

Family: *Commelinaceae*

Taxon: *Tradescantia zebrina*

Synonym: *Tradescantia pendula* (Schnizl.) D. R. Hunt
Zebrina pendula Schnizl.
Cyanotis zebrina (Bosse) Nees

Common Name: wandering jew
 kidneyleaf mudplantain
 inchplant

Questionnaire : current 20090513 **Assessor:** Assessor **Designation:** H(HPWRA)
Status: Assessor Approved **Data Entry Person:** Assessor **WRA Score** 14

101	Is the species highly 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	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	y
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	n=0, y = 2*multiplier (see Appendix 2)	y
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	y=1, n=0	
403	Parasitic	y=1, n=0	n
404	Unpalatable to grazing animals	y=1, n=-1	
405	Toxic to animals	y=1, n=0	n
406	Host for recognized pests and pathogens	y=1, n=0	n
407	Causes allergies or is otherwise toxic to humans	y=1, n=0	
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)	y=1, n=0	n

411	Climbing or smothering growth habit	y=1, n=0	y
412	Forms dense thickets	y=1, n=0	n
501	Aquatic	y=5, n=0	n
502	Grass	y=1, n=0	n
503	Nitrogen fixing woody plant	y=1, n=0	n
504	Geophyte (herbaceous with underground storage organs -- bulbs, corms, or tubers)	y=1, n=0	n
601	Evidence of substantial reproductive failure in native habitat	y=1, n=0	n
602	Produces viable seed	y=1, n=-1	
603	Hybridizes naturally	y=1, n=-1	
604	Self-compatible or apomictic	y=1, n=-1	n
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	1
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	n
704	Propagules adapted to wind dispersal	y=1, n=-1	n
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	
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	n
803	Well controlled by herbicides	y=-1, n=1	n
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)	y=-1, n=1	

Designation: H(HPWRA)

WRA Score 14

Supporting Data:

