TAXON: Ficus platypoda (Miq.) A. Cunn. ex Miq.

Taxon: Ficus platypoda (Miq.) A. Cunn. ex Miq. Family: Moraceae

Common Name(s): desert fig Synonym(s): Ficus platypoda var. platypoda (Miq.)

rock fig Urostigma platypodum Miq.

SCORE: *10.0*

RATING: High Risk

small-leaf Moreton Bay fig

Assessor: Chuck Chimera Status: Assessor Approved End Date: 15 Nov 2019

WRA Score: 10.0 Designation: H(Hawai'i) Rating: High Risk

Keywords: Naturalized Tree, Terrestrial, Epiphytic, 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)	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	У
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	У
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)	У
305	Congeneric weed	n=0, y = 1*multiplier (see Appendix 2)	У
401	Produces spines, thorns or burrs	y=1, n=0	n
402	Allelopathic		
403	Parasitic	y=1, n=0	n
404	Unpalatable to grazing animals		
405	Toxic to animals	y=1, n=0	n
406	Host for recognized pests and pathogens		
407	Causes allergies or is otherwise toxic to humans	y=1, n=0	n
408	Creates a fire hazard in natural ecosystems	y=1, n=0	n
409	Is a shade tolerant plant at some stage of its life cycle	y=1, n=0	у

Creation Date: 15 Nov 2019 (Ficus platypoda (Miq.) A.
Cunn. ex Mia.)

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	у
411	Climbing or smothering growth habit	y=1, n=0	у
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	У
603	Hybridizes naturally		
604	Self-compatible or apomictic		
605	Requires specialist pollinators	y=-1, n=0	У
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)	γ=1, n=-1	n
702	Propagules dispersed intentionally by people	y=1, n=-1	У
703	Propagules likely to disperse as a produce contaminant		
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	У
707	Propagules dispersed by other animals (externally)	y=1, n=-1	n
708	Propagules survive passage through the gut	y=1, n=-1	У
801	Prolific seed production (>1000/m2)		
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)		

RATING: High Risk

Supporting Data:

Qsn #	Question	Answer
101	Is the species highly domesticated?	n
	Source(s)	Notes
	Chew, WL. (1989) Moraceae, Flora of Australia 3: 15-68	[No evidence of domestication] "The species is highly variable with considerable intergration between 5 varieties which are consequently hard to distinguish."
102	Has the species become naturalized where grown?	
	Source(s)	Notes
	WRA Specialist. (2019). Personal Communication	NA.
103	Does the species have weedy races?	
	Source(s)	Notes
	WRA Specialist. (2019). 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
	USDA, Agricultural Research Service, National Plant Germplasm System. (2019). Germplasm Resources Information Network (GRIN-Taxonomy). National Germplasm Resources Laboratory, Beltsville, Maryland. https://npgsweb.ars-grin.gov/. [Accessed 14 Nov 2019]	"Native Australasia AUSTRALIA: Australia [New South Wales (n.e.), Queensland, South Australia (n.w.), Western Australia (n. & c.), Northern Territory]"
202	Quality of climate match data	High
	Source(s)	Notes
	USDA, Agricultural Research Service, National Plant Germplasm System. (2019). Germplasm Resources Information Network (GRIN-Taxonomy). National Germplasm Resources Laboratory, Beltsville, Maryland.	

Qsn #	Question	Answer
203	Broad climate suitability (environmental versatility)	n
	Source(s)	Notes
	l ' '	"Endemic to Australia, occurs in WA, NT and eastwards into NEQ (restricted to the Gulf of Carpentaria region of Queensland). Altitudinal range not known but probably from near sea level to about 300 m. Grows in monsoon forest and dry scrub in rocky situations."
	Dave's Garden. (2019). Australian Rock Fig. Ficus platypoda. https://davesgarden.com/guides/pf/go/71113/. [Accessed 14 Nov 2019]	"Hardiness: USDA Zone 9b: to -3.8 °C (25 °F) USDA Zone 10a: to -1.1 °C (30 °F) USDA Zone 10b: to 1.7 °C (35 °F) USDA Zone 11: above 4.5 °C (40 °F)"

