Fam	ily:	Protea	ceae				
Taxe	on:	Banks	ia burdettii				
Sync	onym:	NA		Common Name	Burdett's banksia		
Que Stat	estionair tus:	e :	current 20090513 Assessor Approved	Assessor: Data Entry Person:	Chuck Chimera Chuck Chimera	Designation: L WRA Score -2	
101	Is the sp	ecies hig	ghly domesticated?			y=-3, n=0	n
102	Has the	species l	become naturalized where g	own?		y=1, n=-1	
103	Does the	e species	have weedy races?			y=1, n=-1	
201			o tropical or subtropical clim tropical'' for ''tropical or sul		y wet habitat, then	(0-low; 1-intermediate; 2- high) (See Appendix 2)	Intermediate
202	Quality	of clima	te match data			(0-low; 1-intermediate; 2- high) (See Appendix 2)	High
203	Broad c	limate sı	uitability (environmental ver	rsatility)		y=1, n=0	n
204	Native of	or natura	alized in regions with tropica	l or subtropical climates		y=1, n=0	n
205	Does the	e species	have a history of repeated in	ntroductions outside its nat	ural range?	y=-2, ?=-1, n=0	n
301	Natural	ized bey	ond 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	Agricul	tural/for	estry/horticultural weed			n=0, y = 2*multiplier (see Appendix 2)	n
304	Enviror	mental	weed			n=0, y = 2*multiplier (see Appendix 2)	n
305	Congen	eric wee	d			n=0, y = 1*multiplier (see Appendix 2)	у
401	Produce	es spines	, thorns or burrs			y=1, n=0	n
402	Allelopa	thic				y=1, n=0	n
403	Parasiti	c				y=1, n=0	n
404	Unpalat	able to g	grazing animals			y=1, n=-1	
405	Toxic to	animals	5			y=1, n=0	n
406	Host for	recogni	zed pests and pathogens			y=1, n=0	
407	Causes	allergies	or is otherwise toxic to hum	ans		y=1, n=0	n
408	Creates	a fire ha	azard in natural ecosystems			y=1, n=0	У
409	Is a sha	de tolera	ant plant at some stage of its	life cycle		y=1, n=0	n
410	Tolerat	es a wide	e range of soil conditions (or	limestone conditions if not	a volcanic island)	y=1, n=0	у
411	Climbir	g or smo	othering growth habit			y=1, n=0	n

412	Forms dense thickets	y=1, n=0	У
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 tube	ers) y=1, n=0	n
501	Evidence of substantial reproductive failure in native habitat	y=1, n=0	n
502	Produces viable seed	y=1, n=-1	У
503	Hybridizes naturally	y=1, n=-1	
604	Self-compatible or apomictic	y=1, n=-1	
505	Requires specialist pollinators	y=-1, n=0	У
506	Reproduction by vegetative fragmentation	y=1, n=-1	n
507	Minimum generative time (years)	1 year = 1, 2 or 3 years = 0, 4+ years = -1	2
701	Propagules likely to be dispersed unintentionally (plants growing in heavily trafareas)	ficked y=1, n=-1	n
702	Propagules dispersed intentionally by people	y=1, n=-1	У
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	n
708	Propagules survive passage through the gut	y=1, n=-1	
801	Prolific seed production (>1000/m2)	y=1, n=-1	
802	Evidence that a persistent propagule bank is formed (>1 yr)	y=1, n=-1	У
803	Well controlled by herbicides	y=-1, n=1	
804	Tolerates, or benefits from, mutilation, cultivation, or fire	y=1, n=-1	n
805	Effective natural enemies present locally (e.g. introduced biocontrol agents)	y=-1, n=1	
	Designati	on: L WRA Score -2	

upporting Data:			
101	2002. Matthews, L.J The protea book: a guide to cultivated Proteaceae. Timber Press, Portland, OR	[Is the species highly domesticated? No] No evidence	
