

Taxon: Calandrinia spectabilis Otto & A.Dietr.

Family: Portulacaceae

Common Name(s): rock purslane

Synonym(s): Claytonia spectabilis (Otto & D.Dietr.)

Assessor: Chuck Chimera

Status: Assessor Approved

End Date: 13 Feb 2017

WRA Score: 2.0

Designation: L

Rating: Low Risk

Keywords: Ornamental, Succulent, Unarmed, Non-Toxic, Vegetative Spread

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)	Low
202	Quality of climate match data	(0-low; 1-intermediate; 2-high) (See Appendix 2)	Low
203	Broad climate suitability (environmental versatility)	y=1, n=0	n
204	Native or naturalized in regions with tropical or subtropical climates	y=1, n=0	n
205	Does the species have a history of repeated introductions outside its natural range?	y=-2, ?=-1, n=0	?
301	Naturalized beyond native range	y = 1*multiplier (see Appendix 2), n= question 205	n
302	Garden/amenity/disturbance weed	n=0, y = 1*multiplier (see Appendix 2)	n
303	Agricultural/forestry/horticultural weed	n=0, y = 2*multiplier (see Appendix 2)	n
304	Environmental weed	n=0, y = 2*multiplier (see Appendix 2)	n
305	Congeneric weed	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	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	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	n
410	Tolerates a wide range of soil conditions (or limestone conditions if not a volcanic island)		

Qsn #	Question	Answer Option	Answer
411	Climbing or smothering growth habit	y=1, n=0	n
412	Forms dense thickets		
501	Aquatic	y=5, n=0	n
502	Grass	y=1, n=0	n
503	Nitrogen fixing woody plant	y=1, n=0	n
504	Geophyte (herbaceous with underground storage organs -- bulbs, corms, or tubers)	y=1, n=0	n
601	Evidence of substantial reproductive failure in native habitat		
602	Produces viable seed	y=1, n=-1	y
603	Hybridizes naturally		
604	Self-compatible or apomictic		
605	Requires specialist pollinators	y=-1, n=0	n
606	Reproduction by vegetative fragmentation	y=1, n=-1	y
607	Minimum generative time (years)		
701	Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)		
702	Propagules dispersed intentionally by people	y=1, n=-1	y
703	Propagules likely to disperse as a produce contaminant		
704	Propagules adapted to wind dispersal	y=1, n=-1	n
705	Propagules water dispersed		
706	Propagules bird dispersed	y=1, n=-1	n
707	Propagules dispersed by other animals (externally)		
708	Propagules survive passage through the gut		
801	Prolific seed production (>1000/m ²)		
802	Evidence that a persistent propagule bank is formed (>1 yr)		
803	Well controlled by herbicides		
804	Tolerates, or benefits from, mutilation, cultivation, or fire		
805	Effective natural enemies present locally (e.g. introduced biocontrol agents)		

Supporting Data:

Qsn #	Question	Answer
101	Is the species highly domesticated?	n
	Source(s)	Notes
	Innes, C. 1981. Complete Handbook of Cacti and Succulents. Van Nostrand Reinhold Company. Van Nostrand Reinhold Company, New York, NY	No evidence of domestication

102	Has the species become naturalized where grown?	
	Source(s)	Notes
	WRA Specialist. 2017. Personal Communication	NA

103	Does the species have weedy races?	
	Source(s)	Notes
	WRA Specialist. 2017. Personal Communication	NA

201	Species suited to tropical or subtropical climate(s) - If island is primarily wet habitat, then substitute "wet tropical" for "tropical or subtropical"	Low
	Source(s)	Notes
	Innes, C. 1981. Complete Handbook of Cacti and Succulents. Van Nostrand Reinhold Company. Van Nostrand Reinhold Company, New York, NY	"Native of Chile."