204	Native or naturalized in regions with tropical or subtropical climates	у
	Source(s)	Notes
	USDA, Agricultural Research Service, National Plant Germplasm System. (2019). Germplasm Resources Information Network (GRIN-Taxonomy). National Germplasm Resources Laboratory, Beltsville, Maryland. https://npgsweb.ars-grin.gov/. [Accessed 14 Nov 2019]	"Native Australasia AUSTRALIA: Australia [New South Wales (n.e.), Queensland, South Australia (n.w.), Western Australia (n. & c.), Northern Territory]"
	Wagner, W.L., Herbst, D.R.& Lorence, D.H. (2019). Flora of the Hawaiian Islands. Smithsonian Institution, Washington, D.C. http://botany.si.edu/. [Accessed 14 Nov 2019]	"Status: Naturalized

205	Does the species have a history of repeated introductions outside its natural range?	?
	Source(s)	Notes
	·	1,920 trees planted on Hawaii island in 1923 (1,750 in the Hilo Forest Reserve and 170 planted in the Kohala Forest Reserve)

301	Naturalized beyond native range	у
	Source(s)	Notes

302

Qsn #	Question	Answer
	Oppenheimer, Hank L. 2003. New plant records from Maui and Hawai'i Counties. Bishop Museum Occasional Papers. 73: 3-30	"Ficus cf. platypoda (A.Cunn. ex Miq.) New island record A.Cunn. ex Miq. First documented as a naturalized taxon in the Hawaiian Islands on Oʻahu and Maui (Oppenheimer & Bartlett 2000: 7), this banyan is also sparingly naturalized in the Kohala Mountains on Hawaiʻi. Examination of fruits collected revealed the pollinator wasp, Pleistodontes imperialis Saunders. Nishida (2002: 148) did not list this species from the island, and these specimens (in Bishop Museum) represent a new island record for this fig wasp. Wasps continued to emerge from the fruits for 10 days after collection. Most of the trees observed at this location were growing terrestrially and are likely the original forestry plantings, but a few were supported solely by prop roots, and probably first germinated on now dead and decayed Cibotium tree ferns. Material examined: HAWAIʻI: S. Kohala Dist, near ditch trail, 945 m, 28 Jul 2001, Oppenheimer H70131."
	Oppenheimer, H.L. & Bartlett, R.T. (2000). New plant records from Maui, Oʻahu, and the Hawaiʻi Islands. Bishop Museum Occasional Papers 64: 1-10	"Ficus cf. platypoda (A.Cunn. ex Miq.) New naturalized record; A.Cunn. ex Miq. Reidentification Nagata (1995: 12) first documented this species naturalized on Oʻahu as F. rubiginosa Desf. According to Berg (in Staples & Herbst, in press), F. rubiginosa, F. platypoda, and F obliqua form a species complex and may better be treated as subspecies or varieties. They all share the same pollinator, Pleistodontes imperialis Saunders, which was introduced to Hawaiʻi in 1922 (Wagner et al., 1999: 924), although Nishida (1994: 142) does not list this wasp from Maui. Berg distinguished all 3 taxa in cultivated voucher material from Hawaiʻi that he examined in 1986; his use of "cf." implies that Hawaiian material is comparable to, but not identical with, wild populations of F. platypoda. Nagataʻs voucher from Oʻahu in BISH was reidentified as F. cf. platypoda in 1990. As far as the West Maui specimens cited here, this taxon shares the same history of introduction and growth habit as F. macrophylla (see discussion above), although it occurs in larger numbers of individuals and is more widespread. Seedlings have also been observed on old wooden fenceposts in pastures, indicating probable dispersal by frugivorous birds. Material examined: OʻAHU: Koʻolauloa District, limestone ridge in hills above Punamanö, 46 m, 27 Dec 1988, Nagata 3946. MAUI: West Maui, Lahaina District, Honolua Valley, west side of valley near Puʻu Kaʻeo, 10 m tall tree originally an epiphyte on Acacia koa, now rooted terrestrially, 457 m, 21 Aug 1998, Oppenheimer H89807; Mokupeʻa Gulch, on A. koa, 427 m, 19 May 1999, Oppenheimer H89807; Mokupeʻa Gulch, on A. koa, 427 m, 19 May 1999, Oppenheimer H89911; East Maui, Häna District, Koʻolau F.R., vicinity of Kapä'ula Gulch, starting as an epiphyte on Psychotria mariniana, now rooted terrestrially, 378 m, 22 Aug 1999, Oppenheimer H89930; on Metrosideros polymorpha var. glaberrima, same date and location, Oppenheimer H89931."
	Wagner, W.L., Herbst, D.R., Khan, N.& Flynn, T. 2012. Hawaiian Vascular Plant Updates: A Supplement to the Manual of the Flowering Plants of Hawai`i & Hawai`i's Ferns & Fern Allies. Smithsonian Institution and NTBG, Washington, DV & Lihue, HI	"Ficus platypoda (A. Cunn. ex Miq.) A. Cunn. ex Miq newly naturalized (O`ahu, Maui); reidentification; new island (Hawai`i)"

