## Key Words: Low Risk, Ornamental Plant, Showy Flowers, Short-statured Herb, Many Cultivars

Family: Goodeniaceae

Print Date: 9/1/2012

Taxon: Scaevola aemula

Synonym: NA Common Name: common fanflower

fairy fanflower

-	estionaire :	current 20090513	Assessor:	Chuck Chimera	<b>Designation:</b> L	
Stat	Status: Assessor Approved Data Entry Person: Chuck Chimera		WRA Score -6			
101	Is the species hig	thly domesticated?			y=-3, n=0	n
102	Has the species become naturalized where grown?			y=1, n=-1		
103	Does the species	have weedy races?			y=1, n=-1	
201		tropical or subtropical clima ropical'' for ''tropical or subt		ily wet habitat, then	(0-low; 1-intermediate; 2-high) (See Appendix 2)	Intermediate
202	Quality of climat	te match data			(0-low; 1-intermediate; 2-high) (See Appendix 2)	High
203	Broad climate su	uitability (environmental vers	atility)		y=1, n=0	n
204	Native or natura	lized in regions with tropical	or subtropical climates		y=1, n=0	n
205	Does the species	have a history of repeated int	troductions outside its na	tural range?	y=-2, ?=-1, n=0	y
301	Naturalized beyo	ond 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)	
303	Agricultural/fore	estry/horticultural weed			n=0, y = 2*multiplier (see Appendix 2)	n
304	Environmental v	veed			n=0, y = 2*multiplier (see Appendix 2)	n
305	Congeneric week	1			n=0, y = 1*multiplier (see Appendix 2)	у
401	Produces spines,	thorns or burrs			y=1, n=0	n
402	Allelopathic				y=1, n=0	
403	Parasitic				y=1, n=0	n
404	Unpalatable to g	razing animals			y=1, n=-1	n
405	Toxic to animals				y=1, n=0	n
406	Host for recogni	zed pests and pathogens			y=1, n=0	n
407	Causes allergies	or is otherwise toxic to huma	ns		y=1, n=0	n
408	Creates a fire ha	zard in natural ecosystems			y=1, n=0	n
409	Is a shade tolera	nt plant at some stage of its li	fe cycle		y=1, n=0	
410	Tolerates a wide	range of soil conditions (or li	mestone conditions if not	a volcanic island)	y=1, n=0	n
411	Climbing or smo	thering 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	
602	Produces viable seed	y=1, n=-1	y
603	Hybridizes naturally	y=1, n=-1	
604	Self-compatible or apomictic	y=1, n=-1	
605	Requires specialist pollinators	y=-1, n=0	n
606	Reproduction by vegetative fragmentation	y=1, n=-1	n
607	Minimum generative time (years)	1 year = 1, 2 or 3 years = 0, 4+ years = -1	1
701	Propagules likely to be dispersed unintentionally (plants growing in heavi areas)	ly trafficked y=1, n=-1	n
702	Propagules dispersed intentionally by people	y=1, n=-1	y
703	Propagules likely to disperse as a produce contaminant	y=1, n=-1	n
704	Propagules adapted to wind dispersal	y=1, n=-1	n
705	Propagules water dispersed	y=1, n=-1	
706	Propagules bird dispersed	y=1, n=-1	
707	Propagules dispersed by other animals (externally)	y=1, n=-1	n
708	Propagules survive passage through the gut	y=1, n=-1	
801	Prolific seed production (>1000/m2)	y=1, n=-1	n
802	Evidence that a persistent propagule bank is formed (>1 yr)	y=1, n=-1	
803	Well controlled by herbicides	y=-1, n=1	
804	Tolerates, or benefits from, mutilation, cultivation, or fire	y=1, n=-1	n
805	Effective natural enemies present locally (e.g. introduced biocontrol agent	y=-1, n=1	
	Des	ignation: L WRA Score -6	

