

Taxon: <i>Polyscias balfouriana</i> L.H.Bailey	Family: Araliaceae
Common Name(s): Balfour aralia dinner plate aralia plate aralia	Synonym(s): <i>Aralia</i> × <i>balfouriana</i> hort. ex André <i>Panax balfourii</i> hort. ex Sand.

Assessor: Chuck Chimera	Status: Assessor Approved	End Date: 11 Jan 2023
WRA Score: 0.0	Designation: L	Rating: Low Risk

Keywords: Tropical Tree, Naturalized Elsewhere, Dermatitis, Vegetatively Propagated, Rarely Fruits

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	y
301	Naturalized beyond native range	y = 1*multiplier (see Appendix 2), n= question 205	y
302	Garden/amenity/disturbance weed		
303	Agricultural/forestry/horticultural weed	n=0, y = 2*multiplier (see Appendix 2)	n
304	Environmental weed	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		
405	Toxic to animals		
406	Host for recognized pests and pathogens		
407	Causes allergies or is otherwise toxic to humans		
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		

Qsn #	Question	Answer Option	Answer
410	Tolerates a wide range of soil conditions (or limestone conditions if not a volcanic island)	y=1, n=0	y
411	Climbing or smothering growth habit	y=1, n=0	n
412	Forms dense thickets	y=1, n=0	n
501	Aquatic	y=5, n=0	n
502	Grass	y=1, n=0	n
503	Nitrogen fixing woody plant	y=1, n=0	n
504	Geophyte (herbaceous with underground storage organs -- bulbs, corms, or tubers)	y=1, n=0	n
601	Evidence of substantial reproductive failure in native habitat	y=1, n=0	n
602	Produces viable seed	y=1, n=-1	y
603	Hybridizes naturally		
604	Self-compatible or apomictic		
605	Requires specialist pollinators	y=-1, n=0	n
606	Reproduction by vegetative fragmentation	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	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)	y=1, n=-1	n
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
	Vermeulen, N. & Rosenfeld, R. (1998). Encyclopedia of House Plants. 2nd Print. Rebo Productions, Lisse, Netherlands	"Polyscias balfouriana ... The ornamental plant which is sold under this name is officially called Polyscias scutellaria 'Balfourii'. It is a popular house plant which is usually sold as a rooted stem cutting. The species originated in the Far East but these days it is a common plant in the tropics, where Polyscias is used as a hedge."
	Lowry, P. P. (1989). A revision of Araliaceae from Vanuatu. Bulletin of the Museum of Natural History, Adansonia, 11 (2), 117-155.	[Regularly cultivated, but not domesticated. Polyscias scutellaria = Polyscias balfouriana] "The native range of Polyscias scutellaria is not clear, although SMITH & STONE (1968) suggest that it may be indigenous to Vanuatu and the Solomon Islands, pointing out that the species occurs there in forests from near sea level to about 300 m. Certainly in other areas this species is almost always encountered near human habitations, most often in the form of cultivated hedges that are trimmed more-or-less regularly, which results in infrequent flowering."

102	Has the species become naturalized where grown?	
	Source(s)	Notes
	WRA Specialist. (2022). Personal Communication	NA

103	Does the species have weedy races?	
	Source(s)	Notes
	WRA Specialist. (2022). 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
	Rojas-Sandoval, J. (2020). Polyscias balfouriana (Balfour aralia). CABI Compendium. https://doi.org/10.1079/cabicompendium.57624994 . [Accessed 6 Jan 2023]	"Polyscias balfouriana is native to New Guinea and Queensland, Australia. It has been introduced to tropical Asia, Africa, the Caribbean and islands in the Pacific (Fernández-Concha et al., 2005; Acevedo-Rodríguez and Strong, 2012; Flora of China Editorial Committee, 2020; POWO, 2020)."

202	Quality of climate match data	High
	Source(s)	Notes
	Rojas-Sandoval, J. (2020). Polyscias balfouriana (Balfour aralia). CABI Compendium. https://doi.org/10.1079/cabicompendium.57624994 . [Accessed 6 Jan 2023]	

203	Broad climate suitability (environmental versatility)	n
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Qsn #	Question	Answer
	Source(s)	Notes
	Lowry, P. P. (1989). A revision of Araliaceae from Vanuatu. Bulletin of the Museum of Natural History, Adansonia, 11 (2), 117-155.	"The native range of <i>Polyscias scutellaria</i> is not clear, although SMITH & STONE (1968) suggest that it may be indigenous to Vanuatu and the Solomon Islands, pointing out that the species occurs there in forests from near sea level to about 300 m."
	NC State Extension. (2023). <i>Polyscias balfouriana</i> . https://plants.ces.ncsu.edu/plants/polyscias-balfouriana/ . [Accessed 9 Jan 2023]	"USDA Plant Hardiness Zone: 10a, 10b, 11a"