SCORE: *10.0*

Cunn. ex Mia.)

Garden/amenity/disturbance weed

Qsn #	Question	Answer
	Source(s)	Notes
	Oppenheimer, H.L. & Bartlett, R.T. (2000). New plant records from Maui, Oʻahu, and the Hawaiʻi Islands. Bishop Museum Occasional Papers 64: 1-10	[An environmental weed. Able to establish on, and potentially strangle, native forest trees] "Material examined: O'AHU: Ko'olauloa District, limestone ridge in hills above Punamanö, 46 m, 27 Dec 1988, Nagata 3946. MAUI: West Maui, Lahaina District, Honolua Valley, west side of valley near Pu'u Ka'eo, 10 m tall tree originally an epiphyte on Acacia koa, now rooted terrestrially, 457 m, 21 Aug 1998, Oppenheimer H89807; Mokupe'a Gulch, on A. koa, 427 m, 19 May 1999, Oppenheimer H59911; East Maui, Häna District, Ko'olau F.R., vicinity of Kapä'ula Gulch, starting as an epiphyte on Psychotria mariniana, now rooted terrestrially, 378 m, 22 Aug 1999, Oppenheimer H89930; on Metrosideros polymorpha var. glaberrima same date and location, Oppenheimer H89931."
	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	у
	Source(s)	Notes
	Oppenheimer, H.L. & Bartlett, R.T. (2000). New plant records from Maui, Oʻahu, and the Hawaiʻi Islands. Bishop Museum Occasional Papers 64: 1-10	[An environmental weed. Able to establish on, and potentially strangle, native forest trees] "Material examined: O'AHU: Ko'olauloa District, limestone ridge in hills above Punamanö, 46 m, 27 Dec 1988, Nagata 3946. MAUI: West Maui, Lahaina District, Honolua Valley, west side of valley near Pu'u Ka'eo, 10 m tall tree originally an epiphyte on Acacia koa, now rooted terrestrially, 457 m, 21 Aug 1998, Oppenheimer H89807; Mokupe'a Gulch, on A. koa, 427 m, 19 May 1999, Oppenheimer H59911; East Maui, Häna District, Ko'olau F.R., vicinity of Kapä'ula Gulch, starting as an epiphyte on Psychotria mariniana, now rooted terrestrially, 378 m, 22 Aug 1999, Oppenheimer H89930; on Metrosideros polymorpha var. glaberrima, same date and location, Oppenheimer H89931."
	Oppenheimer, Hank L. 2003. New plant records from Maui and Hawai'i Counties. Bishop Museum Occasional Papers. 73: 3-30	[May establish on and eventually strangle native tree ferns] "this banyan is also sparingly naturalized in the Kohala Mountains on Hawai'i." "Most of the trees observed at this location were growing terrestrially and are likely the original forestry plantings, but a few were supported solely by prop roots, and probably first germinated on now dead and decayed Cibotium tree ferns."

