Taxon: Cordyline banksii Hook. f. **Family:** Asparagaceae

Common Name(s): forest cabbage tree
ti ngahere

Synonym(s): Terminalis banksii (Hook. f.) Kuntze

Assessor: Chuck Chimera **Status:** Assessor Approved **End Date:** 6 Apr 2017

WRA Score: 0.0 **Designation:** L **Rating:** Low Risk

Keywords: Temperate, Shrub, Small Tree, Shade-Tolerant, Bird-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)		
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		
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	y=1, n=-1	n
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	y=1, n=0	n
409	Is a shade tolerant plant at some stage of its life cycle	y=1, n=0	y

Qsn #	Question	Answer Option	Answer
410	Tolerates a wide range of soil conditions (or limestone conditions if not a volcanic island)		
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	y=1, n=-1	y
604	Self-compatible or apomictic		
605	Requires specialist pollinators	y=-1, n=0	n
606	Reproduction by vegetative fragmentation		
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	y
706	Propagules bird dispersed	y=1, n=-1	y
707	Propagules dispersed by other animals (externally)	y=1, n=-1	n
708	Propagules survive passage through the gut	y=1, n=-1	y
801	Prolific seed production (>1000/m2)		
802	Evidence that a persistent propagule bank is formed (>1 yr)		
803	Well controlled by herbicides	y=-1, n=1	y
804	Tolerates, or benefits from, mutilation, cultivation, or fire	y=1, n=-1	y
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**
	Moore, L. B., & Edgar, E. (1970). Flora of New Zealand. Volume 2. Indigenous Tracheophyta. Monocotyledones except Gramineae. A. R. Shearer, Government Printer, Wellington, New Zealand	No evidence

102	**Has the species become naturalized where grown?**	
	Source(s)	**Notes**
	WRA Specialist. 2017. Personal Communication	NA

103	**Does the species have weedy races?**	
	Source(s)	**Notes**
	WRA Specialist. 2017. 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, ARS, Germplasm Resources Information Network. 2017. National Plant Germplasm System [Online Database]. http://www.ars-grin.gov/npgs/index.html. [Accessed 6 Apr 2017]	"Native: Australasia New Zealand: New Zealand - North Island, - South Island"

202	**Quality of climate match data**	**High**
	Source(s)	**Notes**
	USDA, ARS, Germplasm Resources Information Network. 2017. National Plant Germplasm System [Online Database]. http://www.ars-grin.gov/npgs/index.html. [Accessed 6 Apr 2017]	

Qsn #	Question	Answer
203	**Broad climate suitability (environmental versatility)**	
	Source(s)	**Notes**
	New Zealand Plant Conservation Network. (2017). Flora Details - Cordyline banksii. http://www.nzpcn.org.nz/flora_details.aspx?ID=1745. [Accessed 6 Apr 2017]	"Common in coastal, lowland, and lower montane forests. Occasionally extending into subalpine habitats in the South Island. Often found in shrublands where it is sympatric with, and often hybridises with Cordyline pumilio. Tolerant of a wide range of situations."
	Dave's Garden. 2017. Forest Cabbage Tree, Ti Ngahere 'Electric Pink' - Cordyline banksii. http://davesgarden.com/guides/pf/go/166349/. [Accessed 6 Apr 2017]	"Hardiness: 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**
	USDA, ARS, Germplasm Resources Information Network. 2017. National Plant Germplasm System [Online Database]. http://www.ars-grin.gov/npgs/index.html. [Accessed 6 Apr 2017]	"Native: Australasia New Zealand: New Zealand - North Island, - South Island"
	Randall, R.P. (2017). A Global Compendium of Weeds. 3rd Edition. Perth, Western Australia. R.P. Randall	No evidence

205	**Does the species have a history of repeated introductions outside its natural range?**	**?**
	Source(s)	**Notes**
	The European Palm Society. 2017. Cordyline banksii, The Forest Cabbage Tree. http://www.palmsociety.org/. [Accessed 6 Apr 2017]	"As I mentioned, the main problem with C. banksii is lack of availability. Burncoose and Southdown Nurseries, Gwennap, near Falmouth is the only nursery I know of that stock plants of C. banksii in the U.K. Graham Hutchins of County Park Nurseries, Wingletye Lane, Hornchurch, Essex, who is a New Zealand plant specialist, has had some of my micro-propagated plants."
	New Zealand Plant Conservation Network. (2017). Flora Details - Cordyline banksii. http://www.nzpcn.org.nz/flora_details.aspx?ID=1745. [Accessed 6 Apr 2017]	"Not as commonly cultivated as C. australis but still offered by many garden centres, particularly a purple-coloured leaf variant. Easily grown and great for steep poorly drained slopes or planted with other smaller shrub species such as Muehlenbeckia astonii."