101	2013. WRA Specialist. Personal Communication.	[Is the species highly domesticated? No] No evidence
102	2013. WRA Specialist. Personal Communication.	NA
103	2013. WRA Specialist. Personal Communication.	NA
201	2008. Faden, R.B.. The author and typification of <i>Tradescantia zebrina</i> (Commelinaceae). Kew Bulletin. 63(4): 679-680.	[Species suited to tropical or subtropical climate(s) 2-High] "It is indigenous to Mexico and Central America, but is also widely escaped and naturalised in many tropical and subtropical areas in both hemispheres."
202	2008. Faden, R.B.. The author and typification of <i>Tradescantia zebrina</i> (Commelinaceae). Kew Bulletin. 63(4): 679-680.	[Quality of climate match data 2-High]
203	2013. Missouri Botanical Gardens. <i>Tradescantia zebrina</i> . http://www.missouribotanicalgarden.org/gardens-gardening/your-garden/plant-finder/plant-details/kc/d681/tradescantia-zebrina.aspx [Accessed 06 Aug 2013]	[Broad climate suitability (environmental versatility)? Yes] "Zone: 8 to 12" ... "It is noted for its ease of culture and tolerance for wide range of growing conditions." [Adaptable to 5 hardiness zones]
204	2008. Faden, R.B.. The author and typification of <i>Tradescantia zebrina</i> (Commelinaceae). Kew Bulletin. 63(4): 679-680.	[Native or naturalized in regions with tropical or subtropical climates? Yes] "It is indigenous to Mexico and Central America, but is also widely escaped and naturalised in many tropical and subtropical areas in both hemispheres."
205	2003. Vander Velde, N.. The Vascular Plants of Majuro Atoll, Republic of the Marshall Islands. Atoll Research Bulletin. 503: 1-141.	[Does the species have a history of repeated introductions outside its natural range? Yes] "Recent introduction. Mexico. Occasional. Ornamental potted plant in private household gardens in Rita. Can become invasive"
205	2004. Burns, J.H.. A comparison of invasive and non-invasive dayflowers (Commelinaceae) across experimental nutrient and water gradients. Diversity and Distributions. 10(5-6): 387-397.	[Does the species have a history of repeated introductions outside its natural range? Yes] " <i>Tradescantia zebrina</i> Bosse is native to southern Mexico and Central America (Wiersema & Leon, 1999; Faden, 2000) and invasive in Hawaii, Puerto Rico, the Virgin Islands, Kentucky, Louisiana, and Florida (Faden, 2000; NRCS Plants, 2004), and is probably more widely cultivated than its non-invasive congener, <i>Tradescantia brevifolia</i> (Torr.) Rose."
205	2008. Faden, R.B.. The author and typification of <i>Tradescantia zebrina</i> (Commelinaceae). Kew Bulletin. 63(4): 679-680.	[Does the species have a history of repeated introductions outside its natural range? Yes] " <i>Tradescantia zebrina</i> is a very familiar and commonly cultivated plant in the tropics and temperate regions. It is indigenous to Mexico and Central America, but is also widely escaped and naturalised in many tropical and subtropical areas in both hemispheres."
301	1997. Lorence, D./Flynn, T.. New Naturalized Plant Records for Kaua'i. Bishop Museum Occasional Papers. 49: 9-13.	[Naturalized beyond native range? Yes] "The following collection represents a new state record for the commonly cultivated wandering Jew or honohono. This creeping, nodally-rooting herb is represented by the color form having the leaves mostly purple with two silvery white bands above and purple- pink flowers. Probably an escape from cultivation, it is now naturalized and covers large areas of ground in secondary forest. Material examined. KAUA'I: Koloa District, W side of Lawai Valley, along Lawai Stream above NTBG's Lawai Garden and waterfall near convergence of two streams, in secondary vegetation of <i>Hibiscus tiliaceus</i> , <i>Samanea saman</i> , <i>Aleurites moluccana</i> , and <i>Epipremnum pinnatum</i> , ca. 300 ft [91 m], 30 Dec 1995, Lorence & Lorence 7743 (PTBG)"
301	2000. Oppenheimer, H.L./Bartlett, R.T.. New plant records from Maui, O'ahu, and the Hawai'i Islands. Bishop Museum Occasional Papers. 64: 1-10.	[Naturalized beyond native range? Yes] "First documentation of this taxon as naturalized was by Lorence & Flynn (1997: 10) reporting a specimen from Kaua'i. The collection cited here from Maui is also spreading vegetatively and covering large areas of ground in secondary, alien forest. Material examined: MAUI: West Maui, Lahaina District, Honolua Bay, between the shoreline and HonoaPi'ilani Hwy, 8 m, 5 Sep 1999, Oppenheimer H99903."
301	2004. Starr, F./Starr, K./Loope, L.L.. New plant records from the Hawaiian Archipelago. Bishop Museum Occasional Papers. 79: 20-30.	[Naturalized beyond native range? Yes] "A common houseplant that occasionally escapes from cultivation (Wagner et al., 1990), <i>T. zebrina</i> was previously documented as naturalized on Kaua'i and West Maui (Lorence & Flynn, 1997; Oppenheimer & Bartlett, 2000). It is now also known from Makawao, East Maui. This collection represents a range extension to East Maui. Material examined: MAUI: East Maui, Makawao, climbing steep bank near town, 1600 ft [488 m], 23 Oct 2001, Starr & Martz 011023-1."
301	2006. Rentería, J.L./Buddenhagen, C.. Invasive plants in the <i>Scalesia pedunculata</i> forest at Los Gemelos, Santa Cruz, Galapagos. Galapagos Research. 64: 31-35.	[Naturalized beyond native range? Yes] "Volunteers were used to map invasive plants in 25 ha of one of the best remnants of <i>Scalesia pedunculata</i> forest at Los Gemelos, Santa Cruz Island, Galapagos." ... "The forest extends over c. 140 ha and has been invaded by a number of introduced plant species including ... <i>Tradescantia zebrina</i> hort. Ex Bosse,..."