uppor	ting Data:	
101	2005. Staples, G.W./Herbst, D.R A Tropical Garden Flora - Plants Cultivated in the Hawaiian Islands and Other Tropical Places. Bishop Museum Press, Honolulu, HI	[Is the species highly domesticated? No] "The species has undergone much horticultural selection in Europe, where cultivars with more vivid flowers have been developed." [This assessment deals with the wild-type, although selection for flower color should not necessarily influence a plant's competitive ability]
102	2012. WRA Specialist. Personal Communication.	NA
103	2012. WRA Specialist. Personal Communication.	NA
201	2012. Flora of Australia Online. Scaevola aemula [Accessed 31 Aug 2012]. Australian Biological Resources Study, http://www.anbg.gov.au/abrs/online-resources/flora/stddisplay.xsql?sn_infspnm=aemu la&sn_infsprnk=sp.&sn_fam=goodeniaceae&sn_g en=scaevola&sn_sp	
202	2012. Flora of Australia Online. Scaevola aemula [Accessed 31 Aug 2012]. Australian Biological Resources Study, http://www.anbg.gov.au/abrs/online-resources/flora/stddisplay.xsql?sn_infspnm=aemu la&sn_infsprnk=sp.&sn_fam=goodeniaceae&sn_g en=scaevola&sn_sp	
203	2012. Floridata. Scaevola aemula [Accessed 31 Aug 2012]. http://www.floridata.com/ref/s/scae_aem.cfm	[Broad climate suitability (environmental versatility)? No] "Hardiness: USDA Zones 9 - 11. airy fanflower can tolerate light frosts."
203	2012. Threatened Species Section. Listing Statement for Scaevola aemula (fairy fanflower). [Accessed 01 Sep 2012]. Department of Primary Industries and Water, Hobart, Tasmania	[Broad climate suitability (environmental versatility)? No evidence] "Scaevola aemula occurs on dolerite substrates, growing on wellinsolated slopes with a high rock cover. The species has been recorded from altitudes up to 200 m."
204	2012. Threatened Species Section. Listing Statement for Scaevola aemula (fairy fanflower). [Accessed 01 Sep 2012]. Department of Primary Industries and Water, Hobart, Tasmania	[Native or naturalized in regions with tropical or subtropical climates? No evidence] "Scaevola aemula occurs in South Australia, Victoria, New South Wales and Tasmania (Jeanes 1999). Within Tasmania the species is found on the East Coast between the Prosser River in the south and the Apsley River in the north (Rozefelds 2001). The species has a linear range of 82 km, extent of occurrence of about 850 km2 and a known area of occupancy of about 1 ha."
205	2004. Wang, Y-H./Bhalla, P.L Somatic embryogenesis from leaf explants of Australian fan flower, Scaevola aemula R. Br Plant Cell Reports. 22: 408-414.	[Does the species have a history of repeated introductions outside its natural range? Yes] "Scaevola aemula, a flowering plant characterized by fanshaped flowers with a long flowering period (Greig 1993), is endemic to Australia and increasingly being used in ornamental horticulture. It is widely used as a ground cover in Australia and in hanging baskets and window boxes and as garden-bed plants in Europe and America (Swoboda and Bhalla 1997; von Hentig and Ehler 1991, 1992, 1993)."
205	2005. Staples, G.W./Herbst, D.R A Tropical Garden Flora - Plants Cultivated in the Hawaiian Islands and Other Tropical Places. Bishop Museum Press, Honolulu, HI	[Does the species have a history of repeated introductions outside its natural range? Hawaiian Islands]
205	2012. Dave's Gardern. PlantFiles: Fan Flower, Fanflower - Scaevola aemula [Accessed 31 Aug 2012]. http://davesgarden.com/guides/pf/go/246/	[Does the species have a history of repeated introductions outside its natural range? Yes] "Wetumpka, Alabama Mesa, Arizona Bonadelle Ranchos-madera Ranchos, California Glen Avon, California Manhattan Beach, California San Diego, California Coral Springs, Florida Jacksonville, Florida Keystone Heights, Florida North De Land, Florida Port Saint Lucie, Florida Spring Hill, Florida Benton, Kentucky Marbury, Maryland Morningside, Maryland Madison Heights, Michigan Laurel, Mississippi, New York Averill Park, New York Glen Head, New York Tipp City, Ohio Lincolnville, South Carolina Fort Worth, Texas Paris, Texas San Antonio, Texas Woodway, Texas Chatmoss, Virginia Kalama, Washington Millwood, Washington Huntington, West Virginia"
301	2010. Marco, A./Lavergne, S./Dutoit, T./Bertaudiere-Montes, V From the backyard to the backcountry: how ecological and biological traits explain the escape of garden plants into Mediterranean old fields. Biological Invasions. 12: 761–779.	[Naturalized beyond native range? No] "Table 5 List of the perennial alien plant species escaped (=1) and not escaped (=0) in abandoned agricultural lands of Lauris village" [Scaevola aemula = 0]

