

**Taxon:** *Leptospermum rotundifolium* (Maiden & Betche) F. A. Rodway ex Cheel

**Family:** Myrtaceae

**Common Name(s):** round leaf tea-tree  
round-leaved tea tree

**Synonym(s):** *L. scoparium* J. R. Forst. & G. Forst.  
*L. rotundifolium* (Maiden & Betche) F.

**Assessor:** Chuck Chimera

**Status:** Assessor Approved

**End Date:** 29 Jul 2020

**WRA Score:** 1.0

**Designation:** EVALUATE

**Rating:** Evaluate

**Keywords:** Temperate Shrub, Naturalized (Australia), Cut Flower, Persistent Capsules, Wind-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)	Low
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	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	y
302	Garden/amenity/disturbance weed		
303	Agricultural/forestry/horticultural weed	n=0, y = 2*multiplier (see Appendix 2)	n
304	Environmental weed		
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		
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		

Qsn #	Question	Answer Option	Answer
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		
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)		
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	y
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	n
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
	Dawson, M. (2012). Australian <i>Leptospermum</i> in cultivation: species and cultivars. <i>New Zealand Garden Journal</i> 15(2): 14-22	[Cultivated, with a number of cultivars developed, but no evidence of domestication] "There is good potential for making further selections within <i>L. rotundifolium</i> . The species is quite variable and occurs in a range of coastal and inland tableland habitats in New South Wales. Because of its unique flower colour, <i>L. rotundifolium</i> is an important parent in hybridization programmes"

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"	Low
	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 27 Jul 2020]	"Australasia AUSTRALIA: Australia [New South Wales (e.)]"

202	Quality of climate match data	High
	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 27 Jul 2020]	

203	Broad climate suitability (environmental versatility)	n
	Source(s)	Notes
	Plant This. (2020). <i>Leptospermum rotundifolium</i> . <a href="http://www.plantthis.com.au">http://www.plantthis.com.au</a> . [Accessed ]	
	Benson, D. & McDougall, L. (1998). Ecology of Sydney plant species. Part 6. Dicotyledon family Myrtaceae. <i>Cunninghamia</i> 5(4): 808-987	"Altitude: 0–700 m; Annual rainfall: 1000–1800 mm"

Qsn #	Question	Answer
	Australian Native Plant Society. (2020). <i>Leptospermum rotundifolium</i> . <a href="http://anpsa.org.au/l-rot.html">http://anpsa.org.au/l-rot.html</a> . [Accessed 28 Jul 2020]	"This plant performs best in temperate areas and although it grows quite well in subtropical regions, it does not flower to best advantage in these areas. However, it has been known to flower well in Brisbane in a sunny well-drained situation."

204	Native or naturalized in regions with tropical or subtropical climates	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 28 Jul 2020]	"Australasia AUSTRALIA: Australia [New South Wales (e.)]"
	Royal Botanic Gardens Victoria. (2020). VicFlora Flora of Victoria - <i>Leptospermum rotundifolium</i> . <a href="https://vicflora.rbg.vic.gov.au">https://vicflora.rbg.vic.gov.au</a> . [Accessed 28 Jul 2020]	"Establishment means: Sparingly established" ... "Also naturalised in WA. Native to New South Wales, recorded once in Victoria near Club Terrace, plants presumably established from garden refuse."
	Randall, R.P. (2017). A Global Compendium of Weeds. 3rd Edition. Perth, Western Australia. R.P. Randall	"References: Australia-N-945, Australia- EN-7, Australia-N-354, Australia-N-1902, Australia-W-1977" [Naturalized in Australia, outside native range]
	Imada, C. (2019). Hawaiian Naturalized Vascular Plants Checklist (February 2019 update). Bishop Museum Technical Report 69. Bishop Museum, Honolulu, HI	No evidence for <i>Leptospermum rotundifolium</i> . <i>Leptospermum laevigatum</i> , <i>Leptospermum morrisonii</i> , <i>Leptospermum petersonii</i> , and <i>Leptospermum scoparium</i> are naturalized in the Hawaiian Islands.

