

Taxon: <i>Schotia latifolia</i> Jacq.	Family: Fabaceae
Common Name(s): bush boer-bean forest boer-bean	Synonym(s):

Assessor: Chuck Chimera	Status: Assessor Approved	End Date: 18 Jul 2016
WRA Score: 1.0	Designation: EVALUATE	Rating: Evaluate

Keywords: Small Tree, Unarmed, Flammable, Arillate, 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)	High
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	y
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	y
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)		
411	Climbing or smothering growth habit	y=1, n=0	n
412	Forms dense thickets		
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	y=1, n=-1	n
607	Minimum generative time (years)		
701	Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)	y=1, n=-1	n
702	Propagules dispersed intentionally by people	y=1, n=-1	y
703	Propagules likely to disperse as a produce contaminant	y=1, n=-1	n
704	Propagules adapted to wind dispersal	y=1, n=-1	n
705	Propagules water dispersed		
706	Propagules bird dispersed	y=1, n=-1	y
707	Propagules dispersed by other animals (externally)	y=1, n=-1	y
708	Propagules survive passage through the gut		
801	Prolific seed production (>1000/m ²)		
802	Evidence that a persistent propagule bank is formed (>1 yr)		
803	Well controlled by herbicides		
804	Tolerates, or benefits from, mutilation, cultivation, or fire		
805	Effective natural enemies present locally (e.g. introduced biocontrol agents)		

Supporting Data:

Qsn #	Question	Answer
101	Is the species highly domesticated?	n
	Source(s)	Notes
	Lemmens, R.H.M.J., 2010. <i>Schotia brachypetala</i> Sond. In: Lemmens, R.H.M.J., Louppe, D. & Oteng-Amoako, A.A. (Editors). PROTA (Plant Resources of Tropical Africa, Wageningen, Netherlands	[No evidence of domestication] " <i>Schotia latifolia</i> Jacq. is a small tree up to 10(–15) m tall endemic to South Africa, but recently it has also been recorded from southern Mozambique. The tough, whitish wood is used for fence posts. Roasted seeds are eaten. Bark decoctions are taken to treat stomach-ache. The bark of <i>Schotia latifolia</i> is commonly used in South Africa to treat tick-borne diseases of livestock. The bark has been used as a dye producing a greenish colour, and for tanning. <i>Schotia latifolia</i> is occasionally planted as an ornamental. "

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"	High
	Source(s)	Notes
	Schmidt, E., Lötter, M. & McClelland, W. 2002. Trees and shrubs of Mpumalanga and Kruger National Park. Jacana Media, Johannesburg, South Africa	"Distribution: very restricted distribution and confined to the Burgersfort area in Mpumalanga. possibly crossing over Into Limpopo Province; also in Eastern Cape where It is more common."
	USDA, ARS, Germplasm Resources Information Network, 2016. National Plant Germplasm System [Online Database]. http://www.ars-grin.gov/npgs/index.html . [Accessed 15 Jul 2016]	"Native: Africa Southern Africa: South Africa - Cape Province, - Transvaal"

202	Quality of climate match data	High
	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 15 Jul 2016]	

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

Qsn #	Question	Answer
	Manning, J., & Goldblatt, P. (2012). Plants of the Greater Cape Floristic Region 1: the Core Cape flora, Strelitzia 29. South African National Biodiversity Institute, Pretoria	"SE [Cape] (Knysna to E Cape)."
	Schmidt, E., Lötter, M. & McClelland, W. 2002. Trees and shrubs of Mpumalanga and Kruger National Park. Jacana Media, Johannesburg, South Africa	"very restricted distribution and confined to the Burgersfort area in Mpumalanga. possibly crossing over into Limpopo Province; also in Eastern Cape where it is more common."