301	2012. Randall, R.P A Global Compendium of Weeds. 2nd Edition. Department of Agriculture and Food, Western Australia	[Naturalized beyond native range? No evidence]
302	2012. California Invasive Plant Council. Suggested alternatives for invasive garden plants Central Valley Version [Accessed 01 Sep 2012]. http://www.cal- ipc.org/landscaping/dpp/pdf/CentValley.pdf	[Garden/amenity/disturbance weed? No evidence] Recommended as an non-invasive alternative to invasive plants
302	2012. USDA ARS National Genetic Resources Program. Germplasm Resources Information Network - (GRIN). http://www.ars-grin.gov/cgibin/npgs/html/index.pl	[Garden/amenity/disturbance weed? Possibly] Listed as a weed of unspecified impacts
303	2012. Randall, R.P A Global Compendium of Weeds. 2nd Edition. Department of Agriculture and Food, Western Australia	[Agricultural/forestry/horticultural weed? No evidence]
304	2012. Randall, R.P A Global Compendium of Weeds. 2nd Edition. Department of Agriculture and Food, Western Australia	[Environmental weed? No evidence]
305	1998. Gordon, D.R Effects of Invasive, Non- Indigenous Plant Species on Ecosystems Processes: Lessons from Florida. Ecological Applications. 8(4): 975–989.	[Congeneric weed? Yes] "TABLE 2. Florida's Category I "most invasive plant species" (Austin 1993), and date of introduction or first record of the introduction when available (Gordon and Thomas 1997)." [Scaevola taccada var. sericea]
305	2012. Randall, R.P A Global Compendium of Weeds. 2nd Edition. Department of Agriculture and Food, Western Australia	[Congeneric weed? Yes] Several species listed as invasive
401	2012. Flora of Australia Online. Scaevola aemula [Accessed 31 Aug 2012]. Australian Biological Resources Study, http://www.anbg.gov.au/abrs/online-resources/flora/stddisplay.xsql?sn_infspnm=aemula&sn_infsprnk=sp.&sn_fam=goodeniaceae&sn_gen=scaevola&sn_sp	
402	2012. WRA Specialist. Personal Communication.	[Allelopathic? Unknown]
403	2001. Rozefelds, A.C The species of Scaevola (Goodeniaceae) in Tasmania. Telopea. 9(2): 345-352.	[Parasitic? No evidence] "Herb ascending to decumbent, to 60 cm tall, stems with coarse antrorse strigose hairs."
404	2001. Rozefelds, A.C The species of Scaevola (Goodeniaceae) in Tasmania. Telopea. 9(2): 345-352.	[Unpalatable to grazing animals? No] "Some specimens show evidence of having been grazed, although it is unknown whether this is by native marsupials or introduced mammals. It is also unknown whether this grazing pressure could be impacting negatively on the species."
404	2012. Threatened Species Section. Listing Statement for Scaevola aemula (fairy fanflower). [Accessed 01 Sep 2012]. Department of Primary Industries and Water, Hobart, Tasmania	[Unpalatable to grazing animals? No] "Grazing and drought: The combined effect of browsing by native animals (and/or insects) and drought stress appears to have had a negative impact on seed set on the small population at Cherry Tree Hill (N. Meeson 2008, pers. comm.)." "Plants at the recently discovered Mt Peter population also exhibited signs of heavy browsing by native animals, with the only substantial plants being ones growing in the shelter of fallen trees or shrubs such as Gyrostemon thesioides. Browsing by stock may pose a threat to populations on private land not covered by Conservation Covenants."
405	2001. Rozefelds, A.C The species of Scaevola (Goodeniaceae) in Tasmania. Telopea. 9(2): 345-352.	[Toxic to animals? No evidence] "Some specimens show evidence of having been grazed, although it is unknown whether this is by native marsupials or introduced mammals. It is also unknown whether this grazing pressure could be impacting negatively on the species."
405	2008. Wagstaff, D.J International poisonous plants checklist: an evidence-based reference. CRC Press, Boca Raton, FL	[Toxic to animals? No evidence]
406	2012. Missouri Botanical Garden. Scaevola aemula [Accessed 31 Aug 2012]. http://www.missouribotanicalgarden.org/gardensgardening/your-garden/plant-finder/plant-details/kc/a117/scaevola-aemula.aspx	[Host for recognized pests and pathogens? No evidence] "No serious insect or disease problems."

