

Taxon: <i>Acacia glaucoptera</i> Benth.	Family: Fabaceae
Common Name(s): clay wattle flat wattle	Synonym(s): <i>Acacia sinuata</i> Jacq.

Assessor: Chuck Chimera	Status: Assessor Approved	End Date: 14 Jul 2016
WRA Score: -1.0	Designation: L	Rating: Low Risk

Keywords: Prostrate, Shrub, N-Fixing, Arillate Seeds, Orthodox Seeds

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	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		
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	n
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	y
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	y=1, n=-1	n
607	Minimum generative time (years)	1 year = 1, 2 or 3 years = 0, 4+ years = -1	3
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		
707	Propagules dispersed by other animals (externally)	y=1, n=-1	y
708	Propagules survive passage through the gut		
801	Prolific seed production (>1000/m2)		
802	Evidence that a persistent propagule bank is formed (>1 yr)	y=1, n=-1	y
803	Well controlled by herbicides	y=-1, n=1	y
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
	Maslin, B. R. 2001. <i>Acacia glaucoptera</i> . Flora of Australia. 11A: 584. ABRS/CSIRO Publishing, Melbourne	[No evidence of domestication] "Occurs from near Narrogin S to near Manypeaks (c. 35 km due NE of Albany) and E to Israelite Bay (c. 180 km due E of Ravensthorpe), southern W.A. Grows in clay and gravelly soils in woodland, tall shrubland and mallee communities."

102	Has the species become naturalized where grown?	
	Source(s)	Notes
	WRA Specialist. 2016. Personal Communication	NA

103	Does the species have weedy races?	
	Source(s)	Notes
	WRA Specialist. 2016. 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
	Gardening With Angus. 2016. <i>Acacia glaucoptera</i> – Clay Wattle. http://www.gardeningwithangus.com.au/acacia-glaucoptera-clay-wattle/ . [Accessed 13 Jul 2016]	"Climate Zone: Warm temperate, Cool temperate, Mediterranean, Cool, Semi-arid"
	Maslin, B. R. 2001. <i>Acacia glaucoptera</i> . Flora of Australia. 11A: 584. ABRS/CSIRO Publishing, Melbourne	"Occurs from near Narrogin S to near Manypeaks (c. 35 km due NE of Albany) and E to Israelite Bay (c. 180 km due E of Ravensthorpe), southern W.A."

202	Quality of climate match data	High
	Source(s)	Notes
	Maslin, B. R. 2001. <i>Acacia glaucoptera</i> . Flora of Australia. 11A: 584. ABRS/CSIRO Publishing, Melbourne	

Qsn #	Question	Answer
203	Broad climate suitability (environmental versatility)	n
	Source(s)	Notes
	Gardening With Angus. 2016. <i>Acacia glaucoptera</i> – Clay Wattle. http://www.gardeningwithangus.com.au/acacia-glaucoptera-clay-wattle/ . [Accessed 14 Jul 2016]	"Climate Zone: Warm temperate, Cool temperate, Mediterranean, Cool, Semi-arid"
	Dave's Garden. 2016. Clay Wattle, Flat Wattle, Queen Wattle - <i>Acacia glaucoptera</i> . http://davesgarden.com/guides/pf/go/74089/ . [Accessed 14 Jul 2016]	"Hardiness: USDA Zone 9b: to -3.8 °C (25 °F) USDA Zone 10a: to -1.1 °C (30 °F) USDA Zone 10b: to 1.7 °C (35 °F) USDA Zone 11: above 4.5 °C (40 °F)"

204	Native or naturalized in regions with tropical or subtropical climates	n
	Source(s)	Notes
	Gardening With Angus. 2016. <i>Acacia glaucoptera</i> – Clay Wattle. http://www.gardeningwithangus.com.au/acacia-glaucoptera-clay-wattle/ . [Accessed 13 Jul 2016]	"Climate Zone: Warm temperate, Cool temperate, Mediterranean, Cool, Semi-arid"