202	Quality of climate match data	Low
	Source(s)	Notes
	Innes, C. 1981. Complete Handbook of Cacti and Succulents. Van Nostrand Reinhold Company. Van Nostrand Reinhold Company, New York, NY	[Climate parameters from native range unknown]

203	Broad climate suitability (environmental versatility)	n
	Source(s)	Notes
	Annie's Annuals. 2017. <i>Calandrinia spectabilis</i> . https://www.anniesannuals.com/plants/view/?id=1930 . [Accessed 13 Feb 2017]	"USDA Zones 8-10"

Qsn #	Question	Answer
204	Native or naturalized in regions with tropical or subtropical climates	n
	Source(s)	Notes
	Nickel, E. 2009. Chilean succulent a drought-tolerant charmer. http://www.sfgate.com/homeandgarden/article/Chilean-succulent-a-drought-tolerant-charmer-3226576.php . [Accessed 13 Feb 2017]	"Hailing from the hot, dry mountains of Chile, <i>C. spectabilis</i> isn't merely drought tolerant, it's a tough-as-nails survivor, requiring almost no water once established - which means it's a natural for our Mediterranean climate."

Qsn #	Question	Answer
205	Does the species have a history of repeated introductions outside its natural range?	?
	Source(s)	Notes
	Dave's Garden. 2017. Rock Purslane <i>Calandrinia spectabilis</i> . http://davesgarden.com/guides/pf/go/112396/ . [Accessed 13 Feb 2017]	"This plant has been said to grow in the following regions: Anthem, Arizona Phoenix, Arizona Tempe, Arizona Alameda, California Aliso Viejo, California Arroyo Grande, California Brea, California Camarillo, California Carmel, California Cathedral City, California Corona, California Escondido, California Hayward, California (2 reports) Los Angeles, California Napa, California Palmdale, California Pittsburg, California Ramona, California Richmond, California Salinas, California San Clemente, California San Diego, California San Francisco, California (4 reports) San Jose, California San Luis Obispo, California San Pedro, California Spring Valley, California Valley Center, California Vista, California Walnut Creek, California Las Cruces, New Mexico"

Qsn #	Question	Answer
301	Naturalized beyond native range	n
	Source(s)	Notes
	Randall, R.P. (2017). <i>A Global Compendium of Weeds</i> . 3rd Edition. Perth, Western Australia. R.P. Randall	No evidence

Qsn #	Question	Answer
302	Garden/amenity/disturbance weed	n
	Source(s)	Notes
	Randall, R.P. (2017). <i>A Global Compendium of Weeds</i> . 3rd Edition. Perth, Western Australia. R.P. Randall	No evidence

Qsn #	Question	Answer
303	Agricultural/forestry/horticultural weed	n
	Source(s)	Notes
	Randall, R.P. (2017). <i>A Global Compendium of Weeds</i> . 3rd Edition. Perth, Western Australia. R.P. Randall	No evidence

Qsn #	Question	Answer
304	Environmental weed	n
	Source(s)	Notes
	Randall, R.P. (2017). <i>A Global Compendium of Weeds</i> . 3rd Edition. Perth, Western Australia. R.P. Randall	No evidence

Qsn #	Question	Answer
305	Congeneric weed	y
	Source(s)	Notes
	Randall, R.P. (2017). A Global Compendium of Weeds. 3rd Edition. Perth, Western Australia. R.P. Randall	"Calandrinia ciliata ... Weed of: Cereals, Grapevines, Pome Fruits" ... "Calandrinia ciliata (Ruiz Lopez & Pavon) DC. var. menziesii ... Weed of: Orchards & Plantations, Vegetables" ... "Calandrinia compressa ... Weed of: Cereals" ... "Calandrinia menziesii ... Weed of: Pastures"

401	Produces spines, thorns or burrs	n
	Source(s)	Notes
	Innes, C. 1981. Complete Handbook of Cacti and Succulents. Van Nostrand Reinhold Company. Van Nostrand Reinhold Company, New York, NY	"Calandrinia spectabilis Otto et Dietr. Native of Chile. A somewhat shrubby plant with elongated compressed leaves to 4 cm long, pruinose. Flowers very beautiful, about 5 cm diameter, rich purple." [No evidence]

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

403	Parasitic	n
	Source(s)	Notes
	Innes, C. 1981. Complete Handbook of Cacti and Succulents. Van Nostrand Reinhold Company. Van Nostrand Reinhold Company, New York, NY	"Calandrinia spectabilis Otto et Dietr. Native of Chile. A somewhat shrubby plant with elongated compressed leaves to 4 cm long, pruinose. Flowers very beautiful, about 5 cm diameter, rich purple." [Portulacaceae. No evidence]