204	Native or naturalized in regions with tropical or subtropical climates	y
	Source(s)	Notes
	Rojas-Sandoval, J. (2020). <i>Polyscias balfouriana</i> (Balfour aralia). CABI Compendium. https://doi.org/10.1079/cabicompendium.57624994 . [Accessed 6 Jan 2023]	" <i>Polyscias balfouriana</i> is native to New Guinea and Queensland, Australia. It has been introduced to tropical Asia, Africa, the Caribbean and islands in the Pacific (Fernández-Concha et al., 2005; Acevedo-Rodríguez and Strong, 2012; Flora of China Editorial Committee, 2020; POWO, 2020)."
	Imada, C. (2019). Hawaiian Naturalized Vascular Plants Checklist (February 2019 update). Bishop Museum Technical Report 69. Bishop Museum, Honolulu, HI	No evidence

205	Does the species have a history of repeated introductions outside its natural range?	y
	Source(s)	Notes
	Rojas-Sandoval, J. (2020). <i>Polyscias balfouriana</i> (Balfour aralia). CABI Compendium. https://doi.org/10.1079/cabicompendium.57624994 . [Accessed 6 Jan 2023]	" <i>Polyscias balfouriana</i> is a shrub that is cultivated as a landscape ornamental and indoor potted plant. It can be found cultivated and naturalized in moist habitats and lowlands."
	Vermeulen, N. & Rosenfeld, R. (1998). Encyclopedia of House Plants. 2nd Print. Rebo Productions, Lisse, Netherlands	"The ornamental plant which is sold under this name is officially called <i>Polyscias scutellaria</i> 'Balfourii'. It is a popular house plant which is usually sold as a rooted stem cutting. The species originated in the Far East but these days it is a common plant in the tropics, where <i>Polyscias</i> is used as a hedge." [Commonly cultivated, but often grown indoors]

Qsn #	Question	Answer
301	Naturalized beyond native range	y
	Source(s)	Notes
	Randall, R.P. (2017). A Global Compendium of Weeds. 3rd Edition. Perth, Western Australia. R.P. Randall	"Major Pathway/s: Herbal, Ornamental Dispersed by: Humans References: Cuba-N-1505, El Salvador-N-1849, Cuba-N-2055, Cuba-W-1977, Democratic Republic of the Congo-W-1977, India-W-1977."
	Rojas-Sandoval, J. (2020). <i>Polyscias balfouriana</i> (Balfour aralia). CABI Compendium. https://doi.org/10.1079/cabicompendium.57624994 . [Accessed 6 Jan 2023]	" <i>Polyscias balfouriana</i> is a shrub that is cultivated as a landscape ornamental and indoor potted plant. It can be found cultivated and naturalized in moist habitats and lowlands. Currently, it is listed as invasive only in Cuba, with no further information about economic and/or ecological impact provided."
	Imada, C. (2019). Hawaiian Naturalized Vascular Plants Checklist (February 2019 update). Bishop Museum Technical Report 69. Bishop Museum, Honolulu, HI	No evidence in the Hawaiian Islands

302	Garden/amenity/disturbance weed	
	Source(s)	Notes
	Rojas-Sandoval, J. (2020). <i>Polyscias balfouriana</i> (Balfour aralia). CABI Compendium. https://doi.org/10.1079/cabicompendium.57624994 . [Accessed 10 Jan 2023]	[Possible weed of unspecified impacts] " <i>Polyscias balfouriana</i> is a shrub that is cultivated as a landscape ornamental and indoor potted plant. It can be found cultivated and naturalized in moist habitats and lowlands. Currently, it is listed as invasive only in Cuba, with no further information about economic and/or ecological impact provided."
	GBIF Secretariat (2023). <i>Calycophyllum spruceanum</i> (Benth.) Hook.f. ex K.Schum. GBIF Backbone Taxonomy. Checklist dataset. https://www.gbif.org/species/3035891 . [Accessed 10 Jan 2023]	Recorded as introduced in India, Cuba, and Congo, Democratic Republic of the with no Evidence of impact of any of these locations.

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] "Major Pathway/s: Herbal, Ornamental Dispersed by: Humans References: Cuba-N-1505, El Salvador-N-1849, Cuba-N-2055, Cuba-W-1977, Democratic Republic of the Congo-W-1977, India-W-1977."
	Rojas-Sandoval, J. (2020). <i>Polyscias balfouriana</i> (Balfour aralia). CABI Compendium. https://doi.org/10.1079/cabicompendium.57624994 . [Accessed 10 Jan 2023]	No evidence] " <i>Polyscias balfouriana</i> is a shrub that is cultivated as a landscape ornamental and indoor potted plant. It can be found cultivated and naturalized in moist habitats and lowlands. Currently, it is listed as invasive only in Cuba, with no further information about economic and/or ecological impact provided."