204	Native or naturalized in regions with tropical or subtropical climates	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 15 Jul 2016]	"Native: Africa Southern Africa: South Africa - Cape Province, - Transvaal"
	Lemmens, R.H.M.J., 2010. <i>Schotia brachypetala</i> Sond. In: Lemmens, R.H.M.J., Louppe, D. & Oteng-Amoako, A.A. (Editors). PROTA (Plant Resources of Tropical Africa, Wageningen, Netherlands	" <i>Schotia latifolia</i> Jacq. is a small tree up to 10(-15) m tall endemic to South Africa, but recently it has also been recorded from southern Mozambique."

205	Does the species have a history of repeated introductions outside its natural range?	?
	Source(s)	Notes
	Lemmens, R.H.M.J., 2010. <i>Schotia brachypetala</i> Sond. In: Lemmens, R.H.M.J., Louppe, D. & Oteng-Amoako, A.A. (Editors). PROTA (Plant Resources of Tropical Africa, Wageningen, Netherlands	" <i>Schotia latifolia</i> is occasionally planted as an ornamental. "
	Imada, C.T., Staples, G.W. & Herbst, D.R. 2005. Annotated Checklist of Cultivated Plants of Hawai'i. http://www2.bishopmuseum.org/HBS/botany/cultivatedplants/ . [Accessed 15 Jul 2016]	" <i>Schotia latifolia</i> N. Jacquin Locations: Harold L. Lyon Arboretum"
	Rock, J. F. 1917. Trees recommended for planting. The Hawaiian Forester and Agriculturist XIV(11): 331-337	" <i>Schotia latifolia</i> , <i>Schotia brachypetala</i> , specimens growing at College of Hawaii from seeds, the latter obtainable from South California. Leguminous trees with handsome red flowers from the dry regions of South Africa."
	Kunkel, G. 1978. Flowering Trees in Subtropical Gardens. Dr. W. Junk b.v., Publishers, The Hague - Boston - London	[Canary Islands] "A small to medium-sized tree, in Canary gardens only 8 to 10 m tall" ... "An admirable ornamental for roadsides and smaller gardens, native in South Africa ; propagated from seeds."
	The Plant Attraction- In Living Color! 2016. <i>Schotia Latifolia</i> African Tree Seeds, Gorgeous Bush Boer Bean. http://shop.theplantattraction.com/Schotia-Latifolia-African-Tree-Seeds-Gorgeous-Bush-Boer-Bean-S-Schotia-Latifolia.htm . [Accessed 15 Jul 2016]	[Seeds sold online] "This offer is for 5 seeds."

301	Naturalized beyond native range	n
	Source(s)	Notes

Qsn #	Question	Answer
	Chong, K.Y., Tan, H.T.W. & Corlett, R.T. 2009. A Checklist of the Total Vascular Plant Flora of Singapore: Native, Naturalized and Cultivated Species. Raffles Museum of Biodiversity Research, National University of Singapore, Singapore	" <i>Schotia latifolia</i> Jacq.; Fabaceae; cultivated only"
	Randall, R.P. 2012. A Global Compendium of Weeds. 2nd Edition. Department of Agriculture and Food, Western Australia	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]	No evidence

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	
	Source(s)	Notes
	Randall, R.P. 2012. A Global Compendium of Weeds. 2nd Edition. Department of Agriculture and Food, Western Australia	<i>Schotia afra</i> listed as "Q - Quarantine Weed Species prohibited entry under a countries quarantine laws, either because it's not present or present and under a management program"

401	Produces spines, thorns or burrs	n
	Source(s)	Notes
	Schmidt, E., Lötter, M. & McClelland, W. 2002. Trees and shrubs of Mpumalanga and Kruger National Park. Jacana Media, Johannesburg, South Africa	[No evidence] "Rounded tree, 3-10 m" ... "Main stem: bark smooth, dull grey to reddish-brown; stems usually hairless. Leaves: alternate; compound (paripinnate); 3-5 pairs of opposite leaflets; leaflets 27-65 x 14-35 mm; base asymmetric; leaflets hairless; leaf axis narrowly winged when young; petiole 5-20 mm long."