301	2007. Oppenheimer, H.L.. New plant records from Moloka'i, Lāna'i, Maui, and Hawai'i for 2006. Bishop Museum Occasional Papers. 96: 17-34.	[Naturalized beyond native range? Yes] "Only recently reported as naturalized in Hawai'i and documented from Kaua'i (Lorence & Flynn 1997: 10) and Maui (Oppenheimer & Bartlett 2000: 4), this species was collected on Moloka'i along with <i>Sphagneticola trilobata</i> (see above), spreading at least vegetatively from apparently discarded yard waste into secondary forest. It is the same color form as reported from Kaua'i and Maui, with leaves purple abaxially and green with 2 grayish or silvery stripes on both sides of the midrib on the upper surface. Material examined. MOLOKA'I: Kala'e, 500 m, rooting at nodes, escaping from discarded waste into Casuarina thicket, 2 Nov 2006, Oppenheimer H110607."
301	2008. Foxcroft, L.C./Richardson, D.M./Wilson, J.R.U.. Ornamental Plants as Invasive Aliens: Problems and Solutions in Kruger National Park, South Africa. Environmental Management. 41: 32-51.	[Naturalized beyond native range? Yes] "Table 2 Ornamental alien plant species recorded per camp in the Kruger National Park, indicating the number of camps in which each species has been recorded, as well as mode of introduction" [<i>Tradescantia zebrina</i> - Evidence of naturalization? = Yes]
301	2008. Weber, E./Sun, S.-G./Li, B.. Invasive alien plants in China: diversity and ecological insights. Biological Invasions. 10: 1411-1429.	[Naturalized beyond native range? Yes] "Appendix 1 Invasive alien plant species in China" [Includes <i>T. zebrina</i>]
301	2013. Krauss, U.. Invasive Alien Species Management in St. Lucia and Caribbean Partner Countries. Pp 196-206 in Biodiversité insulaire. DEAL Martinique,	[Naturalized beyond native range? Yes] "Escaped ornamental; Very common around Gros Piton trail; very rare elsewhere"
302	1998. Csurhes, S./Edwards, R.. Potential environmental weeds in Australia: Candidate species for preventative control. Biodiversity Group, Environment Australia, Canberra, Australia	[Garden/amenity/disturbance weed? Yes] "It is recorded as a weed in Puerto Rico, Colombia, Dominican Republic, Guatemala, Honduras and Jamaica (Holm et al. 1979). It has naturalised in north and south-eastern Queensland, on Lord Howe Island and along the central coast region of New South Wales (Hnatiuk 1990)." [Potential environmental weed]
302	2013. Queensland Government. Weeds of Australia - <i>Zebrina</i> , <i>Tradescantia zebrina</i> . http://keyserver.lucidcentral.org/weeds/data/03030800-0b07-490a-8d04-0605030c0f01/media/Html/Tradescantia_zebrina.htm [Accessed 31 July 2013]	[Garden/amenity/disturbance weed? Yes] "A weed of waste areas, disturbed sites, roadsides, urban bushland, riparian vegetation, open woodlands and forests in sub-tropical and warmer temperate regions."