301	**Naturalized beyond native range**	**n**
	Source(s)	**Notes**
	Randall, R.P. (2017). A Global Compendium of Weeds. 3rd Edition. Perth, Western Australia. R.P. Randall	No evidence

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

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

305	Congeneric weed	
	Source(s)	Notes
	CABI, 2017. Invasive Species Compendium. Wallingford , UK: CAB International. www.cabi.org/isc	"C. fruticosa is an evergreen flowering plant that has become essentially pantropical. It is widespread in the Pacific Islands, Australia and tropical Asia (Little and Skolmen, 2003). Usually it is closely associated with settlements and occurs in gardens and hedges, but sometimes it has become naturalized in wild areas, spreading by seed and cuttings of stems or rhizomes. It is a common houseplant and this leads to dispersal in warm temperate areas when discarded. There are no reports that it damages native vegetation."
	Randall, R.P. (2017). A Global Compendium of Weeds. 3rd Edition. Perth, Western Australia. R.P. Randall	Cordyline fruticosa, Cordyline rubra, Cordyline stricta, & Cordyline terminalis listed as naturalized and/or weeds, but impacts are minimal or unspecified

401	Produces spines, thorns or burrs	n
	Source(s)	Notes
	Moore, L. B., & Edgar, E. (1970). Flora of New Zealand. Volume 2. Indigenous Tracheophyta. Monocotyledones except Gramineae. A. R. Shearer, Government Printer, Wellington, New Zealand	[No evidence] "Plant to 4m. tall; stems c. 10–15 cm. diam., us. a number from near ground level, subequal and sparingly branched. Lvs 1–2 m. × 4–8 cm., broad at the middle and inclined to droop from there, narrowed above base into a channelled petiole that is rarely > ½ lamina-width and often occupies c. ¼ to 1/5 of lf-length; lamina paler abaxially; midrib flat adaxially, prominent and rounded abaxially; nerves unequal, several rather strong and sts differently coloured, meeting midrib at appreciable angle; margins laxly revolute."

Qsn #	Question	Answer
402	**Allelopathic**	
	Source(s)	**Notes**
	WRA Specialist. 2017. Personal Communication	Unknown. No evidence found

403	**Parasitic**	**n**
	Source(s)	**Notes**
	Moore, L. B., & Edgar, E. (1970). Flora of New Zealand. Volume 2. Indigenous Tracheophyta. Monocotyledones except Gramineae. A. R. Shearer, Government Printer, Wellington, New Zealand	"Plant to 4m. tall; stems c. 10–15 cm. diam., us. a number from near ground level, subequal and sparingly branched." [No evidence]

404	**Unpalatable to grazing animals**	**n**
	Source(s)	**Notes**
	Forsyth, D. M., Coomes, D. A., Nugent, G., & Hall, G. M. J. (2002). Diet and diet preferences of introduced ungulates (Order: Artiodactyla) in New Zealand. New Zealand Journal of Zoology, 29 (4): 323-343	"Appendix Indigenous plants recorded in the diet of ungulates in New Zealand, and where available, the preference(s) of ungulates for that species." [Cordyline spp. consumed by ungulates]

