

Family: Asteraceae

Taxon: *Sigesbeckia orientalis*

Synonym:

Common Name: eastern St. Pauls-wort
small yellow crownbeard

Questionnaire :	current 20090513	Assessor:	Patti Clifford	Designation: H(HPWRA)
Status:	Assessor Approved	Data Entry Person:	Patti Clifford	WRA Score 13
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)	n
303	Agricultural/forestry/horticultural weed		n=0, y = 2*multiplier (see Appendix 2)	n
304	Environmental weed		n=0, y = 2*multiplier (see Appendix 2)	y
305	Congeneric weed		n=0, y = 1*multiplier (see Appendix 2)	n
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	
406	Host for recognized pests and pathogens		y=1, n=0	
407	Causes allergies or is otherwise toxic to humans		y=1, n=0	n
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	y
411	Climbing or smothering growth habit		y=1, n=0	n

412	Forms dense thickets	y=1, n=0	n
501	Aquatic	y=5, n=0	n
502	Grass	y=1, n=0	n
503	Nitrogen fixing woody plant	y=1, n=0	n
504	Geophyte (herbaceous with underground storage organs -- bulbs, corms, or tubers)	y=1, n=0	n
601	Evidence of substantial reproductive failure in native habitat	y=1, n=0	n
602	Produces viable seed	y=1, n=-1	y
603	Hybridizes naturally	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 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	y
708	Propagules survive passage through the gut	y=1, n=-1	
801	Prolific seed production (>1000/m2)	y=1, n=-1	
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	y
805	Effective natural enemies present locally (e.g. introduced biocontrol agents)	y=-1, n=1	

Designation: H(HPWRA)

WRA Score 13

Supporting Data:

101	2011. WRA Specialist. Personal Communication.	No evidence of domestication.
102	2011. WRA Specialist. Personal Communication.	N/A
103	2011. WRA Specialist. Personal Communication.	N/A
201	2011. USDA, ARS, National Genetic Resources Program. Germplasm Resources Information Network (GRIN) [Online Database Index]. National Germplasm Resources Laboratory, Beltsville, Maryland. http://www.ars-grin.gov/cgi-bin/npgs/html/index.pl	Native range: Africa; China; Japan; India; Australia
202	2011. USDA, ARS, National Genetic Resources Program. Germplasm Resources Information Network (GRIN) [Online Database Index]. National Germplasm Resources Laboratory, Beltsville, Maryland. http://www.ars-grin.gov/cgi-bin/npgs/html/index.pl	Native range: Africa; China; Japan; India; Australia
203	1999. Wagner, W.L./Herbst, D.R./Sohmer, S.H.. Manual of the flowering plants of Hawaii. Revised edition.. University of Hawai'i Press and Bishop Museum Press, Honolulu, HI.	In Hawaii, naturalized in disturbed areas, 0-1,220 m on all of the main islands except Niiha and Lanai.
203	2001. Chuakul, W./Soonthornchareonnon, N./Ruangsomboon, O.. Sigesbeckia orientalis L.[Internet] Record from Proseabase. PROSEA (Plant Resources of South-East Asia) Foundation, Bogor http://proseanet.org/prosea/e-prosea_detail.php?frt=&id=1303	Sigesbeckia orientalis is widespread along roadsides, in wastelands and cultivated land, young secondary forests, tea and coffee plantations, and prefers moist, fertile localities. It grows mostly at low altitudes, but can be found up to 2100 m altitude.
204	2011. USDA, ARS, National Genetic Resources Program. Germplasm Resources Information Network (GRIN) [Online Database Index]. National Germplasm Resources Laboratory, Beltsville, Maryland. http://www.ars-grin.gov/cgi-bin/npgs/html/index.pl	Native range: Africa; China; Japan; India; Australia
205	2011. Pacific Islands Ecosystems at Risk (PIER). Sigesbeckia orientalis. http://www.hear.org/pier/species/sigesbeckia_orientalis.htm	According to the PIER website, Sigesbeckia orientalis has been introduced to: Australia, Fiji, French Polynesia, Hawaii, New Caledonia, New Zealand, Papua New Guinea, Tonga and the Seychelles Islands.
301	2011. USDA, ARS, National Genetic Resources Program. Germplasm Resources Information Network (GRIN) [Online Database Index]. National Germplasm Resources Laboratory, Beltsville, Maryland. http://www.ars-grin.gov/cgi-bin/npgs/html/index.pl	In Hawaii, naturalized in disturbed areas, 0-1,220 m on all of the main islands except Niiha and Lanai. Naturalized prior to 1871.
302	2011. WRA Specialist. Personal Communication.	Scored as environmental weed. [3.04].
303	2011. WRA Specialist. Personal Communication.	The Global Compendium of Weeds lists Sigesbeckia orientalis as an agricultural weed. However I was unable to find information on impacts or control.
304	2002. Batianoff, G.N./Butler, D.W.. Assessment of Invasive naturalized plants in south-east Queensland. Appendix. Plant Protection Quarterly. 17: 27-34.	Considered an environmental weed in Southeast Queensland.
305	2007. Randall, R.P.. Global Compendium of Weeds - Index [Online Database]. http://www.hear.org/gcw/	No evidence of a congeneric weed that is negatively impacting the environment or agriculture.
401	1999. Wagner, W.L./Herbst, D.R./Sohmer, S.H.. Manual of the flowering plants of Hawaii. Revised edition.. University of Hawai'i Press and Bishop Museum Press, Honolulu, HI.	Many-branched annual herbs; stems 5-12 dm long. Leaves deltate to elliptic-lanceolate, 2-20 cm long, 0.6-9 cm wide.
402	2011. WRA Specialist. Personal Communication.	Unknown.