404	Unpalatable to grazing animals	
	Source(s)	Notes
	Letnic, M. (2004). Cattle grazing in a hummock grassland regenerating after fire: the short-term effects of cattle exclusion on vegetation in south-western Queensland. The Rangeland Journal, 26(1), 34-48	[Other Calandrinia species are palatable to cattle] "In this study, with the exception of the March 2001 sampling period, cattle consistently showed preference for areas regenerating after fire. This behaviour is likely a response to the abundance of palatable grasses and forbs, particularly Eragrostis eriopoda, Aristida contorta, Ptilotus polystachyus and Calandrinia balonensis."
	Annie's Annuals. 2017. Calandrinia spectabilis. https://www.anniesannuals.com/plants/view/?id=1930 . [Accessed 13 Feb 2017]	[Possibly. Deer resistant] "This spectacular Chilean perennial gets my highest recommendation as the best, super EASY, everblooming, deer-resistant plant for a dry garden or difficult spot."

405	Toxic to animals	n
	Source(s)	Notes
	Quattrocchi, U. 2012. CRC World Dictionary of Medicinal and Poisonous Plants: Common Names, Scientific Names, Eponyms, Synonyms, and Etymology. CRC Press, Boca Raton, FL	No evidence

Qsn #	Question	Answer
	Wagstaff, D.J. 2008. International poisonous plants checklist: an evidence-based reference. CRC Press, Boca Raton, FL	No evidence

406	Host for recognized pests and pathogens	n
	Source(s)	Notes
	Nickel, E. 2009. Chilean succulent a drought-tolerant charmer. http://www.sfgate.com/homeandgarden/article/Chilean-succulent-a-drought-tolerant-charmer-3226576.php . [Accessed 13 Feb 2017]	"Pests and diseases: Keep an eye out for slugs and snails when plants are young, but generally calandrinia species are tough plants not prone to disease."
	thegardengeeks. 2017. Calandrinia spectabilis. http://thegardengeeks.com . [Accessed 13 Feb 2017]	"Pests and Diseases: Rock Purslane (<i>Calandrinia spectabilis</i>) is susceptible to aphids and spider mites indoors. Young plants are vulnerable to slugs and snails"

407	Causes allergies or is otherwise toxic to humans	n
	Source(s)	Notes
	Quattrocchi, U. 2012. CRC World Dictionary of Medicinal and Poisonous Plants: Common Names, Scientific Names, Eponyms, Synonyms, and Etymology. CRC Press, Boca Raton, FL	No evidence
	Wagstaff, D.J. 2008. International poisonous plants checklist: an evidence-based reference. CRC Press, Boca Raton, FL	No evidence

408	Creates a fire hazard in natural ecosystems	n
	Source(s)	Notes
	Nickel, E. 2009. Chilean succulent a drought-tolerant charmer. http://www.sfgate.com/homeandgarden/article/Chilean-succulent-a-drought-tolerant-charmer-3226576.php . [Accessed 13 Feb 2017]	[Succulent. No evidence] "Its succulent foliage means that this versatile plant can also blend in with a succulent and cacti garden or, as Annie's Annuals and Perennials suggests, matched with other "blues" such as <i>Senecio mandraliscae</i> and <i>Crassula lycopodioides</i> ."

409	Is a shade tolerant plant at some stage of its life cycle	n
	Source(s)	Notes
	Mostly Natives Nursery. 2017. <i>Calandrinia spectabilis</i> . http://www.mostlynatives.com/plants/calandrinia-spectabilis . [Accessed 13 Feb 2017]	"Full sun, may not be hardy below 25°F."
	Dave's Garden. 2017. Rock Purslane <i>Calandrinia spectabilis</i> . http://davesgarden.com/guides/pf/go/112396/ . [Accessed 17 Feb 2017]	"Sun Exposure: Full Sun"