407	2012. Dave's Gardern. PlantFiles: Fan Flower, Fanflower - Scaevola aemula [Accessed 31 Aug 2012]. http://davesgarden.com/guides/pf/go/246/	[Causes allergies or is otherwise toxic to humans? No evidence] "Danger: N/A"
408	2001. Rozefelds, A.C The species of Scaevola (Goodeniaceae) in Tasmania. Telopea. 9(2): 345-352.	[Creates a fire hazard in natural ecosystems? Adapted to appear after fire] "Scaevola aemula in both Tasmania and Victoria appears to have a disturbance-based ecology and is recorded as appearing after fire or disturbance due to land clearing."
408	2011. Wollombi Valley Landcare Group. News for August 2011 - Bushfire Safety Community Meeting. http://wollombi.nsw.au/documents/landcare- 0811.pdf	[Creates a fire hazard in natural ecosystems? No evidence] "Ground Cover Plants that are Hard to Burn Include:" [Includes Scaevola aemula]
409	2012. Floridata. Scaevola aemula [Accessed 31 Aug 2012]. http://www.floridata.com/ref/s/scae_aem.cfm	[Is a shade tolerant plant at some stage of its life cycle? Possibly] "Light: Full sun or light shade."
410	2001. Rozefelds, A.C The species of Scaevola (Goodeniaceae) in Tasmania. Telopea. 9(2): 345-352.	[Tolerates a wide range of soil conditions? No] "The Tasmanian populations of S. aemula, along with Eucalyptus barberi, Ozothamnus lycopodioides, Lasiopetalum micrantheum and Melaleuca pustulata are restricted to doleritic soils in this region. Scaevola aemula is also known from South Australia, Victoria and New South Wales (Carolin 1992a)."
411	2012. Flora of Australia Online. Scaevola aemula [Accessed 31 Aug 2012]. Australian Biological Resources Study, http://www.anbg.gov.au/abrs/online-resources/flora/stddisplay.xsql?sn_infspnm=aemu la&sn_infsprnk=sp.&sn_fam=goodeniaceae&sn_gen=scaevola&sn_sp	
412	1998. Gordon, D.R Effects of Invasive, Non- Indigenous Plant Species on Ecosystems Processes: Lessons from Florida. Ecological Applications. 8(4): 975–989.	[Forms dense thickets? No evidence]
412	2001. Rozefelds, A.C The species of Scaevola (Goodeniaceae) in Tasmania. Telopea. 9(2): 345-352.	[Forms dense thickets? No evidence] "The Tasmanian populations of S. aemula, along with Eucalyptus barberi, Ozothamnus lycopodioides, Lasiopetalum micrantheum and Melaleuca pustulata are restricted to doleritic soils in this region. Scaevola aemula is also known from South Australia, Victoria and New South Wales (Carolin 1992a)."
501	2001. Rozefelds, A.C The species of Scaevola (Goodeniaceae) in Tasmania. Telopea. 9(2): 345-352.	[Aquatic? No] "Distribution and Ecology: Rozefelds 1671 records the species growing in a Eucalyptus amygdalina community on dolerite."
502	2012. USDA ARS National Genetic Resources Program. Germplasm Resources Information Network - (GRIN). http://www.ars-grin.gov/cgi- bin/npgs/html/index.pl	[Grass? No] Goodeniaceae
503	2012. USDA ARS National Genetic Resources Program. Germplasm Resources Information Network - (GRIN). http://www.ars-grin.gov/cgibin/npgs/html/index.pl	[Nitrogen fixing woody plant? No] Goodeniaceae
504	2012. Flora of Australia Online. Scaevola aemula [Accessed 31 Aug 2012]. Australian Biological Resources Study, http://www.anbg.gov.au/abrs/online-resources/flora/stddisplay.xsql?sn_infspnm=aemu la&sn_infsprnk=sp.&sn_fam=goodeniaceae&sn_gen=scaevola&sn_sp	
601	1997. Benson, D./McDougall, L Ecology of Sydney Plant Species. Part 5. Dicotyledon families Flacourtiaceae to Myrsinaceae. Cunninghamia. 5(2): 330-544.	[Evidence of substantial reproductive failure in native habitat? No evidence] "Conservation: A generally widespread species that has a restricted distribution within the Sydney area. Probably conserved in Moreton NP."