403	1999. Wagner, W.L./Herbst, D.R./Sohmer, S.H.. Manual of the flowering plants of Hawaii. Revised edition.. University of Hawai'i Press and Bishop Museum Press, Honolulu, HI.	Asteraceae.
406	2011. WRA Specialist. Personal Communication.	Unknown
407	2001. Chuakul, W./Soonthornchareonnon, N./Ruangsomboon, O.. <i>Sigesbeckia orientalis</i> L.[Internet] Record from Proseabase. PROSEA (Plant Resources of South-East Asia) Foundation, Bogor http://proseanet.org/prosea/e- prosea_detail.php?frt=&id=1303	" <i>Sigesbeckia orientalis</i> extracts are widely used for restoring the blood circulation, stimulating urine secretion and as a renal tonic. The sap is also commonly used in treatments of gangrenous ulcers and sores, skin lesions of leprosy, syphilis and venereal diseases, and as a remedy for ringworm and parasitic infections. The fresh sap leaves a varnish-like covering when it dries. In Indo-China, the Philippines and Tahiti, the extract of <i>Sigesbeckia orientalis</i> is used for diarrhoea, leucorrhoea, to facilitate menstruation (as a pain reliever), as a stomachic and a cardiotonic, and to cure snake, insect or dog bites. In Vietnam, the whole plant is used as an antiphlogistic, and applied in the treatment of rheumatism, ostalgia, lumbago and impetigo. In Thailand, the extract is used in the treatment of sprains, dislocations and contusions, and also for bee stings and snake bites. In China, the plant is used as a remedy for ringworm, scabies, and other skin diseases, and is also used as an anodyne, alterative (for blood pressure), and used to treat convulsions, strokes, paralysis, arthritis and neuralgic pains, and for chronic malaria. In Africa, <i>Sigesbeckia orientalis</i> is considered cardiotonic, diaphoretic, antiscorbutic, sialagogic and anthelmintic. In Nigeria, it is used externally to treat leprosy, venereal diseases and ulcers, and internally as a laxative. In the Mascarenes, the syrup is used for the treatment of gout and scrofula. In India, a decoction of the stem is used to treat constipation in children, and a decoction of the dried leaves and flowers for the treatment of dysentery."
408	1999. Wagner, W.L./Herbst, D.R./Sohmer, S.H.. Manual of the flowering plants of Hawaii. Revised edition.. University of Hawai'i Press and Bishop Museum Press, Honolulu, HI.	Herbaceous [doesn't accumulate fire prone biomass].
409	2009. The Yarra Ranges Shire Council. The Yarra Ranges plant directory: <i>Sigesbeckia</i> <i>orientalis</i> ssp. <i>Orientalis</i> . The Yarra Ranges Shire Council, http://www.yarraranges.vic.gov.au/Residents/Yarra _Ranges_Plant_Directory/Yarra_Ranges_Local_ Plant_Directory/Lo	Semi-shade and dappled shade.
410	2004. Downe, J./Coates, F.. Recovery of Silurian limestone Pomaderris shrubland after the 2003 bushfires in north-east Victoria. Victorian Government Department of Sustainability and Environment, Melbourne http://www.greenhouse.vic.gov.au/CA256F310024 B628	<i>Sigesbeckia orientalis</i> is a component of the Silurian limestone Pomaderris shrubland in Victoria.
411	1999. Wagner, W.L./Herbst, D.R./Sohmer, S.H.. Manual of the flowering plants of Hawaii. Revised edition.. University of Hawai'i Press and Bishop Museum Press, Honolulu, HI.	Annual herb.
412	1999. Wagner, W.L./Herbst, D.R./Sohmer, S.H.. Manual of the flowering plants of Hawaii. Revised edition.. University of Hawai'i Press and Bishop Museum Press, Honolulu, HI.	Herbaceous.
501	1999. Wagner, W.L./Herbst, D.R./Sohmer, S.H.. Manual of the flowering plants of Hawaii. Revised edition.. University of Hawai'i Press and Bishop Museum Press, Honolulu, HI.	Terrestrial.
502	1999. Wagner, W.L./Herbst, D.R./Sohmer, S.H.. Manual of the flowering plants of Hawaii. Revised edition.. University of Hawai'i Press and Bishop Museum Press, Honolulu, HI.	Asteraceae.
503	1999. Wagner, W.L./Herbst, D.R./Sohmer, S.H.. Manual of the flowering plants of Hawaii. Revised edition.. University of Hawai'i Press and Bishop Museum Press, Honolulu, HI.	Herbaceous.