410	Tolerates a wide range of soil conditions (or limestone conditions if not a volcanic island)	

Qsn #	Question	Answer
	Source(s)	Notes
	thegardengeeks. 2017. <i>Calandrinia spectabilis</i> . http://thegardengeeks.com . [Accessed 13 Feb 2017]	"Soil Type: Rock Purslane (<i>Calandrinia spectabilis</i>) prefer slightly acidic, humus rich, sharply drained soil"
	Blooming Advantage. 2017. <i>Calandrinia spectabilis</i> . http://www.bloomingadvantage.com/static/Calandrinia-spectabilis.html . [Accessed 13 Feb 2017]	"Soil: Tolerates Poor, Well-drained, Tolerates Dry, Tolerates Sandy, Tolerates Rocky"
	Suncrest Nurseries. 2017. <i>Calandrinia spectabilis</i> . http://www.suncrestnurseries.com/ . [Accessed 13 Feb 2017]	"Soils: Well-drained soil"

411	Climbing or smothering growth habit	n
	Source(s)	Notes
	Innes, C. 1981. Complete Handbook of Cacti and Succulents. Van Nostrand Reinhold Company. Van Nostrand Reinhold Company, New York, NY	" <i>Calandrinia spectabilis</i> Otto et Dietr. Native of Chile. A somewhat shrubby plant with elongated compressed leaves to 4 cm long, pruinose. Flowers very beautiful, about 5 cm diameter, rich purple." [Portulacaceae]

412	Forms dense thickets	n
	Source(s)	Notes
	Dave's Garden. 2017. Rock Purslane <i>Calandrinia spectabilis</i> . http://davesgarden.com/guides/pf/go/112396/ . [Accessed 13 Feb 2017]	[Clumping] "On Dec 8, 2011, boomboer from Cape Town, South Africa wrote:" ... " word of warning - when <i>Calandrinia</i> is happy - it simply explodes in growth! A plant with one rosette can grow to a clump with 30+ rosettes, 2 to 3 feet in diameter in a single spring and summer"

501	Aquatic	n
	Source(s)	Notes
	Innes, C. 1981. Complete Handbook of Cacti and Succulents. Van Nostrand Reinhold Company. Van Nostrand Reinhold Company, New York, NY	[Terrestrial] "A somewhat shrubby plant with elongated compressed leaves to 4 cm long, pruinose."

502	Grass	n
	Source(s)	Notes
	The Plant List. 2013. Version 1.1. Published on the Internet; http://www.theplantlist.org/ . [Accessed 10 Feb 2017]	"The genus <i>Calandrinia</i> is in the family Portulacaceae"

503	Nitrogen fixing woody plant	n
	Source(s)	Notes
	The Plant List. 2013. Version 1.1. Published on the Internet; http://www.theplantlist.org/ . [Accessed 10 Feb 2017]	"The genus <i>Calandrinia</i> is in the family Portulacaceae"

Qsn #	Question	Answer
504	Geophyte (herbaceous with underground storage organs -- bulbs, corms, or tubers)	n
	Source(s)	Notes
	Innes, C. 1981. Complete Handbook of Cacti and Succulents. Van Nostrand Reinhold Company. Van Nostrand Reinhold Company, New York, NY	"A somewhat shrubby plant with elongated compressed leaves to 4 cm long, pruinose."

601	Evidence of substantial reproductive failure in native habitat	
	Source(s)	Notes
	WRA Specialist. 2017. Personal Communication	Unknown. Most information comes from commercial websites with no information about reproductive failure.

602	Produces viable seed	y
	Source(s)	Notes
	thegardengeeks. 2017. <i>Calandrinia spectabilis</i> . http://thegardengeeks.com . [Accessed 13 Feb 2017]	"Propagation: sow Rock Purslane (<i>Calandrinia spectabilis</i>) seed at 61-64°F/16-18°C in early spring or autumn or take stem cuttings in spring."