601	2001. Rozefelds, A.C The species of Scaevola (Goodeniaceae) in Tasmania. Telopea. 9(2): 345-352.	[Evidence of substantial reproductive failure in native habitat? Possibly in Tasmania] "The species is currently listed as 'endangered' in the Tasmanian Threatened Species Protection Act (1995). Scaevola aemula in both Tasmania and Victoria appears to have a disturbance based ecology and is recorded as appearing after fire or disturbance due to land clearing. Some specimens show evidence of having been grazed, although it is unknown whether this is by native marsupials or introduced mammals. It is also unknown whether this grazing pressure could be impacting negatively on the species."
602	2003. Australian National Botanic Gardens. Growing Native Plants - Scaevola aemula [Accessed 31 Aug 2012]. http://www.anbg.gov.au/gnp/interns- 2002/scaevola-aemula.html	[Produces viable seed? Yes in Australia] "Seeds or cuttings can be used to propagate this plant. The seeds need to be sown fresh and the cutting need to be semi-ripe. The cuttings need to be placed in a sand-filled container and kept at warm temperatures. These plants are frost sensitive and do not do well in colder areas. S. aemula also requires well-drained sandy soil and a good sunny position."
502	2005. Staples, G.W./Herbst, D.R A Tropical Garden Flora - Plants Cultivated in the Hawaiian Islands and Other Tropical Places. Bishop Museum Press, Honolulu, HI	[Produces viable seed? Possibly No in Australia] "Since no fruit is produced in Hawaii, propagation here must be by vegetative means such as cuttings or layers."
602	2012. Flora of Australia Online. Scaevola aemula [Accessed 31 Aug 2012]. Australian Biological Resources Study, http://www.anbg.gov.au/abrs/online-resources/flora/stddisplay.xsql?sn_infspnm=aemu la&sn_infsprnk=sp.&sn_fam=goodeniaceae&sn_g en=scaevola&sn_sp	
602	2012. Missouri Botanical Garden. Scaevola aemula [Accessed 31 Aug 2012]. http://www.missouribotanicalgarden.org/gardensgardening/your-garden/plant-finder/plant-details/kc/a117/scaevola-aemula.aspx	[Produces viable seed? Yes] "May be grown from seed started indoors 6-8 weeks before last frost date."
603	1997. Swoboda, I./Bhalla, P.L RAPD analysis of genetic variation in the Australian fan flower, Scaevola. Genome. 40: 600-606.	[Hybridizes naturally? Unknown, but hybridization is apparently possible] "topology of the dendrogram implies that the distance between Purple Fanfare (S. aemula), Pink Perfection (S. striata), and Mauve Cluster (S. albida) is large, indicating the amount of genetic variation between commercial cultivars. These results are supported by the fact that progeny of S. phlebopetala x S. striata are fully fertile compared with progeny of S. striata x S. aemula or S. aemula x S. phlebopetala."
603	2004. Wang, Y-H./Bhalla, P.L Somatic embryogenesis from leaf explants of Australian fan flower, Scaevola aemula R. Br Plant Cell Reports. 22: 408-414.	[Hybridizes naturally? Probably No] "In addition, the existence of strong hybridization barriers in this genus puts serious constraints on the use of conventional breeding approaches."
503	2012. WRA Specialist. Personal Communication.	[Hybridizes naturally? Unknown]
504	1966. Carlquist, S The biota of long-distance dispersal. IV. Genetic systems in the floras of oceanic islands. Evolution. 20(4): 433-455.	[Self-compatible or apomictic? Unknown for S. aemula] "Scaevola" "spacial separation of anthers and style so that flower tends to be non selfing (NS)"
605	1996. Paton, D.C. Overview of Feral and Managed Honeybees in Australia. Australian Nature Conservation Agency, Canberra	[Requires specialist pollinators? No] "Prominence of honeybees at the flowers of Australian plants. Data provided in the table illustrate that honeybees are often the most prominent visitors to the flowers of a wide range of Australian plants." [S. aemula flowers visited by honeybees]
605	[Accessed 31 Aug 2012]. Australian Biological Resources Study, http://www.anbg.gov.au/abrs/online-	[Requires specialist pollinators] "Flowers in spikes to 24 cm long; bracts leaf like but smaller; bracteoles lanceolate, 4.5–7 mm long. Sepals broadly deltoid, to 0.5 mm long, ciliate, basally connate. Corolla 17–25 mm long, with appressed hairs outside, bearded inside, blue or white; barbulae few, simple; wings 1–1.5 mm wide. Ovary 2-locular; indusium to 1.5 mm long, stiff purplish beard ±equalling bristles on lips."
606	2012. Threatened Species Section. Listing Statement for Scaevola aemula (fairy fanflower). [Accessed 01 Sep 2012]. Department of Primary Industries and Water, Hobart, Tasmania	[Reproduction by vegetative fragmentation? No evidence] "Scaevola aemula has a disturbance based ecology, appearing after fire or physical disturbance (Rozefelds 2001). Plants in Tasmania have been observed to recruit from a soil-stored seedbank, flower and set seed within the first year after fire, while flowering has been observed from November to May."
607	2012. Floridata. Scaevola aemula [Accessed 31 Aug 2012].	[Minimum generative time (years)? Unknown] "It grows fast enough to be used as an annual in cooler zones."

