

**Family:** *Brassicaceae*

**Taxon:** *Lobularia maritima*

**Synonym:** *Alyssum maritimum* (L.) Lam.

**Common Name** sweet alyssum  
sweet alison  
alyse corbeille d'argent  
lágrimas de la virgen

<b>Questionnaire :</b>	current 20090513	<b>Assessor:</b>	Chuck Chimera	<b>Designation:</b>	H(Hawai'i)
<b>Status:</b>	Assessor Approved	<b>Data Entry Person:</b>	Chuck Chimera	<b>WRA Score</b>	<b>8</b>
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)	Intermediate
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)	
303	Agricultural/forestry/horticultural weed			n=0, y = 2*multiplier (see Appendix 2)	
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	n
403	Parasitic			y=1, n=0	n
404	Unpalatable to grazing animals			y=1, n=-1	y
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	
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	
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	y
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	
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	n
803	Well controlled by herbicides	y=-1, n=1	
804	Tolerates, or benefits from, mutilation, cultivation, or fire	y=1, n=-1	
805	Effective natural enemies present locally (e.g. introduced biocontrol agents)	y=-1, n=1	

Designation: H(Hawai'i)

WRA Score **8**

## Supporting Data:

101	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 highly domesticated
201	2010. USDA, ARS, National Genetic Resources Program.. Lobularia maritima - Germplasm Resources Information Network - (GRIN) [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland. <a href="http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.p">http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.p</a>	Native: * AFRICA Macaronesia: Portugal - Madeira Islands; Spain - Canary Islands Northern Africa: Algeria [n.]; Egypt; Libya [n.]; Morocco; Tunisia * ASIA-TEMPERATE Western Asia: Egypt - Sinai; Turkey [Islands] * EUROPE Southeastern Europe: Albania; Greece -Crete; Italy [incl. Sicily] Southwestern Europe: France [incl. Corsica]; Portugal; Spain [incl. Balears] [Mediterranean climates]
203	1999. Gilman, E.F./Howe, T.. Lobularia maritima. Fact Sheet FPS-352. Environmental Horticulture Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida, Gainesville, FL <a href="http://hort.ufl.edu/shr">http://hort.ufl.edu/shr</a>	"They perform best in the winter in USDA hardiness zones 9 and 10 in some shade but will "melt away" during the summer. The plants are smaller on sunny sites with poor soil...USDA hardiness zones: all zones"
204	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.	"naturalized principally in sandy areas" [Kure and Midway Atolls], "in Hawai'i, grown in gardens and sparingly naturalized"
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.	"the most widely cultivated plant in the Brassicaceae"
301	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.	"naturalized principally in sandy areas" [Kure and Midway Atolls], "in Hawai'i, grown in gardens and sparingly naturalized"
301	2008. Weber, E./Sun, S.-G./Li, B.. Invasive alien plants in China: diversity and ecological insights. Biological Invasions. 10: 1411-1429.	Appendix 1 Invasive alien plant species in China [Lists Lobularia maritima in habitat that includes "roadsides, railways, waste places, disturbed ground"]
302	2003. Ornduff, R./Faber, P.M./Keeler-Wolf, T.. Introduction to California plant life. University of California Press, Berkeley and Los Angeles, CA	"Some weeds were introduced into California consciously because they had ornamental or other value. For example, European sweet alyssum (Lobularia maritima) and red valerian (Centranthus ruber) were introduced as garden plants because of their drought tolerance and attractive flowers. Both have become established locally as inhabitants of poorly kept gardens, in empty lots, and along roadsides." [a weed of disturbed areas with environmental implications. See 3.4]
304	1991. Baker, H.G.. The Continuing Evolution of Weeds. Economic Botany. 45 (4): 445-449.	"Lobularia maritima, as its name indicates, is a native of coastal Europe where it is restricted to maritime habitats. It is found most abundantly as a weed in California near and on sea coasts, thereby fitting its ancestral restriction"
304	1998. Morin, M./Conant, S.. Laysan Island Ecosystem Restoration Plan. University of Hawaii at Manoa, Honolulu, HI <a href="http://www2.hawaii.edu/~conant/laysan.res.plan.pdf">http://www2.hawaii.edu/~conant/laysan.res.plan.pdf</a>	"Achyranthes atollensis...It reportedly became extinct on Kure Atoll due to competition with introduced golden crown-beard (Verbesina encelioides) and sweet alyssum (Lobularia maritima)...Introduction that on Green Island, Kure atoll, presumably through competition helped caused extinction of three leeward islands' endemics (see golden crown-beard entry above, Herbst and Wagner 1992) that were also formerly found on Laysan"
304	2006. Cal-IPC. California Invasive Plant Inventory - Cal-IPC Publication 2006-02. California Invasive Plant Council, Berkeley, CA <a href="http://www.cal-ipc.org">www.cal-ipc.org</a>	"Lobularia maritima: Ecological Types Invaded and Other Comments: Coastal dune, coastal scrub, coastal prairie, riparian."
304	2007. Barbour, M.G./Keeler-Wolf, T./Schoenherr, A.A.. Terrestrial vegetation of California. University of California Press, Berkeley and Los Angeles, CA	"Several nonnative plant taxa threaten native plants in the dunes, especially on San Nicolas islands. Highly invasive Ammophila arenaria has been planted for erosion control. Carpobrotus edulis, Cakile maritima, and Lobularia maritima are widespread."
304	2008. Adair, R./Cheal, D./White, M.. Advisory list of environmental weeds in coastal plains and heathy forest bioregions of Victoria. The State of Victoria Department of Sustainability and Environment, Melbourne <a href="http://www.dse.vic.gov.au/">http://www.dse.vic.gov.au/</a>	Appendix 1 Environmental weeds of coastal plains and heathy forests bioregions of Victoria listed alphabetically within risk categories [includes Lobularia maritima]