603	Hybridizes naturally	
	Source(s)	Notes
	Wickramasinghe, P., Harrison, D. K., & Johnston, M. E. (2010). Reproductive biology and intergeneric breeding compatibility of ornamental <i>Portulaca</i> and <i>Calandrinia</i> (Portulacaceae). <i>Australian Journal of Botany</i> , 57(8), 697-707	[Unknown. Hybridization documented in genus] "Our hypothesis was that <i>Portulaca</i> and <i>Calandrinia</i> species with similar chromosome numbers may hybridise. However, there may be other breeding barriers that prevent this. We investigated the reproductive biology of <i>P. grandiflora</i> , <i>P. umbraticola</i> , <i>C. balonensis</i> and <i>C. sp. nov.</i> and breeding compatibility for reciprocal crosses of <i>P. grandiflora</i> × <i>C. balonensis</i> (2n=18) and <i>P. umbraticola</i> × <i>C. sp. nov.</i> (2n=24)." ... "For all species, none of the five emasculated flowers produced seeds without hand-pollination and none of the reciprocal intergeneric crosses between <i>P. grandiflora</i> × <i>C. balonensis</i> , and <i>P. umbraticola</i> × <i>C. sp. nov.</i> produced hybrid seeds (25 flowers × ~50 ovules per flower for <i>C. balonensis</i> and <i>P. umbraticola</i> and ~100 ovules per flower for <i>P. grandiflora</i> and <i>C. sp. nov.</i>) (Table 3)."

604	Self-compatible or apomictic	
	Source(s)	Notes

Qsn #	Question	Answer
	Wickramasinghe, P., Harrison, D. K., & Johnston, M. E. (2010). Reproductive biology and intergeneric breeding compatibility of ornamental <i>Portulaca</i> and <i>Calandrinia</i> (Portulacaceae). <i>Australian Journal of Botany</i> , 57(8), 697-707	[Unknown for. <i>C. specatbilis</i>] "Intraspecific outcrosses of <i>P. grandiflora</i> , <i>P. umbraticola</i> , <i>C. balonensis</i> and <i>C. sp. nov.</i> were compatible. <i>P. grandiflora</i> and <i>C. sp. nov.</i> were partially self-compatible, whereas <i>C. balonensis</i> and <i>P. umbraticola</i> were self-incompatible. Autogamy was detected only for <i>P. grandiflora</i> . This means that seed production of <i>C. balonensis</i> and <i>P. umbraticola</i> was mainly due to out-crossing. However, parthenogenesis and/or apomixes cannot be fully excluded for the four species because our experiments neither provided evidence for parthenogenesis and/or apomixis nor generated information on entrance of pollen tubes into the micropyle of ovules, fertilization and embryo development. Intergeneric reciprocal crosses of <i>P. grandiflora</i> x <i>C. balonensis</i> (2n = 18) and <i>P. umbraticola</i> x <i>C. sp. nov.</i> (2n = 24) with consistent chromosome numbers did not produce seeds because pollen-tube growth was arrested within the stigmata."

605	Requires specialist pollinators	n
	Source(s)	Notes
	Nickel, E. 2009. Chilean succulent a drought-tolerant charmer. http://www.sfgate.com/homeandgarden/article/Chilean-succulent-a-drought-tolerant-charmer-3226576.php . [Accessed 13 Feb 2017]	"It's known to be popular with butterflies and bees."
	Zomlefer, W.B. 1994. <i>Guide to Flowering Plant Families</i> . The University of North Carolina Press, Chapel Hill & London	[Portulacaceae family description. Insect-pollinated] "The ephemeral flowers, which are protandrous or homogamous, usually open for a short period in full sunlight. Small pollinators (e.g., flies and ants) are attracted to the brightly colored perianth and the nectar (produced by the glands or disc at the base of the stamens). Self-pollination may occur as the anthers are pressed against the stigmas when the flowers close (or fail to expand in inclement weather; Knuth 1908)."

606	Reproduction by vegetative fragmentation	y
	Source(s)	Notes
	Dave's Garden. 2017. Rock Purslane <i>Calandrinia spectabilis</i> . http://davesgarden.com/guides/pf/go/112396/ . [Accessed 10 Feb 2017]	"Propagation Methods: From leaf cuttings From herbaceous stem cuttings Allow cut surface to callous over before planting" ... "On Jan 26, 2017, Mildcat from Escondido, CA (Zone 10a) wrote: I got a <i>Calandrinia</i> (aka <i>Cistanthe</i>) cutting from a friend. It rooted easily and I planted it in my succulent bed. After a few months it was galloping in all directions and threatening to take over the entire large bed. I tore the whole thing out and stuck a few stems into two half barrel planters, where it has flourished." ... "On Dec 8, 2011, boomboer from Cape Town, South Africa wrote:" ... A word of warning - when <i>Calandrinia</i> is happy - it simply explodes in growth! A plant with one rosette can grow to a clump with 30+ rosettes, 2 to 3 feet in diameter in a single spring and summer... Growth can be curbed by limiting water, but it responds well to pruning also and you can root the cuttings and give to friends and family - spread the joy."