205	Does the species have a history of repeated introductions outside its natural range?	?
	Source(s)	Notes
	Fairall, A. R. 2013. West Australian Native Plants in Cultivation. Pergamon Press, Rushcutters Bay, NSW	"An interesting and decorative spreading shrub from the lower South West" [Cultivated as an ornamental in Australia. Frequency of cultivation outside native range unknown]
	Dave's Garden. 2016. Clay Wattle, Flat Wattle, Queen Wattle - <i>Acacia glaucoptera</i> . http://davesgarden.com/guides/pf/go/74089/ . [Accessed 14 Jul 2016]	"Regional This plant has been said to grow in the following regions: Phoenix, Arizona (2 reports) San Mateo, California"
	Australian Succulents. 2016. <i>Acacia glaucoptera</i> Mimosaceae. http://australiansucculents.com/articles-news/acacia/acacia-glaucoptera . [Accessed 14 Jul 2016]	"Though not a rare species in habitat, this most unusual and attractive wattle is still very uncommon in cultivation. "

301	Naturalized beyond native range	n
	Source(s)	Notes
	Randall, R.P. 2012. A Global Compendium of Weeds. 2nd Edition. Department of Agriculture and Food, Western Australia	No evidence
	USDA, ARS, Germplasm Resources Information Network, 2016. National Plant Germplasm System [Online Database]. http://www.ars-grin.gov/npgs/index.html . [Accessed 14 Jul 2016]	No evidence
	Wagner, W.L., Herbst, D.R. & Lorence, D.H. 2016. Flora of the Hawaiian Islands. Smithsonian Institution, Washington, D.C. http://botany.si.edu/ . [Accessed 14 Jul 2016]	No evidence

Qsn #	Question	Answer
302	Garden/amenity/disturbance weed	n
	Source(s)	Notes
	Randall, R.P. 2012. A Global Compendium of Weeds. 2nd Edition. Department of Agriculture and Food, Western Australia	No evidence

303	Agricultural/forestry/horticultural weed	n
	Source(s)	Notes
	Randall, R.P. 2012. A Global Compendium of Weeds. 2nd Edition. Department of Agriculture and Food, Western Australia	No evidence

304	Environmental weed	n
	Source(s)	Notes
	Randall, R.P. 2012. A Global Compendium of Weeds. 2nd Edition. Department of Agriculture and Food, Western Australia	No evidence

305	Congeneric weed	y
	Source(s)	Notes
	Le Maitre, D. C., Gaertner, M., Marchante, E., Ens, E. J., Holmes, P. M., Pauchard, A., O'Farrell, P. J., Rogers, A. M., Blanchard, R., Blignaut, J. & Richardson, D. M. (2011). Impacts of invasive Australian acacias: implications for management and restoration. Diversity and Distributions, 17(5): 1015-1029	"Case studies are used to identify similarities and differences between three regions severely affected by invasions of Australian acacias: <i>Acacia dealbata</i> in Chile, <i>Acacia longifolia</i> in Portugal and <i>Acacia saligna</i> in South Africa." ... "Australian acacias have a wide range of impacts on ecosystems that increase with time and disturbance, transform ecosystems and alter and reduce ecosystem service delivery. A shared trait is the accumulation of massive seed banks, which enables them to become dominant after disturbances. Ecosystem trajectories and recovery potential suggest that there are important thresholds in ecosystem state and resilience. When these are crossed, options for restoration are radically altered; in many cases, autogenic (self-driven and self-sustaining) recovery to a preinvasion condition is inhibited, necessitating active intervention to restore composition and function."
	Randall, R.P. 2012. A Global Compendium of Weeds. 2nd Edition. Department of Agriculture and Food, Western Australia	Several <i>Acacia</i> species are invasive

401	Produces spines, thorns or burrs	n
	Source(s)	Notes

Qsn #	Question	Answer
	Maslin, B. R. 2001. <i>Acacia glaucoptera</i> . Flora of Australia. 11A: 584. ABR/CSIRO Publishing, Melbourne	[No evidence] "Prostrate or erect shrub to 1.5 m high; branches often somewhat gangling. Branchlets straight to slightly flexuose, glabrous. Stipules persistent or caducous. Phyllodes continuous with branchlets, bifariouly decurrent and forming opposite wings with each one extending to the next below, usually 2.5–7 cm long and 0.6–2 cm wide, occasionally undulate, coriaceous, glaucous, glabrous except axils densely tomentulose; free portion of phyllode usually 1–4 cm long, acute to shortly acuminate, with main nerve evident; gland not prominent."

