

<b>Taxon:</b> <i>Phylica purpurea</i> Sond.	<b>Family:</b> Rhamnaceae
<b>Common Name(s):</b> silkyfruit hard-leaf	<b>Synonym(s):</b> <i>Phylica purpurea</i> var. <i>purpurea</i>

<b>Assessor:</b> Chuck Chimera	<b>Status:</b> Assessor Approved	<b>End Date:</b> 19 Aug 2020
<b>WRA Score:</b> -1.0	<b>Designation:</b> L	<b>Rating:</b> Low Risk

**Keywords:** Fynbos Shrub, Unarmed, Cut Flower/Foliage, Dense Stands, Ant-Dispersed

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)	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	n
205	Does the species have a history of repeated introductions outside its natural range?	y=-2, ?=-1, n=0	n
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)	n
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		
407	Causes allergies or is otherwise toxic to humans	y=1, n=0	n
408	Creates a fire hazard in natural ecosystems		
409	Is a shade tolerant plant at some stage of its life cycle		
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	y=1, n=0	y
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		
604	Self-compatible or apomictic		
605	Requires specialist pollinators	y=-1, n=0	n
606	Reproduction by vegetative fragmentation		
607	Minimum generative time (years)		
701	Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)	y=1, n=-1	n
702	Propagules dispersed intentionally by people	y=1, n=-1	y
703	Propagules likely to disperse as a produce contaminant	y=1, n=-1	n
704	Propagules adapted to wind dispersal	y=1, n=-1	n
705	Propagules water dispersed	y=1, n=-1	n
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	n
801	Prolific seed production (>1000/m <sup>2</sup> )		
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
	Palgrave, K. C. (2015). Palgrave's Trees of Southern Africa. Struik Nature, Cape Town, SA	[No evidence of domestication in genus] "A dense shrub or small tree 1-3 m in height; occurring in fynbos, usually on sandstone slopes, often at forest margins."

102	Has the species become naturalized where grown?	
	Source(s)	Notes
	WRA Specialist. (2020). Personal Communication	NA

103	Does the species have weedy races?	
	Source(s)	Notes
	WRA Specialist. (2020). 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"	Intermediate
	Source(s)	Notes
	Germishuizen, G. & Meyer, N.L. (eds). (2003). Plants of southern Africa: an annotated checklist. Strelitzia 14. National Botanical Institute, Pretoria	[Three varieties of <i>Phylica purpurea</i> all native to Western and Eastern Cape provinces of South Africa. The Western Cape has a Mediterranean climate, The Eastern Cape climate is highly varied] "purpurea Sond. var. floccosa Pillans Perennial. Dwarf shrub or shrub. Ht 0.3–2 m. Alt 200–1220 m. WC, EC purpurea Sond. var. pearsonii Pillans Perennial. Shrub. Ht up to 1.5 m. Alt 265–1530 m. WC purpurea Sond. var. purpurea Perennial. Shrub or tree. Ht up to 3 m. Alt 15–1640 m. WC"

202	Quality of climate match data	High
	Source(s)	Notes
	Germishuizen, G. & Meyer, N.L. (eds). (2003). Plants of southern Africa: an annotated checklist. Strelitzia 14. National Botanical Institute, Pretoria	[Three varieties of <i>Phylica purpurea</i> all native to Western and Eastern Cape provinces of South Africa. The Western Cape has a Mediterranean climate, The Eastern Cape climate is highly varied]