101	2011. Western Australian Herbarium. FloraBase - The Western Australian Flora - Banksia burdettii. Department of Environment and Conservation, http://florabase.calm.wa.gov.au/browse/profile/18 07	[Is the species highly domesticated? No] No evidence	
102	2011. WRA Specialist. Personal Communication.	NA	
103	2011. WRA Specialist. Personal Communication.	NA	
201	2011. Western Australian Herbarium. FloraBase - The Western Australian Flora - Banksia burdettii. Department of Environment and Conservation, http://florabase.calm.wa.gov.au/browse/profile/18 07	[Species suited to tropical or subtropical climate(s)? 1-intermediate] "Distribution: SW: GS, SWA." [Southwestern Australia with a Mediterranean climate]	
202	2011. Western Australian Herbarium. FloraBase - The Western Australian Flora - Banksia burdettii. Department of Environment and Conservation, http://florabase.calm.wa.gov.au/browse/profile/18 07	[Quality of climate match data? 2-high] "Distribution: SW: GS, SWA." [Southwestern Australia with a Mediterranean climate]	
203	2011. Dave's Garden. PlantFiles: Burdett's Banksia - Banksia burdettii. http://davesgarden.com/guides/pf/go/74768/	[Broad climate suitability (environmental versatility)? No] Hardiness: USDA Zone 9a: to -6.6 °C (20 °F) 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	2005. Wagner, W.L./Herbst, D.R./Lorence, D.H Flora of the Hawaiian Islands website. Smithsonian Institution, Washington, D.C. http://botany.si.edu/pacificislandbiodiversity/hawai ianflora/index.htm	[Native or naturalized in regions with tropical or subtropical climates? No] No evidence	
204	2007. Randall, R.P Global Compendium of Weeds - Index [Online Database]. http://www.hear.org/gcw/	[Native or naturalized in regions with tropical or subtropical climates? No] No evidence	
205	2011. WRA Specialist. Personal Communication.	[Does the species have a history of repeated introductions outside its natural range? No] No evidence of widespread cultivation outside native range, although popular ornamental within Australia.	
301	2005. Wagner, W.L./Herbst, D.R./Lorence, D.H Flora of the Hawaiian Islands website. Smithsonian Institution, Washington, D.C. http://botany.si.edu/pacificislandbiodiversity/hawai ianflora/index.htm	[Naturalized beyond native range? No] No evidence	
301	2007. Randall, R.P Global Compendium of Weeds - Index [Online Database]. http://www.hear.org/gcw/	[Naturalized beyond native range? No] No evidence	
302	2007. Randall, R.P Global Compendium of Weeds - Index [Online Database]. http://www.hear.org/gcw/	[Garden/amenity/disturbance weed? No] No evidence	
303	2007. Randall, R.P Global Compendium of Weeds - Index [Online Database]. http://www.hear.org/gcw/	[Agricultural/forestry/horticultural weed? No] No evidence	
304	2007. Randall, R.P Global Compendium of Weeds - Index [Online Database]. http://www.hear.org/gcw/	Environmental weed? No] No evidence	
305	2008. Williams, P.A Biological Success and Weediness of Some Terrestrial Weeds Not Presently in the Northland Regional Council's RPMS. Landcare Research Contract Report: LC0708/079/. Landcare Research, New Zealand	[Congeneric weed? Yes] "Coastal banksia (Banksia integrifolia)Widespread coast weed in NZ. Not known as a weed elsewhere except in Western Australia where it has been introduced outside its native rangeshades out native biota and competes with native species in vegetation succession."	