Qsn #	Question	Answer
402	Allelopathic	
	Source(s)	Notes
	WRA Specialist. 2016. Personal Communication	Unknown

403	Parasitic	n
	Source(s)	Notes
	Schmidt, E., Lötter, M. & McClelland, W. 2002. Trees and shrubs of Mpumalanga and Kruger National Park. Jacana Media, Johannesburg, South Africa	"Rounded tree, 3-10 m" ... "Main stem: bark smooth, dull grey to reddish-brown; stems usually hairless. Leaves: alternate; compound (paripinnate); 3-5 pairs of opposite leaflets; leaflets 27-65 x 14-35 mm; base asymmetric; leaflets hairless; leaf axis narrowly winged when young; petiole 5-20 mm long." [Fabaceae. No evidence]

404	Unpalatable to grazing animals	n
	Source(s)	Notes
	Gaylard, A., & Kerley, G. I. H. . (1997). Diet of Tree Hyraxes <i>Dendrohyrax arboreus</i> (Hyracoidea: Procaviidae) in the Eastern Cape, South Africa. <i>Journal of Mammalogy</i> , 78(1), 213-221	"S. latifolia is clearly an important dietary item for the eastern Cape tree hyrax and, in addition, is an important tree species for denning at Pirie and Alexandria (Gaylard, 1994). This is not a commercial-timber species." ... "The low diversity of the diet may, in fact, reflect the need for predator avoidance and the cost of arboreal locomotion, forcing D. a. arboreus to minimize foraging distances. This is emphasized by the fact that the principal-preferred dietary plants (e.g., <i>P. falcatus</i> and <i>S. latifolia</i>) also are largely the preferred den trees (Gaylard, 1994). We suggest that this aspect be investigated further. Because of the energetic constraints imposed by arboreal folivory, and the fact that most species eaten by <i>D. a. arboreus</i> occur naturally in relatively low proportions, removal of these plants could result in loss of dietary resources of the species, particularly if they are unable to exploit other species of plants"
	Parker, D. M., & Bernard, R. T. F. (2005). The diet and ecological role of giraffe (<i>Giraffa camelopardalis</i>) introduced to the Eastern Cape, South Africa. <i>Journal of Zoology</i> , 267(02), 203-210	"Table 1. The mean annual frequency of occurrence (M.A.F.O.) of plant species in the diet of giraffe <i>Giraffa camelopardalis</i> for all sites and seasons as determined by direct observations for the study period 2002–03." [<i>Schotia latifolia</i> included in diet]
	Palmer, E. & Pitman, N. 1972. <i>Trees of Southern Africa</i> . A. A. Balkema, Cape Town	"The foliage is browsed by animals."

Qsn #	Question	Answer
405	Toxic to animals	n
	Source(s)	Notes
	South African National Biodiversity Institute. 2007. PlantzAfrica.com. <i>Schotia latifolia</i> . http://pza.sanbi.org/schotia-latifolia . [Accessed]	"Birds are attracted by the nectar"; ... "monkeys eat the seeds".
	Palmer, E. & Pitman, N. 1972. Trees of Southern Africa. A. A. Balkema, Cape Town	"The foliage is browsed by animals." [No evidence]
	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
	van de Bijl, P. A. (1922). A host list of the Polyporeae occurring in the Union of South Africa. Bulletin of Miscellaneous Information (Royal Botanic Gardens, Kew), 1922(6): 177-182	"The Polyporeae are of considerable economic importance to all concerned either with the care of forests or with the timber trade. Several parasitic and semiparasitic species are responsible for the decay of valuable timber trees, and even those which are purely saprophytic often cause serious loss by inducing the decay of sleepers and posts." ... "Fomes rimosus (Berk.) Cooke. On living plants of <i>Acacia</i> sp., <i>Curtisea faginea</i> , <i>Elaeodendron croceum</i> , <i>Kiggelaria africana</i> , <i>Olea laurifolia</i> , <i>Pleurostyla</i> sp., <i>Ptaeroxylon utile</i> , <i>Rhus laevigata</i> , <i>Schotia latifolia</i> , <i>Scolopia Mundtii</i> , <i>Xymalos monospora</i> ." ... "Trametes lactinea, Berk. Saprophytic on <i>Acacia mollissima</i> and <i>Schotia latifolia</i> ."