304	2010. California Invasive Plant Council. <i>Lobularia maritima</i> (sweet alyssum). <a href="http://www.cal-ipc.org/ip/management/plant_profiles/Lobularia_maritima.php">http://www.cal-ipc.org/ip/management/plant_profiles/Lobularia_maritima.php</a>	This Mediterranean native may crowd out native plants in some habitats.
304	2010. The Los Angeles and San Gabriel Rivers Watershed Council. Weed Watch - <i>Lobularia maritima</i> . <a href="http://weedwatch.lasgrwc.org/docs/matrix/Lobularia_maritima_042907.pdf">http://weedwatch.lasgrwc.org/docs/matrix/Lobularia_maritima_042907.pdf</a>	"Once established in natural areas, it not only crowds out native annuals, it prevents coastal sage scrub species from establishing."
305	2007. Randall, R.. Global Compendium of Weeds. <a href="http://www.hear.org/gcw/">http://www.hear.org/gcw/</a>	<i>Lobularia arabica</i> ; <i>Lobularia libyca</i> listed as weeds, but no evidence of or information on control found.
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.	"Short-lived perennial herbs; stems grayish green, ascending or some decumbent, covered with appressed, branched hairs. Leaves linear to narrowly oblanceolate, 1-3 cm long, 0.1-0.4 cm wide." [no spines, thorns, or burrs]
402	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.	Widely cultivated [no evidence of allelopathy]
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.	"Short-lived perennial herbs; stems grayish green, ascending or some decumbent, covered with appressed, branched hairs." [not parasitic]
404	2006. Miller, W.B.. Bulbs, Perennials, Annuals and Woody Plants that are Rarely Eaten by Deer. Cornell University, Ithaca NY <a href="http://www.westerbeekbulb.com/Research%20Program%20Website/Newsletters/Deer%20resistant%20plant%20list%20MAY%202006.pdf">http://www.westerbeekbulb.com/Research%20Program%20Website/Newsletters/Deer%20resistant%20plant%20list%20MAY%202006.pdf</a>	"The alternative is to plant bulbs and plants that deer do not eat (as much as other plants). The following list of rarely eaten plant material was developed over the past 18 years and at the Mohonk Mountain House, a National Historic Landmark in the Hudson River Valley near New Paltz, NY. It was supplied by Diana K. Weiner, Mohonk's Superintendent of Parks and Grounds. The list is based on observations of whitetail deer browsing plant materials during the growing season at Mohonk" [includes <i>Lobularia maritima</i> ]
404	2010. Michigan State University Extension. Ornamental and Garden Plants: Controlling Deer Damage. <a href="http://www.canr.msu.edu/jackson/Horticulture/Fact_Sheets/Animal/deer.html">http://www.canr.msu.edu/jackson/Horticulture/Fact_Sheets/Animal/deer.html</a>	Herbaceous Plants - Annual Flowers - Rarely Damaged [includes <i>Lobularia maritima</i> ]
405	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.	Widely cultivated [no evidence of toxicity to animals]
405	2010. The Lizard Lounge. Non-Toxic Plants for Lizards. <a href="http://www.the-lizard-lounge.com/content/library/plants/nontoxic-plants.asp">http://www.the-lizard-lounge.com/content/library/plants/nontoxic-plants.asp</a>	Non-Toxic Plants for Lizards [includes <i>Lobularia maritima</i> ]
406	1999. Gilman, E.F./Howe, T.. <i>Lobularia maritima</i> . Fact Sheet FPS-352. Environmental Horticulture Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida, Gainesville, FL <a href="http://hort.ufl.edu/shr">http://hort.ufl.edu/shr</a>	Downy mildew causes leaf lesions that are light green then yellow. A downy growth forms on both sides of the leaves in the yellow zone. Warm days and cool nights favor the disease. A wilt disease attacks the stems during wet weather and a cobwebby growth may develop. Parts of the plant above the infection wilt and die. The lower leaves rot, shrink, and shrivel. White rust causes pale yellow leaf lesions. The underside of the leaves have smooth white pustules. Infected stems and flowers are seriously deformed. Club root causes deformation and lack of development of infected roots. Infected plants may wilt on hot days but recover at night. Avoid planting in soil where club root has been a problem. Powdery mildew causes a white coating on the leaves.
406	2010. Missouri Botanical Garden. PlantFinder - <i>Lobularia maritima</i> . <a href="http://www.mobot.org/gardeninghelp/plantfinder/Plant.asp?code=A103">http://www.mobot.org/gardeninghelp/plantfinder/Plant.asp?code=A103</a>	"No serious insect or disease problems. Damping off is an occasional problem with seedlings."
406	2010. The Ohio State University. <i>Lobularia maritima</i> . <a href="http://www.hcs.ohio-state.edu/hcs/TMI/Plantlist/lo_itima.html">http://www.hcs.ohio-state.edu/hcs/TMI/Plantlist/lo_itima.html</a>	"with virtually no disease or pest problems in the landscape"