504	1999. Wagner, W.L./Herbst, D.R./Sohmer, S.H.. Manual of the flowering plants of Hawaii. Revised edition.. University of Hawai'i Press and Bishop Museum Press, Honolulu, HI.	Not a geophyte.
601	2011. WRA Specialist. Personal Communication.	No evidence.
602	2001. Chuakul, W./Soonthornchareonnon, N./Ruangsomboon, O.. <i>Sigesbeckia orientalis</i> L.[Internet] Record from Proseabase. PROSEA (Plant Resources of South-East Asia) Foundation, Bogor http://proseanet.org/prosea/e-prosea_detail.php?frt=&id=1303	<i>Sigesbeckia orientalis</i> is propagated by seed.
603	2011. WRA Specialist. Personal Communication.	Unknown.
604	2011. WRA Specialist. Personal Communication.	Unknown.
605	1999. Wagner, W.L./Herbst, D.R./Sohmer, S.H.. Manual of the flowering plants of Hawaii. Revised edition.. University of Hawai'i Press and Bishop Museum Press, Honolulu, HI.	Asteraceae.
606	2001. Chuakul, W./Soonthornchareonnon, N./Ruangsomboon, O.. <i>Sigesbeckia orientalis</i> L.[Internet] Record from Proseabase. PROSEA (Plant Resources of South-East Asia) Foundation, Bogor http://proseanet.org/prosea/e-prosea_detail.php?frt=&id=1303	<i>Sigesbeckia orientalis</i> is propagated by seed.
607	1999. Wagner, W.L./Herbst, D.R./Sohmer, S.H.. Manual of the flowering plants of Hawaii. Revised edition.. University of Hawai'i Press and Bishop Museum Press, Honolulu, HI.	Annual herb.
607	2001. Chuakul, W./Soonthornchareonnon, N./Ruangsomboon, O.. <i>Sigesbeckia orientalis</i> L.[Internet] Record from Proseabase. PROSEA (Plant Resources of South-East Asia) Foundation, Bogor http://proseanet.org/prosea/e-prosea_detail.php?frt=&id=1303	Under favourable growing conditions 2 life cycles of <i>Sigesbeckia orientalis</i> per year can be reached, e.g. in Russia.
701	2001. Chuakul, W./Soonthornchareonnon, N./Ruangsomboon, O.. <i>Sigesbeckia orientalis</i> L.[Internet] Record from Proseabase. PROSEA (Plant Resources of South-East Asia) Foundation, Bogor http://proseanet.org/prosea/e-prosea_detail.php?frt=&id=1303	<i>Sigesbeckia orientalis</i> is widespread along roadsides, in wastelands and cultivated land, young secondary forests, tea and coffee plantations, and prefers moist, fertile localities. It grows mostly at low altitudes, but can be found up to 2100 m altitude.
702	2001. Chuakul, W./Soonthornchareonnon, N./Ruangsomboon, O.. <i>Sigesbeckia orientalis</i> L.[Internet] Record from Proseabase. PROSEA (Plant Resources of South-East Asia) Foundation, Bogor http://proseanet.org/prosea/e-prosea_detail.php?frt=&id=1303	" <i>Sigesbeckia orientalis</i> extracts are widely used for restoring the blood circulation, stimulating urine secretion and as a renal tonic. The sap is also commonly used in treatments of gangrenous ulcers and sores, skin lesions of leprosy, syphilis and venereal diseases, and as a remedy for ringworm and parasitic infections. The fresh sap leaves a varnish-like covering when it dries. In Indo-China, the Philippines and Tahiti, the extract of <i>Sigesbeckia orientalis</i> is used for diarrhoea, leucorrhoea, to facilitate menstruation (as a pain reliever), as a stomachic and a cardiotonic, and to cure snake, insect or dog bites. In Vietnam, the whole plant is used as an antiphlogistic, and applied in the treatment of rheumatism, ostalgia, lumbago and impetigo. In Thailand, the extract is used in the treatment of sprains, dislocations and contusions, and also for bee stings and snake bites. In China, the plant is used as a remedy for ringworm, scabies, and other skin diseases, and is also used as an anodyne, alterative (for blood pressure), and used to treat convulsions, strokes, paralysis, arthritis and neuralgic pains, and for chronic malaria. In Africa, <i>Sigesbeckia orientalis</i> is considered cardiotonic, diaphoretic, antiscorbutic, sialagogic and anthelmintic. In Nigeria, it is used externally to treat leprosy, venereal diseases and ulcers, and internally as a laxative. In the Mascarenes, the syrup is used for the treatment of gout and scrofula. In India, a decoction of the stem is used to treat constipation in children, and a decoction of the dried leaves and flowers for the treatment of dysentery."
703	2011. WRA Specialist. Personal Communication.	No evidence of produce contamination.