303	2012. Queensland Government. Fact Sheet - <i>Zebrina</i> - <i>Tradescantia zebrina</i> (PP102). The State of Queensland (Department of Primary Industries and Fisheries),	[Agricultural/forestry/horticultural weed? No] "As an environmental weed, <i>zebrina</i> has the capacity to invade natural vegetation across south-east Queensland. <i>Zebrina</i> is currently an invasive environmental weed in north Queensland."
304	1998. Csurhes, S./Edwards, R.. Potential environmental weeds in Australia: Candidate species for preventative control. Biodiversity Group, Environment Australia, Canberra, Australia	[Environmental weed? Yes] "In north Queensland, it has formed dense infestations (up to 1m thick) along the edges of rainforests, particularly near settlements (Humphries and Stanton 1992). Humphries and Stanton (1992) suggest that it is only a matter of time before this weed becomes a major problem in the wet tropics of north Queensland."
304	2012. Graveson, R./Smith, M./Rock, R.. Survey of Invasive Alien Plant Species on Gros Piton, Saint Lucia, 2012. Forestry Department, Union	[Environmental weed? Yes] "This species is an aggressive invasive that if left untreated could affect the flora of large areas of Upper Deciduous Seasonal Forest and possible other vegetation classes."
304	2012. Queensland Government. Fact Sheet - <i>Zebrina</i> - <i>Tradescantia zebrina</i> (PP102). The State of Queensland (Department of Primary Industries and Fisheries),	[Environmental weed? Yes] "As an environmental weed, <i>zebrina</i> has the capacity to invade natural vegetation across south-east Queensland. <i>Zebrina</i> is currently an invasive environmental weed in north Queensland."
304	2013. Queensland Government. Weeds of Australia - <i>Zebrina</i> , <i>Tradescantia zebrina</i> . http://keyserver.lucidcentral.org/weeds/data/03030800-0b07-490a-8d04-0605030c0f01/media/Html/Tradescantia_zebrina.htm [Accessed 31 July 2013]	[Environmental weed? Yes] " <i>Zebrina</i> (<i>Tradescantia zebrina</i>) is regarded as an environmental weed in Queensland and New South Wales." [Impacts on native ecosystems unspecified]
305	2001. Standish, R.J./Robertson, A.W./Williams, P.A.. The impact of an invasive weed <i>Tradescantia fluminensis</i> on native forest regeneration. Journal of Applied Ecology. 38: 1253-1263.	[Congeneric weed? Yes] " <i>Tradescantia fluminensis</i> is an invasive weed of New Zealand, eastern Australia and Florida, where it carpets the ground in canopy depleted native forest remnants and prevents regeneration."
401	1994. Orchard, A.E. (ed.). Flora of Australia. Vol. 49, Oceanic islands 1. Australian Government Publishing Service, Canberra	[Produces spines, thorns or burrs? No] "Creeping and pendulous, succulent herb, rooting readily at nodes; stems, leaves and floral bracts tinged with purple-red. Leaves spaced along stem; petiole ca 2 mm long, passing into basal ciliate sheath; lamina ovate, 2-5 cm long, green tinged with purple red, especially beneath, usually with ca 3 darker, broad, longitudinal stripes."
402	2013. WRA Specialist. Personal Communication.	[Allelopathic? Unknown]