407	1999. Gilman, E.F./Howe, T.. <i>Lobularia maritima</i> . Fact Sheet FPS-352. Environmental Horticulture Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida, Gainesville, FL <a href="http://hort.ufl.edu/shr">http://hort.ufl.edu/shr</a>	No evidence that <i>Lobularia</i> causes allergies or is otherwise toxic to humans
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.	"Short-lived perennial herbs; stems grayish green, ascending or some decumbent, covered with appressed, branched hairs." [growth habit unlikely to contribute significantly to fire hazard in natural ecosystems]
409	2010. Floridata. <i>Lobularia maritima</i> . Floridata.com, Tallahassee, Florida <a href="http://www.floridata.com/ref//lobu_mar.cfm">http://www.floridata.com/ref//lobu_mar.cfm</a>	"Light: Full sun is best but will tolerate some shade. "
409	2010. The Ohio State University. <i>Lobularia maritima</i> . <a href="http://www.hcs.ohio-state.edu/hcs/TMI/Plantlist/lo_itima.html">http://www.hcs.ohio-state.edu/hcs/TMI/Plantlist/lo_itima.html</a>	"full sun to partial shade"
410	1999. Gilman, E.F./Howe, T.. <i>Lobularia maritima</i> . Fact Sheet FPS-352. Environmental Horticulture Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida, Gainesville, FL <a href="http://hort.ufl.edu/shr">http://hort.ufl.edu/shr</a>	"Soil tolerances: clay; sand; acidic; loam"
410	2010. The Los Angeles and San Gabriel Rivers Watershed Council. Weed Watch - <i>Lobularia maritima</i> . <a href="http://weedwatch.lasgrwc.org/docs/matrix/Lobularia_maritima_042907.pdf">http://weedwatch.lasgrwc.org/docs/matrix/Lobularia_maritima_042907.pdf</a>	"This self-sowing annual is well adapted to Mediterranean climates and does well in a variety of soil types and is drought tolerant."
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.	"Short-lived perennial herbs; stems grayish green, ascending or some decumbent, covered with appressed, branched hairs." [not climbing or smothering]
412	2010. Floridata. <i>Lobularia maritima</i> . Floridata.com, Tallahassee, Florida <a href="http://www.floridata.com/ref//lobu_mar.cfm">http://www.floridata.com/ref//lobu_mar.cfm</a>	"Forming dense mats less than 9 in (30 cm) in height sweet alyssum covers itself densely with delicate white, pink or purple blossoms to create splashes of color in the landscape." [could suppress other vegetation]
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.	Brassicaceae [not a grass]
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.	Brassicaceae [not a nitrogen fixing woody plant]
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	2003. Pico, F.X./Retana, J.. Seed ecology of a Mediterranean perennial herb with an exceptionally extended flowering and fruiting season. <i>Botanical Journal of the Linnean Society</i> . 142: 273–280.	No evidence of substantial reproductive failure in native habitat
602	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.	"Seeds 1 per cell, ellipsoid, compressed, 1-1.5 mm long"
603	2010. WRA Specialist. Personal Communication.	Ability to hybridize naturally Unknown