305	Congeneric weed	у
	Source(s)	Notes

401

404

n

Qsn #	Question	Answer
	Loope, L.L., Nagata, R.J. & Medeiros, A.C. 1992. Alien plants in Haleakala National Park Pp. 551-576 in Stone et al (eds) Alien plant invasions in native ecosystems of Hawaii. Coop. Nat. Park Resources Studies Unit, University of Hawaii, Honolulu, HI	"Chinese banyan, Ficus microcarpa. Chinese banyan is a strangling, aggressive invader on rocky walls of low-elevation stream courses and sea cliffs in lower Kipahulu. The several dozen known established plants present in the Park should be removed as soon as possible in order to prevent this species from taking over these habitats."
	Motooka, P., Castro, L., Nelson, D., Nagai, G. & Ching,L. 2003. Weeds of Hawaii's Pastures and Natural Areas: An Identification and Management Guide. CTAHR, UH Manoa, Honolulu, HI	"Environmental impact: Besides shading with its broad canopy, it is a threat to host plants. Banyan roots are very destructive to infrastructures: pavement, home foundations, irrigation ditches."
	Weber, E. 2017. Invasive Plant Species of the World, 2nd Edition: A Reference Guide to Environmental Weeds. CABI Publishing, Wallingford, UK	"Ficus carica The fast-growing tree has often escaped cultivation and has become invasive in several regions. The tree forms dense thickets crowding out native trees and understorey shrubs in river accompanying forests (Bossard et al., 2000). The dense foliage casts heavy shade, reducing growth of native plants under the crown." "Ficus microcarpa Little is known about direct ecological effects of colonized host trees or invaded communities. The tree forms impenetrable thickets due to the numerous hanging aerial roots that likely shade out other plants. If laurel fig seedlings grow as epiphytes on trees they send aerial roots to the ground. This may affect the host tree by competing for light and nutrients and because of the constricting roots."

SCORE: 10.0

	•	
	Source(s)	Notes
	Chew, WL. (1989) Moraceae, Flora of Australia 3: 15-68	[No evidence] "Spreading shrub or tree to 6 m. Leaves alternate, broadly ovate to elliptic, acute, the base cuneate, rounded to cordate; lamina 6–10 cm long, 1–7 cm wide, usually glabrous; lateral veins 10–15 pairs, prominent to indistinct; petiole usually dorsiventrally flattened, 1–4 cm long; stipules small, soon glabrous. Figs globular, 1–1.5 cm diam., glabrous; ostiole often triradiate, slightly umbonate, diam. variable; basal bracts 3, small, soon glabrous; peduncle c. 1 cm long, glabrous to pubescent. Male and female flowers interspersed; tepals 3 or 4. Female lowers sessile. Male flowers shortly pedicellate to subsessile."
402	Allelopathic	
	Source(s)	Notes
	WRA Specialist. (2019). Personal Communication	Unknown. No evidence found
403	Parasitic	n
	Source(s)	Notes
	Chew, WL. (1989) Moraceae, Flora of Australia 3: 15-68	"Spreading shrub or tree to 6 m." [Moraceae. No evidence]

Unpalatable to grazing animals

Produces spines, thorns or burrs

Qsn #	Question	Answer
	Source(s)	Notes
	Gardeners and Graziers. (2019). Desert Rock Native Fig Tree Seedlings. https://www.gardenersandgraziers.com.au/native-fig- trees-for-sale. [Accessed 15 Nov 2019]	"Predators: Sheep would eat shoots we suspect. Other grazers unknown."
	Laurie, V. (2010). The Kimberley: Australia's Last Great Wilderness. UWA Publishing, Crawley, Western Australia	[Palatable to possums] "Few visitors will see a Rock Ringtail Possum (Petropseudes dahli), which sleeps in well-protected crevices by day and climbs Rock Figs (Ficus platypoda) at night to feed on their thick, waxy leaves and fruits."
	Maiden, J. H. (1897). Some Native Australian Fodder plants (Other Than Grasses and Salt-bushes). The Agricultural Gazette of New South Wales Vol. VIII, Part 10: 685-697	[Unknown. Foliage of other Ficus species is palatable] "Ficus glomerata The leaves are used in India for cattle and elephant fodder." "Ficus macrophylla, Desf. " Moreton Bay Fig." This is an excellent fodder plant, cattle and horses eating the leaves, young twigs, and figs with great zest."
	Brim-Box, J., Guest, T., Barker, P., Jambrecina, M., Moran, S., & Kulitja, R. (2010). Camel usage and impacts at a permanent spring in central Australia: a case study. The Rangeland Journal, 32(1), 55-62	[Unknown] "Of the two found at X that were not evaluated for their palatability, one was the non-native milk thistle (Silybum marianum) and the other was the rock fig (Ficus platypoda)"