305	2010. Fraser, T Can genetic diversity predict weeds?. What's New in Biological Control of Weeds?. 54(10): 4-5.	[Congeneric weed? Yes] "Coastal banksia (Banksia integrifolia) is an emerging weed in New Zealand and alpine wattle (Acacia pravissima) is starting to cause concern. Both species are potentially serious threats to New Zealand biodiversity yet lack of evidence to support a weedy classification means that they are not regarded uniformly across the country. In the case of coastal banksia, one North Island Regional Council enforces restrictions on its propagation while a neighbouring authority is actively planting it in reservesDr Houliston also compared the health of coastal banksia in Australia and New Zealand. 'The plant has a wide distribution in Australia but in some parts of its native range is so hard hit by natural enemies – herbivores and diseases – that it is hard to find a healthy plant. By contrast in New Zealand, where plants have had to undergo phytosanitary inspections prior to arriving in the country and have escaped from their natural enemies, it is doing extremely well.' "
401		[Produces spines, thorns or burrs? No] "Shrub to 4 m without lignotuber. Stems tomentose, at length glabrous. Leaves: petiole 5–20 mm long; lamina narrowly cuneate-oblong, 10–16 cm long, 15–25 mm wide, truncate; margins slightly recurved, shortly dentate; both surfaces tomentose. Inflorescence 6–10 cm long; involucral bracts tomentose, mostly falling early. Flowers bright orange inside, pale outside with white hairs; styles orange. Perianth 34–35 mm long, curved, glabrous; pollen presenter narrow with swelling at centre and constriction below, 4–5 mm long. Old flowers persistent. Follicles up to 20, narrowly elliptic, 20–25 mm long, 5–10 mm high, 8–10 mm wide, smooth, hirsute. Seed obliquely obovate, 14–16 mm long; seed body broadly elliptic, 9–10 mm long, 12 mm wide, shallowly pitted outside, muricate inside."
402	2002. Matthews, L.J The protea book: a guide to cultivated Proteaceae. Timber Press, Portland, OR	[Allelopathic? No] No evidence
402	2011. Australian Native Plants Nursery. Banksia burdettii. http://www.australianplants.com/plants.aspx?id=1 168	[Allelopathic? No] No evidence
403	2011. Western Australian Herbarium. FloraBase - The Western Australian Flora - Banksia burdettii. Department of Environment and Conservation, http://florabase.calm.wa.gov.au/browse/profile/18 07	[Parasitic? No] "Bushy, non-lignotuberous shrub, to 4 m high." [Proteaceae]
404	2011. WRA Specialist. Personal Communication.	[Unpalatable to grazing animals? Unknown] No information found on palatability to animals.
405	1988. Lamont, B.B./Barker, M.J Seed bank dynamics of a serotinus, fire-sensitive Banksia species. Australian Journal of Botany 36(2): 193 - 203. 36(2): 193-203.	[Toxic to animals? No] No evidence
405	2002. Matthews, L.J The protea book: a guide to cultivated Proteaceae. Timber Press, Portland, OR	[Toxic to animals? No] No evidence
406	1981. Cho, J.J Phytophthora Root Rot of Banksia: Host Range and Chemical Controi. Plant Disease. 65(1): 830-833.	[Host for recognized pests and pathogens? Unknown] "Phytophthora cinnamomi was isolated from blackened roots of 2-yr-old Banksia speciosa plants grown on the island of Maui, Hawaii. Infected plants wilted rapidly, and one side or all of the plant died; other symptoms were collapse of the bark and dark brown discoloration of xylem tissue B. occidentalis, B. prionotes, B: burdettii, and Protea cynaroides were highly susceptible; B. menziesii was moderately susceptible; B. caleyi was moderately tolerant" [Importance of B. burdetti as an alternate host of this pathogen is unknown]
406	1990. Richardson, D.M./Cowling, R.M./Le Maitre, D.C Assessing the Risk of Invasive Success in Pinus and Banksia in South African Mountain Fynbos. Journal of Vegetation Science. 1(5): 629- 642.	[Host for recognized pests and pathogens? Unknown] "As is the case with pines, we would expect idiosyncratic events to confound some of our predictions based on life history. For example, we note that some banksias that we have identified as high-risk introductions (B Burdettii, B. coccinea, B. hookeriana, B. prionotes) are readily infected by the pathogenic fungus Phytophthora cinnamomi in the Cape (von Broembsen 1984; von Broembsen& Brits 1985; A. P. Brink pers. comm.; see also App. 3). This factor mayconceivably havea marked influence on invasive success."