203	Broad climate suitability (environmental versatility)	y
	Source(s)	Notes

Qsn #	Question	Answer
	Mucina, L., & Rutherford, M. (eds) 2006. The vegetation of South Africa, Lesotho and Swaziland. Strelitzia 19. South African National Biodiversity Institute, Pretoria	"North Rooiberg Sandstone Fynbos" ... "Distribution Western Cape Province: Northern slopes of the mountains of Rooiberg, Gamka and the Amalienstein Ridge-Sandberg-Bakenkop range. Altitude 500–1490 m on the summit of Rooiberg." ... "Climate MAP 160–710 mm (mean: 330 mm), with no prominent peak, but a low from December to February. Mean daily maximum and minimum temperatures 29.7°C and 3.0°C for January and July, respectively. Frost incidence 10–20 days per year."
	Germishuizen, G. & Meyer, N.L. (eds). (2003). Plants of southern Africa: an annotated checklist. Strelitzia 14. National Botanical Institute, Pretoria	[Elevation range of three varieties all exceed 1000 m, demonstrating environmental versatility] "purpurea Sond. var. floccosa Pillans Perennial. Dwarf shrub or shrub. Ht 0.3–2 m. Alt 200–1220 m. WC, EC purpurea Sond. var. pearsonii Pillans Perennial. Shrub. Ht up to 1.5 m. Alt 265–1530 m. WC purpurea Sond. var. purpurea Perennial. Shrub or tree. Ht up to 3 m. Alt 15–1640 m. WC"

204	Native or naturalized in regions with tropical or subtropical climates	n
	Source(s)	Notes
	Germishuizen, G. & Meyer, N.L. (eds). (2003). Plants of southern Africa: an annotated checklist. Strelitzia 14. National Botanical Institute, Pretoria	[Three varieties of <i>Phylica purpurea</i> all native to Western and Eastern Cape provinces of South Africa. The Western Cape has a Mediterranean climate, The Eastern Cape climate is highly varied] "purpurea Sond. var. floccosa Pillans Perennial. Dwarf shrub or shrub. Ht 0.3–2 m. Alt 200–1220 m. WC, EC purpurea Sond. var. pearsonii Pillans Perennial. Shrub. Ht up to 1.5 m. Alt 265–1530 m. WC purpurea Sond. var. purpurea Perennial. Shrub or tree. Ht up to 3 m. Alt 15–1640 m. WC"
	Imada, C. (2019). Hawaiian Naturalized Vascular Plants Checklist (February 2019 update). Bishop Museum Technical Report 69. Bishop Museum, Honolulu, HI	No evidence
	Randall, R.P. (2017). A Global Compendium of Weeds. 3rd Edition. Perth, Western Australia. R.P. Randall	No evidence

205	Does the species have a history of repeated introductions outside its natural range?	n
	Source(s)	Notes
	WRA Specialist. (2020). Personal Communication	No evidence found

301	Naturalized beyond native range	n
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Qsn #	Question	Answer
	<b>Source(s)</b>	<b>Notes</b>
	Imada, C. (2019). Hawaiian Naturalized Vascular Plants Checklist (February 2019 update). Bishop Museum Technical Report 69. Bishop Museum, Honolulu, HI	No evidence
	Randall, R.P. (2017). A Global Compendium of Weeds. 3rd Edition. Perth, Western Australia. R.P. Randall	No evidence

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

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

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

305	Congeneric weed	n
	<b>Source(s)</b>	<b>Notes</b>
	Randall, R.P. (2017). A Global Compendium of Weeds. 3rd Edition. Perth, Western Australia. R.P. Randall	<p>[Neither species is regarded as a significant weed]</p> <p>"Phylica ericoides L.                      Rhamnaceae                      Total N° of Refs: 1                      Global Risk Score: 0.24                      Rating: Low                      Habit: Shrub                      Preferred Climate/s: Mediterranean                      Origin: Africa                      Major Pathway/s: Ornamental                      Dispersed by: Humans                      References: Australia-Q-1134.                      Phylica gnidioides Eckl. &amp; Zeyh.                      Rhamnaceae                      Total N° of Refs: 1                      Habit: Shrub                      Origin: Africa                      Major Pathway/s: Ornamental                      Dispersed by: Humans                      References: New Zealand-U-2048."</p>

401	Produces spines, thorns or burrs	n
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Qsn #	Question	Answer
	<b>Source(s)</b>	<b>Notes</b>
	Palgrave, K. C. (2015). Palgrave's Trees of Southern Africa. Struik Nature, Cape Town, SA	[No evidence] "A dense shrub or small tree 1-3 m in height; occurring in fynbos, usually on sandstone slopes, often at forest margins. Bark: grey to brown; young branches covered with grey hairs. Leaves: small, lanceolate, almost needle-like, up to 10 mm long; base rounded to lobed; margin conspicuously rolled under."