607	Minimum generative time (years)	

Qsn #	Question	Answer
	Source(s)	Notes
	Blooming Advantage. 2017. <i>Calandrinia spectabilis</i> . http://www.bloomingadvantage.com/static/Calandrinia-spectabilis.html . [Accessed 13 Feb 2017]	"Growth Rate: Fast, Moderate"
	WRA Specialist. 2017. Personal Communication	Unknown. Sometimes grown as an annual, but time to first flowering in wild unknown. May be able to spread vegetatively prior to first flowering.

701	Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)	
	Source(s)	Notes
	Jurado, E., Westoby, M., & Nelson, D. (1991). Diaspore weight, dispersal, growth form and perenniality of central Australian plants. <i>The Journal of Ecology</i> , 79(3): 811-828	[Related taxon with unassisted dispersal] "Seed mass, dispersal, perenniality and growth form of some species of the Central Australian flora" ... "Dispersal classification was based on the presence or absence of structures on the diaspores: unassisted (U)" [Calandrinia polyanda]
	WRA Specialist. 2017. Personal Communication	Unknown. Seeds, if produced, may be small enough to adhere to soil stuck to footwear, tools, or vehicles.

702	Propagules dispersed intentionally by people	y
	Source(s)	Notes
	Dave's Garden. 2017. Rock Purslane <i>Calandrinia spectabilis</i> . http://davesgarden.com/guides/pf/go/112396/ . [Accessed 13 Feb 2017]	"This plant has been said to grow in the following regions: Anthem, Arizona Phoenix, Arizona Tempe, Arizona Alameda, California Aliso Viejo, California Arroyo Grande, California Brea, California Camarillo, California Carmel, California Cathedral City, California Corona, California Escondido, California Hayward, California (2 reports) Los Angeles, California Napa, California Palmdale, California Pittsburg, California Ramona, California Richmond, California Salinas, California San Clemente, California San Diego, California San Francisco, California (4 reports) San Jose, California San Luis Obispo, California San Pedro, California Spring Valley, California Valley Center, California Vista, California Walnut Creek, California Las Cruces, New Mexico"
	Annie's Annuals. 2017. <i>Calandrinia spectabilis</i> . https://www.anniesannuals.com/plants/view/?id=1930 . [Accessed 13 Feb 2017]	Sold online

703	Propagules likely to disperse as a produce contaminant	
	Source(s)	Notes
	WRA Specialist. 2017. Personal Communication	Unknown. Cultivated as an ornamental. Seeds could possibly become established in planting media of other ornamentals

704	Propagules adapted to wind dispersal	n
	Source(s)	Notes

Qsn #	Question	Answer
	Kubitzki, K., Rohwer, J.G. & Bittrich, V. (eds.). 1993. The Families and Genera of Vascular Plants: Volume II. Flowering Plants. Dicotyledons: Magnoliid, Hamamelid and Caryophyllid Families. Springer-Verlag, Berlin, Heidelberg, New York	[Possibly ejected, but otherwise lacking adaptations for wind dispersal] "In some species of <i>Calandrinia</i> (<i>Cistanthe</i>) and <i>Monocosmia</i> the capsule is so flimsy towards the base that the top separates from the receptacle but there is no abscission layer. The circumscissile dehiscence of the inferior capsule of <i>Portulaca</i> is probably not similar to that of <i>Lewisia</i> (Carolin 1987). In <i>Calandrinia</i> s. str., the <i>Montia</i> group and <i>Claytonia</i> the valves are usually intensely involute almost immediately after dehiscence, thus often forcibly ejecting the seeds."