205	Does the species have a history of repeated introductions outside its natural range?	?
	Source(s)	Notes
	Starr Environmental. (2009). <i>Leptospermum rotundifolium</i> (Round-leaved tea tree). <a href="http://www.starrenvironmental.com/">http://www.starrenvironmental.com/</a> . [Accessed 28 Jul 2020]	"Non-Native : Cultivated" [Series of images taken on April 30, 2009, and March 05, 2012 in Kula, Maui]
	Royal Botanic Gardens Victoria. (2020). VicFlora Flora of Victoria - <i>Leptospermum rotundifolium</i> . <a href="https://vicflora.rbg.vic.gov.au">https://vicflora.rbg.vic.gov.au</a> . [Accessed 28 Jul 2020]	[Cultivated, and naturalized in Australia outside natural range] "Establishment means: Sparingly established" ... " Also naturalised in WA. Native to New South Wales, recorded once in Victoria near Club Terrace, plants presumably established from garden refuse."

301	Naturalized beyond native range	y
	Source(s)	Notes
	Royal Botanic Gardens Victoria. (2020). VicFlora Flora of Victoria - <i>Leptospermum rotundifolium</i> . <a href="https://vicflora.rbg.vic.gov.au">https://vicflora.rbg.vic.gov.au</a> . [Accessed 28 Jul 2020]	"Establishment means: Sparingly established" ... "Also naturalised in WA. Native to New South Wales, recorded once in Victoria near Club Terrace, plants presumably established from garden refuse."
	Plants of South Eastern New South Wales. (2020). <i>Leptospermum rotundifolium</i> . <a href="https://apps.lucidcentral.org/plants_se_nsw">https://apps.lucidcentral.org/plants_se_nsw</a> . [Accessed 28 Jul 2020]	"Heath, shrubland, woodland, and dry forest. Sometimes on rocky escarpments. Coast, ranges, and the eastern edge of the tablelands between the Kings Highway and west of Thirroul. Plants elsewhere are probably planted/naturalised."
	Randall, R.P. (2017). A Global Compendium of Weeds. 3rd Edition. Perth, Western Australia. R.P. Randall	"References: Australia-N-945, Australia- EN-7, Australia-N-354, Australia-N-1902, Australia-W-1977" [Naturalized in Australia, outside native range]

Qsn #	Question	Answer
	Imada, C. (2019). Hawaiian Naturalized Vascular Plants Checklist (February 2019 update). Bishop Museum Technical Report 69. Bishop Museum, Honolulu, HI	No evidence for <i>Leptospermum rotundifolium</i> . <i>Leptospermum laevigatum</i> , <i>Leptospermum morrisonii</i> , <i>Leptospermum petersonii</i> , and <i>Leptospermum scoparium</i> are naturalized in the Hawaiian Islands.

302	Garden/amenity/disturbance weed	
	Source(s)	Notes
	Royal Botanic Gardens Victoria. (2020). VicFlora Flora of Victoria - <i>Leptospermum rotundifolium</i> . <a href="https://vicflora.rbg.vic.gov.au">https://vicflora.rbg.vic.gov.au</a> . [Accessed 28 Jul 2020]	"Establishment means: Sparingly established" ... "Also naturalised in WA. Native to New South Wales, recorded once in Victoria near Club Terrace, plants presumably established from garden refuse." [No evidence of negative impacts]
	Adair, R. J. (2008). Biological control of Australian native plants, in Australia, with an emphasis on acacias. <i>Muelleria</i> , 26(1), 67-78	"Table 2. Potential native plant targets (bold) for biological control in Western Australia" [In this table, <i>Leptospermum rotundifolium</i> , which is an Australian plant naturalized in Western Australia, is included as a potential native target for biocontrol, categorized as having Medium Feasibility and Medium Ecological impact. The impacts of this species, however, have not been described]
	Randall, R.P. (2017). A Global Compendium of Weeds. 3rd Edition. Perth, Western Australia. R.P. Randall	Cited as a weed of unspecified impacts

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

304	Environmental weed	
	Source(s)	Notes
	Adair, R. J. (2008). Biological control of Australian native plants, in Australia, with an emphasis on acacias. <i>Muelleria</i> , 26(1), 67-78	"Table 2. Potential native plant targets (bold) for biological control in Western Australia" [In this table, <i>Leptospermum rotundifolium</i> , which is an Australian plant naturalized in Western Australia, is included as a potential native target for biocontrol, categorized as having Medium Feasibility and Medium Ecological impact. The impacts of this species, however, have not been described]
	White, M., Cheal, D., Carr, G. W., Adair, R., Blood, K. and Meagher, D. (2018). Advisory list of environmental weeds in Victoria. Arthur Rylah Institute for Environmental Research Technical Report Series No. 287. Department of Environment, Land, Water and Planning, Heidelberg, Victoria	[No evidence from Victoria, Australia outside natural range] "Advisory list of environmental weeds in Victoria ... <i>Leptospermum rotundifolium</i> - Weed status in Victoria = Casual or ruderal; Impact on natural systems = Currently insignificant; Potential for invasion = Currently non-invasive]