405	**Toxic to animals**	**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

406	**Host for recognized pests and pathogens**	
	Source(s)	**Notes**
	Liefting, L. W., Beever, R. E., Andersen, M. T., & Clover, G. R. (2007). Phytoplasma diseases in New Zealand. Bulletin of Insectology, 60(2), 165-166	"Five phytoplasma diseases are known in New Zealand. Of these, phormium yellow leaf, strawberry lethal yellows, cordyline sudden decline, and coprosma lethal decline are associated with a single phytoplasma species, 'Candidatus Phytoplasma australiense'. The fifth, poinsettia branch-inducing phytoplasma is the only exotic phytoplasma." ... "Table 1. Phytoplasma diseases recorded in New Zealand" [Cordyline sudden decline ... Species - 'Ca. P. australiense'; Plant host - Cordyline banksii]
	Shoot Gardening. 2017. Cordyline banksii 'Sprilecpink' (Forest cabbage tree 'Sprilecpink'). https://www.shootgardening.co.uk/. [Accessed 6 Apr 2017]	"Specific pests Glasshouse red spider mite , Scale insects Diseases Generally disease-free."
	McKenzie, E. H. C., Buchanan, P. K., & Johnston, P. R. (2005). Checklist of fungi on cabbage trees (Cordyline spp.) and New Zealand flaxes (Phormium spp.) in New Zealand. New Zealand Journal of Botany, 43(1), 119-139	[Cordyline banksii hosts several fungi. Pathogenicity unknown] "New Zealand on cabbage trees (Cordyline spp.) and New Zealand flaxes (Phormium spp.) is followed by an annotated listing of all fungi known to grow on living or dead parts of these endemic monocotyledonous plants."

Qsn #	Question	Answer
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

408	**Creates a fire hazard in natural ecosystems**	**n**
	Source(s)	**Notes**
	The European Palm Society. 2017. Cordyline banksii, The Forest Cabbage Tree. http://www.palmsociety.org/. [Accessed 6 Apr 2017]	"It is used to a windy, rainy climate and in warm dry; still air inside it is susceptible to red spider mite."

409	**Is a shade tolerant plant at some stage of its life cycle**	**y**
	Source(s)	**Notes**
	The European Palm Society. 2017. Cordyline banksii, The Forest Cabbage Tree. http://www.palmsociety.org/. [Accessed 6 Apr 2017]	"Also unlike the other New Zealand species, C. banksii has a wide light level tolerance, and can be found fully under the shade of Leptospermum trees, or in full sun in waist-high subalpine scrub. A common place to find it is leaning out from steep rocky banks where roads and tracks cut though hilly bush; here all the leaves swing round and hang the same way, out to the sun."
	Burrows, C. J. (1999). Germination behaviour of seeds of the New Zealand woody species Alseuosmia macrophylla, A. pusilla, Cordyline banksii, Geniostoma rupestre, Myrtus bullata, and Solanum aviculare. New Zealand Journal of Botany, 37(2), 277-287	"The plant prefers well lit sites at forest margins and along river banks, often hanging down over cliffs. It is common in high rainfall areas from North Auckland to Fiordland."

410	**Tolerates a wide range of soil conditions (or limestone conditions if not a volcanic island)**	
	Source(s)	**Notes**
	Plant This. 2017. Cordyline banksii. http://www.plantthis.com.au/plant-information.asp?gardener=11809&tabview=photos&plantSpot=. [Accessed 6 Apr 2017]	"Soil Moisture: dry between watering to constantly moist Soil: ordinary soil, enriched soil, mildly acidic to mildly alkaline"
	Dave's Garden. 2017. Forest Cabbage Tree, Ti Ngahere 'Electric Pink' - Cordyline banksii. http://davesgarden.com/guides/pf/go/166349/. [Accessed 6 Apr 2017]	"Soil pH requirements: 5.6 to 6.0 (acidic) 6.1 to 6.5 (mildly acidic)"
	New Zealand Plant Conservation Network. (2017). Flora Details - Cordyline banksii. http://www.nzpcn.org.nz/flora_details.aspx?ID=1745. [Accessed 6 Apr 2017]	Tolerant of a wide range of situations."

411	**Climbing or smothering growth habit**	**n**

Qsn #	Question	Answer
	Source(s)	**Notes**
	Moore, L. B., & Edgar, E. (1970). Flora of New Zealand. Volume 2. Indigenous Tracheophyta. Monocotyledones except Gramineae. A. R. Shearer, Government Printer, Wellington, New Zealand	"Plant to 4m. tall; stems c. 10–15 cm. diam., us. a number from near ground level, subequal and sparingly branched."
	Burrows, C. J. (1999). Germination behaviour of seeds of the New Zealand woody species Alseuosmia macrophylla, A. pusilla, Cordyline banksii, Geniostoma rupestre, Myrtus bullata, and Solanum aviculare. New Zealand Journal of Botany, 37(2), 277-287	[Vine-like, but not a true vine] "This monocotyledon, evergreen plant is sprawling and vine-like. Its stems, up to 3 m or more long, are often too weak to act as erect trunks and are then supported by other low, woody plants."