402	Allelopathic	
	<b>Source(s)</b>	<b>Notes</b>
	WRA Specialist. (2020). Personal Communication	Unknown. No evidence found

403	Parasitic	n
	<b>Source(s)</b>	<b>Notes</b>
	Palgrave, K. C. (2015). Palgrave's Trees of Southern Africa. Struik Nature, Cape Town, SA	"A dense shrub or small tree 1-3 m in height; occurring in fynbos, usually on sandstone slopes, often at forest margins." [Rhamnaceae. No evidence]

404	Unpalatable to grazing animals	
	<b>Source(s)</b>	<b>Notes</b>
	Odendaal, P. D. (1983). Feeding habits and nutrition of bush buck in the Knysna forests during winter. South African Journal of Wildlife Research 13(2), 27-31	"Table 1 Food plants of bush buck in the Knysna forests determined by analysis of the stomach contents of 25 males" [Includes <i>Phylica</i> sp. Species not identified]

405	Toxic to animals	n
	<b>Source(s)</b>	<b>Notes</b>
	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

406	Host for recognized pests and pathogens	
	<b>Source(s)</b>	<b>Notes</b>
	WRA Specialist. (2020). Personal Communication	Unknown

407	Causes allergies or is otherwise toxic to humans	n
	<b>Source(s)</b>	<b>Notes</b>
	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

408	Creates a fire hazard in natural ecosystems	
	Source(s)	Notes
	Rebelo, A. G., Boucher, C., Helme, N., Mucina, L., & Rutherford, M. C. (2006). Fynbos Biome 4. <i>Strelitzia</i> 19: 144-145. South African National Biodiversity Institute, Pretoria	[Unknown. Forms dense thickets in a fire prone ecosystem. May increase fire risk if reaching high densities] "Fynbos (derived from the Dutch 'fijn-bosch' and pronounced 'feinbos') means 'fine bush', with a Dutch connotation for 'kindling' — as opposed to fire-wood. It is an evergreen, fire-prone shrubland characterised by the presence of restios (wiry, evergreen graminoids of the Restionaceae), a high cover of ericoid shrubs (fine-leaved, principally in the families Ericaceae, Asteraceae, Rhamnaceae, Thymelaeaceae and Rutaceae), and the common occurrence of proteoid shrubs (exclusively Proteaceae)."

409	Is a shade tolerant plant at some stage of its life cycle	
	Source(s)	Notes
	Palgrave, K. C. (2015). <i>Palgrave's Trees of Southern Africa</i> . Struik Nature, Cape Town, SA	"occurring in fynbos, usually on sandstone slopes, often at forest margins." [Unknown, but presumably higher light environments]

410	Tolerates a wide range of soil conditions (or limestone conditions if not a volcanic island)	
	Source(s)	Notes
	Rebelo, A. G., Boucher, C., Helme, N., Mucina, L., & Rutherford, M. C. (2006). Fynbos Biome 4. <i>Strelitzia</i> 19: 144-145. South African National Biodiversity Institute, Pretoria	[Unknown] "Geology & Soils Acidic lithosol soils derived from Ordovician sandstones of the Table Mountain Group"

411	Climbing or smothering growth habit	n
	Source(s)	Notes
	Palgrave, K. C. (2015). <i>Palgrave's Trees of Southern Africa</i> . Struik Nature, Cape Town, SA	"A dense shrub or small tree 1-3 m in height; occurring in fynbos, usually on sandstone slopes, often at forest margins."