305	Congeneric weed	y
	Source(s)	Notes

Qsn #	Question	Answer
	Weber, E. 2017. Invasive Plant Species of the World, 2nd Edition: A Reference Guide to Environmental Weeds. CABI Publishing, Wallingford, UK	" <i>Leptospermum laevigatum</i> " ... "This shrub is native to coastal heath communities in Australia. The plant is tolerant of salt spray and invades mainly coastal vegetation. It can form extensive and dense thickets displacing the native vegetation and preventing any regeneration of native woody species."
	Smith, C.W. 1985. Impact of Alien Plants on Hawaii's Native Biota. Pp. 180-250 in Stone & Scott (eds.). Hawaii's terrestrial ecosystems: preservation & management. CPSU, Honolulu, HI	" <i>Leptospermum scoparium</i> ... This small, scrubby tree forms thickets which crowd out other plants. On Lanai, it has infested goat ( <i>Capra hircus</i> )-eroded ridgetops, resulting in their stabilization. It appears to have allelopathic activity like many other members of the Myrtaceae. The seeds are dispersed by wind." ... "It is elevation found in mesic habitats between 300-700 m. The principal infestations are on Lana'i and above La'ie in the Ko'olau Mountains, Oahu."
	WRA Specialist. (2020). Personal Communication	<i>Leptospermum polygalifolium</i> is targeted for control by the Ko'olau Mountains Watershed Partnership, Oahu, Hawaiian Islands

401	Produces spines, thorns or burrs	n
	Source(s)	Notes
	Thompson, J. (1989). A revision of the genus <i>Leptospermum</i> (Myrtaceae). <i>Telopea</i> 3(3): 301-449	[No evidence] "Shrub from less than 1 to 2 m or more in height with close and ultimately gnarled bark; the younger stems stout, with a dense pubescence of short ascending to recurved hairs and, at first, some long silky hairs, and with a short dense spreading pubescence persisting, without a perceptible flange or with a flange seen only as a thickening below each node, and with branching at 45°-60°. Leaves usually somewhat spreading or recurved, mostly 4-7 mm long and as wide, in general orbicular but sometimes longer than broad or broader than long, glabrous or with some minute pubescence, usually rather thick and incurved in cross-section, or incurved top and bottom and somewhat recurved between, the apex rounded, acute or acuminate, usually infolded, and strongly recurved with a short, usually blunt, but occasionally somewhat pungent point, the base tapering, rounded or somewhat cordate above a distinct pubescent petiole to 1 mm or more in length."

402	Allelopathic	n
	Source(s)	Notes
	WRA Specialist. (2020). Personal Communication	Unknown. No evidence found

403	Parasitic	n
	Source(s)	Notes
	Thompson, J. (1989). A revision of the genus <i>Leptospermum</i> (Myrtaceae). <i>Telopea</i> 3(3): 301-449	"Shrub from less than 1 to 2 m or more in height with close and ultimately gnarled bark" [Myrtaceae. No evidence]

404	Unpalatable to grazing animals	n
	Source(s)	Notes

Qsn #	Question	Answer
	Bennett, L. T. (1994). The expansion of <i>Leptospermum laevigatum</i> on the Yanakie Isthmus, Wilson's Promontory, under changes in the burning and grazing regimes. <i>Australian Journal of Botany</i> , 42(5), 555-564	[Unknown. Other species may be palatable] "An increase in grazing pressure was identified as the probable cause of the <i>L. laevigatum</i> expansion due to: (1) the exposure of bare ground, and (2) the restriction of the feeding range of cattle (known to graze both <i>L. laevigatum</i> and <i>Acacia sophorae</i> on the Isthmus) ... Cattle also grazed <i>Leptospermum laevigatum</i> on the aerodrome (Judd 1990) and probably prevented its spread in other areas where cattle congregated."
	Understorey Network. (2020). <i>Leptospermum lanigerum</i> . <a href="http://www.understorey-network.org.au">http://www.understorey-network.org.au</a> . [Accessed 29 Jul 2020]	[Unknown. Other species reported to be unpalatable] "Resistant to wildlife browsing due to its unpalatability."