402	Allelopathic	
	Source(s)	Notes
	WRA Specialist. 2016. Personal Communication	Unknown

403	Parasitic	n
	Source(s)	Notes
	Maslin, B. R. 2001. <i>Acacia glaucoptera</i> . Flora of Australia. 11A: 584. ABR/CSIRO Publishing, Melbourne	"Prostrate or erect shrub to 1.5 m high; branches often somewhat gangling." [Fabaceae. No evidence]

404	Unpalatable to grazing animals	
	Source(s)	Notes
	San Marcos Growers. 2016. <i>Acacia glaucoptera</i> - Clay Wattle. http://www.smgrowers.com/products/plants/plantdisplay.asp?region_id=18&plant_id=13&page=# . [Accessed 13 Jul 2016]	"Deer Tolerant: Yes" [Deer resistance suggest possible lack of palatability]
	Orchard, A. E. & Wilson, A. J. G. 2001. Flora of Australia. Volume 11A, Mimosaceae, <i>Acacia</i> , Part 1. ABR/CSIRO, Melbourne	[Generic Description. No specific mention of uses of <i>A. glaucoptera</i> as fodder] "In Australia, a significant economic use of the foliage and green pods of acacias has been as stock fodder, especially during times of drought."

405	Toxic to animals	n
	Source(s)	Notes
	Orchard, A. E. & Wilson, A. J. G. 2001. Flora of Australia. Volume 11A, Mimosaceae, <i>Acacia</i> , Part 1. ABR/CSIRO, Melbourne	[No evidence for <i>A. glaucoptera</i>] "The foliage of some species, notably <i>A. georginae</i> (<i>Georgina</i> Gidgee), may be extremely poisonous to stock (Everist, 1981). Poisoning seriously affects sheep and cattle production in areas where natural stands of this species occurs (Barnes, 1958).
	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

Qsn #	Question	Answer
406	Host for recognized pests and pathogens	
	Source(s)	Notes
	Botanic Gardens and Parks Authority. 2016. Native Plant Notes. Flat Wattle <i>Acacia glaucoptera</i> . Government of Western Australia. http://www.bgpa.wa.gov.au/images/horticulture/docs/pn_acacia_glaucoptera.pdf . [Accessed 14 Jul 2016]	"Pests and diseases: In the home garden, this species is rarely susceptible to pests or diseases."

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	
	Source(s)	Notes
	Barrett, S., Comer, S., McQuoid, N., Porter, M., Tiller, C. & Utber, D. (2009). Identification and Conservation of Fire Sensitive Ecosystems and Species of the South Coast Natural Resource Management Region. Department of Conservation and Land Management, South Coast Region, Western Australia	[Not identified as a particular fire risk in this report. Recruits from seed bank after fires] " <i>Acacia glaucoptera</i> - Fire response = OCC" [Plants are classified as obligate seeders with a canopy (OSC) or soil-stored seed bank (OSS)]

409	Is a shade tolerant plant at some stage of its life cycle	
	Source(s)	Notes
	LandscapeResource. 2016. <i>Acacia glaucoptera</i> . http://www.landscaperesource.com/plants/acacia-glaucoptera.htm#tab-specs . [Accessed 13 Jul 2016]	"Exposure: Full Sun to Partial Shade"
	Gardening With Angus. 2016. <i>Acacia glaucoptera</i> – Clay Wattle. http://www.gardeningwithangus.com.au/acacia-glaucoptera-clay-wattle/ . [Accessed 13 Jul 2016]	"Light: Sunny, Light shade"
	San Marcos Growers. 2016. <i>Acacia glaucoptera</i> - Clay Wattle. http://www.smgrowers.com/products/plants/plantdisplay.asp?region_id=18&plant_id=13&page=# . [Accessed 13 Jul 2016]	"Requires full sun and good drainage. Hardy to 20-25 degrees F."
	Dave's Garden. 2016. Clay Wattle, Flat Wattle, Queen Wattle - <i>Acacia glaucoptera</i> . http://davesgarden.com/guides/pf/go/74089/ . [Accessed 14 Jul 2016]	"Sun Exposure: Full Sun"