407	Causes allergies or is otherwise toxic to humans	n
	Source(s)	Notes
	South African National Biodiversity Institute. 2007. PlantzAfrica.com. <i>Schotia latifolia</i> . http://pza.sanbi.org/schotia-latifolia . [Accessed]	[Multiple uses. No hazards to humans identified] "The seeds are edible and have been used for food historically by both indigenous African peoples and the European settlers and farmers. The pods were picked green and then roasted. The seeds would have effectively been steamed inside the pods. These were removed and eaten. The tough white wood has been used to make strong fence posts although it is not an economically important timber. The bark has been used as a dye which produces a greenish colour. It has also been recorded as being used as a tanning agent for leather. The bush boer bean has been used successfully as a bonsai subject. "
	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	y
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Qsn #	Question	Answer
	Source(s)	Notes
	Calitz, W., Potts, A. J., & Cowling, R. M. (2015). Investigating species-level flammability across five biomes in the Eastern Cape, South Africa. <i>South African Journal of Botany</i> , 101, 32-39	"However, the most flammable Thicket species— <i>Schotia latifolia</i> and <i>Ptaeroxylon obliquum</i> —grow in dense Thicket that is seldom, if ever, exposed to fire."

409	Is a shade tolerant plant at some stage of its life cycle	
	Source(s)	Notes
	Kumbula Indigenous Nursery. 2016. A database of Indigenous South African Flora. <i>Schotia latifolia</i> . http://kumbulanursery.co.za/plants/schotia-latifolia . [Accessed 17 Jul 2016]	"Position: Partial Shade, Sun"

410	Tolerates a wide range of soil conditions (or limestone conditions if not a volcanic island)	
	Source(s)	Notes
	South African National Biodiversity Institute. 2007. <i>PlantzAfrica.com</i> . <i>Schotia latifolia</i> . http://pza.sanbi.org/schotia-latifolia . [Accessed 17 Jul 2016]	"Soil type: Loam PH: Neutral"
	USDA NRCS. 2016. <i>World Soil Resources / Global Soil Regions Map</i> . http://www.nrcs.usda.gov . [Accessed 17 Jul 2016]	Alfisols are the predominant soil order in this region

411	Climbing or smothering growth habit	n
	Source(s)	Notes
	Schmidt, E., Lötter, M. & McClelland, W. 2002. <i>Trees and shrubs of Mpumalanga and Kruger National Park</i> . Jacana Media, Johannesburg, South Africa	"Rounded tree, 3-10 m" ... "Main stem: bark smooth, dull grey to reddish-brown; stems usually hairless. Leaves: alternate; compound (paripinnate); 3-5 pairs of opposite leaflets; leaflets 27-65 x 14-35 mm; base asymmetric; leaflets hairless; leaf axis narrowly winged when young; petiole 5-20 mm long."

412	Forms dense thickets	
	Source(s)	Notes
	Calitz, W., Potts, A. J., & Cowling, R. M. (2015). Investigating species-level flammability across five biomes in the Eastern Cape, South Africa. <i>South African Journal of Botany</i> , 101, 32-39	[Identified as a thicket species. Unknown if monocultures are formed] "However, the most flammable Thicket species— <i>Schotia latifolia</i> and <i>Ptaeroxylon obliquum</i> —grow in dense Thicket that is seldom, if ever, exposed to fire."

501	Aquatic	n
	Source(s)	Notes
	Schmidt, E., Lötter, M. & McClelland, W. 2002. <i>Trees and shrubs of Mpumalanga and Kruger National Park</i> . Jacana Media, Johannesburg, South Africa	[Terrestrial] "Rounded tree, 3-10 m; In isolated localities in bushveld along mountain slopes."