405	Toxic to animals	n
	Source(s)	Notes
	Plant This. (2020). <i>Leptospermum rotundifolium</i> . <a href="http://www.planthis.com.au">http://www.planthis.com.au</a> . [Accessed 28 Jul 2020]	"No hazards currently listed."
	Quattrocchi, U. 2012. <i>CRC World Dictionary of Medicinal and Poisonous Plants: Common Names, Scientific Names, Eponyms, Synonyms, and Etymology</i> . CRC Press, Boca Raton, FL	No evidence

406	Host for recognized pests and pathogens	n
	Source(s)	Notes
	Carnegie, A. J., & Lidbetter, J. R. (2012). Rapidly expanding host range for <i>Puccinia psidii</i> sensu lato in Australia. <i>Australasian Plant Pathology</i> , 41(1), 13-29	"Table 2 Current known hosts of <i>Puccinia psidii</i> sensu lato in Australia based on surveys in NSWa and Queenslandb and host testing reported here." [Includes <i>L. rotundifolium</i> . Unknown it could serve as an important host to the fungus <i>Austropuccinia psidii</i> , but this pathogen is already present in the Hawaiian Islands and has been documented on a fairly wide host range of native and non-native plants. The cultivation of <i>L. rotundifolium</i> is therefore unlikely to significantly affect the distribution of <i>Austropuccinia psidii</i> .]
	Australian Plants online. (1998). <i>Leptospermum</i> . <a href="http://anpsa.org.au/APOL11/sep98-3.html">http://anpsa.org.au/APOL11/sep98-3.html</a> . [Accessed 29 Jul 2020]	"The main problems I have experienced have been caused by a small white scale insect which appears in fairly large numbers and affects growth rates. The other problem experienced has been with leaf and twig webbers. They bind a mass of leaves and twigs together from where the caterpillars emerge by night to feed on adjacent leaves. The scale insects can be fairly readily controlled with white oil/carbaryl spray in summer. The leaf and twig webbers can be controlled by carbaryl spray or hand removal of nests. Unless the leaf and twig webber infestation is very severe, the problem is usually one of unsightliness rather than one of major plant damage."

407	Causes allergies or is otherwise toxic to humans	n
	Source(s)	Notes
	Plant This. (2020). <i>Leptospermum rotundifolium</i> . <a href="http://www.planthis.com.au">http://www.planthis.com.au</a> . [Accessed 28 Jul 2020]	"No hazards currently listed."

Qsn #	Question	Answer
	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

408	Creates a fire hazard in natural ecosystems	
	Source(s)	Notes
	Benson, D. & McDougall, L. (1998). Ecology of Sydney plant species. Part 6. Dicotyledon family Myrtaceae. <i>Cunninghamia</i> 5(4): 808-987	"Fire response:" [No data on fire ecology provided. Other species are known to be flammable and to potentially increase fire risk]

409	Is a shade tolerant plant at some stage of its life cycle	
	Source(s)	Notes
	Australian Native Plants. (2020). <i>Leptospermum rotundifolium</i> . <a href="https://www.australianplants.com/plants.aspx?id=1323">https://www.australianplants.com/plants.aspx?id=1323</a> . [Accessed 29 Jul 2020]	"Exposure: Full Sun to Partial Shade"
	Plant This. (2020). <i>Leptospermum rotundifolium</i> . <a href="http://www.plantthis.com.au">http://www.plantthis.com.au</a> . [Accessed 29 Jul 2020]	"Sunlight: hot overhead sun to warm low sun"

410	Tolerates a wide range of soil conditions (or limestone conditions if not a volcanic island)	y
	Source(s)	Notes
	Australian National Botanic Gardens and Centre for Australian National Biodiversity Research. (2020). Growing Native Plants. <i>Leptospermum rotundifolium</i> . <a href="https://www.anbg.gov.au">https://www.anbg.gov.au</a> . [Accessed 28 Jul 2020]	"Any soil is suitable and good watering brings rapid growth and flowers at an early age."
	Benson, D. & McDougall, L. (1998). Ecology of Sydney plant species. Part 6. Dicotyledon family Myrtaceae. <i>Cunninghamia</i> 5(4): 808-987	"Substrate: Skeletal sandy soils on sandstone, low nutrients, well-drained."