604	2000. Gomez, J.M.. Phenotypic selection and response to selection in <i>Lobularia maritima</i> : importance of direct and correlational components of natural selection. <i>Journal of Evolutionary Biology</i> . 13 (4): 689-699.	" <i>Lobularia maritima</i> is self-compatible, and can produce seeds after spontaneous autogamy (Gomez, 2000). Nevertheless, this crucifer is primarily allogamous (Borgen, 1955), suffering a high inbreeding depression expressed in higher seed-abortion rate, and lower seed germination and seeding-survival rates after self-pollination (Gomez, 2000)."
604	2003. Pico, F.X./Retana, J.. Seed ecology of a Mediterranean perennial herb with an exceptionally extended flowering and fruiting season. <i>Botanical Journal of the Linnean Society</i> . 142: 273–280.	"self-pollination does not significantly decrease either the reproductive output or germinability of the resulting seeds"
605	2000. Gomez, J.M.. Phenotypic selection and response to selection in <i>Lobularia maritima</i> : importance of direct and correlational components of natural selection. <i>Journal of Evolutionary Biology</i> . 13 (4): 689-699.	" <i>Lobularia maritima</i> is pollinated primarily by ants ( <i>Camponotus micans</i> ) and flies (mainly <i>Muscidae</i> and relatives), two pollinators that have similar effectiveness (Gomez, 2000)."
605	2001. Picó, F.X./Retana, J.. The flowering pattern of the perennial herb <i>Lobularia maritima</i> : an unusual case in the Mediterranean basin. <i>Acta Oecologica</i> . 22: 209–217.	"Flowers are hermaphroditic and insect pollinated [4, 11, 23], and present a high degree of self-compatibility (F.X. Picó and J. Retana unpublished data). <i>L. maritima</i> flowers are mostly visited by flies throughout the year, although beetles are also common in the months prior to summer (J. Retana and F.X. Picó unpublished data)."
606	2003. Pico, F.X./Retana, J.. Seed ecology of a Mediterranean perennial herb with an exceptionally extended flowering and fruiting season. <i>Botanical Journal of the Linnean Society</i> . 142: 273–280.	No evidence of reproduction by vegetative fragmentation
607	2000. Gomez, J.M.. Phenotypic selection and response to selection in <i>Lobularia maritima</i> : importance of direct and correlational components of natural selection. <i>Journal of Evolutionary Biology</i> . 13 (4): 689-699.	" <i>Lobularia maritima</i> is an annual to perennial herb distributed throughout the western Mediterranean, which usually inhabits warm sites close to the coast, such as sandy dunes or rocky slopes (Fernandes, 1993). In the study site, seeds germinate in autumn, and seedlings reach maturity and usually flower very young, during the first winter (December)."
701	2003. Ornduff, R./Faber, P.M./Keeler-Wolf, T.. <i>Introduction to California plant life</i> . University of California Press, Berkeley and Los Angeles, CA	"established locally as inhabitants of poorly kept gardens, in empty lots, and along roadsides" [roadside distribution suggests <i>Lobularia maritima</i> seeds are unintentionally dispersed along heavily trafficked corridors]
702	2001. Hanelt, P. (ed.). <i>Mansfeld's encyclopedia of agricultural and horticultural crops, Volume 2</i> . Springer-Verlag, Berlin, Heidelberg, New York	Popular ornamental
703	2010. WRA Specialist. Personal Communication.	No evidence that <i>Lobularia maritima</i> has been a contaminant of produce
704	2003. Pico, F.X./Retana, J.. Seed ecology of a Mediterranean perennial herb with an exceptionally extended flowering and fruiting season. <i>Botanical Journal of the Linnean Society</i> . 142: 273–280.	"Fruits are siliquas (2–3.5 mm long) containing two seeds (1–2 mm long) that lack primary dispersal mechanisms." [no adaptations for wind dispersal]
705	2000. Gomez, J.M.. Phenotypic selection and response to selection in <i>Lobularia maritima</i> : importance of direct and correlational components of natural selection. <i>Journal of Evolutionary Biology</i> . 13 (4): 689-699.	"The small, 1-2-mm-long, wingless seeds are passively dispersed." [possible water dispersed, as seeds are small and plants are found in coastal habitats]
706	2000. Gomez, J.M.. Phenotypic selection and response to selection in <i>Lobularia maritima</i> : importance of direct and correlational components of natural selection. <i>Journal of Evolutionary Biology</i> . 13 (4): 689-699.	"The small, 1±2-mm-long, wingless seeds are passively dispersed."
706	2003. Pico, F.X./Retana, J.. Seed ecology of a Mediterranean perennial herb with an exceptionally extended flowering and fruiting season. <i>Botanical Journal of the Linnean Society</i> . 142: 273–280.	"Fruits are siliquas (2–3.5 mm long) containing two seeds (1–2 mm long) that lack primary dispersal mechanisms." [not fleshy-fruited.]
707	2003. Pico, F.X./Retana, J.. Seed ecology of a Mediterranean perennial herb with an exceptionally extended flowering and fruiting season. <i>Botanical Journal of the Linnean Society</i> . 142: 273–280.	"Fruits are siliquas (2–3.5 mm long) containing two seeds (1–2 mm long) that lack primary dispersal mechanisms."