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] "Major Pathway/s: Herbal, Ornamental Dispersed by: Humans References: Cuba-N-1505, El Salvador-N-1849, Cuba-N-2055, Cuba-W-1977, Democratic Republic of the Congo-W-1977, India-W-1977."

Qsn #	Question	Answer
	Rojas-Sandoval, J. (2020). <i>Polyscias balfouriana</i> (Balfour aralia). CABI Compendium. https://doi.org/10.1079/cabicompendium.57624994 . [Accessed 10 Jan 2023]	[No impacts specified] " <i>Polyscias balfouriana</i> is a shrub that is cultivated as a landscape ornamental and indoor potted plant. It can be found cultivated and naturalized in moist habitats and lowlands. Currently, it is listed as invasive only in Cuba, with no further information about economic and/or ecological impact provided."

305	Congeneric weed	
	Source(s)	Notes
	Rojas-Sandoval, J. (2023). <i>Polyscias balfouriana</i> (Balfour aralia). CABI Compendium. https://www.cabidigitallibrary.org/doi/10.1079/cabicompendium.46036 . [Accessed 10 Jan 2023]	[Unknown] " <i>Polyscias fruticosa</i> is an evergreen shrub that is native to tropical areas from India to Polynesia. It is cultivated as an ornamental and medicinal plant and for culinary use. Currently, it is listed as invasive only in Anguilla, but no further information about economic and/or ecological impact has been provided."

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

Qsn #	Question	Answer
	<p>Lowry, P. P. (1989). A revision of Araliaceae from Vanuatu. Bulletin of the Museum of Natural History, Adansonia, 11 (2), 117-155.</p>	<p>[No evidence] "Andromonoecious treelets. or small trees 2-6(-7) m tall. Leaves (8-)13-40(-50) cm long; leaflets 1 (the leaves thus unifoliolate), 3 or 5 (rarely 2 or 4), dark green or yellow green above, paler beneath, papyraceous to subcoriaceous, widely elliptic to oblate or reniform, occasionally somewhat ovate or obovate, flat or sometimes adaxially concave and shallowly scutellate, (5-)6-20(-24) x (5-)6-20(-26)cm, the apex rounded (rarely slightly emarginate), the margin subentire to coarsely crenulate or shallowly serrate (occasionally to subpalmately lobed), slightly thickened and often minutely revolute, the teeth 1-2cm distant in larger leaflets and sometimes conspicuously spinulose, the base shallowly cordate or convex (rarely rounded-truncate); petiolules (0.5-)1.5-5cm long; rachis articulated at petiolule bases (including in unifoliolate leaves); petiole (3-)5-20(-30) cm long, enlarged and clasping at the base, evidently alate for 1-5(-6)cm with membranous wings. Inflorescence terminal, erect, glabrous throughout, the scarious bractlets early caducous, the primary axis stout, often lenticellate, 30-80 (-100)cm long, the secondary axes ca. 15-30, grouped in 2-4 verticils (occasionally opposite or irregularly scattered below), 15-50cm long, tertiary axes (peduncles) ca. 7-30 per secondary axis, grouped in 4-6 often somewhat irregular verticils, each 2-18 mm long at maturity, with a terminal umbellule of (5-)8-25 hermaphroditic, protandrous flowers and functionally staminate flowers, and bearing 2-6 paired (or occasionally scattered to irregularly grouped), scarious, adaxially concave, deltate-triangular bractlets, each 0.5-1 mm long, the pedicels slender, 1.5-7 mm long. Calyx broadly cupuliform, 0.4-1.2mm high, the rim undulate and irregularly 5-8- denticulate, hyaline. Corolla elliptic to subglobose in bud, the petals (4-)5-7(-9), spreading to recurved at anthesis, ovate-lanceolate, 1.6-2.5 mm long (somewhat smaller in staminate flowers). Stamens as many as petals, the filaments 0.5-1 mm long, the anthers cream white, 1.2-. 1.8mm long. Ovary (2-)3-5-carpellate, obtriangular to broadly uniform, 0.5-1 mm high at anthesis; styles as many as carpels, free nearly to the base, 0.4-0.6 mm long and erect at anthesis, spreading and expanding slightly in fruit to 0.8 mm long. Mature fruit infrequently seen, subglobose to depressed-globose (somewhat triangular to quadrangular when 3- or 4-carpellate), 4-6mm high, ribbed when dry."</p>