411	Climbing or smothering growth habit	n
	Source(s)	Notes
	Thompson, J. (1989). A revision of the genus <i>Leptospermum</i> (Myrtaceae). <i>Telopea</i> 3(3): 301-449	"Shrub from less than 1 to 2 m or more in height with close and ultimately gnarled bark"

412	Forms dense thickets	n
	Source(s)	Notes
	Australian Plants online. (1998). <i>Leptospermum</i> . <a href="http://anpsa.org.au/APOL11/sep98-3.html">http://anpsa.org.au/APOL11/sep98-3.html</a> . [Accessed 29 Jul 2020]	" <i>Leptospermum lanigerum</i> - can form dense thickets in Tasmania." [Leptospermum rotundifolium mentioned on this website, with no evidence that it forms dense thickets]
	Thompson, J. (1989). A revision of the genus <i>Leptospermum</i> (Myrtaceae). <i>Telopea</i> 3(3): 301-449	[No evidence] "On the tableland escarpment of central eastern New South Wales southward of Sydney, and extending to the coast near Jervis Bay (Map 8). Usually in skeletal soils on sandstone."

Qsn #	Question	Answer
	Benson, D. & McDougall, L. (1998). Ecology of Sydney plant species. Part 6. Dicotyledon family Myrtaceae. <i>Cunninghamia</i> 5(4): 808-987	[No evidence] "Typical local abundance: Frequent. Vegetation: Eucalypt woodland and open-forest e.g. with <i>Eucalyptus sieberi</i> , <i>E. haemastoma</i> , <i>Banksia serrata</i> , <i>Leptospermum trinervium</i> ."
<b>501</b>	<b>Aquatic</b>	<b>n</b>
	<b>Source(s)</b>	<b>Notes</b>
	Thompson, J. (1989). A revision of the genus <i>Leptospermum</i> (Myrtaceae). <i>Telopea</i> 3(3): 301-449	[Terrestrial] "On the tableland escarpment of central eastern New South Wales southward of Sydney, and extending to the coast near Jervis Bay (Map 8). Usually in skeletal soils on sandstone."
<b>502</b>	<b>Grass</b>	<b>n</b>
	<b>Source(s)</b>	<b>Notes</b>
	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 28 Jul 2020]	Family: Myrtaceae Subfamily: Myrtoideae Tribe: Leptospermeae
<b>503</b>	<b>Nitrogen fixing woody plant</b>	<b>n</b>
	<b>Source(s)</b>	<b>Notes</b>
	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 28 Jul 2020]	Family: Myrtaceae Subfamily: Myrtoideae Tribe: Leptospermeae
<b>504</b>	<b>Geophyte (herbaceous with underground storage organs -- bulbs, corms, or tubers)</b>	<b>n</b>
	<b>Source(s)</b>	<b>Notes</b>
	Thompson, J. (1989). A revision of the genus <i>Leptospermum</i> (Myrtaceae). <i>Telopea</i> 3(3): 301-449	"Shrub from less than 1 to 2 m or more in height with close and ultimately gnarled bark"
<b>601</b>	<b>Evidence of substantial reproductive failure in native habitat</b>	<b>n</b>
	<b>Source(s)</b>	<b>Notes</b>
	Australian Native Plant Society. (2020). <i>Leptospermum rotundifolium</i> . <a href="http://anpsa.org.au/l-rot.html">http://anpsa.org.au/l-rot.html</a> . [Accessed 28 Jul 2020]	"Conservation Status: Not considered to be at risk in the wild"
	Benson, D. & McDougall, L. (1998). Ecology of Sydney plant species. Part 6. Dicotyledon family Myrtaceae. <i>Cunninghamia</i> 5(4): 808-987	"Typical local abundance: Frequent"
<b>602</b>	<b>Produces viable seed</b>	<b>y</b>

Qsn #	Question	Answer
	<b>Source(s)</b>	<b>Notes</b>
	Australian Native Plant Society. (2020). <i>Leptospermum rotundifolium</i> . <a href="http://anpsa.org.au/l-rot.html">http://anpsa.org.au/l-rot.html</a> . [Accessed 28 Jul 2020]	" <i>L. rotundifolium</i> can be propagated easily from seed or from cuttings of medium hard wood which will strike fairly easily."
	Thompson, J. (1989). A revision of the genus <i>Leptospermum</i> (Myrtaceae). <i>Telopea</i> 3(3): 301-449	"Mature seeds 4-5 mm long, irregularly narrowly linear-cuneiform, striate."