607	2012. Threatened Species Section. Listing Statement for Scaevola aemula (fairy fanflower). [Accessed 01 Sep 2012]. Department of Primary Industries and Water, Hobart, Tasmania	[Minimum generative time (years)? 1] "The species has the ability to recruit from soil-stored seed, flower and set seed in the space of a year after fire, so a fire frequency at the lower end of this range is unlikely to be detrimental to the species."
701	2012. Threatened Species Section. Listing Statement for Scaevola aemula (fairy fanflower). [Accessed 01 Sep 2012]. Department of Primary Industries and Water, Hobart, Tasmania	[Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)? No evidence] "The fruit is ovoid, 3 to 4 mm long, rugose and pubescent. It is two-celled, with one ovule per cell." [No means of external attachment]
702	2003. Australian National Botanic Gardens. Growing Native Plants - Scaevola aemula [Accessed 31 Aug 2012]. http://www.anbg.gov.au/gnp/interns- 2002/scaevola-aemula.html	[Propagules dispersed intentionally by people? Yes] "Although this plant is plant is not currently widely cultivated, it's fast growth rate and prolific flowering should soon change this. S. aemula is extremely versatile and is recommended for growing in pots as well as garden beds."
702	2005. Staples, G.W./Herbst, D.R A Tropical Garden Flora - Plants Cultivated in the Hawaiian Islands and Other Tropical Places. Bishop Museum Press, Honolulu, HI	[Propagules dispersed intentionally by people? Yes] Ornamental
703	1997. Benson, D./McDougall, L Ecology of Sydney Plant Species. Part 5. Dicotyledon families Flacourtiaceae to Myrsinaceae. Cunninghamia. 5(2): 330-544.	[Propagules likely to disperse as a produce contaminant? No evidence] "Fruit/seed: Ovoid hairy dry indehiscent fruit with 2 seeds. Dispersal, establishment & growth: Diaspore: fruit."
703	2005. Staples, G.W./Herbst, D.R A Tropical Garden Flora - Plants Cultivated in the Hawaiian Islands and Other Tropical Places. Bishop Museum Press, Honolulu, HI	[Propagules likely to disperse as a produce contaminant? No evidence] "Since no fruit is produced in Hawaii, propagation here must be by vegetative means such as cuttings or layers."
704	2012. Threatened Species Section. Listing Statement for Scaevola aemula (fairy fanflower). [Accessed 01 Sep 2012]. Department of Primary Industries and Water, Hobart, Tasmania	[Propagules adapted to wind dispersal? No] "The fruit is ovoid, 3 to 4 mm long, rugose and pubescent. It is two-celled, with one ovule per cell. The description is adapted from Curtis (1963), Jeanes (1999), Rozefelds (2001) and TSS field observations in 2008."
705	1997. Benson, D./McDougall, L Ecology of Sydney Plant Species. Part 5. Dicotyledon families Flacourtiaceae to Myrsinaceae. Cunninghamia. 5(2): 330-544.	[Propagules water dispersed? Possibly] "Fruit/seed: Ovoid hairy dry indehiscent fruit with 2 seeds. Dispersal, establishment & growth: Diaspore: fruit."
706	1997. Benson, D./McDougall, L Ecology of Sydney Plant Species. Part 5. Dicotyledon families Flacourtiaceae to Myrsinaceae. Cunninghamia. 5(2): 330-544.	[Propagules bird dispersed? Unknown] "Fruit/seed: Ovoid hairy dry indehiscent fruit with 2 seeds. Dispersal, establishment & growth: Diaspore: fruit." [Dry fruit probably unlikely to be consumed]
707	1997. Benson, D./McDougall, L Ecology of Sydney Plant Species. Part 5. Dicotyledon families Flacourtiaceae to Myrsinaceae. Cunninghamia. 5(2): 330-544.	[Propagules dispersed by other animals (externally)? No evidence] "Fruit/seed: Ovoid hairy dry indehiscent fruit with 2 seeds. Dispersal, establishment & growth: Diaspore: fruit." [No means of external attachment]
708	1997. Benson, D./McDougall, L Ecology of Sydney Plant Species. Part 5. Dicotyledon families Flacourtiaceae to Myrsinaceae. Cunninghamia. 5(2): 330-544.	[Propagules survive passage through the gut? Unknown] "Fruit/seed: Ovoid hairy dry indehiscent fruit with 2 seeds. Dispersal, establishment & growth: Diaspore: fruit." [Dry fruit probably unlikely to be consumed]
801	2004. Wang, Y-H./Bhalla, P.L Somatic embryogenesis from leaf explants of Australian fan flower, Scaevola aemula R. Br Plant Cell Reports. 22: 408-414.	[Prolific seed production (>1000/m2)? No evidence] "The breeding potential of Scaevola, however, is limited due to the poor germination ability of its seeds (Wrigley and Fagg 1996)."
801	2005. Staples, G.W./Herbst, D.R A Tropical Garden Flora - Plants Cultivated in the Hawaiian Islands and Other Tropical Places. Bishop Museum Press, Honolulu, HI	[Prolific seed production (>1000/m2)? Not in Hawaiian Islands] "Since no fruit is produced in Hawaii, propagation here must be by vegetative means such as cuttings or layers."
802	2012. Threatened Species Section. Listing Statement for Scaevola aemula (fairy fanflower). [Accessed 01 Sep 2012]. Department of Primary Industries and Water, Hobart, Tasmania	[Evidence that a persistent propagule bank is formed (>1 yr)? Possibly] "Plants in Tasmania have been observed to recruit from a soil-stored seedbank, flower and set seed within the first year after fire, while flowering has been observed from November to May." "The longevity of the seedbank is unknown, though it might be expected to be at the upper end of the aforementioned fire interval."
803	2012. WRA Specialist. Personal Communication.	[Well controlled by herbicides? Unknown] No information on herbicide efficacy or chemical control of this species
804	2001. Rozefelds, A.C The species of Scaevola (Goodeniaceae) in Tasmania. Telopea. 9(2): 345-352.	[Tolerates, or benefits from, mutilation, cultivation, or fire? Adult plants killed. Recruits from seed banks] "Scaevola aemula in both Tasmania and Victoria appears to have a disturbance-based ecology and is recorded as appearing after fire or disturbance due to land clearing."