402	Allelopathic	
	Source(s)	Notes
	<p>Ashmawy, N. S., Gad, H. A., Ashour, M. L., El-Ahmady, S. H., & Singab, A. N. B. (2020). The genus <i>Polyscias</i> (Araliaceae): A phytochemical and biological review. Journal of Herbal Medicine, 23, 100377</p>	<p>[Unknown. Species may contain chemicals with antimicrobial properties] "Plants produce antimicrobial compounds as a defense mechanism against various microorganisms (Cowan, 1999). The release of these products is referred to as allelopathy, and many studies have been directed towards the isolation of these allelopathic compounds (Fukuyama et al., 2012). Among these compounds, polyacetylenes are found to be highly effective against different virulent microbial strains. Several studies have focused on the antimicrobial and antifungal activities of genus <i>Polyscias</i> in order to identify the compounds responsible for their effect."</p>

Qsn #	Question	Answer
403	Parasitic	n
	Source(s)	Notes
	Lowry, P. P. (1989). A revision of Araliaceae from Vanuatu. Bulletin of the Museum of Natural History, Adansonia, 11 (2), 117-155.	"Andromonoecious treelets. or small trees 2-6(-7) m tall." [Araliaceae. No evidence]

404	Unpalatable to grazing animals	
	Source(s)	Notes
	Stevens, A.M. (2004). Kamus Lengkap Indonesia Inggris. A Comprehensive Indonesian-English Dictionary. Ohio University Press, Athens, OH	[Unknown. Other species may be palatable. No other information on use of <i>P. nodosa</i> as a fodder plant was found] "jaranan: various species of plant used as fodder, <i>Crataeva nurvala</i> , <i>Polyscias nodosa</i> , <i>Hiptage benghalensis</i> ."

405	Toxic to animals	
	Source(s)	Notes
	Spoerke, D.G. & Smolinske, S.C. (1990). Toxicity of Houseplants. CRC Press, Boca Raton, FL	"The saponins are irritants that may cause oral and skin irritation. Polyacetylene compounds are primary irritants and sensitizers." [Potentially harmful if ingested by animals, but unknown if plants will attempt to browse foliage]
	PAWS Dog Daycare. (2023). Balfour Aralia. https://www.pawdogdaycare.com/toxic-and-non-toxic-plants/balfour-aralia . [Accessed 10 Jan 2023]	[Potentially] "Potent irritant; the cell sap has shown the ability to create redness, itching and/or blisters when it comes in contact with living tissue. Symptoms of ingestion include an immediate burning sensation in throat and mouth; possibly followed by redness, blisters, rash and obvious visible irritation of oral mucosa; excessive drooling, obvious pain or discomfort of the mouth, pawing at the mouth, hoarse or weak sounding vocalization; excessive desire to drink; gastrointestinal upset, vomiting, diarrhea, abdominal pain, potentially serious swelling of the face, mouth and throat is possible."

406	Host for recognized pests and pathogens	
	Source(s)	Notes
	Rojas-Sandoval, J. (2020). <i>Polyscias balfouriana</i> (Balfour aralia). CABI Compendium. https://doi.org/10.1079/cabicompendium.57624994 . [Accessed 10 Jan 2023]	"Host of (source-data mining): <i>Lasiodiplodia theobromae</i> (diplodia pod rot of cocoa)"
	Kwantlen Polytechnic University. (2023). <i>Polyscias balfouriana</i> . School of Horticulture Plant Database. https://plantdatabase.kpu.ca/plant/plantDetail/1190 . [Accessed 10 Jan 2023]	"Pest Susceptibility: Mites, Nematodes, Specific Pests: mealybugs"

Qsn #	Question	Answer
	Mehl, J., Wingfield, M. J., Roux, J., & Slippers, B. (2017). Invasive everywhere? Phylogeographic analysis of the globally distributed tree pathogen <i>Lasiodiplodia theobromae</i> . <i>Forests</i> , 8(5), 145	[Broad host range] "Abstract: Fungi in the Botryosphaeriaceae are important plant pathogens that persist endophytically in infected plant hosts. <i>Lasiodiplodia theobromae</i> is a prominent species in this family that infects numerous plants in tropical and subtropical areas. We characterized a collection of 255 isolates of <i>L. theobromae</i> from 52 plants and from many parts of the world to determine the global genetic structure and a possible origin of the fungus using sequence data from four nuclear loci. One to two dominant haplotypes emerged across all loci, none of which could be associated with geography or host; and no other population structure or subdivision was observed. The data also did not reveal a clear region of origin of the fungus. This global collection of <i>L. theobromae</i> thus appears to constitute a highly connected population. The most likely explanation for this is the human-mediated movement of plant material infected by this fungus over a long period of time. These data, together with related studies on other Botryosphaeriaceae, highlight the inability of quarantine systems to reduce the spread of pathogens with a prolonged latent phase."