403	1994. Orchard, A.E. (ed.). Flora of Australia. Vol. 49, Oceanic islands 1. Australian Government Publishing Service, Canberra	[Parasitic? No] Commelinaceae
404	2001. Standish, R.J.. Prospects for biological control of <i>Tradescantia fluminensis</i> Vell. (Commelinaceae). DOC Science Internal Series 9. New Zealand Department of Conservation, Wellington, New Zealand	[Unpalatable to grazing animals? Unknown] "Cattle and chickens are known to eat <i>T. fluminensis</i> (Timmins & Mackenzie 1995; Wilfred Henson, pers. comm.)." [Related species are palatable, but unknown for <i>T. zebrina</i>]
405	2008. Wagstaff, D.J.. International poisonous plants checklist: an evidence-based reference. CRC Press, Boca Raton, FL	[Toxic to animals? No] No evidence
405	2012. 25 years... And Still Growing. Plants and Pets... (Non-toxic houseplant options). http://paulsplants.blogspot.com/2012/01/plants-and-pets-non-toxic-houseplant.html [Accessed 14 Aug 2013]	[Toxic to animals? No] "The following list of plants are non-toxic, and safe around pets." [List includes <i>Tradescantia zebrina</i>]
406	2013. Floridata. <i>Tradescantia zebrina</i> . http://www.floridata.com/ref/t/trad_zeb.cfm [Accessed 14 Aug 2013]	[Host for recognized pests and pathogens? No] "seldom afflicted by pests or diseases, but is susceptible to an aphid-transmitted virus that causes stunting and malformed leaves. "
406	2013. Missouri Botanical Gardens. <i>Tradescantia zebrina</i> . http://www.missouribotanicalgarden.org/gardens-gardening/your-garden/plant-finder/plant-details/kc/d681/tradescantia-zebrina.aspx [Accessed 06 Aug 2013]	[Host for recognized pests and pathogens? No] "No serious insect or disease problems. Root rot and stem rot may occur if soils are kept too moist. Watch for aphids, mealybugs, scale, whiteflies and spider mites."
407	2008. PATSP. The Wandering Jew (<i>Tradescantia zebrina</i>). http://plantsarethe strangestpeople.blogspot.com/2008/09/wandering-jew-tradescantia-zebrina.html [Accessed 31 July 2013]	[Causes allergies or is otherwise toxic to humans? Possibly an irritant] "It's a safe plant to have around pets and children, though the sap can apparently be irritating to skin. So I don't advise eating it on purpose, regardless of age or species."
407	2013. Floridata. <i>Tradescantia zebrina</i> . http://www.floridata.com/ref/t/trad_zeb.cfm [Accessed 14 Aug 2013]	[Causes allergies or is otherwise toxic to humans? Possibly] "Wandering Jew sap often causes a skin irritation in humans, and dogs kept in yards covered with wandering Jew have developed rashes. <i>Tradescantia zebrina</i> is nevertheless frequently recommended as a safe non-toxic plant for landscaping bird and reptile enclosures."
408	1994. Orchard, A.E. (ed.). Flora of Australia. Vol. 49, Oceanic islands 1. Australian Government Publishing Service, Canberra	"Creeping and pendulous, succulent herb" [No evidence, and unlikely given succulent habit]
409	2008. PATSP. The Wandering Jew (<i>Tradescantia zebrina</i>). http://plantsarethe strangestpeople.blogspot.com/2008/09/wandering-jew-tradescantia-zebrina.html [Accessed 31 July 2013]	[Is a shade tolerant plant at some stage of its life cycle? Yes] " <i>Tradescantia zebrina</i> can survive without much light at all, though without at least filtered sun (full sun preferred), the leaves' colors will be less intense and more green: it takes a lot of light to get the purple color."
409	2012. Queensland Government. Fact Sheet - Zebrina - <i>Tradescantia zebrina</i> (PP102). The State of Queensland (Department of Primary Industries and Fisheries),	[Is a shade tolerant plant at some stage of its life cycle? Yes]"Zebrina will spread across shady or damp areas, preventing the establishment of other vegetation."
409	2013. Missouri Botanical Gardens. <i>Tradescantia zebrina</i> . http://www.missouribotanicalgarden.org/gardens-gardening/your-garden/plant-finder/plant-details/kc/d681/tradescantia-zebrina.aspx [Accessed 06 Aug 2013]	[Is a shade tolerant plant at some stage of its life cycle? Yes] "Best in filtered sun. Will grow in direct sun with some afternoon protection. Also grows in shade."
410	2013. Floridata. <i>Tradescantia zebrina</i> . http://www.floridata.com/ref/t/trad_zeb.cfm [Accessed 14 Aug 2013]	[Tolerates a wide range of soil conditions?] "...prefers rich organic soil and thrives on mulch."
411	2007. Erskine, A./Wagner, E.. West Shelly Beach Vegetation Management Plan. Environmental Training and Employment Inc., Lismore	[Climbing or smothering growth habit? Yes. Smothering habit] "It can form a dense groundcover which suppresses native germination and growth."
411	2012. Graveson, R./Smith, M./Rock, R.. Survey of Invasive Alien Plant Species on Gros Piton, Saint Lucia, 2012. Forestry Department, Union	[Climbing or smothering growth habit? Yes] "Wandering Jew, native to Mexico, has a tendency to naturalize. It is invasive in some Pacific islands (PIER, 2012). It is established on Gros Piton and forms carpets replacing indigenous flora."