412	Forms dense thickets	n
	Source(s)	**Notes**
	New Zealand Plant Conservation Network. (2017). Flora Details - Cordyline banksii. http://www.nzpcn.org.nz/flora_details.aspx?ID=1745. [Accessed 6 Apr 2017]	[No evidence] "Endemic. Common throughout the North Island, In the South widespread through the northern half, extending in the west to about Haast with occasional as unsubstantiated reports of it from the coastal portion of Fiordland." ... "Common in coastal, lowland, and lower montane forests. Occasionally extending into subalpine habitats in the South Island. Often found in shrublands where it is sympatric with, and often hybridises with Cordyline pumilio. Tolerant of a wide range of situations."
	Moore, L. B., & Edgar, E. (1970). Flora of New Zealand. Volume 2. Indigenous Tracheophyta. Monocotyledones except Gramineae. A. R. Shearer, Government Printer, Wellington, New Zealand	No evidence

501	Aquatic	n
	Source(s)	**Notes**
	Moore, L. B., & Edgar, E. (1970). Flora of New Zealand. Volume 2. Indigenous Tracheophyta. Monocotyledones except Gramineae. A. R. Shearer, Government Printer, Wellington, New Zealand	[Terrestrial] "Plant to 4m. tall; stems c. 10–15 cm. diam., us. a number from near ground level, subequal and sparingly branched." ... "Forest margins."

502	Grass	n
	Source(s)	**Notes**
	USDA, ARS, Germplasm Resources Information Network. 2017. National Plant Germplasm System [Online Database]. http://www.ars-grin.gov/npgs/index.html. [Accessed 6 Apr 2017]	Family: Asparagaceae Subfamily: Lomandroideae

Qsn #	Question	Answer
503	**Nitrogen fixing woody plant**	**n**
	Source(s)	**Notes**
	USDA, ARS, Germplasm Resources Information Network. 2017. National Plant Germplasm System [Online Database]. http://www.ars-grin.gov/npgs/index.html. [Accessed 6 Apr 2017]	Family: Asparagaceae Subfamily: Lomandroideae

504	**Geophyte (herbaceous with underground storage organs -- bulbs, corms, or tubers)**	**n**
	Source(s)	**Notes**
	Moore, L. B., & Edgar, E. (1970). Flora of New Zealand. Volume 2. Indigenous Tracheophyta. Monocotyledones except Gramineae. A. R. Shearer, Government Printer, Wellington, New Zealand	"Plant to 4m. tall; stems c. 10–15 cm. diam., us. a number from near ground level, subequal and sparingly branched. Lvs 1–2 m. × 4–8 cm., broad at the middle and inclined to droop from there, narrowed above base into a channelled petiole that is rarely > ½ lamina-width and often occupies c. ¼ to 1/5 of lf-length; lamina paler abaxially; midrib flat adaxially, prominent and rounded abaxially; nerves unequal, several rather strong and sts differently coloured, meeting midrib at appreciable angle; margins laxly revolute."

601	**Evidence of substantial reproductive failure in native habitat**	**n**
	Source(s)	**Notes**
	New Zealand Plant Conservation Network. (2017). Flora Details - Cordyline banksii. http://www.nzpcn.org.nz/flora_details.aspx?ID=1745. [Accessed 7 Apr 2017]	"Threats - Common and not threatened. Does not seem so susceptible to Sudden Decline as C. australis has proved to be."

602	**Produces viable seed**	**y**
	Source(s)	**Notes**
	Burrows, C. J. (1999). Germination behaviour of seeds of the New Zealand woody species Alseuosmia macrophylla, A. pusilla, Cordyline banksii, Geniostoma rupestre, Myrtus bullata, and Solanum aviculare. New Zealand Journal of Botany, 37(2), 277-287	"Cordyline banksii seeds are not quite as versatile as those of S. aviculare and Geniostoma. However, they germinate in the light, or in darkness, resist drying, and at least some seeds send shoots to the soil surface when buried. Cordyline banksii resembles C. australis, a plant with very different general ecology (Burrows 1995a), in this ability to germinate when relatively deeply buried and extend shoots to the surface. The species is very successful and abundant in its preferred habitats in the mild, wetter climates of New Zealand. Its germination behavior no doubt contributes to this."
	New Zealand Plant Conservation Network. (2017). Flora Details - Cordyline banksii. http://www.nzpcn.org.nz/flora_details.aspx?ID=1745. [Accessed 6 Apr 2017]	"Propagation Technique - Easily grown from fresh seed. Can be grown from stem, shoot and trunk cuttings."