Qsn #	Question	Answer
502	Grass	n
	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 15 Jul 2016]	Family: Fabaceae (alt.Leguminosae) Subfamily: Caesalpinioideae Tribe: Detarieae

503	Nitrogen fixing woody plant	n
	Source(s)	Notes
	Useful Tropical Plants Database. 2016. <i>Schotia latifolia</i> . http://tropical.theferns.info/viewtropical.php?id=Schotia+latifolia . [Accessed 24 Jul 2016]	"Although many species within the family Fabaceae have a symbiotic relationship with soil bacteria, this species is said to be devoid of such a relationship and therefore does not fix atmospheric nitrogen"
	Halliday, J. (1984). Integrated approach to nitrogen fixing tree germplasm development. <i>Pesq. agropec. bras., Brasilia</i> . 19 s/n.; 91-117	"N <i>Schotia latifolia</i> " [Not reported to fix atmospheric nitrogen]
	USDA, ARS, Germplasm Resources Information Network, 2016. National Plant Germplasm System [Online Database]. http://www.ars-grin.gov/npgs/index.html . [Accessed]	Family: Fabaceae (alt.Leguminosae) Subfamily: Caesalpinioideae Tribe: Detarieae

504	Geophyte (herbaceous with underground storage organs -- bulbs, corms, or tubers)	n
	Source(s)	Notes
	Schmidt, E., Lötter, M. & McClelland, W. 2002. Trees and shrubs of Mpumalanga and Kruger National Park. Jacana Media, Johannesburg, South Africa	"Rounded tree, 3-10 m;"

601	Evidence of substantial reproductive failure in native habitat	n
	Source(s)	Notes
	Schmidt, E., Lötter, M. & McClelland, W. 2002. Trees and shrubs of Mpumalanga and Kruger National Park. Jacana Media, Johannesburg, South Africa	[No evidence] "very restricted distribution and confined to the Burgersfort area in Mpumalanga. possibly crossing over into Limpopo Province; also in Eastern Cape where it is more common."

602	Produces viable seed	y
	Source(s)	Notes
	South African National Biodiversity Institute. 2007. PlantzAfrica.com. <i>Schotia latifolia</i> . http://pza.sanbi.org/schotia-latifolia . [Accessed 15 Jul 2016]	"Propagate this tree from seed in spring. Pour hot water over the seeds and leave them to soak overnight. They should quickly swell as they absorb the water. When the seed coat becomes wrinkled they are ready to be sown. "
	Kunkel, G. 1978. Flowering Trees in Subtropical Gardens. Dr. W. Junk b.v., Publishers, The Hague - Boston - London	"propagated from seeds."

603	Hybridizes naturally	y
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Qsn #	Question	Answer
	Source(s)	Notes
	Palmer, E. & Pitman, N. 1972. Trees of Southern Africa. A. A. Balkema, Cape Town	"Its distribution overlaps that of <i>Schotia afra</i> , and where this happens hybrids between the two species are known."
	Ramdhani, S., Cowling, R. M., & Barker, N. P. (2010). Phylogeography of <i>Schotia</i> (Fabaceae): recent evolutionary processes in an ancient thicket biome lineage. <i>International Journal of Plant Sciences</i> , 171(6), 626-640	"Ross (1977) also noted the existence of a possible new species and recorded what he considered to be hybrids between <i>S. latifolia</i> and <i>S. afra</i> ."

604	Self-compatible or apomictic	
	Source(s)	Notes
	South African National Biodiversity Institute. 2007. PlantzAfrica.com. <i>Schotia latifolia</i> . http://pza.sanbi.org/schotia-latifolia . [Accessed 17 Jul 2016]	[Unknown] "The pale pink flowers are borne in clusters on the ends of stems. Flower colour can be variable, from flesh-coloured to whiteish. Unlike <i>S. brachypetala</i> , the petals are well formed and not very narrow or reduced to thin filaments. The flowers appear in October and November. When not in flower it may be confused with <i>S. brachypetala</i> but this tree usually has more leaflets (4-7 pairs) per leaf."