411	2012. Queensland Government. Fact Sheet - Zebrina - Tradescantia zebrina (PP102). The State of Queensland (Department of Primary Industries and Fisheries),	[Climbing or smothering growth habit? Yes] "Zebrina's ability to thrive and spread without assistance has enabled it to escape gardens and invade disturbed areas of bushland, where it forms thick carpets of growth, smothering native ground cover vegetation"
412	1998. Csurhes, S./Edwards, R.. Potential environmental weeds in Australia: Candidate species for preventative control. Biodiversity Group, Environment Australia, Canberra, Australia	[Forms dense thickets? Could potentially impede movement, but this growth form is more smothering] "In north Queensland, it has formed dense infestations (up to 1m thick) along the edges of rainforests, particularly near settlements (Humphries and Stanton 1992)."
412	2006. Rentería, J.L./Buddenhagen, C.. Invasive plants in the Scalesia pedunculata forest at Los Gemelos, Santa Cruz, Galapagos. Galapagos Research. 64: 31-35.	[Forms dense thickets? No] "Table1. Size of infestations for thicket-forming invasive species at Los Gemelos. Data are n (%) of observations." [T. zebrina included as a thicket-forming plant. Low growing habit]
412	2007. Erskine, A./Wagner, E.. West Shelly Beach Vegetation Management Plan. Environmental Training and Employment Inc., Lismore	[Forms dense thickets? No] "It can form a dense groundcover which suppresses native germination and growth." [Description is of a smothering plant. See Question 4.11]
501	1994. Orchard, A.E. (ed.). Flora of Australia. Vol. 49, Oceanic islands 1. Australian Government Publishing Service, Canberra	[Aquatic? No] "Creeping and pendulous, succulent herb, rooting readily at nodes..." [Terrestrial]
502	1994. Orchard, A.E. (ed.). Flora of Australia. Vol. 49, Oceanic islands 1. Australian Government Publishing Service, Canberra	[Grass? No] Commelinaceae
503	1994. Orchard, A.E. (ed.). Flora of Australia. Vol. 49, Oceanic islands 1. Australian Government Publishing Service, Canberra	[Nitrogen fixing woody plant? No] Commelinaceae
504	1994. Orchard, A.E. (ed.). Flora of Australia. Vol. 49, Oceanic islands 1. Australian Government Publishing Service, Canberra	[Geophyte (herbaceous with underground storage organs -- bulbs, corms, or tubers)? No] "Creeping and pendulous, succulent herb, rooting readily at nodes; stems, leaves and floral bracts tinged with purple-red." [Herbaceous, but not a geophyte]
601	2013. WRA Specialist. Personal Communication.	[Evidence of substantial reproductive failure in native habitat? No] No evidence
602	2008. PATSP. The Wandering Jew (Tradescantia zebrina). http://plantsarethe strangestpeople.blogspot.com/2008/09/wandering-jew-tradescantia-zebrina.html [Accessed 31 July 2013]	[Produces viable seed? Unknown] "...this one does flower, though I don't think it forms seeds."
602	2009. Inkson, T./Smith, M./Strachan, I.. Garden Escapees & Other Weeds of Bushland & Reserves. Great Lakes Council, Forster, NSW	[Produces viable seed?] "Papery capsule, seed not viable in Australia."
602	2013. Floridata. Tradescantia zebrina. http://www.floridata.com/ref/t/trad_zeb.cfm [Accessed 14 Aug 2013]	[Produces viable seed? Possibly] "...rarely flowers or reproduces from seed."
602	2013. Queensland Government. Weeds of Australia - Zebrina, Tradescantia zebrina. http://keyserver.lucidcentral.org/weeds/data/03030800-0b07-490a-8d04-0605030c0f01/media/Html/Tradescantia_zebrina.htm [Accessed 31 July 2013]	[Produces viable seed? Possibly] "This plant reproduces by seed and also vegetatively via its creeping stems that produce roots at their joints (i.e. stolons)." [Reported to produce seeds in Australia, but unknown in Hawaii or other Pacific Islands]
603	1938. Anderson, E./Hubricht, L.. Hybridization in Tradescantia. III. The evidence for introgressive hybridization. American Journal of Botany. 25(6): 396-402.	[Hybridizes naturally? Unknown. Hybridization occurs in genus] "Previous studies of the American species of Tradescantia have shown that interspecific hybridization is comparatively frequent between the eighteen or more species closely related to Tradescantia virginiana. The analysis in this research "further demonstrates that introgression is roughly proportional to the frequency of the introgressive species and that it is greater when plants are growing as weeds than when they occupy more natural habitats."
603	2013. Floridata. Tradescantia zebrina. http://www.floridata.com/ref/t/trad_zeb.cfm [Accessed 14 Aug 2013]	[Hybridizes naturally? Unknown] "The cultivar, 'Quadricolor' has green, white, and pink stripes on the upper sides of its leaves; it may in fact be a hybrid between T. zebrina and T. fluminensis."
604	2006. Moriuchi, J.B.. A Comparison of Invasive and Noninvasive Commelinaceae in a Phylogentic Context. PhD Dissertation. Florida State University, Tallahassee, FL	[Self-compatible or apomictic? No] "The Tradescantia species used here are self incompatible and did not reproduce sexually..."