603	Hybridizes naturally	
	<b>Source(s)</b>	<b>Notes</b>
	Dawson, M. (2012). Australian <i>Leptospermum</i> in cultivation: species and cultivars. <i>New Zealand Garden Journal</i> 15(2): 14-22	"Because of its unique flower colour, <i>L. rotundifolium</i> is an important parent in hybridization programmes"
	Thompson, J. (1989). A revision of the genus <i>Leptospermum</i> (Myrtaceae). <i>Telopea</i> 3(3): 301-449	[Possibly yes. Several natural hybrids documented between other species, and <i>L. rotundifolium</i> able to naturalized in cultivation] "As well, natural hybrids have been found between <i>L. laevigatum</i> and <i>L. myrsinoides</i> , <i>L. parvifolium</i> and <i>L. squarrosum</i> , <i>L. arachnoides</i> and <i>L. squarrosum</i> , <i>L. juniperinum</i> and <i>L. polygalifolium</i> , <i>L. grandifolium</i> and <i>L. sphaerocarpum</i> , and <i>L. nitidum</i> and <i>L. lanigerum</i> . <i>L. emarginatum</i> and <i>L. petersonii</i> have been found to hybridise in cultivation."

604	Self-compatible or apomictic	
	<b>Source(s)</b>	<b>Notes</b>
	Thompson, J. (1989). A revision of the genus <i>Leptospermum</i> (Myrtaceae). <i>Telopea</i> 3(3): 301-449	[Unknown, but other taxa are self-compatible] "That plants are self-compatible has been shown for <i>L. scoparium</i> in New Zealand (Burrell 1965)."

605	Requires specialist pollinators	n
	<b>Source(s)</b>	<b>Notes</b>
	Williams, S. (2018). <i>A Beekeeper's Guide to Australian Leptospermum Trees and Honey</i> . Simon Williams, Sippy Downs, Qld	"Do bees like <i>Leptospermum</i> flowers? <i>Leptospermum</i> generally has poor pollen and are mainly visited by bees for nectar. Even so, your bees may show a preference for Eucalypts if co-flowering in the region. Selecting sites with little else co-flowering will focus the bees to collect from <i>Leptospermum</i> species."
	Australian National Botanic Gardens and Centre for Australian National Biodiversity Research. (2020). <i>Growing Native Plants. Leptospermum rotundifolium</i> . <a href="https://www.anbg.gov.au">https://www.anbg.gov.au</a> . [Accessed 28 Jul 2020]	[Attracts bees] "This species has one flowering season a year, from the end of October to the end of November, bursting into full flower in a warm spell of weather. If the season is hot and dry, flowers last only about three weeks. Despite this the shrub is worth having in a home garden for its mass of flowers down to the ground. Bees are attracted to the shrub. "

Qsn #	Question	Answer
606	<b>Reproduction by vegetative fragmentation</b>	
	<b>Source(s)</b>	<b>Notes</b>
	Australian Native Plant Society. (2020). <i>Leptospermum rotundifolium</i> . <a href="http://anpsa.org.au/l-rot.html">http://anpsa.org.au/l-rot.html</a> . [Accessed 29 Jul 2020]	" <i>L. rotundifolium</i> can be propagated easily from seed or from cuttings of medium hard wood which will strike fairly easily." [Cuttings root easily, & could possibly root naturally from stem fragments]

607	<b>Minimum generative time (years)</b>	
	<b>Source(s)</b>	<b>Notes</b>
	Benson, D. & McDougall, L. (1998). Ecology of Sydney plant species. Part 6. Dicotyledon family Myrtaceae. <i>Cunninghamia</i> 5(4): 808-987	"Primary juvenile period:" [No details provided]
	Australian National Botanic Gardens and Centre for Australian National Biodiversity Research. (2020). Growing Native Plants. <i>Leptospermum rotundifolium</i> . <a href="https://www.anbg.gov.au">https://www.anbg.gov.au</a> . [Accessed 28 Jul 2020]	[Flowers at an early age, presumably <4 years] "Any soil is suitable and good watering brings rapid growth and flowers at an early age."

701	<b>Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)</b>	
	<b>Source(s)</b>	<b>Notes</b>
	Royal Botanic Gardens Victoria. (2020). VicFlora Flora of Victoria - <i>Leptospermum rotundifolium</i> . <a href="https://vicflora.rbg.vic.gov.au">https://vicflora.rbg.vic.gov.au</a> . [Accessed 29 Jul 2020]	[Possibly spread accidentally as garden refuse. No other evidence of this dispersal mode found] "Establishment means: Sparingly established" ... "Also naturalised in WA. Native to New South Wales, recorded once in Victoria near Club Terrace, plants presumably established from garden refuse."