412	Forms dense thickets	y
	Source(s)	Notes
	Norton, P. M. (2011). The habitat and feeding ecology of the klipspringer <i>Oreotragus Oreotragus</i> (Zimmermann, 1973) in two areas of the Cape Province. MS Thesis. University of Pretoria, Pretoria, South Africa	"On the plateau edge near the dry rocky slopes the vegetation is also dense. but rocks 'constitute a higher proportion of the cover, and the total vegetation cover drops to 60% or lower, depending on the amount of soil and the drainage (Fig. 17). The most typical plants of this part of the plateau are <i>Phylica purpurea</i> and <i>Chrysanthemoides monilifera</i> , which form fairly dense stands in some places."

Qsn #	Question	Answer
	Watson, L. H., Odendaal, H. E., Barry, T. J., & Pietersen, J. (2005). Population viability of Cape mountain zebra in Gamka Mountain Nature Reserve, South Africa: the influence of habitat and fire. <i>Biological Conservation</i> , 122 (2), 173-180	[Dry Mountain Fynbos community dominated by <i>Phylica purpurea</i> and other plants] "Gamka Mountain Nature Reserve (9428 ha) is situated in the Western Cape, 33 km south west of the town of Oudtshoorn. The reserve is dominated by mountainous plateaus, incised with deep valleys and the underlying rock formations are of Table Mountain quartzite and shale, and Bokkeveld shale and sandstone (Allardice and Ince, undated)." ... "Dry Mountain Fynbos community on southern slopes dominated by <i>Phylica purpurea</i> and <i>Erica simulans</i> ; <i>Rhodocoma fruticosa</i> community on higher northern slopes; <i>Themeda triandra</i> – <i>Merxmuellera stricta</i> community on eastern plateaus and slopes"

501	Aquatic	n
	Source(s)	Notes
	Palgrave, K. C. (2015). <i>Palgrave's Trees of Southern Africa</i> . Struik Nature, Cape Town, SA	[Terrestrial] "A dense shrub or small tree 1-3 m in height; occurring in fynbos, usually on sandstone slopes, often at forest margins."

502	Grass	n
	Source(s)	Notes
	USDA, Agricultural Research Service, National Plant Germplasm System. (2020). Germplasm Resources Information Network (GRIN-Taxonomy). National Germplasm Resources Laboratory, Beltsville, Maryland. <a href="https://npgsweb.ars-grin.gov/">https://npgsweb.ars-grin.gov/</a> . [Accessed 14 Aug 2020]	Family: Rhamnaceae Tribe: Phyliceae

503	Nitrogen fixing woody plant	n
	Source(s)	Notes
	USDA, Agricultural Research Service, National Plant Germplasm System. (2020). Germplasm Resources Information Network (GRIN-Taxonomy). National Germplasm Resources Laboratory, Beltsville, Maryland. <a href="https://npgsweb.ars-grin.gov/">https://npgsweb.ars-grin.gov/</a> . [Accessed 14 Aug 2020]	Family: Rhamnaceae Tribe: Phyliceae

504	Geophyte (herbaceous with underground storage organs -- bulbs, corms, or tubers)	n
	Source(s)	Notes
	Palgrave, K. C. (2015). <i>Palgrave's Trees of Southern Africa</i> . Struik Nature, Cape Town, SA	"A dense shrub or small tree 1-3 m in height; occurring in fynbos, usually on sandstone slopes, often at forest margins."

601	Evidence of substantial reproductive failure in native habitat	n
	Source(s)	Notes



Qsn #	Question	Answer
	Foden, W. & Potter, L. (2005). <i>Phylica purpurea</i> Sond. var. <i>floccosa</i> Pillans. National Assessment: Red List of South African Plants version 2020.1. <a href="http://redlist.sanbi.org/species.php?species=4057-156">http://redlist.sanbi.org/species.php?species=4057-156</a> . [Accessed 19 Aug 2020]	Status and Criteria - Least Concern
	Foden, W. & Potter, L. (2005). <i>Phylica purpurea</i> Sond. var. <i>purpurea</i> . National Assessment: Red List of South African Plants version 2020.1. <a href="http://redlist.sanbi.org/species.php?species=4057-158">http://redlist.sanbi.org/species.php?species=4057-158</a> . [Accessed 19 Aug 2020]	Status and Criteria - Least Concern