603	**Hybridizes naturally**	**y**
	Source(s)	**Notes**

Qsn #	Question	Answer
	Beever, R. E., & Parkes, S. L. (1996). Self-incompatibility in Cordyline australis (Asteliaceae). New Zealand Journal of Botany, 34(1), 135-137	"Natural hybridisation of C. australis has been reported with C. banksii (Kirk 1874; Esler 1961) and with C. pumilio (Carse 1926), and artificial hybridisation has been demonstrated both with C. kaspar and with a putative F1 hybrid between C. australis and C. kaspar (Beever 1981)."
	New Zealand Plant Conservation Network. (2017). Flora Details - Cordyline banksii. http://www.nzpcn.org.nz/flora_details.aspx?ID=1745. [Accessed 6 Apr 2017]	"Often found in shrublands where it is sympatric with, and often hybridises with Cordyline pumilio."

604	Self-compatible or apomictic	
	Source(s)	**Notes**
	Beever, R. E., & Parkes, S. L. (1996). Self-incompatibility in Cordyline australis (Asteliaceae). New Zealand Journal of Botany, 34(1), 135-137	[Unknown. Related taxon self-incompatible] "Abstract Controlled pollination among four individuals of Cordyline australis (cabbage tree, ti kouka) demonstrate that this species is self-incompatible, setting little or no seed when self pollinated. Seed production per fruit in wild trees was less than half that observed following artificial pollination. Parthenocarpic fruit production is recorded in some wild populations."
	Beever, R. E. (1981). Self-incompatibility in Cordyline kaspar (Agavaceae). New Zealand Journal of Botany, 19(1), 13-16	[Unknown. Related taxon self-incompatible] "Abstract The tree from which the type material of the Three Kings cabbage tree (Cordyline kaspar W. R. B. Oliver) was taken is shown to be self-incompatible. setting few seeds when pollinated by its own pollen. It sets abundant seeds when pollinated by Cordyline australis pollen. and by pollen from one of its own seed progeny. This latter plant is believed to be a hybrid between C. kaspar and C. australis; it. and other putative hybrids. show a leaf form intermediate between the two presumed parents."

605	Requires specialist pollinators	n
	Source(s)	**Notes**
	Butz Huryn, V. M. (1995). Use of native New Zealand plants by honey bees (Apis mellifera L.): a review. New Zealand Journal of Botany, 33(4), 497-512	"Table 1 Checklist of native New Zealand flora used by honey bees according to the literature. References cited here are given in Appendix 1." [Cordyline banksii - Resource = N - nectar source only]
	Newstrom-Lloyd, L. E. (2013). Pollination in New Zealand. Pp. 408-431 In Dymond JR ed. Ecosystem services in New Zealand – conditions and trends. Manaaki Whenua Press, Lincoln, New Zealand	"TABLE 1 List of Native Bee Plants from the Federated Farmers Bee Industry Group Bee Plant Guides of November 2009 shows all species that were selected by beekeepers as good bee forage and by farmers and nurseries as suitable for planting on farms. These plants are listed according to their regions in the 10 regional Bee Plant Guides on www.treesforbeesnz.org or http://www.fedfarm.org.nz/membership/Industry-Groups/Trees-for-Bees" [Includes Cordyline banksii]

Qsn #	Question	Answer
606	**Reproduction by vegetative fragmentation**	
	Source(s)	**Notes**
	New Zealand Plant Conservation Network. (2017). Flora Details - Cordyline banksii. http://www.nzpcn.org.nz/flora_details.aspx?ID=1745. [Accessed 6 Apr 2017]	"Easily grown from fresh seed. Can be grown from stem, shoot and trunk cuttings."