702	<b>Propagules dispersed intentionally by people</b>	y
	<b>Source(s)</b>	<b>Notes</b>
	Dawson, M. (2012). Australian <i>Leptospermum</i> in cultivation: species and cultivars. <i>New Zealand Garden Journal</i> 15(2): 14-22	[Ornamental and cut flower uses] " <i>Leptospermum rotundifolium</i> (Maiden & Betche) F. Rodway ex Cheel is a highly ornamental and distinctive species (Fig. 14A–B). The orbicular leaves are responsible for its common name, the round leaf tea-tree. This species is well suited for cut flowers, as its vase life is relatively long for a <i>Leptospermum</i> (Bicknell, 1995). It also has one of the largest flower sizes (20–50 mm in diameter), with colours that range from white, cream, pink, to purplish-pink."

703	<b>Propagules likely to disperse as a produce contaminant</b>	
	<b>Source(s)</b>	<b>Notes</b>
	Williams, S. (2018). A Beekeeper's Guide to Australian <i>Leptospermum</i> Trees and Honey. Simon Williams, Sippy Downs, Qld	"Seed capsules are woody and large and persist over multiple flowering seasons." [No evidence, but possible that seeds could be dispersed through cut flower and foliage uses]

704	<b>Propagules adapted to wind dispersal</b>	y
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Qsn #	Question	Answer
	<b>Source(s)</b>	<b>Notes</b>
	Thompson, J. (1989). A revision of the genus <i>Leptospermum</i> (Myrtaceae). <i>Telopea</i> 3(3): 301-449	"Mature seeds 4-5 mm long, irregularly narrowly linear-cuneiform, striate." [Small seeds presumably dispersed by wind after capsules dehisce, similar to other species in the genus]

705	Propagules water dispersed	n
	<b>Source(s)</b>	<b>Notes</b>
	Thompson, J. (1989). A revision of the genus <i>Leptospermum</i> (Myrtaceae). <i>Telopea</i> 3(3): 301-449	[Not a riparian species. Although seeds could be moved by water, this mode of dispersal is unlikely to be important in establishment] "On the tableland escarpment of central eastern New South Wales southward of Sydney, and extending to the coast near Jervis Bay (Map 8). Usually in skeletal soils on sandstone."
	Benson, D. & McDougall, L. (1998). Ecology of Sydney plant species. Part 6. Dicotyledon family Myrtaceae. <i>Cunninghamia</i> 5(4): 808-987	[Not a riparian species] "Vegetation: Eucalypt woodland and open-forest e.g. with <i>Eucalyptus sieberi</i> , <i>E. haemastoma</i> , <i>Banksia serrata</i> , <i>Leptospermum trinervium</i> ."

706	Propagules bird dispersed	n
	<b>Source(s)</b>	<b>Notes</b>
	Thompson, J. (1989). A revision of the genus <i>Leptospermum</i> (Myrtaceae). <i>Telopea</i> 3(3): 301-449	[Persistent woody capsules. Not fleshy-fruited] "Fruit long-persistent, usually 8-12 (-15) mm in diameter, widest near the slightly woody but little-extended rim, the base usually almost hemispherical but occasionally shallower and broader and occasionally with a very short stalk, the valves very woody, exerted at first so as to be more or less symmetrical with the base, after opening often not at first spreading widely at the apex, but tearing the base of the style as they part, later often somewhat wider than the rim."

707	Propagules dispersed by other animals (externally)	n
	<b>Source(s)</b>	<b>Notes</b>
	Thompson, J. (1989). A revision of the genus <i>Leptospermum</i> (Myrtaceae). <i>Telopea</i> 3(3): 301-449	[No evidence. No means of external attachment] "Fruit long-persistent, usually 8-12 (-15) mm in diameter, widest near the slightly woody but little-extended rim, the base usually almost hemispherical but occasionally shallower and broader and occasionally with a very short stalk, the valves very woody, exerted at first so as to be more or less symmetrical with the base, after opening often not at first spreading widely at the apex, but tearing the base of the style as they part, later often somewhat wider than the rim."