407	2002. Matthews, L.J The protea book: a guide to cultivated Proteaceae. Timber Press, Portland, OR	[Causes allergies or is otherwise toxic to humans? No] No evidence

407	2011. Australian Native Plants Nursery. Banksia burdettii. http://www.australianplants.com/plants.aspx?id=1	[Causes allergies or is otherwise toxic to humans? No] No evidence
	168	
408	1988. Lamont, B.B./Barker, M.J Seed bank dynamics of a serotinus, fire-sensitive Banksia species. Australian Journal of Botany 36(2): 193 - 203. 36(2): 193-203.	[Creates a fire hazard in natural ecosystems? Presumably yes] "B. burdettii is a vigorous, highly floriferous shrub, up to 4 m tall (George 1981). It occurs in dry, sclerophyllous scrub-heath or low open woodland with an annual rainfall of 500-600 mm in localised, dense populations on undulating, deep white sandy soils (Barker and Lamont 1986)." [Potential to grow in dry, fire prone habitats and ability to form thickets would presumably increase the risk of fire]
409	2002. Matthews, L.J The protea book: a guide to cultivated Proteaceae. Timber Press, Portland, OR	[Is a shade tolerant plant at some stage of its life cycle? No] "The occasionally light frost is tolerated, and a sunny position is required."
409	2011. Australian Native Plants Nursery. Banksia burdettii. http://www.australianplants.com/plants.aspx?id=1 168	[Is a shade tolerant plant at some stage of its life cycle? No] "Prefers well-drained soils in full sun."
409	2011. Plant this. Banksia burdettii. http://plantthis.com.au/plant- information.asp?gardener=9642&tabview=mainte nance&plantSpot=0	[Is a shade tolerant plant at some stage of its life cycle? No] "Sunlight: hot overhead sun to warm low sun"
410	2011. Plant this. Banksia burdettii. http://plantthis.com.au/plant- information.asp?gardener=9642&tabview=mainte nance&plantSpot=0	[Tolerates a wide range of soil conditions? Yes] "Soil: ordinary soil, enriched soil, acidic to alkaline"
411	2011. Western Australian Herbarium. FloraBase - The Western Australian Flora - Banksia burdettii. Department of Environment and Conservation, http://florabase.calm.wa.gov.au/browse/profile/18 07	[Climbing or smothering growth habit? No] "Bushy, non-lignotuberous shrub, to 4 m high."
412	1988. Lamont, B.B./Barker, M.J Seed bank dynamics of a serotinus, fire-sensitive Banksia species. Australian Journal of Botany 36(2): 193 - 203. 36(2): 193-203.	[Forms dense thickets? Yes] "B. burdettii is a vigorous, highly floriferous shrub, up to 4 m tall (George 1981). It occurs in dry, sclerophyllous scrub-heath or low open woodland with an annual rainfall of 500-600 mm in localised, dense populations on undulating, deep white sandy soils (Barker and Lamont 1986)."
412	1990. Richardson, D.M./Cowling, R.M./Le Maitre, D.C Assessing the Risk of Invasive Success in Pinus and Banksia in South African Mountain Fynbos. Journal of Vegetation Science. 1(5): 629- 642.	[Forms dense thickets? Yes] "Tall serotinous shrubs with many small seeds per plant, short juvenile periods and low fire tolerance were identified as high risk introductions. This group includes thicket forming species which maintain very large viable seed banks, e.g. Banksia burdettii, B. hookeriana and B. leptophylla."
501	2011. Western Australian Herbarium. FloraBase - The Western Australian Flora - Banksia burdettii. Department of Environment and Conservation, http://florabase.calm.wa.gov.au/browse/profile/18 07	[Aquatic? No; Terrestrial] "Bushy, non-lignotuberous shrub, to 4 m high."