602	Produces viable seed	y
	Source(s)	Notes
	Kubitzki, K. (ed.). 2004. The Families and genera of vascular plants. Volume VI. Flowering plants, Dicotyledons: Celastrales, Oxalidales, Rosales, Cornales, Ericales. Springer-Verlag, Berlin, Heidelberg, New York	"seeds arillate."
	Silverhill Seeds and Books. (2020). Silverhill Seeds Catalogue. <a href="http://www.silverhillseeds.co.za/byEntireAZ.asp">http://www.silverhillseeds.co.za/byEntireAZ.asp</a> . [Accessed 19 Aug 2020]	[Seeds sold online] "Phylica purpurea (Rhamnaceae) US\$ 3.50 per Pkt   UK£ 2.75 per Pkt   Rand 16.00 per Pkt 1-3m shrub, pink fl Au-Sp, foliage plant & cut fl. Tall form also available."

603	Hybridizes naturally	
	Source(s)	Notes
	WRA Specialist. (2020). Personal Communication	Unknown. No evidence found

604	Self-compatible or apomictic	
	Source(s)	Notes
	Kubitzki, K. (ed.). 2004. The Families and genera of vascular plants. Volume VI. Flowering plants, Dicotyledons: Celastrales, Oxalidales, Rosales, Cornales, Ericales. Springer-Verlag, Berlin, Heidelberg, New York	[Unknown for <i>Phylica purpurea</i> ] "Monomorphic hermaphroditism combined with protandry and self-incompatibility (SI) is widespread in the family. Incomplete dichogamy, high flower number per individual and sequential flowering favour selfing, which is counterbalanced by gametophytic SI. Pollen-ovule ratios under this system are about 7000: 1."

Qsn #	Question	Answer
605	<b>Requires specialist pollinators</b>	<b>n</b>
	<b>Source(s)</b>	<b>Notes</b>
	Palgrave, K. C. (2015). Palgrave's Trees of Southern Africa. Struik Nature, Cape Town, SA	"Flowers: small, pink to purple, with dense woolly hairs, in compact heads, crowded near the ends of the branchlets, giving the flowerhead an almost floss-like appearance (Mar.-Oct)." [Flowers not specialized]
	Kubitzki, K. (ed.). 2004. The Families and genera of vascular plants. Volume VI. Flowering plants, Dicotyledons: Celastrales, Oxalidales, Rosales, Cornales, Ericales. Springer-Verlag, Berlin, Heidelberg, New York	"Generalized, unspecialised entomophily is the rule, with Hymenoptera and Diptera co-dominating nearly always."

606	<b>Reproduction by vegetative fragmentation</b>	
	<b>Source(s)</b>	<b>Notes</b>
	WRA Specialist. (2020). Personal Communication	Unknown

607	<b>Minimum generative time (years)</b>	
	<b>Source(s)</b>	<b>Notes</b>
	WRA Specialist. (2020). Personal Communication	Unknown

701	<b>Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)</b>	<b>n</b>
	<b>Source(s)</b>	<b>Notes</b>
	Cowling, R. M., Pierce, S. M., Stock, W. D., & Cocks, M. (1994). Why are there so many myrmecochorous species in the Cape fynbos?. In Plant-animal interactions in Mediterranean-type ecosystems (pp. 159-168). Springer, Dordrecht	[Phylica are ant-dispersed] "Large ant-dispersed genera were Phylica (133 spp.; Rhamnaceae), Agathosma (130 spp.; Rutaceae), Cliffortia (106 spp.; Rosaceae), Muraltia (106 spp.; Polygalaceae), Thesium (79 spp.; Santalaceae) and Serruria (48 spp.; Proteaceae). Large non myrmecochorous genera included Erica (528 spp.; Ericaceae), Aspalathus (245 spp.; Fabaceae), Gnidia (47 spp.; Thymeleaceae), and Euryops (46 spp.; Asteraceae)."