605	Requires specialist pollinators	n
	Source(s)	Notes
	South African National Biodiversity Institute. 2007. PlantzAfrica.com. <i>Schotia latifolia</i> . http://pza.sanbi.org/schotia-latifolia . [Accessed 15 Jul 2016]	"Birds are attracted by the nectar, although it is not as copious as the weeping boer-bean, which derives its common name from the fact that the nectar literally drips from the tree! The flowers also attract insects such as wasps, ants, beetles and flies, which in turn attract birds and reptiles."
	Schmidt, E., Lötter, M. & McClelland, W. 2002. Trees and shrubs of Mpumalanga and Kruger National Park. Jacana Media, Johannesburg, South Africa	"Flowers: clustered in loose, open, pink terminal bunches; petals well developed, to 25 mm long (Oct-Nov)."

606	Reproduction by vegetative fragmentation	n
	Source(s)	Notes
	South African National Biodiversity Institute. 2007. PlantzAfrica.com. <i>Schotia latifolia</i> . http://pza.sanbi.org/schotia-latifolia . [Accessed 18 Jul 2016]	"Propagate this tree from seed in spring." [No evidence]

607	Minimum generative time (years)	
	Source(s)	Notes
	Kumbula Indigenous Nursery. 2016. A database of Indigenous South African Flora. <i>Schotia latifolia</i> . http://kumbulanursery.co.za/plants/schotia-latifolia . [Accessed 18 Jul 2016]	"Growth Rate: Moderate"

Qsn #	Question	Answer
701	Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)	n
	Source(s)	Notes
	Schmidt, E., Lötter, M. & McClelland, W. 2002. Trees and shrubs of Mpumalanga and Kruger National Park. Jacana Media, Johannesburg, South Africa	[No evidence. No means of external attachment] "Fruit a flat woody pod, 50-140 x 75-100 mm; seeds with yellow basal aril"

702	Propagules dispersed intentionally by people	y
	Source(s)	Notes
	Lemmens, R.H.M.J., 2010. <i>Schotia brachypetala</i> Sond. In: Lemmens, R.H.M.J., Louppe, D. & Oteng-Amoako, A.A. (Editors). PROTA (Plant Resources of Tropical Africa, Wageningen, Netherlands	" <i>Schotia latifolia</i> is occasionally planted as an ornamental."
	The Plant Attraction- In Living Color! 2016. <i>Schotia Latifolia</i> African Tree Seeds, Gorgeous Bush Boer Bean. http://shop.theplantattraction.com/Schotia-Latifolia-African-Tree-Seeds-Gorgeous-Bush-Boer-Bean-S-Schotia-Latifolia.htm . [Accessed 15 Jul 2016]	[Seeds sold online] "This offer is for 5 seeds."

703	Propagules likely to disperse as a produce contaminant	n
	Source(s)	Notes
	Schmidt, E., Lötter, M. & McClelland, W. 2002. Trees and shrubs of Mpumalanga and Kruger National Park. Jacana Media, Johannesburg, South Africa	"Fruit a flat woody pod, 50-140 x 75-100 mm; seeds with yellow basal aril" [No evidence. Unlikely given relatively large size]

704	Propagules adapted to wind dispersal	n
	Source(s)	Notes
	Coates Palgrave, K. (2002) Trees of Southern Africa. Struik Publishers, Cape Town	"The seeds are oval, flattened, up to 2 cm in diameter."
	South African National Biodiversity Institute. 2007. PlantzAfrica.com. <i>Schotia latifolia</i> . http://pza.sanbi.org/schotia-latifolia . [Accessed 18 Jul 2016]	[No evidence of adaptations for wind dispersal] "As with the other boer-bean species, the pods peel away from their outer edges, leaving these narrow rims with the seeds attached hanging on the tree".

705	Propagules water dispersed	
	Source(s)	Notes
	Schmidt, E., Lötter, M. & McClelland, W. 2002. Trees and shrubs of Mpumalanga and Kruger National Park. Jacana Media, Johannesburg, South Africa	"Fruit a flat woody pod, 50-140 x 75-100 mm; seeds with yellow basal aril" [Buoyancy of pods unknown]

706	Propagules bird dispersed	y
	Source(s)	Notes

Qsn #	Question	Answer
	South African National Biodiversity Institute. 2007. PlantzAfrica.com. <i>Schotia latifolia</i> . http://pza.sanbi.org/schotia-latifolia . [Accessed 15 Jul 2016]	"The pods apparently have an astringent taste but monkeys eat the seeds. The seeds have fleshy, yellow arils with a high oil content, making them it very attractive to birds. This is possibly a way of dispersing seed as the bird may carry its prize off, discard the seed and eat the aril. Other animals such as ants or small mammals would most likely carry away seeds that fall to the ground, as they would also find the aril irresistible."