605	1906. Knuth, P./Müller, H.. Handbook of Flower Pollination: Introduction and literature. Princeton University, Princeton, NJ	[Requires specialist pollinators? No] "In some pollen flowers the filaments are closely beset with hairs (<i>Verbascum</i> , <i>Anagallis</i> , <i>Nartheicum</i> , <i>Tradescantia</i>), which often display conspicuous colours, and serve not only as pollen-guides to insects, but also as supports and footholds during their labour. Flowers of this kind are preferred by pollen-collecting bees." [No evidence of specialized pollinator requirements, although seed set in this species is limited]
605	1998. Kubitzki, K. (ed.). The Families and genera of vascular plants. Volume IV. Flowering plants, Monocotyledons: Alismatanae and Commelinanae (except Gramineae). Springer-Verlag, Berlin, Heidelberg, New York	[Requires specialist pollinators? No evidence] "Commelinaceae flowers are chiefly entomophilous and usually attract a variety of bees and diptera."
606	1998. Csurhes, S./Edwards, R.. Potential environmental weeds in Australia: Candidate species for preventative control. Biodiversity Group, Environment Australia, Canberra, Australia	[Reproduction by vegetative fragmentation? Yes] " <i>Zebrina pendula</i> is a sprawling herbaceous plant which reproduces from stolons (Wells et al. 1986)." [<i>Zebrina pendula</i> - Syn. <i>Tradescantia zebrina</i>]
606	2000. Oppenheimer, H.L./Bartlett, R.T.. New plant records from Maui, O'ahu, and the Hawai'i Islands. Bishop Museum Occasional Papers. 64: 1-10.	[Reproduction by vegetative fragmentation? Yes] "The collection cited here from Maui is also spreading vegetatively and covering large areas of ground in secondary, alien forest."
606	2007. Oppenheimer, H.L.. New plant records from Moloka'i, Lāna'i, Maui, and Hawai'i for 2006. Bishop Museum Occasional Papers. 96: 17-34.	[Reproduction by vegetative fragmentation? Yes] "spreading at least vegetatively from apparently discarded yard waste into secondary forest." ... "rooting at nodes, escaping from discarded waste into <i>Casuarina</i> thicket"
607	2008. PATSP. The Wandering Jew (<i>Tradescantia zebrina</i>). http://plantsarethe strangest people.blogspot.com/2008/09/wandering-jew-tradescantia-zebrina.html [Accessed 31 July 2013]	[Minimum generative time (years)? <1] "Propagation of <i>Tradescantia zebrina</i> is very easy: it will usually work to break off the end of a stem, make a hole in the dirt, and shove the stem in the hole." ... "Usually roots will begin to grow within two weeks; often within one week." [Small fragments can rapidly develop into new plants]
701	2007. Oppenheimer, H.L.. New plant records from Moloka'i, Lāna'i, Maui, and Hawai'i for 2006. Bishop Museum Occasional Papers. 96: 17-34.	[Propagules likely to be dispersed unintentionally? Yes] "spreading at least vegetatively from apparently discarded yard waste into secondary forest." ... "rooting at nodes, escaping from discarded waste into <i>Casuarina</i> thicket"
701	2012. Graveson, R./Smith, M./Rock, R.. Survey of Invasive Alien Plant Species on Gros Piton, Saint Lucia, 2012. Forestry Department, Union	[Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)? Yes] " <i>Tradescantia zebrina</i> forms dense carpets along a substantial length of the main track and a side track to an abandoned garden."
701	2012. Queensland Government. Fact Sheet - <i>Zebrina</i> - <i>Tradescantia zebrina</i> (PP102). The State of Queensland (Department of Primary Industries and Fisheries),	[Propagules likely to be dispersed unintentionally? Yes] "Be sure to dispose of the plant carefully, by allowing it to rot in a sealed black plastic bag for one week before placing it in a refuse bin. <i>Zebrina</i> is not suitable for composting or dumping in a 'green waste' section of a refuse station."
701	2013. Queensland Government. Weeds of Australia - <i>Zebrina</i> , <i>Tradescantia zebrina</i> . http://keyserver.lucidcentral.org/weeds/data/03030800-0b07-490a-8d04-0605030c0f01/media/Html/Tradescantia_zebrina.htm [Accessed 31 July 2013]	[Propagules likely to be dispersed unintentionally? Yes] "Stem fragments easily break off and may be dispersed by water, vehicles, machinery, in dumped garden waste or in contaminated soil."
702	2013. Queensland Government. Weeds of Australia - <i>Zebrina</i> , <i>Tradescantia zebrina</i> . http://keyserver.lucidcentral.org/weeds/data/03030800-0b07-490a-8d04-0605030c0f01/media/Html/Tradescantia_zebrina.htm [Accessed 31 July 2013]	[Propagules dispersed intentionally by people? Yes] "Cultivated as a garden ornamental, particularly in the warmer parts of Australia. It is often grown as a groundcover, mainly for its colourful foliage."
703	2012. Queensland Government. Fact Sheet - <i>Zebrina</i> - <i>Tradescantia zebrina</i> (PP102). The State of Queensland (Department of Primary Industries and Fisheries),	[Propagules likely to disperse as a produce contaminant? No] "Stem fragments easily break off and may be dispersed by water, vehicles, machinery, in dumped garden waste or in contaminated soil." [Produce contamination not reported to be a dispersal vector of this species, which also rarely, if ever, produces seeds]
704	2013. Queensland Government. Weeds of Australia - <i>Zebrina</i> , <i>Tradescantia zebrina</i> . http://keyserver.lucidcentral.org/weeds/data/03030800-0b07-490a-8d04-0605030c0f01/media/Html/Tradescantia_zebrina.htm [Accessed 31 July 2013]	[Propagules adapted to wind dispersal? No] "Stem fragments easily break off and may be dispersed by water, vehicles, machinery, in dumped garden waste or in contaminated soil."
705	2009. Inkson, T./Smith, M./Strachan, I.. Garden Escapees & Other Weeds of Bushland & Reserves. Great Lakes Council, Forster, NSW	[Propagules water dispersed? Yes] "Stem fragments spread by water, and contaminated soil (green waste dumping, earth moving etc). Common in watercourses."