607	**Minimum generative time (years)**	**>3**
	Source(s)	**Notes**
	Shoot Gardening. 2017. Cordyline banksii 'Sprilecpink' (Forest cabbage tree 'Sprilecpink'). https://www.shootgardening.co.uk/. [Accessed 6 Apr 2017]	"10-20 years To maturity"

701	**Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)**	**n**
	Source(s)	**Notes**
	New Zealand Plant Conservation Network. (2017). Flora Details - Cordyline banksii. http://www.nzpcn.org.nz/flora_details.aspx?ID=1745. [Accessed 6 Apr 2017]	"Fruit 4-5 mm diam., globose, white, bluish-white, or blue. Seeds 2 mm diam., black, glossy, 2 sides flat the other convex." ... "Life Cycle and Dispersal - Fleshy berries are dispersed by frugivory (Thorsen et al., 2009)." [Fruits & seeds relatively small, but otherwise lack means of external attachment]

702	**Propagules dispersed intentionally by people**	**y**
	Source(s)	**Notes**
	New Zealand Plant Conservation Network. (2017). Flora Details - Cordyline banksii. http://www.nzpcn.org.nz/flora_details.aspx?ID=1745. [Accessed 6 Apr 2017]	"Not as commonly cultivated as C. australis but still offered by many garden centres, particularly a purple-coloured leaf variant. Easily grown and great for steep poorly drained slopes or planted with other smaller shrub species such as Muehlenbeckia astonii."

703	**Propagules likely to disperse as a produce contaminant**	**n**
	Source(s)	**Notes**
	New Zealand Plant Conservation Network. (2017). Flora Details - Cordyline banksii. http://www.nzpcn.org.nz/flora_details.aspx?ID=1745. [Accessed 6 Apr 2017]	"Fleshy berries are dispersed by frugivory" [No evidence of produce contamination]

704	**Propagules adapted to wind dispersal**	**n**
	Source(s)	**Notes**
	New Zealand Plant Conservation Network. (2017). Flora Details - Cordyline banksii. http://www.nzpcn.org.nz/flora_details.aspx?ID=1745. [Accessed 6 Apr 2017]	"Fruit 4-5 mm diam., globose, white, bluish-white, or blue. Seeds 2 mm diam., black, glossy, 2 sides flat the other convex." ... "Fleshy berries are dispersed by frugivory"

Qsn #	Question	Answer
705	**Propagules water dispersed**	**y**
	Source(s)	**Notes**
	Burrows, C. J. (1999). Germination behaviour of seeds of the New Zealand woody species Alseuosmia macrophylla, A. pusilla, Cordyline banksii, Geniostoma rupestre, Myrtus bullata, and Solanum aviculare. New Zealand Journal of Botany, 37(2), 277-287	[Probably Yes] "The plant prefers well lit sites at forest margins and along river banks, often hanging down over cliffs. It is common in high rainfall areas from North Auckland to Fiordland."

706	**Propagules bird dispersed**	**y**
	Source(s)	**Notes**
	Burrows, C. J. (1999). Germination behaviour of seeds of the New Zealand woody species Alseuosmia macrophylla, A. pusilla, Cordyline banksii, Geniostoma rupestre, Myrtus bullata, and Solanum aviculare. New Zealand Journal of Botany, 37(2), 277-287	"It is assumed that the seeds of each species are dispersed by birds. Blackbirds (Turdus merula) and silvereyes (Zosterops lateralis) were seen eating the berries of Solanum. Silvereyes ate Cordyline berries and also the placenta masses, plus seeds, of Geniostoma."
	New Zealand Plant Conservation Network. (2017). Flora Details - Cordyline banksii. http://www.nzpcn.org.nz/flora_details.aspx?ID=1745. [Accessed 6 Apr 2017]	"Life Cycle and Dispersal - Fleshy berries are dispersed by frugivory (Thorsen et al., 2009)."

707	**Propagules dispersed by other animals (externally)**	**n**
	Source(s)	**Notes**
	New Zealand Plant Conservation Network. (2017). Flora Details - Cordyline banksii. http://www.nzpcn.org.nz/flora_details.aspx?ID=1745. [Accessed 6 Apr 2017]	"Fleshy berries are dispersed by frugivory" [Dispersed internally]

708	**Propagules survive passage through the gut**	**y**
	Source(s)	**Notes**
	New Zealand Plant Conservation Network. (2017). Flora Details - Cordyline banksii. http://www.nzpcn.org.nz/flora_details.aspx?ID=1745. [Accessed 6 Apr 2017]	[Presumably Yes] "Fruit 4-5 mm diam., globose, white, bluish-white, or blue. Seeds 2 mm diam., black, glossy, 2 sides flat the other convex." ... "Fleshy berries are dispersed by frugivory"