407	Causes allergies or is otherwise toxic to humans	
	Source(s)	Notes
	NC State Extension. (2023). <i>Polyscias balfouriana</i> . https://plants.ces.ncsu.edu/plants/polyscias-balfouriana/ . [Accessed 10 Jan 2023]	"Poison Severity: Low Poison Symptoms: Skin irritation Poison Toxic Principle: Unknown Causes Contact Dermatitis: Yes"
	Spoerke, D.G. & Smolinske, S.C. (1990). Toxicity of Houseplants. CRC Press, Boca Raton, FL	"Toxic Class. All parts of these plants contain saponins." ... "Specific Mechanism. The saponins are irritants that may cause oral and skin irritation. Polyacetylene compounds are primary irritants and sensitizers." ... "Potential Manifestations. Skin- Brushing against the plant may produce skin irritation and dermatitis. Handling cuttings from the plant may produce a more acute form of dermatitis in landscape workers who are exposed to the plant juices. Ingestion- Chewing a leaf may produce oral edema and rash around the mouth."

408	Creates a fire hazard in natural ecosystems	n
	Source(s)	Notes
	Whistler, W.A. (2000). <i>Tropical Ornamentals: A Guide</i> . Timber Press, Portland, OR	[No evidence of fire risk documented in peer reviewed literature] "Polyscias scutellaria is a panax that lacks a well-known common name. It is probably native to the forests of the Solomon Islands and Vanuatu, the former New Hebrides, but cultivars derived from the wild plant are widely grown, often as hedge plants." [Synonyms, <i>Polyscias balfouriana</i>]

409	Is a shade tolerant plant at some stage of its life cycle	
	Source(s)	Notes
	NC State Extension. (2023). <i>Polyscias balfouriana</i> . https://plants.ces.ncsu.edu/plants/polyscias-balfouriana/ . [Accessed 10 Jan 2023]	"Light: Full sun (6 or more hours of direct sunlight a day) Partial Shade (Direct sunlight only part of the day, 2-6 hours)"

Qsn #	Question	Answer
	Rojas-Sandoval, J. (2020). <i>Polyscias balfouriana</i> (Balfour aralia). CABI Compendium. https://doi.org/10.1079/cabicompendium.57624994 . [Accessed 10 Jan 2023]	" <i>Polyscias balfouriana</i> prefers to grow in moist and wet habitats in tropical climates with temperatures between 18° and 27°C. It grows best in open areas with full sunlight, but also tolerates partial shade (Whistler, 2000; North Carolina State Extension, 2020)."
	Whistler, W.A. (2000). <i>Tropical Ornamentals: A Guide</i> . Timber Press, Portland, OR	"The plant is adaptable to most soils, preferably in partially shaded or sunny places."

410	Tolerates a wide range of soil conditions (or limestone conditions if not a volcanic island)	y
	Source(s)	Notes
	Whistler, W.A. (2000). <i>Tropical Ornamentals: A Guide</i> . Timber Press, Portland, OR	"adaptable to most soils"
	Rojas-Sandoval, J. (2020). <i>Polyscias balfouriana</i> (Balfour aralia). CABI Compendium. https://doi.org/10.1079/cabicompendium.57624994 . [Accessed 10 Jan 2023]	"Soil Tolerances Soil texture > light Soil texture > medium Soil reaction > acid Soil reaction > neutral"

411	Climbing or smothering growth habit	n
	Source(s)	Notes
	Lowry, P. P. (1989). A revision of Araliaceae from Vanuatu. <i>Bulletin of the Museum of Natural History, Adansonia</i> , 11 (2), 117-155.	"Andromonoecious treelets. or small trees 2-6(-7) m tall."

412	Forms dense thickets	n
	Source(s)	Notes
	Rojas-Sandoval, J. (2020). <i>Polyscias balfouriana</i> (Balfour aralia). CABI Compendium. https://doi.org/10.1079/cabicompendium.57624994 . [Accessed 10 Jan 2023]	[No evidence in documented in the invasive species compendium or found in peer reviewed literature] " <i>Polyscias balfouriana</i> is a shrub that is cultivated as a landscape ornamental and indoor potted plant. It can be found cultivated and naturalized in moist habitats and lowlands. Currently, it is listed as invasive only in Cuba, with no further information about economic and/or ecological impact provided."
	Staples, G.W. & Herbst, D.R. (2005). <i>A Tropical Garden Flora - Plants Cultivated in the Hawaiian Islands and Other Tropical Places</i> . Bishop Museum Press, Honolulu, HI	[No evidence] "apparently native to Vanuatu and the Santa Cruz Islands and grown elsewhere in the Pacific"

501	Aquatic	n
	Source(s)	Notes
	Lowry, P. P. (1989). A revision of Araliaceae from Vanuatu. <i>Bulletin of the Museum of Natural History, Adansonia</i> , 11 (2), 117-155.	[Terrestrial] "Andromonoecious treelets. or small trees 2-6(-7) m tall."