Qsn #	Question	Answer
410	Tolerates a wide range of soil conditions (or limestone conditions if not a volcanic island)	n
	Source(s)	Notes
	Botanic Gardens and Parks Authority. 2016. Native Plant Notes. Flat Wattle <i>Acacia glaucoptera</i> . Government of Western Australia. http://www.bgpa.wa.gov.au/images/horticulture/docs/pn_acacia_glaucoptera.pdf . [Accessed 14 Jul 2016]	"Flat Wattle, also known as Clay Wattle, grows naturally in clay and gravelly lateritic soils."
	Corrick, M.G. & Fuhrer, B. 2004. Wildflowers of Southern Western Australia. Rosenberg Publishing, Kenthurst, Australia	"Habitat: kwongan or shrubland in sandy or lateritic clay soil, common in winter-moist areas."
	Gardening With Angus. 2016. <i>Acacia glaucoptera</i> – Clay Wattle. http://www.gardeningwithangus.com.au/acacia-glaucoptera-clay-wattle/ . [Accessed 13 Jul 2016]	"Ph Level: Acid, Neutral, Alkaline Soil Type: Sandy, Clay, Loamy, Sandy loam, Clay loam"

411	Climbing or smothering growth habit	n
	Source(s)	Notes
	Maslin, B. R. 2001. <i>Acacia glaucoptera</i> . Flora of Australia. 11A: 584. ABR/CSIRO Publishing, Melbourne	"Prostrate or erect shrub to 1.5 m high; branches often somewhat gangling. Branchlets straight to slightly flexuose, glabrous. Stipules persistent or caducous. Phyllodes continuous with branchlets, bifariouly decurrent and forming opposite wings with each one extending to the next below, usually 2.5–7 cm long and 0.6–2 cm wide, occasionally undulate, coriaceous, glaucous, glabrous except axils densely tomentulose; free portion of phyllode usually 1–4 cm long, acute to shortly acuminate, with main nerve evident; gland not prominent."

412	Forms dense thickets	n
	Source(s)	Notes
	Maslin, B. R. 2001. <i>Acacia glaucoptera</i> . Flora of Australia. 11A: 584. ABR/CSIRO Publishing, Melbourne	[No evidence from native range] "Occurs from near Narrogin S to near Manypeaks (c. 35 km due NE of Albany) and E to Israelite Bay (c. 180 km due E of Ravensthorpe), southern W.A. Grows in clay and gravelly soils in woodland, tall shrubland and mallee communities."
	McQuoid, N. K., & Hopper, S. D. (2007). The rediscovery of <i>Eucalyptus nutans</i> F. Muell. from the south coast of Western Australia. <i>Journal of the Royal Society of Western Australia</i> , 90, 41-45	[Refers to <i>Eucalyptus nutans</i>] "It grows in a more or less pure stand with <i>Acacia glaucoptera</i> , <i>A. cyclops</i> , <i>Hakea laurina</i> , <i>Eucalyptus anceps</i> , <i>E. occidentalis</i> , <i>Rhadinothamnus rudis</i> , <i>Lepidosperma</i> sp, <i>Astroloma</i> sp."

501	Aquatic	n
	Source(s)	Notes
	Maslin, B. R. 2001. <i>Acacia glaucoptera</i> . Flora of Australia. 11A: 584. ABR/CSIRO Publishing, Melbourne	[Terrestrial shrub] "Grows in clay and gravelly soils in woodland, tall shrubland and mallee communities."

502	Grass	n
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Qsn #	Question	Answer
	Source(s)	Notes
	USDA, ARS, Germplasm Resources Information Network, 2016. National Plant Germplasm System [Online Database]. http://www.ars-grin.gov/npgs/index.html . [Accessed 13 Jul 2016]	Family: Fabaceae (alt.Leguminosae) Subfamily: Mimosoideae Tribe: Acacieae

503	Nitrogen fixing woody plant	y
	Source(s)	Notes
	USDA, ARS, Germplasm Resources Information Network, 2016. National Plant Germplasm System [Online Database]. http://www.ars-grin.gov/npgs/index.html . [Accessed 13 Jul 2016]	Family: Fabaceae (alt.Leguminosae) Subfamily: Mimosoideae Tribe: Acacieae

504	Geophyte (herbaceous with underground storage organs -- bulbs, corms, or tubers)	n
	Source(s)	Notes
	Maslin, B. R. 2001. <i>Acacia glaucoptera</i> . Flora of Australia. 11A: 584. ABR/CSIRO Publishing, Melbourne	"Prostrate or erect shrub to 1.5 m high"