801	**Prolific seed production (>1000/m2)**	
	Source(s)	**Notes**
	Royal Botanic Gardens Kew. (2017) Seed Information Database (SID). Version 7.1. Available from: http://data.kew.org/sid/. [Accessed 6 Apr 2017]	"Storage Behaviour: No data available for species. Of 2 known taxa of genus Cordyline, 100.00% Orthodox(p/?)"
	Moore, L. B., & Edgar, E. (1970). Flora of New Zealand. Volume 2. Indigenous Tracheophyta. Monocotyledones except Gramineae. A. R. Shearer, Government Printer, Wellington, New Zealand	[Unknown] "Fr. c . 4–5 mm. diam., globose, white or bluish. Seeds c . 2 mm. diam., ± shining,"

Qsn #	Question	Answer
802	**Evidence that a persistent propagule bank is formed (>1 yr)**	
	Source(s)	**Notes**
	Royal Botanic Gardens Kew. (2017) Seed Information Database (SID). Version 7.1. Available from: http://data.kew.org/sid/. [Accessed 6 Apr 2017]	"Storage Behaviour: No data available for species. Of 2 known taxa of genus Cordyline, 100.00% Orthodox(p/?)"
	Burrows, C. J. (1999). Germination behaviour of seeds of the New Zealand woody species Alseuosmia macrophylla, A. pusilla, Cordyline banksii, Geniostoma rupestre, Myrtus bullata, and Solanum aviculare. New Zealand Journal of Botany, 37(2), 277-287	[Seeds may persist beyond one year] "Most Cordyline seeds (92%) withstood drying for several months (Table 3). In the burial test, a few seeds of this species germinated and sent shoots to the soil surface in the first year, and a few more in the second year (Table 4). Results for the two replicates differed, with, in one, only one seedling appearing in the first year and four in the second year. In the other replicate seven seedlings appeared in the first year and one in the second year."

803	**Well controlled by herbicides**	**y**
	Source(s)	**Notes**
	Robison, R. and Heintzelman, C. 2014. Cabbage Tree (Cordyline australis) Distribution and Management in California State Parks [Poster]. California Invasive Plant Council Symposium. October 8-11, Chico, CA	[Related taxon effectively controlled with herbicides. Likely works on congeners] "Cabbage tree removal began in 2013 and three chemical treatments have been tried with varying degrees of success. Foliar application has been used on small plants (< 2 feet tall) while cut stump and the EZ-Ject lance with cartridges of glyphosate has been used on mature plants. Foliar spraying gave modest success as the leaves shed moisture very effectively. Cut stump treatments induced sprouting from the base of the plant. One 8 foot long stalk re sprouted into 6 individuals. Treatment with the EZ-Ject lance glyphosate cartridges appears to be the most effective. They deliver a precise dose of herbicide into the trunk of the plant, and no resprouting has occurred. Treatment with EZ-Ject lance glyphosate cartridges began in December 2013 and will continue into the fall to help determine the most effective treatment timing."

804	**Tolerates, or benefits from, mutilation, cultivation, or fire**	**y**
	Source(s)	**Notes**
	New Zealand Plant Conservation Network. (2017). Flora Details - Cordyline banksii. http://www.nzpcn.org.nz/flora_details.aspx?ID=1745. [Accessed 6 Apr 2017]	[Probably yes. Most species in genus able to resprout after cutting] "Propagation Technique - Easily grown from fresh seed. Can be grown from stem, shoot and trunk cuttings."

805	**Effective natural enemies present locally (e.g. introduced biocontrol agents)**	
	Source(s)	**Notes**
	WRA Specialist. 2017. Personal Communication	Unknown

Summary of Risk Traits:

High Risk / Undesirable Traits
- Shade tolerant
- Hybridizes with other Cordyline species
- Reproduces by seeds and vegetatively
- Seeds dispersed by birds & intentionally by people
- Able to resprout after cutting

Low Risk Traits
- Native to temperate climates (may only be a threat at higher elevations)
- No reports of naturalization or invasiveness to date
- Unarmed (no spines, thorns, or burrs)
- Palatable to animals and humans
- Ornamental
- Herbicides may provide effective control