707	2004. Cuevas, J.G./Marticorena, A./Cavieres, L.A.. New additions to the introduced flora of the Juan Fernández Islands: origin, distribution, life history traits, and potential of invasion. <i>Revista Chilena de Historia Natural</i> . 77: 523-538.	"Dispersal by animals was present in 19 %, including some epizoochorous species such as <i>Erodium moschatum</i> , myrmecorous such as <i>Lobularia maritima</i> , and endozoochorous such as <i>Solanum nigrum</i> ." [dispersed by ants]
708	2010. WRA Specialist. Personal Communication.	Unknown if seeds survive passage through gut [although probably unlikely for seeds to be ingested]
801	2000. Gomez, J.M.. Phenotypic selection and response to selection in <i>Lobularia maritima</i> : importance of direct and correlational components of natural selection. <i>Journal of Evolutionary Biology</i> . 13 (4): 689-699.	Total seed production 813.0 +/- 58. 3 [seeds per plant. Actual seed density for naturally occurring plants unknown]
802	2000. Gomez, J.M.. Phenotypic selection and response to selection in <i>Lobularia maritima</i> : importance of direct and correlational components of natural selection. <i>Journal of Evolutionary Biology</i> . 13 (4): 689-699.	"This species does not appear to produce persistent soil seed bank, since over 80% of the seeds germinate within the first 2 months after dispersal (Shoemaker & Carlson, 1990; Gomez, 2000)."
802	2003. Pico, F.X./Retana, J.. Seed ecology of a Mediterranean perennial herb with an exceptionally extended flowering and fruiting season. <i>Botanical Journal of the Linnean Society</i> . 142: 273-280.	"the seed bank study indicates that seeds in the soil basically come from current seed production at each period of the flowering season and that seeds do not remain for a long time in the seed bank" [no evidence for a persistent seed bank]
803	2010. WRA Specialist. Personal Communication.	Unknown [no information found on herbicide effectiveness]
804	2010. WRA Specialist. Personal Communication.	Unknown [no information found on effects of mutilation, cultivation, or fire]
805	2010. WRA Specialist. Personal Communication.	Unknown [no information found on presence or effectiveness of natural enemies]