704	2001. Chuakul, W./Soonthornchareonnon, N./Ruangsomboon, O.. <i>Sigesbeckia orientalis</i> L.[Internet] Record from Proseabase. PROSEA (Plant Resources of South-East Asia) Foundation, Bogor http://proseanet.org/prosea/e-prosea_detail.php?frt=&id=1303	Fruit an oblong, curved, truncate, 4-angular achene, 3 mm long, blackish, smooth; pappus absent.
705	2010. Leach, H.. Gardens without weeds? Pre-European Maori gardens and inadvertent introductions. <i>New Zealand Journal of Botany</i> . 43: 271-284.	<i>Sigesbeckia orientalis</i> grows on waste ground in coastal and lowland areas.
706	2002. Heinrich, G./Pfeifhofer, H.W./Stabentheiner, E./Sawidis, T.. Glandular hairs of <i>Sigesbeckia jorullensis</i> Kunth (Asteraceae): morphology, histochemistry and composition of essential oil. <i>Annals of Botany</i> . 89: 459-469. http://aob.oxfordjournals.org/cont	"Instead of hooked hairs, <i>Sigesbeckia</i> and <i>Carpesium</i> species produce sticky substances by which their fruits adhere to animals."
707	2002. Heinrich, G./Pfeifhofer, H.W./Stabentheiner, E./Sawidis, T.. Glandular hairs of <i>Sigesbeckia jorullensis</i> Kunth (Asteraceae): morphology, histochemistry and composition of essential oil. <i>Annals of Botany</i> . 89: 459-469. http://aob.oxfordjournals.org/cont	"Instead of hooked hairs, <i>Sigesbeckia</i> and <i>Carpesium</i> species produce sticky substances by which their fruits adhere to animals."
707	2011. Eurobodall Shire Council. Southcoast weeds - species profile:cobbler's pegs (<i>Bidens pilosa</i>). Eurobodall Shire Council, http://www.esc.nsw.gov.au/weeds/sheets/herbs/H%20Cobbler%27s%20peg.htm	The seeds of <i>Sigesbeckia orientalis</i> stick to clothing and skin because they are sticky.
708	2011. WRA Specialist. Personal Communication.	Unknown.
801	2011. WRA Specialist. Personal Communication.	Unknown.
802	2011. WRA Specialist. Personal Communication.	Unknown.
803	2011. WRA Specialist. Personal Communication.	Unknown.
804	2004. Downe, J./Coates, F.. Recovery of Silurian limestone Pomaderris shrubland after the 2003 bushfires in north-east Victoria. Victorian Government Department of Sustainability and Environment, Melbourne http://www.greenhouse.vic.gov.au/CA256F310024B628	In this study on the recovery of Silurian limestone Pomaderris shrubland after bushfires, <i>Sigesbeckia orientalis</i> seed persisted in the soil and germinated.
805	2011. WRA Specialist. Personal Communication.	Unknown.