601	Evidence of substantial reproductive failure in native habitat	n
	Source(s)	Notes
	Marriott, N. R. 2009. Small and Interesting Acacias – Part 1. <i>Acacia Study Group Newsletter</i> No. 104: 2-4	"... <i>Acacia glaucoptera</i> is widespread from east of Albany right across to Israelite Bay."
	Maslin, B. R. (1995). <i>Acacia miscellany</i> 13. Taxonomy of some Western Australian phyllocladinous and aphyllodinous taxa (Leguminosae: Mimosoideae). <i>Nuytsia</i> , 10(2), 151-179	"Conservation status. Widespread, not considered rare or endangered."
	Maslin, B. R. 2001. <i>Acacia glaucoptera</i> . Flora of Australia. 11A: 584. ABR/CSIRO Publishing, Melbourne	[No evidence] "Occurs from near Narrogin S to near Manypeaks (c. 35 km due NE of Albany) and E to Israelite Bay (c. 180 km due E of Ravensthorpe), southern W.A. Grows in clay and gravelly soils in woodland, tall shrubland and mallee communities."

Qsn #	Question	Answer
602	Produces viable seed	y
	Source(s)	Notes
	Maslin, B. R. 2001. <i>Acacia glaucoptera</i> . Flora of Australia. 11A: 584. ABR/CSIRO Publishing, Melbourne	"Pods somewhat irregularly coiled and twisted, subterete to compressed, to 2 cm long, 2–3 mm wide, thinly crustaceous, black, glabrous. Seeds longitudinal, ±oblong, 2.5–3.5 mm long; arilterminal, ±conical."
	Sweedman, L. & Merritt, D. 2006. Australian seeds: a guide to their collection, identification and biology. Csiro Publishing, Collingwood, Australia	"Soak in very hot water (c. 95 degrees C) for about 2 minutes"
	Australian National Botanic Gardens, 2012. Wattles - genus <i>Acacia</i> . Commonly Grown <i>Acacia</i> , Australian Government, Canberra. http://www.anbg.gov.au/acacia/species.html . [Accessed 13 Jul 2016]	Propagation: From scarified seed or boiling water treatment.

603	Hybridizes naturally	
	Source(s)	Notes
	Maslin, B. R. (1995). <i>Acacia</i> miscellany 13. Taxonomy of some Western Australian phyllocladinous and aphyllodinous taxa (Leguminosae: Mimosoideae). <i>Nuytsia</i> , 10(2), 151-179	Hybrids documented in this publication, but no evidence for <i>Acacia glaucoptera</i>

604	Self-compatible or apomictic	
	Source(s)	Notes
	Maslin, B. R. 2001. <i>Acacia glaucoptera</i> . Flora of Australia. 11A: 584. ABR/CSIRO Publishing, Melbourne	"Inflorescences rudimentary 1-headed racemes, with axes to 0.5 mm long; peduncles 3–18 mm long, glabrous, often patent or descending in fruit; heads globular, 5–6 mm diam., 30–80-flowered, golden. Flowers 5-merous; sepals ±free; petals nerveless."
	Australian Native Plants Society. 2010. <i>Acacia glaucoptera</i> . <i>Acacia</i> Study Group Newsletter No. 110: 3	"There is still no seed set on his plant, but he advises that he only has the one specimen so it may be that this is one of those species that requires another separate plant for cross pollination to occur."

605	Requires specialist pollinators	n
	Source(s)	Notes
	Maslin, B. R. (1995). <i>Acacia</i> miscellany 13. Taxonomy of some Western Australian phyllocladinous and aphyllodinous taxa (Leguminosae: Mimosoideae). <i>Nuytsia</i> , 10(2), 151-179	[Flowers unspecialized] "Inflorescences extremely reduced 1-headed racemes, 1-2 per axil; raceme axes to 0.5 mm long, glabrous; peduncles 3-18 mm long, glabrous, ± erect except often strongly recurved from the base when in fruit so that the peduncle is patent or descending; receptacle sub-glabrous or tomentulous; heads globular, golden, 30-80-flowered. Flowers 5-merous; sepals c. 1/2 length of petals, free or joined at base, narrowly oblong to narrowly oblong-oblancheolate, sparsely puberulous; petals 2 mm long, glabrous, nerveless."