502	Grass	n
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Qsn #	Question	Answer
	Source(s)	Notes
	USDA, Agricultural Research Service, National Plant Germplasm System. (2022). Germplasm Resources Information Network (GRIN-Taxonomy). National Germplasm Resources Laboratory, Beltsville, Maryland. https://npgsweb.ars-grin.gov/ . [Accessed 6 Jan 2023]	"Genus: Polyscias Family: Araliaceae Subfamily: Aralioideae"

503	Nitrogen fixing woody plant	n
	Source(s)	Notes
	USDA, Agricultural Research Service, National Plant Germplasm System. (2022). Germplasm Resources Information Network (GRIN-Taxonomy). National Germplasm Resources Laboratory, Beltsville, Maryland. https://npgsweb.ars-grin.gov/ . [Accessed 6 Jan 2023]	"Genus: Polyscias Family: Araliaceae Subfamily: Aralioideae"

504	Geophyte (herbaceous with underground storage organs -- bulbs, corms, or tubers)	n
	Source(s)	Notes
	Lowry, P. P. (1989). A revision of Araliaceae from Vanuatu. Bulletin of the Museum of Natural History, Adansonia, 11 (2), 117-155.	"Andromonoecious treelets. or small trees 2-6(-7) m tall."

601	Evidence of substantial reproductive failure in native habitat	n
	Source(s)	Notes
	Lowry, P. P. (1989). A revision of Araliaceae from Vanuatu. Bulletin of the Museum of Natural History, Adansonia, 11 (2), 117-155.	"The native range of Polyscias scutellaria is not clear, although SMITH & STONE (1968) suggest that it may be indigenous to Vanuatu and the Solomon Islands, pointing out that the species occurs there in forests from near sea level to about 300 m. Certainly in other areas this species is almost always encountered near human habitations, most often in the form of cultivated hedges that are trimmed more-or-less regularly, which results in infrequent flowering."

602	Produces viable seed	y
	Source(s)	Notes
	Rojas-Sandoval, J. (2020). Polyscias balfouriana (Balfour aralia). CABI Compendium. https://doi.org/10.1079/cabicompendium.57624994 . [Accessed 10 Jan 2023]	"Polyscias balfouriana spreads by seed and vegetatively by stem cuttings. In cultivation, it rarely produces flowers and/or fruits (Hume, 1951)."
	Kwantlen Polytechnic University. (2023). Polyscias balfouriana. School of Horticulture Plant Database. https://plantdatabase.kpu.ca/plant/plantDetail/1190 . [Accessed 10 Jan 2023]	"Propagation: Seed"

603	Hybridizes naturally	
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Qsn #	Question	Answer
	Source(s)	Notes
	WRA Specialist. (2023). Personal Communication	Unknown. No evidence found

604	Self-compatible or apomictic	
	Source(s)	Notes
	Lowry, P. P. (1989). A revision of Araliaceae from Vanuatu. Bulletin of the Museum of Natural History, Adansonia, 11 (2), 117-155.	"Andromonoecious treelets or small trees" [Male and hermaphrodite flowers are on the same plant. Unknown if plants are capable of selfing]

605	Requires specialist pollinators	n
	Source(s)	Notes
	Kadereit J., & Bittrich V. (eds). (2018). The Families and Genera of Vascular Plants, Volume XV. Flowering Plants Eudicots Apiales, Gentianales (except Rubiaceae). Springer, Cham, Switzerland	"Pollination in Araliaceae appears to be effected primarily by insects, but few species have been studied in great detail. Pollinators are attracted by nectar (often copious, produced by the floral nectary disc) and presumably pollen."
	Lowry, P. P. (1989). A revision of Araliaceae from Vanuatu. Bulletin of the Museum of Natural History, Adansonia, 11 (2), 117-155.	[No evidence] "Inflorescence terminal, erect, glabrous throughout, the scarious bractlets early caducous, the primary axis stout, often lenticellate, 30-80 (-100)cm long, the secondary axes ca. 15-30, grouped in 2-4 verticils (occasionally opposite or irregularly scattered below), 15-50cm long, tertiary axes (peduncles) ca. 7-30 per secondary axis, grouped in 4-6 often somewhat irregular verticils, each 2-18 mm long at maturity, with a terminal umbellule of (5-)8-25 hermaphroditic, protandrous flowers and functionally staminate flowers, and bearing 2-6 paired (or occasionally scattered to irregularly grouped), scarious, adaxially concave, deltate-triangular bractlets, each 0.5-1 mm long, the pedicels slender, 1.5-7 mm long. Calyx broadly cupuliform, 0.4-1.2mm high, the rim undulate and irregularly 5-8-denticulate, hyaline. Corolla elliptic to subglobose in bud, the petals (4-)5-7(-9), spreading to recurved at anthesis, ovate-lanceolate, 1.6-2.5 mm long (somewhat smaller in staminate flowers)."