707	Propagules dispersed by other animals (externally)	y
	Source(s)	Notes
	South African National Biodiversity Institute. 2007. PlantzAfrica.com. <i>Schotia latifolia</i> . http://pza.sanbi.org/schotia-latifolia . [Accessed 18 Jul 2016]	"Other animals such as ants or small mammals would most likely carry away seeds that fall to the ground, as they would also find the aril irresistible."

708	Propagules survive passage through the gut	
	Source(s)	Notes
	South African National Biodiversity Institute. 2007. PlantzAfrica.com. <i>Schotia latifolia</i> . http://pza.sanbi.org/schotia-latifolia . [Accessed 18 Jul 2016]	[Unknown if dispersers swallow seeds or just consume aril] "The pods apparently have an astringent taste but monkeys eat the seeds. The seeds have fleshy, yellow arils with a high oil content, making them it very attractive to birds. This is possibly a way of dispersing seed as the bird may carry its prize off, discard the seed and eat the aril. Other animals such as ants or small mammals would most likely carry away seeds that fall to the ground, as they would also find the aril irresistible."

801	Prolific seed production (>1000/m2)	
	Source(s)	Notes
	Schmidt, E., Lötter, M. & McClelland, W. 2002. Trees and shrubs of Mpumalanga and Kruger National Park. Jacana Media, Johannesburg, South Africa	[Unknown] "Fruit a flat woody pod, 50-140 x 75-100 mm; seeds with yellow basal aril"

802	Evidence that a persistent propagule bank is formed (>1 yr)	
	Source(s)	Notes
	South African National Biodiversity Institute. 2007. PlantzAfrica.com. <i>Schotia latifolia</i> . http://pza.sanbi.org/schotia-latifolia . [Accessed 18 Jul 2016]	"Propagate <i>Schotia latifolia</i> from seed in spring. Pour hot water over the seeds and leave them to soak overnight. They should quickly swell as they absorb the water. When the seed coat becomes wrinkled they are ready to be sown. " [Unknown, but hot water treatment suggests seeds may persist in soil under natural conditions]
	Royal Botanic Gardens Kew. (2016) Seed Information Database (SID). Version 7.1. http://data.kew.org/sid/ . [Accessed 18 Jul 2016]	"Storage Behaviour: Orthodox Storage Conditions: 75 % viability following drying to mc's in equilibrium with 15 % RH and freezing for 81 days at -20C at RBG Kew, WP"

Qsn #	Question	Answer
803	Well controlled by herbicides	
	Source(s)	Notes
	WRA Specialist. 2016. Personal Communication	Unknown. No information on herbicide efficacy or chemical control of this species

804	Tolerates, or benefits from, mutilation, cultivation, or fire	
	Source(s)	Notes
	WRA Specialist. 2016. Personal Communication	Unknown

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

Summary of Risk Traits:

High Risk / Undesirable Traits

- Found in tropical climates
- Flammable thicket species in native range
- Reproduces by seed
- Hybridizes with other *Schotia* species
- Seeds dispersed by birds, monkeys, ants & intentionally by people
- Limited ecological information reduces accuracy of risk prediction

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
- Palatable to grazing animals
- Seeds edible to humans
- Ornamental
- Not reported to spread vegetatively

Second Screening Results for Tree/tree-like shrubs

(A) Shade tolerant or known to form dense stands?> Unknown. Shade tolerance unknown. Ability to form dense stands unclear (a component of thicket vegetation)

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

(C) Life cycle <4 years? Unknown

Outcome = Evaluation further