests and forest margins, often along streams, montane in East Africa, also coastal to the south; 1100-2300 m.; flowering sporadically, mainly March to May, also July to January."

706	Propagules bird dispersed	n
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Qsn #	Question	Answer
	Source(s)	Notes
	Goldblatt, P. (1981). Systematics, Phylogeny and Evolution of <i>Dietes</i> (Iridaceae). <i>Annals of the Missouri Botanical Garden</i> , 68(1), 132-153	"Capsule ovoid-cylindric, usually rostrate, 20-30 mm long, 14 mm in diameter."
	Inkson, T., Smith, M. & Strachan, I. (2018). Garden Escapes & Other Weeds in Bushland and Reserves. A responsible gardening guide for the Sydney Region. Sydney Weeds Committees	"Seed is spread by water, humans, contaminated soil (earthmoving equipment, car tyres etc) and garden refuse dumping."

707	Propagules dispersed by other animals (externally)	n
	Source(s)	Notes
	Inkson, T., Smith, M. & Strachan, I. (2018). Garden Escapes & Other Weeds in Bushland and Reserves. A responsible gardening guide for the Sydney Region. Sydney Weeds Committees	"Seed is spread by water, humans, contaminated soil (earthmoving equipment, car tyres etc) and garden refuse dumping."
	Goldblatt, P. (1981). Systematics, Phylogeny and Evolution of <i>Dietes</i> (Iridaceae). <i>Annals of the Missouri Botanical Garden</i> , 68(1), 132-153	"Seeds of all species of <i>Dietes</i> are large, somewhat irregular in shape, and distinctly flattened." [Possible but unlikely. Seeds lack means of external attachment]

708	Propagules survive passage through the gut	n
	Source(s)	Notes
	Inkson, T., Smith, M. & Strachan, I. (2018). Garden Escapes & Other Weeds in Bushland and Reserves. A responsible gardening guide for the Sydney Region. Sydney Weeds Committees	"Seed is spread by water, humans, contaminated soil (earthmoving equipment, car tyres etc) and garden refuse dumping." [Seeds not adapted for consumption & unlikely to be internally dispersed]

801	Prolific seed production (>1000/m2)	
	Source(s)	Notes
	Sydney Weeds Network. (2022). Wild Iris - <i>Dietes bicolor</i> , <i>Dietes iridioides</i> . https://sydneyweeds.org.au/weeds/wild-iris/ . [Accessed 3 May 2022]	"Fruit: Green, three-celled capsule containing numerous hard angular seeds 1-2mm in diameter." [Seed densities unknown]

802	Evidence that a persistent propagule bank is formed (>1 yr)	y
	Source(s)	Notes
	Nursery & Garden Industry Australia. (2009). Grow Me Instead - <i>Dietes</i> species. http://www.growmeinstead.com.au/plant/dietes-species.aspx . [Accessed 2 May 2022]	" <i>Dietes</i> produce numerous seed pods which contain an abundance of seeds. Each seed can remain viable in the soil for an extended period of time and can readily germinate under most conditions." [Generic description]
	Victorian Resources Online. (2022). <i>Dietes</i> (<i>Dietes iridioides</i>). http://vro.agriculture.vic.gov.au . [Accessed 2 May 2022]	"Taking one to four or more years to weather away before germination takes place" (GAMA 2009). Most seeds probably germinate within 5 years. "

803	Well controlled by herbicides	

Qsn #	Question	Answer
	Source(s)	Notes
	Sydney Weeds Network. (2022). Wild Iris - <i>Dietes bicolor</i> , <i>Dietes iridioides</i> . https://sydneyweeds.org.au/weeds/wild-iris/ . [Accessed 3 May 2022]	"Control Hand pull/dig, Foliar spray." [Specifics on herbicide type & efficacy not provided]

804	Tolerates, or benefits from, mutilation, cultivation, or fire	Y
	Source(s)	Notes
	Weber, J. (2020). African Iris species in Florida. African Iris species in Florida. Citrus County Chronicle. Nov 15, 2020. https://www.chronicleonline.com . [Accessed 3 May 2022]	"Fire resistance means dietes will regenerate from its thick underground rhizomes. Top growth will be burned off. A hot fire could burn the rhizomes and roots."
	Sydney Weeds Network. (2022). Wild Iris - <i>Dietes bicolor</i> , <i>Dietes iridioides</i> . https://sydneyweeds.org.au/weeds/wild-iris/ . [Accessed 3 May 2022]	"Roots: Rhizomatous and fibrous, will re-shoot from any rootstock left in soil."

805	Effective natural enemies present locally (e.g. introduced biocontrol agents)	
	Source(s)	Notes
	Staples, G.W. & Herbst, D.R. (2005). A Tropical Garden Flora - Plants Cultivated in the Hawaiian Islands and Other Tropical Places. Bishop Museum Press, Honolulu, HI	Unknown. No information on pests or pathogens provided, but widespread cultivation suggests natural enemies are of negligible impact

Summary of Risk Traits:

High Risk / Undesirable Traits

- Able to grow in tropical and subtropical climates
- Naturalized on Oahu, Hawaii (Hawaiian Islands), Australia, New Zealand and elsewhere
- Regarded as a persistent garden and landscaping weed, and a potential environmental weed in Australia
- Other *Dietes* species are weedy and invasive
- May be unpalatable to deer and other browsing animals
- Roots and other plant parts reported to be toxic
- Shade tolerant
- Tolerates many soil types
- Reproduces by seeds and vegetatively by rhizomes
- Self-fertile
- Reaches maturity in 2-3 years
- Seed dispersed by wind, water, humans, contaminated soil, and garden refuse dumping
- Seeds may persist for one to four years before germination
- Able to resprout after cutting and fire

Low Risk Traits

- Unarmed (no spines, thorns, or burrs)
- May be fire-resistant and could potentially reduce fire risk in fire prone areas