606	Reproduction by vegetative fragmentation	n
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Qsn #	Question	Answer
	Source(s)	Notes
	Australian National Botanic Gardens, 2012. Wattles - genus <i>Acacia</i> . Commonly Grown <i>Acacia</i> , Australian Government, Canberra. http://www.anbg.gov.au/acacia/species.html . [Accessed 14 Jul 2016]	" <i>Acacia glaucoptera</i> ... Propagation: From scarified seed or boiling water treatment." [No evidence. Other <i>Acacia</i> species are capable of suckering]

607	Minimum generative time (years)	3
	Source(s)	Notes
	Fairall, A. R. 2013. West Australian Native Plants in Cultivation. Pergamon Press, Rushcutters Bay, NSW	"Our specimens are a little over 3 years old and have flowered for the first time on plants of 3 1/2 ft x 3 ft"

701	Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)	n
	Source(s)	Notes
	Maslin, B. R. (1995). <i>Acacia</i> miscellany 13. Taxonomy of some Western Australian phyllocladinous and aphyllodinous taxa (Leguminosae: Mimosoideae). <i>Nuytsia</i> , 10(2), 151-179	[Pods & seeds relatively small but lack means of external attachment] "Pods somewhat irregularly coiled and twisted, subterete to compressed, slightly constricted between seeds along the inner edge, to 2 cm long, 2-3 mm wide, thinly crustaceous, smooth or finely longitudinally rugulose, glabrous, black. Seeds longitudinal with aril facing apex of pod, ± oblong, 2.5-3.5 mm long, 2 mm wide, dark brown, dull; pleurogram very fine, open at hilar end; areole 1-1.5 mm long, 0.5 mm wide; funicle filiform, c. 1 mm long, abruptly expanded into a ± conical, terminal, yellow-brown (when dry) aril c. 1 mm long."

702	Propagules dispersed intentionally by people	y
	Source(s)	Notes
	Dave's Garden. 2016. Clay Wattle, Flat Wattle, Queen Wattle - <i>Acacia glaucoptera</i> . http://davesgarden.com/guides/pf/go/74089/ . [Accessed 14 Jul 2016]	[Cultivated as an ornamental] "Regional This plant has been said to grow in the following regions: Phoenix, Arizona (2 reports) San Mateo, California"

703	Propagules likely to disperse as a produce contaminant	n
	Source(s)	Notes
	Maslin, B. R. (1995). <i>Acacia</i> miscellany 13. Taxonomy of some Western Australian phyllocladinous and aphyllodinous taxa (Leguminosae: Mimosoideae). <i>Nuytsia</i> , 10(2), 151-179	[Unlikely. A shrub that reaches maturity in 3+ years with conspicuous pods & seeds] "Pods somewhat irregularly coiled and twisted, subterete to compressed, slightly constricted between seeds along the inner edge, to 2 cm long, 2-3 mm wide, thinly crustaceous, smooth or finely longitudinally rugulose, glabrous, black. Seeds longitudinal with aril facing apex of pod, ± oblong, 2.5-3.5 mm long, 2 mm wide, dark brown, dull; pleurogram very fine, open at hilar end; areole 1-1.5 mm long, 0.5 mm wide; funicle filiform, c. 1 mm long, abruptly expanded into a ± conical, terminal, yellow-brown (when dry) aril c. 1 mm long."

Qsn #	Question	Answer
704	Propagules adapted to wind dispersal	n
	Source(s)	Notes
	Maslin, B. R. (1995). <i>Acacia</i> miscellany 13. Taxonomy of some Western Australian phyllocladinous and aphyllodinous taxa (Leguminosae: Mimosoideae). <i>Nuytsia</i> , 10(2), 151-179	[Arillate seeds] "Pods somewhat irregularly coiled and twisted, subterete to compressed, slightly constricted between seeds along the inner edge, to 2 cm long, 2-3 mm wide, thinly crustaceous, smooth or finely longitudinally rugulose, glabrous, black. Seeds longitudinal with aril facing apex of pod, ± oblong, 2.5-3.5 mm long, 2 mm wide, dark brown, dull; pleurogram very fine, open at hilar end; areole 1-1.5 mm long, 0.5 mm wide"
	Cavanagh, T. 2010. The Germination of <i>Acacia</i> seeds– the Technical Side. <i>Acacia Study Group Newsletter</i> No. 110: 6-9	[Generic description of arillate <i>Acacia</i> seeds] "The funicle is rarely seen on mature seed as it usually breaks off although some seeds have a large, fleshy, colourful swelling attached to the top of the seed known as an "aril" (Figure 3). The aril is rich in oils and fats and probably is a seed-dispersal mechanism. Ants (and possibly birds) collect such seeds and eat off the arils, with the ants storing the otherwise undamaged seeds in their nests. After a bushfire, "clump" germination of wattles is sometimes seen from these buried seeds."