702	<b>Propagules dispersed intentionally by people</b>	<b>y</b>
	<b>Source(s)</b>	<b>Notes</b>
	Powrie, F. (1998). Grow South African Plants. National Botanical Institute, Kirstenbosch	"Dense shrub or tree, needle-like foliage, dense white flowers in compact heads, good texture plant, ideal for fynbos gardens." [Cultivated as an ornamental]
	Silverhill Seeds and Books. (2020). Silverhill Seeds Catalogue. <a href="http://www.silverhillseeds.co.za/byEntireAZ.asp">http://www.silverhillseeds.co.za/byEntireAZ.asp</a> . [Accessed 19 Aug 2020]	[Seeds sold online] "Phylica purpurea (Rhamnaceae) US\$ 3.50 per Pkt   UK£ 2.75 per Pkt   Rand 16.00 per Pkt 1-3m shrub, pink fl Au-Sp, foliage plant & cut fl. Tall form also available."
	WRA Specialist. (2020). Personal Communication	Introduced and proposed for cultivation in Hawaiian Islands for cut flower/foliage uses.

703	<b>Propagules likely to disperse as a produce contaminant</b>	<b>n</b>
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Qsn #	Question	Answer
	<b>Source(s)</b>	<b>Notes</b>
	Palgrave, K. C. (2015). Palgrave's Trees of Southern Africa. Struik Nature, Cape Town, SA	"Fruit: an ovoid capsule about 6 mm long, covered with silky white hairs and with a conspicuous apical ring (May onwards)." [No evidence. Unlikely. Ant-dispersed]

704	Propagules adapted to wind dispersal	n
	<b>Source(s)</b>	<b>Notes</b>
	Cowling, R. M., Pierce, S. M., Stock, W. D., & Cocks, M. (1994). Why are there so many myrmecochorous species in the Cape fynbos?. In Plant-animal interactions in Mediterranean-type ecosystems (pp. 159-168). Springer, Dordrecht	[Phylica are ant-dispersed] "Large ant-dispersed genera were Phylica (133 spp.; Rhamnaceae), "

705	Propagules water dispersed	n
	<b>Source(s)</b>	<b>Notes</b>
	Cowling, R. M., Pierce, S. M., Stock, W. D., & Cocks, M. (1994). Why are there so many myrmecochorous species in the Cape fynbos?. In Plant-animal interactions in Mediterranean-type ecosystems (pp. 159-168). Springer, Dordrecht	[Phylica are ant-dispersed] "Large ant-dispersed genera were Phylica (133 spp.; Rhamnaceae), "

706	Propagules bird dispersed	n
	<b>Source(s)</b>	<b>Notes</b>
	Palgrave, K. C. (2015). Palgrave's Trees of Southern Africa. Struik Nature, Cape Town, SA	"Fruit: an ovoid capsule about 6 mm long, covered with silky white hairs and with a conspicuous apical ring (May onwards)." [Not fleshy-fruited]
	Cowling, R. M., Pierce, S. M., Stock, W. D., & Cocks, M. (1994). Why are there so many myrmecochorous species in the Cape fynbos?. In Plant-animal interactions in Mediterranean-type ecosystems (pp. 159-168). Springer, Dordrecht	[Phylica are ant-dispersed] "Large ant-dispersed genera were Phylica (133 spp.; Rhamnaceae), "

707	Propagules dispersed by other animals (externally)	y
	<b>Source(s)</b>	<b>Notes</b>
	Moll, E. J., & McKenzie, B. (1994). Modes of dispersal of seeds in the Cape fynbos. In Plant-animal interactions in Mediterranean-type ecosystems (pp. 151-157). Springer, Dordrecht	"Finally, there are many myrmecochorous plants in the heathlands (e.g. Leucospermum, Phylica, Aspalathus)."
	Gordon, D. R., Mitterdorfer, B., Pheloung, P. C., Ansari, S., Buddenhagen, C., Chimera, C., ... & Williams, P. A. (2010). Guidance for addressing the Australian Weed Risk Assessment questions. Plant Protection Quarterly, 25(2): 56-74	"This dispersal group includes seeds with an oily or fat-rich outgrowth that aids in ant seed dispersal."