705	2013. Queensland Government. Weeds of Australia - Zebrina, Tradescantia zebrina. http://keyserver.lucidcentral.org/weeds/data/03030800-0b07-490a-8d04-0605030c0f01/media/Html/Tradescantia_zebrina.htm [Accessed 31 July 2013]	[Propagules water dispersed? Yes] "Stem fragments easily break off and may be dispersed by water, vehicles, machinery, in dumped garden waste or in contaminated soil."
706	2013. Queensland Government. Weeds of Australia - Zebrina, Tradescantia zebrina. http://keyserver.lucidcentral.org/weeds/data/03030800-0b07-490a-8d04-0605030c0f01/media/Html/Tradescantia_zebrina.htm [Accessed 31 July 2013]	[Propagules bird dispersed? No] "Stem fragments easily break off and may be dispersed by water, vehicles, machinery, in dumped garden waste or in contaminated soil."
707	2013. Queensland Government. Weeds of Australia - Zebrina, Tradescantia zebrina. http://keyserver.lucidcentral.org/weeds/data/03030800-0b07-490a-8d04-0605030c0f01/media/Html/Tradescantia_zebrina.htm [Accessed 31 July 2013]	[Propagules dispersed by other animals (externally)? No evidence] "Stem fragments easily break off and may be dispersed by water, vehicles, machinery, in dumped garden waste or in contaminated soil." [It may be possible that animals could transport stem fragments through their movement, but this would seem to be an unlikely vector]
708	2013. WRA Specialist. Personal Communication.	[Propagules survive passage through the gut? Unknown] No evidence that seeds or propagules (i.e. vegetative material) would be consumed or internally dispersed by animals
801	2013. Floridata. Tradescantia zebrina. http://www.floridata.com/ref/t/trad_zeb.cfm [Accessed 14 Aug 2013]	[Prolific seed production (>1000/m ²)? No] "...rarely flowers or reproduces from seed." [Reproduces mainly by vegetative fragmentation]
802	2009. Inkson, T./Smith, M./Strachan, I.. Garden Escapees & Other Weeds of Bushland & Reserves. Great Lakes Council, Forster, NSW	[Evidence that a persistent propagule bank is formed (>1 yr)? No] "Papery capsule, seed not viable in Australia." [Lack of seed production would prevent formation of a seed bank in Australia]
803	2008. PATSP. The Wandering Jew (Tradescantia zebrina). http://plantsarethestrangestpeople.blogspot.com/2008/09/wandering-jew-tradescantia-zebrina.html [Accessed 31 July 2013]	[Well controlled by herbicides? No] "And forget about using Roundup, too. Doesn't work."
803	2012. Queensland Government. Fact Sheet - Zebrina - Tradescantia zebrina (PP102). The State of Queensland (Department of Primary Industries and Fisheries),	[Well controlled by herbicides? Efficacy unknown] "Table 1 Herbicides permitted for the control of zebrina" ... "Spot spray fluroxypyr (200 g/L) 500 mL to 1 L per 100 L water PERMIT 11463 Follow-up spray on re-growth may be required."
804	2008. PATSP. The Wandering Jew (Tradescantia zebrina). http://plantsarethestrangestpeople.blogspot.com/2008/09/wandering-jew-tradescantia-zebrina.html [Accessed 31 July 2013]	[Tolerates, or benefits from, mutilation, cultivation, or fire? Yes] "The main problems with T. zebrina are: 1) the roots are capable of sprouting new surface growth on their own, though in practice they seem not to do this all that often. 2) most pieces of an existing plant are capable of rooting and growing another plant (I'm not even sure you have to have a node, necessarily. I keep meaning to experiment with this.). 3) The stems are ridiculously brittle.6 Eradication, consequently, depends on one being able to collect every piece of plant from the area to be cleared. For small areas, this isn't that tough, but the bigger the patch to be cleared, the more careful you have to be."
804	2012. Queensland Government. Fact Sheet - Zebrina - Tradescantia zebrina (PP102). The State of Queensland (Department of Primary Industries and Fisheries),	[Tolerates, or benefits from, mutilation, cultivation, or fire? Yes] "Zebrina can reproduce and spread from single pieces of stem or root fragments. Careful handpulling is required in order to be certain to remove all stem and root fragments from the soil. Regular mowing can be effective, but a catcher should be used to prevent the spread of stem pieces."
805	2013. WRA Specialist. Personal Communication.	[Effective natural enemies present locally (e.g. introduced biocontrol agents)? Unknown] Distribution in Hawaiian Islands suggests plant is not limited by any biological agents

Summary of Risk Traits

High Risk / Undesirable Traits

- Thrives in tropical climates and tolerates many climates
- Widely naturalized
- A disturbance adapted weed
- Environmental weed that competes with and excludes native vegetation
- Other *Tradescantia* species have become highly invasive
- Sap often causes a skin irritation
- Shade tolerant
- Can form a dense, smothering groundcover
- Spreads vegetatively
- Can reproduce and spread from single pieces of stem or root fragments
- Stem fragments spread by garden waste, water, and machinery
- Certain herbicides may not provide effective control

Low Risk / Desirable Traits

- Values as an ornamental plant
- Unarmed (no spines, thorns or burrs)
- May have limited or no seed production in introduced range
- Self-incompatible