705	Propagules water dispersed	n
	Source(s)	Notes
	Maslin, B. R. (1995). <i>Acacia</i> miscellany 13. Taxonomy of some Western Australian phyllocladinous and aphyllodinous taxa (Leguminosae: Mimosoideae). <i>Nuytsia</i> , 10(2), 151-179	"Habitat. Grows in clay and gravelly soils in woodland, tall shrubland and Mallee communities." [Pods may float, but does not occur in riparian areas]

706	Propagules bird dispersed	
	Source(s)	Notes
	Maslin, B. R. 2001. <i>Acacia glaucoptera</i> . <i>Flora of Australia</i> . 11A: 584. ABRS/CSIRO Publishing, Melbourne	"Seeds longitudinal, ±oblong, 2.5–3.5 mm long; aril terminal, ±conical." [Presence of aril presumably an adaptation for ant, or possibly bird, dispersal]
	Cavanagh, T. 2010. The Germination of <i>Acacia</i> seeds– the Technical Side. <i>Acacia Study Group Newsletter</i> No. 110: 6-9	[Generic description of arillate <i>Acacia</i> seeds] "The funicle is rarely seen on mature seed as it usually breaks off although some seeds have a large, fleshy, colourful swelling attached to the top of the seed known as an "aril" (Figure 3). The aril is rich in oils and fats and probably is a seed-dispersal mechanism. Ants (and possibly birds) collect such seeds and eat off the arils, with the ants storing the otherwise undamaged seeds in their nests. After a bushfire, "clump" germination of wattles is sometimes seen from these buried seeds."

707	Propagules dispersed by other animals (externally)	y
	Source(s)	Notes
	Maslin, B. R. 2001. <i>Acacia glaucoptera</i> . <i>Flora of Australia</i> . 11A: 584. ABRS/CSIRO Publishing, Melbourne	"Seeds longitudinal, ±oblong, 2.5–3.5 mm long; aril terminal, ±conical." [Presence of aril presumably an adaptation for ant, or bird, dispersal]

Qsn #	Question	Answer
	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. <i>Plant Protection Quarterly</i> , 25(2): 56-74	"This dispersal group includes seeds with an oily or fat-rich outgrowth that aids in ant seed dispersal."
	Cavanagh, T. 2010. The Germination of Acacia seeds– the Technical Side. <i>Acacia Study Group Newsletter</i> No. 110: 6-9	[Generic description of arillate Acacia seeds] "The funicle is rarely seen on mature seed as it usually breaks off although some seeds have a large, fleshy, colourful swelling attached to the top of the seed known as an "aril" (Figure 3). The aril is rich in oils and fats and probably is a seed-dispersal mechanism. Ants (and possibly birds) collect such seeds and eat off the arils, with the ants storing the otherwise undamaged seeds in their nests. After a bushfire, "clump" germination of wattles is sometimes seen from these buried seeds."

708	Propagules survive passage through the gut	
	Source(s)	Notes
	Maslin, B. R. 2001. <i>Acacia glaucoptera</i> . <i>Flora of Australia</i> . 11A: 584. ABR/CSIRO Publishing, Melbourne	[Unknown. Presence of aril presumably an adaptation for ant, or possibly bird, dispersal] "Seeds longitudinal, ±oblong, 2.5–3.5 mm long; aril terminal, ±conical."

801	Prolific seed production (>1000/m2)	
	Source(s)	Notes
	Maslin, B. R. (1995). <i>Acacia</i> miscellany 13. Taxonomy of some Western Australian phyllocladinous and aphyllodinous taxa (Leguminosae: Mimosoideae). <i>Nuytsia</i> , 10(2), 151-179	[Unknown, but relatively small stature tree] "Prostrate or semi-prostrate, mid-dense to moderately open shrubs to c. 1.5 m across, also growing single-stemmed and erect to 1.5 m tall, branches often somewhat gangling." ... "Pods somewhat irregularly coiled and twisted, sub-terete to compressed, slightly constricted between seeds along the inner edge, to 2 cm long, 2-3 mm wide, thinly crustaceous, smooth or finely longitudinally rugulose, glabrous, black. Seeds longitudinal with aril facing apex of pod, ± oblong, 2.5-3.5 mm long, 2 mm wide"