606	Reproduction by vegetative fragmentation	n
	Source(s)	Notes
	Rojas-Sandoval, J. (2020). <i>Polyscias balfouriana</i> (Balfour aralia). CABI Compendium. https://doi.org/10.1079/cabicompendium.57624994 . [Accessed 10 Jan 2023]	" <i>Polyscias balfouriana</i> spreads by seed and vegetatively by stem cuttings." [Not documented as spreading vegetatively through natural means]

Qsn #	Question	Answer
607	Minimum generative time (years)	>3
	Source(s)	Notes
	Candide. (2023). Balfour Aralia <i>Polyscias scutellaria</i> 'Balfourii'. https://candide.com/ZA/plants/c22a1058-5911-4d5a-8bdd-db133d42a7d8 . [Accessed 10 Jan 2023]	"10 years to reach maturity" [Unknown if this refers to fruiting, but maturity presumably reached after 3+ years]
	NC State Extension. (2023). <i>Polyscias balfouriana</i> . https://plants.ces.ncsu.edu/plants/polyscias-balfouriana/ . [Accessed 10 Jan 2023]	"Growth Rate: Slow"

701	Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)	n
	Source(s)	Notes
	Lowry, P. P. (1989). A revision of Araliaceae from Vanuatu. <i>Bulletin of the Museum of Natural History, Adansonia</i> , 11 (2), 117-155.	"Mature fruit infrequently seen, subglobose to depressed-globose (somewhat triangular to quadrangular when 3- or 4-carpellate), 4-6mm high, ribbed when dry." [Unlikely. Rarely seen, and not adapted for external attachment]

702	Propagules dispersed intentionally by people	y
	Source(s)	Notes
	Rojas-Sandoval, J. (2020). <i>Polyscias balfouriana</i> (Balfour aralia). <i>CABI Compendium</i> . https://doi.org/10.1079/cabicompendium.57624994 . [Accessed 6 Jan 2023]	" <i>Polyscias balfouriana</i> is a shrub that is cultivated as a landscape ornamental and indoor potted plant. It can be found cultivated and naturalized in moist habitats and lowlands."
	Vermeulen, N. & Rosenfeld, R. (1998). <i>Encyclopedia of House Plants</i> . 2nd Print. Rebo Productions, Lisse, Netherlands	"The ornamental plant which is sold under this name is officially called <i>Polyscias scutellaria</i> 'Balfourii'. It is a popular house plant which is usually sold as a rooted stem cutting. The species originated in the Far East but these days it is a common plant in the tropics, where <i>Polyscias</i> is used as a hedge."

703	Propagules likely to disperse as a produce contaminant	n
	Source(s)	Notes
	Lowry, P. P. (1989). A revision of Araliaceae from Vanuatu. <i>Bulletin of the Museum of Natural History, Adansonia</i> , 11 (2), 117-155.	"Mature fruit infrequently seen, subglobose to depressed-globose (somewhat triangular to quadrangular when 3- or 4-carpellate), 4-6mm high, ribbed when dry." [No evidence. Fruit rarely produced]

704	Propagules adapted to wind dispersal	n
	Source(s)	Notes
	Lowry, P. P. (1989). A revision of Araliaceae from Vanuatu. <i>Bulletin of the Museum of Natural History, Adansonia</i> , 11 (2), 117-155.	"Mature fruit infrequently seen, subglobose to depressed-globose (somewhat triangular to quadrangular when 3- or 4- carpellate), 4-6mm high, ribbed when dry."

705	Propagules water dispersed	n
	Source(s)	Notes

Qsn #	Question	Answer
	Lowry, P. P. (1989). A revision of Araliaceae from Vanuatu. Bulletin of the Museum of Natural History, Adansonia, 11 (2), 117-155.	"Mature fruit infrequently seen, subglobose to depressed-globose (somewhat triangular to quadrangular when 3- or 4- carpellate), 4-6mm high, ribbed when dry." [Buoyancy unknown, but not described as occurring primarily in riparian habitats]

706	Propagules bird dispersed	y
	Source(s)	Notes
	Lowry, P. P. (1989). A revision of Araliaceae from Vanuatu. Bulletin of the Museum of Natural History, Adansonia, 11 (2), 117-155.	"Mature fruit infrequently seen, subglobose to depressed-globose (somewhat triangular to quadrangular when 3- or 4-carpellate), 4-6mm high, ribbed when dry." [Presumably yes, although may be irrelevant if fruit are rarely produced]
	Kadereit J., & Bittrich V. (eds). (2018). The Families and Genera of Vascular Plants, Volume XV. Flowering Plants Eudicots Apiales, Gentianales (except Rubiaceae). Springer, Cham, Switzerland	"The fleshy drupes that characterize most species of Araliaceae suggest vertebrate dispersal of the pyrenes."