502	2011. Western Australian Herbarium. FloraBase - The Western Australian Flora - Banksia burdettii. Department of Environment and Conservation, http://florabase.calm.wa.gov.au/browse/profile/18 07	[Grass? No] Proteaceae
503	2011. Western Australian Herbarium. FloraBase - The Western Australian Flora - Banksia burdettii. Department of Environment and Conservation, http://florabase.calm.wa.gov.au/browse/profile/18 07	[Nitrogen fixing woody plant? No] Proteaceae
504	2011. Western Australian Herbarium. FloraBase - The Western Australian Flora - Banksia burdettii. Department of Environment and Conservation, http://florabase.calm.wa.gov.au/browse/profile/18 07	[Geophyte (herbaceous with underground storage organs bulbs, corms, or tubers)? No] "Bushy, non-lignotuberous shrub, to 4 m high."
601	2011. Western Australian Herbarium. FloraBase - The Western Australian Flora - Banksia burdettii. Department of Environment and Conservation, http://florabase.calm.wa.gov.au/browse/profile/18 07	[Evidence of substantial reproductive failure in native habitat? No] "Conservation Status: Not threatened"

602	2011. Australian Native Plants Nursery. Banksia burdettii. http://www.australianplants.com/plants.aspx?id=1 168	[Produces viable seed? Yes] 'Propagation Information: No pre treatment require Seed germinates readily 4-12 weeks. Sow seed in mix 3:1 Perlite:Peat and con- the depth of the seed. Keep moist until germination occurs. Best to sow in individual containers to prevent damage to the root system when transplanting Drench seed with a fungicide after sowing to prevent "Damping Off'."	ver
602	2011. Flora of Australia [online]. Banksia burdettii. Australian Biological Resources Study, http://www.anbg.gov.au/abrs/online- resources/flora/stddisplay.xsql?sn_infspnm=burde ttii&sn_infsprnk=sp.&sn_fam=proteaceae&sn_ger =banksia&sn_sp=	[Produces viable seed? Yes] "Seed obliquely obovate, 14–16 mm long; seed body broadly elliptic, 9–10 mm long, 12 mm wide, shallowly pitted outside, muricate inside."	
603	2011. WRA Specialist. Personal Communication.	[Hybridizes naturally? Unknown]	
604	1993. Vaughton, G Nonrandom Patterns of Fruit Set in Banksia spinulosa (Proteaceae): Interovary Competition Within and Among Inflorescences. International Journal of Plant Sciences. 154(2): 306-313.	[Self-compatible or apomictic? Unknown] "Flowers are partially self-compatible seed set is greater following crossing than selfing (Vaughton 1988; Vaughton a Carthew 1993). Many inflorescences borne by plants do not produce any fruits and on infructescences fruit set is less than 10% (Vaughton 1988, 199 1b)." [other Banksia species are self-compatible, so possibility exists for B. burdettii]	and ,
605	1980. Whelan, R.J./Burbidge, A.H Flowering phenology, seed set and bird pollination of five Western Australian Banksia species. Australian Journal of Ecology. 5(1): 1-7.	[Requires specialist pollinators? Yes] "Abstract: Flowering phenology and see set characteristics of five species of Banksia were studied in relation to the nectarivorous birds which feed at their inflorescences. Within the Banksia woodland at the study site near Perth, the flowering seasons of the Banksia species were sequential and only slightly overlapping, providing a year-round nectar source. Although honeyeaters visited alt five species, seed set was verp low in each case. Caging experiments indicated that, in B. attenuata at least, alternative pollinators may play a more important role in pollination than do nea feeding birds. It is suggested that non-avian pollinators, predatory insects, and characteristics of the breeding system may also have been important in the evolution of the observed flowering phenology and patterns of seed set." [B. burdetti is apparently bird-pollinated]	y ctar
606	1988. Lamont, B.B./Barker, M.J Seed bank dynamics of a serotinus, fire-sensitive Banksia species. Australian Journal of Botany 36(2): 193 - 203. 36(2): 193-203.	[Reproduction by vegetative fragmentation? No evidence] "Banksia burdettii ranks with the most fire sensitive of the 74 species in the genus (Table 5; Geol 1981; Cowling et al. 1987) and depends entirely on seed for regeneration."	rge
606	2011. Flora of Australia [online]. Banksia burdettii. Australian Biological Resources Study, http://www.anbg.gov.au/abrs/online- resources/flora/stddisplay.xsql?sn_infspnm=burde ttii&sn_infsprnk=sp.&sn_fam=proteaceae&sn_ger =banksia&sn_sp=		
607	1990. Richardson, D.M./Cowling, R.M./Le Maitre, D.C Assessing the Risk of Invasive Success in Pinus and Banksia in South African Mountain Fynbos. Journal of Vegetation Science. 1(5): 629- 642.	[Minimum generative time (years)? 2] "App. 3. Selected life history attributes or 69 western Australian Banksia taxa." [B. burdetti: JP = juvenile period: 1 =<5yr	
607	2005. Liber, C. (ed.). Correspondence: Liesbeth Uijtewaal has sent an update of her banksia growing in Holland. Banksia Study Group Newsletter. 6(2): 9.	[Minimum generative time (years)? 2] "Found quite a few first-time buds on several banksias like Banksia speciosa and B. burdettii (both sown September 2002, of either species two plants each and on each plant one cone). Speciosa almost flowering, burdettii is developing much slower."	