Qsn #	Question	Answer
	Cowling, R. M., Pierce, S. M., Stock, W. D., & Cocks, M. (1994). Why are there so many myrmecochorous species in the Cape fynbos?. In Plant-animal interactions in Mediterranean-type ecosystems (pp. 159-168). Springer, Dordrecht	[Phylica are ant-dispersed] "Large ant-dispersed genera were Phylica (133 spp.; Rhamnaceae), Agathosma (130 spp.; Rutaceae), Cliffortia (106 spp.; Rosaceae), Muraltia (106 spp.; Polygalaceae), Thesium (79 spp.; Santalaceae) and Serruria (48 spp.; Proteaceae). Large non-myrmecochorous genera included Erica (528 spp.; Ericaceae), Aspalathus (245 spp.; Fabaceae), Gnidia (47 spp.; Thymeleaceae), and Euryops (46 spp.; Asteraceae)."

708	Propagules survive passage through the gut	n
	Source(s)	Notes
	Cowling, R. M., Pierce, S. M., Stock, W. D., & Cocks, M. (1994). Why are there so many myrmecochorous species in the Cape fynbos?. In Plant-animal interactions in Mediterranean-type ecosystems (pp. 159-168). Springer, Dordrecht	[Phylica are ant-dispersed] "Large ant-dispersed genera were Phylica (133 spp.; Rhamnaceae), "
	WRA Specialist. (2020). Personal Communication	Plants are externally carried by ants, attracted to the arillate seeds

801	Prolific seed production (>1000/m2)	n
	Source(s)	Notes
	WRA Specialist. (2020). Personal Communication	Unknown

802	Evidence that a persistent propagule bank is formed (>1 yr)	n
	Source(s)	Notes
	Royal Botanic Gardens Kew. (2020) Seed Information Database (SID). Version 7.1. Available from: <a href="http://data.kew.org/sid/">http://data.kew.org/sid/</a> . [Accessed 19 Aug 2020]	[Unknown under natural conditions] "Storage Behaviour: Orthodox Storage Conditions: 90 % viability following drying to mc's in equilibrium with 15 % RH and freezing for approx. 1.02 years at -20°C at RBG Kew, WP"

803	Well controlled by herbicides	n
	Source(s)	Notes
	WRA Specialist. (2020). Personal Communication	Unknown. No information found on herbicide efficacy or chemical control of this species

804	Tolerates, or benefits from, mutilation, cultivation, or fire	n
	Source(s)	Notes
	Cowling, R. M., Pierce, S. M., Stock, W. D., & Cocks, M. (1994). Why are there so many myrmecochorous species in the Cape fynbos?. In Plant-animal interactions in Mediterranean-type ecosystems (pp. 159-168). Springer, Dordrecht	[Possibly killed by fire] "All large ant-dispersed shrub genera (e.g. Agathosma, Cliffortia, Diosma, Muraltia, Phylica, Serruria) have a majority (ca 60-90%) of species killed by fire (Williams, 1982; Le Maitre & Midgley, 1992, A. Bean, pers. comm.; R.M. Cowling, pers. obs)."

Qsn #	Question	Answer
805	Effective natural enemies present locally (e.g. introduced biocontrol agents)	
	Source(s)	Notes
	WRA Specialist. (2020). Personal Communication	Unknown

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**Summary of Risk Traits:**

## High Risk / Undesirable Traits

- Elevation range exceeds 1000 m, demonstrating environmental versatility
- From fire prone ecosystems; may increase fire risk in introduced range
- Forms dense stands in native range
- Reproduces by ant-dispersed seeds
- Gaps in biological and ecological information may reduce accuracy or risk prediction

## Low Risk Traits

- No reports of invasiveness or naturalization, but no evidence of widespread introduction outside native range
- Unarmed (no spines, thorns, or burrs)