705	Propagules water dispersed	
	Source(s)	Notes
	Kubitzki, K., Rohwer, J.G. & Bittrich, V. (eds.). 1993. The Families and Genera of Vascular Plants: Volume II. Flowering Plants. Dicotyledons: Magnoliid, Hamamelid and Caryophyllid Families. Springer-Verlag, Berlin, Heidelberg, New York	"Fruit a 3-valved capsule or a thin-walled nut." [Unknown. No apparent adaptations for water dispersal, but small size may allow for movement by water]

706	Propagules bird dispersed	n
	Source(s)	Notes
	Kubitzki, K., Rohwer, J.G. & Bittrich, V. (eds.). 1993. The Families and Genera of Vascular Plants: Volume II. Flowering Plants. Dicotyledons: Magnoliid, Hamamelid and Caryophyllid Families. Springer-Verlag, Berlin, Heidelberg, New York	"Fruit a 3-valved capsule or a thin-walled nut." [No evidence]

707	Propagules dispersed by other animals (externally)	
	Source(s)	Notes
	Kubitzki, K., Rohwer, J.G. & Bittrich, V. (eds.). 1993. The Families and Genera of Vascular Plants: Volume II. Flowering Plants. Dicotyledons: Magnoliid, Hamamelid and Caryophyllid Families. Springer-Verlag, Berlin, Heidelberg, New York	"Fruit a 3-valved capsule or a thin-walled nut." [Unknown. Probably Not]

708	Propagules survive passage through the gut	
	Source(s)	Notes
	Cosyns, E., Claerbout, S., Lamoot, I., & Hoffmann, M. (2005). Endozoochorous seed dispersal by cattle and horse in a spatially heterogeneous landscape. <i>Plant Ecology</i> , 178(2), 149-162	"Appendix A. Alphabetic ordered list of 49 plant species, within two functional groups, which were recorded less than 5 times from different dung samples of large herbivores (2.5 l) at Westhoek North and South." [Includes <i>Claytonia perfoliata</i> , a related taxon with similar morphology]

Qsn #	Question	Answer
801	Prolific seed production (>1000/m²)	
	Source(s)	Notes
	WRA Specialist. 2017. Personal Communication	Unknown. Often vegetatively propagated in cultivation
802	Evidence that a persistent propagule bank is formed (>1 yr)	
	Source(s)	Notes
	WRA Specialist. 2017. Personal Communication	Unknown
803	Well controlled by herbicides	
	Source(s)	Notes
	Urbatsch, L.E. and A. Meszaros. 2013. <i>Calandrinia ciliata</i> (Portulacaceae) new to Louisiana. <i>Phytoneuron</i> 2013-28: 1-3	[Unknown for <i>C. spectabilis</i>] "Pre-emergence herbicide was applied at this time and weed emergence was monitored and evaluated. <i>Calandrinia ciliata</i> was observed for the first time in October 2012. Most pre-emergence treatments were ineffective against <i>C. ciliata</i> ."
	WRA Specialist. 2017. Personal Communication	Unknown. No information on herbicide efficacy or chemical control of this species
804	Tolerates, or benefits from, mutilation, cultivation, or fire	
	Source(s)	Notes
	Dave's Garden. 2017. Rock Purslane <i>Calandrinia spectabilis</i> . http://davesgarden.com/guides/pf/go/112396/ . [Accessed 13 Feb 2017]	[Responds well to pruning] "On Dec 8, 2011, boomboer from Cape Town, South Africa wrote: What a nice addition to any garden - the magenta pink poppy-ish flowers float over a thick carpet of bluegreen echeveria-like foliage down below. A word of warning - when <i>Calandrinia</i> is happy - it simply explodes in growth! A plant with one rosette can grow to a clump with 30+ rosettes, 2 to 3 feet in diameter in a single spring and summer... Growth can be curbed by limiting water, but it responds well to pruning also and you can root the cuttings and give to friends and family - spread the joy."
805	Effective natural enemies present locally (e.g. introduced biocontrol agents)	
	Source(s)	Notes
	WRA Specialist. 2017. Personal Communication	Unknown

Summary of Risk Traits:

High Risk / Undesirable Traits

- Other *Calandrinia* species are invasive weeds
- Reproduces by seeds and spreads vegetatively
- Intentionally spread by people
- Seeds lack specific adaptations for dispersal, but small size may facilitate dispersal
- Limited ecological information reduces accuracy of risk prediction

Low Risk Traits

- No reports of invasiveness or naturalization
- Unarmed (no spines, thorns, or burrs)
- Non-toxic
- Ornamental

Second Screening Results for Herbs or Low Stature Shrubby Life Forms

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