701	1988. Lamont, B.B./Barker, M.J Seed bank dynamics of a serotinus, fire-sensitive Banksia species. Australian Journal of Botany 36(2): 193 - 203. 36(2): 193-203.	[Propagules likely to be dispersed unintentionally? No] "B. burdettii is essential dependent on fire for regeneration, as the age of the stand could be related to previous fire and no seedlings were observed in the 17-year-old stand."	
702	2002. Matthews, L.J The protea book: a guide to cultivated Proteaceae. Timber Press, Portland, OR	[Propagules dispersed intentionally by people? Yes; Ornamental] "They are beautiful as a cut flower, both fresh and dried, and area a popular picking spec in South Australia and Hawaii."	cies
703	2011. Flora of Australia [online]. Banksia burdettii. Australian Biological Resources Study, http://www.anbg.gov.au/abrs/online- resources/flora/stddisplay.xsql?sn_infspnm=burde ttii&sn_infsprnk=sp.&sn_fam=proteaceae&sn_ger =banksia&sn_sp=		
704	1988. Lamont, B.B./Barker, M.J Seed bank dynamics of a serotinus, fire-sensitive Banksia species. Australian Journal of Botany 36(2): 193 - 203. 36(2): 193-203.	[Propagules adapted to wind dispersal? No] "B. burdettii is essentially depended on fire for regeneration, as the age of the stand could be related to the previous fire and no seedlings were observed in the 17-year-old stand."	
·	ata: 5/11/2011	Dankaja hundattii (Duotogoogo)	Page 6 of

704	2011. Flora of Australia [online]. Banksia burdettii. Australian Biological Resources Study, http://www.anbg.gov.au/abrs/online- resources/flora/stddisplay.xsql?sn_infspnm=burde ttii&sn_infsprnk=sp.&sn_fam=proteaceae&sn_gen =banksia&sn_sp=	
705	1988. Lamont, B.B./Barker, M.J Seed bank dynamics of a serotinus, fire-sensitive Banksia species. Australian Journal of Botany 36(2): 193 - 203. 36(2): 193-203.	[Propagules water dispersed? No] "B. burdettii is essentially dependent on fire for regeneration, as the age of the stand could be related to the previous fire and no seedlings were observed in the 17-year-old stand."
706	1988. Lamont, B.B./Barker, M.J Seed bank dynamics of a serotinus, fire-sensitive Banksia species. Australian Journal of Botany 36(2): 193 - 203. 36(2): 193-203.	[Propagules bird dispersed? No] "B. burdettii is essentially dependent on fire for regeneration, as the age of the stand could be related to the previous fire and no seedlings were observed in the 17-year-old stand."
707	2011. Flora of Australia [online]. Banksia burdettii. Australian Biological Resources Study, http://www.anbg.gov.au/abrs/online- resources/flora/stddisplay.xsql?sn_infspnm=burde ttii&sn_infsprnk=sp.&sn_fam=proteaceae&sn_gen =banksia&sn_sp=	
708	2011. WRA Specialist. Personal Communication.	[Propagules survive passage through the gut? Unknown] Seeds unlikely to be consumed by vertebrates, with the possible exception of seed predators that would more likely destroy, rather than disperse, seeds internally.