Qsn #	Question	Answer
708	Propagules survive passage through the gut	n
	Source(s)	Notes
	Thompson, J. (1989). A revision of the genus <i>Leptospermum</i> (Myrtaceae). <i>Telopea</i> 3(3): 301-449	[Persistent woody capsules. No evidence of consumption or internal dispersal] "Fruit long-persistent, usually 8-12 (-15) mm in diameter, widest near the slightly woody but little-extended rim, the base usually almost hemispherical but occasionally shallower and broader and occasionally with a very short stalk, the valves very woody"

801	Prolific seed production (>1000/m2)	
	Source(s)	Notes
	Thompson, J. (1989). A revision of the genus <i>Leptospermum</i> (Myrtaceae). <i>Telopea</i> 3(3): 301-449	[Seed densities unknown] "Fruit long-persistent, usually 8-12 (-15) mm in diameter, widest near the slightly woody but little-extended rim, the base usually almost hemispherical but occasionally shallower and broader and occasionally with a very short stalk, the valves very woody, exerted at first so as to be more or less symmetrical with the base, after opening often not at first spreading widely at the apex, but tearing the base of the style as they part, later often somewhat wider than the rim. Mature seeds 4-5 mm long, irregularly narrowly linear-cuneiform, striate."

802	Evidence that a persistent propagule bank is formed (>1 yr)	
	Source(s)	Notes
	Thompson, J. (1989). A revision of the genus <i>Leptospermum</i> (Myrtaceae). <i>Telopea</i> 3(3): 301-449	"Fruit long-persistent," [Likely forms a persistent canopy seed bank, as do other species in the genus]
	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 29 Jul 2020]	"Storage Behaviour: No data available for species. Of 36 known taxa of genus <i>Leptospermum</i> , 100.00% Orthodox(p/?)"

803	Well controlled by herbicides	
	Source(s)	Notes
	Motooka, P., Castro, L., Nelson, D., Nagai, G. & Ching, L. 2003. Weeds of Hawaii's Pastures and Natural Areas: An Identification and Management Guide. CTAHR, UH Manoa, Honolulu, HI	" <i>Leptospermum scoparium</i> ... Reported to be sensitive to triclopyr" [Related invasive taxon controlled by herbicides. Efficacy on <i>L. rotundifolium</i> unknown]

804	Tolerates, or benefits from, mutilation, cultivation, or fire	
	Source(s)	Notes
	Australian Plants online. (1998). <i>Leptospermum</i> . <a href="http://anpsa.org.au/APOL11/sep98-3.html">http://anpsa.org.au/APOL11/sep98-3.html</a> . [Accessed 29 Jul 2020]	"My experience with pruning of <i>Leptospermum</i> species has indicated that they don't like heavy pruning and are not all too happy with only light pruning. It appears that, unlike many Australian plants, they don't produce many, if any, epicormic buds which produce regrowth following pruning or fire." [General description]

Qsn #	Question	Answer
805	Effective natural enemies present locally (e.g. introduced biocontrol agents)	
	Source(s)	Notes
	Carnegie, A. J., & Lidbetter, J. R. (2012). Rapidly expanding host range for <i>Puccinia psidii</i> sensu lato in Australia. <i>Australasian Plant Pathology</i> , 41(1), 13-29	"Table 2 Current known hosts of <i>Puccinia psidii</i> sensu lato in Australia based on surveys in NSWa and Queenslandb and host testing reported here." [Includes <i>L. rotundifolium</i> . Impacts unspecified. Unknown if presence of <i>Austropuccinia psidii</i> in Hawaiian Islands would affect <i>L. rotundifolium</i> ]

**Summary of Risk Traits:**

High Risk / Undesirable Traits

- Naturalized in Victoria, and Western Australia, outside natural range
- Other species are invasive
- Tolerates many soil types
- Reproduces by seeds
- Seeds in persistent woody capsules; likely dispersed by wind, and intentionally cultivated by people
- Persistent capsules may result in a persistent “canopy seed bank”
- Gaps in biological and ecological information may reduce accuracy of risk prediction

Low Risk Traits

- No negative impacts currently documented from naturalized populations
- Unarmed (no spines, thorns, or burrs)
- Non-toxic
- Seeds may be retained on plants for extended periods, limiting dispersal unless exposed to fire or drought

Second Screening Results for Tree/tree-like shrubs

(A) Shade tolerant or known to form dense stands?> Not known to form dense stands, but tolerates partial shade

(B) Bird or clearly wind-dispersed?> Presumably dispersed by wind

(C) Life cycle <4 years? Unknown

Outcome = Evaluate further