707	Propagules dispersed by other animals (externally)	n
	Source(s)	Notes
	Lowry, P. P. (1989). A revision of Araliaceae from Vanuatu. Bulletin of the Museum of Natural History, Adansonia, 11 (2), 117-155.	"Mature fruit infrequently seen, subglobose to depressed-globose (somewhat triangular to quadrangular when 3- or 4-carpellate), 4-6mm high, ribbed when dry." [No evidence. No means of external attachment]

708	Propagules survive passage through the gut	y
	Source(s)	Notes
	Lowry, P. P. (1989). A revision of Araliaceae from Vanuatu. Bulletin of the Museum of Natural History, Adansonia, 11 (2), 117-155.	"Mature fruit infrequently seen, subglobose to depressed-globose (somewhat triangular to quadrangular when 3- or 4-carpellate), 4-6mm high, ribbed when dry." [Presumably Yes]
	Kadereit J., & Bittrich V. (eds). (2018). The Families and Genera of Vascular Plants, Volume XV. Flowering Plants Eudicots Apiales, Gentianales (except Rubiaceae). Springer, Cham, Switzerland	[Presumably Yes] "The fleshy drupes that characterize most species of Araliaceae suggest vertebrate dispersal of the pyrenes. In species with small fruits, the disperser likely ingests the entire drupe, allowing some of the pyrenes to pass through undigested, as has been demonstrated in <i>Hedera helix</i> for birds (especially thrushes, families Muscicapidae and Turdidae) and possibly mammals (deer and martens) (Metcalf 2005). Alternatively, when the fruits are quite large, it appears that dispersers may feed on the fleshy mesocarp, discarding the hardened pyrenes."

Qsn #	Question	Answer
801	Prolific seed production (>1000/m²)	n
	Source(s)	Notes
	Whistler, W.A. (2000). <i>Tropical Ornamentals: A Guide</i> . Timber Press, Portland, OR	"Fruit a subglobose drupe. Propagate by cuttings." [Unlikely. No description of seeds]
	Lowry, P. P. (1989). A revision of Araliaceae from Vanuatu. <i>Bulletin of the Museum of Natural History, Adansonia</i> , 11 (2), 117-155.	"Mature fruit infrequently seen, subglobose to depressed-globose (somewhat triangular to quadrangular when 3- or 4-carpellate), 4-6mm high, ribbed when dry." [No evidence. Unlikely if mature fruit rarely produced]
802	Evidence that a persistent propagule bank is formed (>1 yr)	
	Source(s)	Notes
	Royal Botanic Gardens Kew. (2022) Seed Information Database (SID). Version 7.1. http://data.kew.org/sid/ . [Accessed 10 Jan 2023]	Unknown. Several <i>Polyscias</i> species exhibit orthodox storage behavior
803	Well controlled by herbicides	
	Source(s)	Notes
	WRA Specialist. (2023). 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
	Evergreen Seeds. (2023). <i>Balfour Aralia: Successfully Grow the Dinner Plate Plant at Home</i> . https://www.evergreenseeds.com/balfour-aralia . [Accessed 10 Jan 2023]	"Pruning Balfour aralia is an important aspect of plant care. Cut off one to two inches of the stem tips every other month to promote growth. Pruning should be especially carried out during the fall."
	WRA Specialist. (2023). Personal Communication	Tolerates regular pruning. May indicate persistence of plant and ability to resprout if cut without subsequent herbicide treatment
805	Effective natural enemies present locally (e.g. introduced biocontrol agents)	
	Source(s)	Notes
	Rojas-Sandoval, J. (2020). <i>Polyscias balfouriana</i> (Balfour aralia). <i>CABI Compendium</i> . https://doi.org/10.1079/cabicompendium.57624994 . [Accessed 10 Jan 2023]	" <i>Lasiodiplodia theobromae</i> was identified as causing shoot blight in <i>P. balfouriana</i> in China (Li et al., 2015). <i>Fusarium</i> wilt caused by <i>Fusarium oxysporum</i> has been reported affecting <i>P. balfouriana</i> (Dissanayake et al., 2012)."

Summary of Risk Traits:

High Risk / Undesirable Traits

- Grows and could spread in regions with tropical climates.
- Reported to be naturalized and possibly invasive in Cuba (no evidence from the Hawaiian Islands to date)
- Contact with leaves may cause dermatitis, and plants could possibly be toxic to animals.
- Tolerates many soil types.
- Reproduces by seeds and vegetatively by cuttings (seed set may be limited in cultivation)
- Seeds, if produced, may be dispersed by birds and other frugivorous animals.
- Tolerates regular pruning. May resprout after cutting, making mechanical control more labor intensive and possible ineffective.

Low Risk Traits

- A commonly cultivated plant. Despite reports of invasiveness in Cuba, no negative impacts have been documented.
- Unarmed (no spines, thorns, or burrs)
- Fruit production and seed set in cultivation may be limited, and possibly absent.
- Limited or absent seed production reduces risk of accidental or long-distance dispersal.