802	Evidence that a persistent propagule bank is formed (>1 yr)	y
	Source(s)	Notes
	Sweedman, L. & Merritt, D. 2006. <i>Australian seeds: a guide to their collection, identification and biology</i> . Csiro Publishing, Collingwood, Australia	"Soak in very hot water (c. 95 degrees C) for about 2 minutes" [Probably yes. Many other Acacia seeds also have long-lived seed banks]
	Royal Botanic Gardens Kew. (2016) Seed Information Database (SID). Version 7.1. http://data.kew.org/sid/ . [Accessed 21 Jul 2016]	"Storage Behaviour: Orthodox Storage Conditions: 85 % viability following drying to mc's in equilibrium with 15 % RH and freezing for 5 weeks at -20C at RBG Kew, WP"

803	Well controlled by herbicides	y
	Source(s)	Notes

Qsn #	Question	Answer
	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	[Methods used for invasive <i>Acacia mearnsii</i> would presumably be effective] " <i>Acacia mearnsii</i> ... Saplings sensitive to foliar applications of triclopyr. Dicamba, glyphosate, and picloram applied cut-surface effective(45); triclopyr probably effective, although applications to drilled holes is probably necessary in larger trees. Cut-surface (notching) applications of picloram provided complete control, glyphosate and dicamba caused 80% control, and 2,4-D was inadequate at Kalaïe, Molokaïi. Alton Arakaki (Univ. Hawai'i) and Ed Misaki (TNC) confirmed the efficacy of picloram but got much better results with glyphosate and dicamba, each resulting in over 90% control at Kamakou Preserve. Basal bark and stump bark treatments with 2,4-D or triclopyr effective. Pat Bily (TNC) reported that basal bark application with triclopyr ester at 20% in oil was effective, as was cut-stump application of triclopyr amine at 50% in water. HAVO staff got good control with triclopyr amine at 10% in water applied to cut stumps (Chris Zimmer, HAVO). Anecdotes indicate that black wattle is sensitive to basal bark treatment with diesel alone and to girdling (stripping the bark)."

804	Tolerates, or benefits from, mutilation, cultivation, or fire	
	Source(s)	Notes
	District Council of the Copper Coast. 2010. Landscape Plants Recommended for the Copper Coast Region. https://www.coppercoast.sa.gov.au/webdata/resources/files/PLANT_LIST_for_residents.pdf . [Accessed 14 Jul 2016]	"Pruning to remove dead wood is required in cultivation. Responds well to pruning."
	Australian National Botanic Gardens, 2012. Wattles - genus <i>Acacia</i> . Commonly Grown <i>Acacia</i> , Australian Government, Canberra. http://www.anbg.gov.au/acacia/species.html . [Accessed 13 Jul 2016]	[Possibly. Tolerates pruning] "Cultivation: Foliage is unique. Good drainage is essential. In cultivation, dead wood often mars the appearance. judicious pruning may overcome this problem."
	Barrett, S., Comer, S., McQuoid, N., Porter, M., Tiller, C. & Utber, D. (2009). Identification and Conservation of Fire Sensitive Ecosystems and Species of the South Coast Natural Resource Management Region. Department of Conservation and Land Management, South Coast Region, Western Australia	[Recruits from seed bank after fires] " <i>Acacia glaucoptera</i> - Fire response = OCC" [Plants are classified as obligate seeders with a canopy (OSC) or soil-stored seed bank (OSS)]

805	Effective natural enemies present locally (e.g. introduced biocontrol agents)	
	Source(s)	Notes
	WRA Specialist. 2016. Personal Communication	Unknown

Summary of Risk Traits:

- Other Acacia species have become serious weeds
- N-Fixing
- Reproduces by seeds
- Reaches maturity in 3+ years
- Seeds possibly dispersed by ants or birds & intentionally by people
- Seeds able to be stored for extended periods; May form a persistent seed bank

Low Risk Traits

- No reports of invasiveness or naturalization, but limited evidence of widespread introduction outside native range
- Unarmed (no spines, thorns or burrs)
- Non-toxic
- Ornamental
- Not reported to spread vegetatively
- Herbicides may provide effective control if needs