804	2010. Gordon, D.R./Mitterdorfer, B./Pheloung, P.C. et al Guidance for addressing the Australian Weed Risk Assessment questions. Plant Protection Quarterly. 25(2): 56-74.	[Tolerates, or benefits from, mutilation, cultivation, or fire? Recruits from seed banks] "Plants that tolerate or benefit from such disturbance may out-compete other species. This question does not apply to seed banks."
804	2012. Threatened Species Section. Listing Statement for Scaevola aemula (fairy fanflower). [Accessed 01 Sep 2012]. Department of Primary Industries and Water, Hobart, Tasmania	[Tolerates, or benefits from, mutilation, cultivation, or fire? Adult plants killed. Recruits from seed banks] "Scaevola aemula has a disturbance based ecology, appearing after fire or physical disturbance (Rozefelds 2001). Plants in Tasmania have been observed to recruit from a soil-stored seedbank, flower and set seed within the first year after fire, while flowering has been observed from November to May." "The absence of fire for longer periods poses a potential threat to the species."
805	2012. WRA Specialist. Personal Communication.	[Effective natural enemies present locally (e.g. introduced biocontrol agents)? Unknown]

## **Summary of Risk Traits**

## High Risk / Undesirable Traits

- Unconfirmed report of weediness
- Seeds, if produced, may form a seed bank
- Plant may be reproductive in as little as one year
- Fire-adapted ecology. May invade burned areas

## **Low Risk / Desirable Traits**

- No confirmed reports of naturalization or of negative impacts have been documented
- Unarmed (no spines, thorns or burrs)
- Non-toxic
- Landscaping and ornamental value (showy flowers)
- May rarely produce fruit in cultivation
- Seed viability may be low