802	1988. Lamont, B.B./Barker, M.J Seed bank dynamics of a serotinus, fire-sensitive Banksia species. Australian Journal of Botany 36(2): 193 - 203. 36(2): 193-203.	[Evidence that a persistent propagule bank is formed (>1 yr)? Yes, canopy- stored] "Banksia burdettii is a locally abundant shrub restricted to a small area in south western Australia. At the study site, the canopy stored seed bank built up exponentially with plant age to yield a mean of 830 viable seeds per plant from about 212 000 ovules produced over 16 years. Seed availability was the net result per year of number of flower heads, extent of head removal by cockatoos, number of florets per head and number of fruits (follicles) per floret in the production phase and the extent of seed abortion, insect granivory, seed senescence and spontaneous seed release in the mortality phase."
802	1990. Richardson, D.M./Cowling, R.M./Le Maitre, D.C Assessing the Risk of Invasive Success in Pinus and Banksia in South African Mountain Fynbos. Journal of Vegetation Science. 1(5): 629- 642.	[Evidence that a persistent propagule bank is formed (>1 yr)? Yes, canopy- stored] "Taxa in the bottom right hand corner of the diagram are tall serotinous shrubs with many small (and presumably well-dispersed) seeds per plant. They also have short juvenile periods and are all killed by fire (App.3). These taxa have many traits which would allow them to invade mountain fynbos. Included in this group are many thicket-forming species which maintain very large viable seed banks [e.g. B. burdettii (Lamont & Barker 1988); B. hookeriana (Enright & Lamont 1989b); B. leptophylla (Cowling, Lamont & Pierce 1987)]."
802	2001. Baskin, C.C./Baskin, J.M Seeds ecology, biogeography, and evolution of dormancy and germination. Academic Press, San Francisco, CA	[Evidence that a persistent propagule bank is formed (>1 yr)? Yes, canopy- stored] "Viable seeds remain in the canopy for various periods of time: 9-12 in Banksia burdettii (Lamont and Barker, 1988)" [seeds remain in canopy for 9-12 years]
803	2011. WRA Specialist. Personal Communication.	[Well controlled by herbicides? Unknown] No evidence that this species is being controlled with herbicides.
804	1988. Lamont, B.B./Barker, M.J Seed bank dynamics of a serotinus, fire-sensitive Banksia species. Australian Journal of Botany 36(2): 193 - 203. 36(2): 193-203.	[Tolerates, or benefits from, mutilation, cultivation, or fire? No] "Plants are killed by fire and a substantial proportion of cones was consumed by a hot fire. Up to 87% of viable seed may survive and be released within 100 days of a fire, depending on intensity and season of burn. Plants which died in the absence of fire released little viable seed subsequently, while the remainder were consumed when fire occurred."
804	1990. Richardson, D.M./Cowling, R.M./Le Maitre, D.C Assessing the Risk of Invasive Success in Pinus and Banksia in South African Mountain Fynbos. Journal of Vegetation Science. 1(5): 629- 642.	[Tolerates, or benefits from, mutilation, cultivation, or fire? No. Does not tolerate fire] "They also have short juvenile periods and are all killed by fire."
805	1981. Cho, J.J Phytophthora Root Rot of Banksia: Host Range and Chemical Controi. Plant Disease. 65(1): 830-833.	[Effective natural enemies present locally (e.g. introduced biocontrol agents)? Unknown] "Phytophthora cinnamomi was isolated from blackened roots of 2-yr- old Banksia speciosa plants grown on the island of Maui, Hawaii. Infected plants wilted rapidly, and one side or all of the plant died; other symptoms were collapse of the bark and dark brown discoloration of xylem tissue B. occidentalis, B. prionotes, B: burdettii, and Protea cynaroides were highly susceptible; B. menziesii was moderately susceptible; B. caleyi was moderately tolerant" [Not a biocontrol agent, but could effect B. burdetti plants]