405	Toxic to animals	n
	Source(s)	Notes
	Tropical Plants Database, Ken Fern. (2019). Ficus platypoda. http://tropical.theferns.info/viewtropical.php?id=Ficus+platypoda. [Accessed 15 Nov 2019]	"Known Hazards - None known"
	Atlas of Living Australia. (2019). Ficus platypoda. https://bie.ala.org.au. [Accessed 15 Nov 2019]	[No evidence] "Uses - The fruit can be eaten when soft and ripe.[7] Horticulturally, it is suitable for use in bonsai; its tendency to form a wide trunk base and small leaves being attractive features.[8] Specimens have been exhibited in at the 5th Annual Exhibition of Australian Native Plants as Bonsai in Canberra in November 2007.[9]
	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
	WRA Specialist. (2019). Personal Communication	Unknown

407	Causes allergies or is otherwise toxic to humans	n
	Source(s)	Notes
	Tropical Plants Database, Ken Fern. (2019). Ficus platypoda. http://tropical.theferns.info/viewtropical.php?id=Ficus+platypoda. [Accessed 15 Nov 2019]	"Known Hazards - None known"

Qsn #	Question	Answer
	Atlas of Living Australia. (2019). Ficus platypoda. https://bie.ala.org.au. [Accessed 15 Nov 2019]	[No evidence] "Uses - The fruit can be eaten when soft and ripe.[7] Horticulturally, it is suitable for use in bonsai; its tendency to form a wide trunk base and small leaves being attractive features.[8] Specimens have been exhibited in at the 5th Annual Exhibition of Australian Native Plants as Bonsai in Canberra in November 2007.[9]
	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
	Griffin, G. F., Price, N. F., & Portlock, H. F. (1983). Wildfires in the central Australian rangelands, 1970-1980. Journal of Environmental Management, 17(4), 311-323	[No evidence. Grows in areas protected from fire] "Fire-sensitive trees and shrubs, such as the pine (Callitris columellaris F. Muell.) and fig (Ficus platypoda (Miq.) A. Cunn. ex Miq.) grow in protected habitats along cliff edges, boulder-strewn areas and sheltered gullies."

409	Is a shade tolerant plant at some stage of its life cycle	у
	Source(s)	Notes
	Paten Park Native Nursery. (2019). Ficus platypoda "Rock Fig". https://ppnn.org.au/plantlist/ficus-platypoda/. [Accessed 15 Nov 2019]	"Aspect: Full Shade / Filtered Sun"

410	Tolerates a wide range of soil conditions (or limestone conditions if not a volcanic island)	у
	Source(s)	Notes
	Western Australian Herbarium (1998–2019). FloraBase—the Western Australian Flora. Department of Parks and Wildlife. https://florabase.dpaw.wa.gov.au/. [Accessed 14 Nov 2019]	"Sand, alluvium, loam, limestone, sandstone, granite. Cliffs, hills, screes, uplands, granite rock pockets."

411	Climbing or smothering growth habit	У
	Source(s)	Notes
	CSIRO. (2010). Australian Tropical Rainforest Plants Edition 6 - Ficus platypoda. http://keys.trin.org.au/. [Accessed 14 Nov 2019]	"A strangling fig or growing over boulders."
		[May start out epiphytically and kill host tree] "Most of the trees observed at this location were growing terrestrially and are likely the original forestry plantings, but a few were supported solely by prop roots, and probably first germinated on now dead and decayed Cibotium tree ferns."

Qsn #	Question	Answer
	Oppenheimer, H.L. & Bartlett, R.T. (2000). New plant records from Maui, Oʻahu, and the Hawaiʻi Islands. Bishop Museum Occasional Papers 64: 1-10	[May start out growing epiphytically on trees] "Material examined: O'AHU: Ko'olauloa District, limestone ridge in hills above Punamanö, 46 m, 27 Dec 1988, Nagata 3946. MAUI: West Maui, Lahaina District, Honolua Valley, west side of valley near Pu'u Ka'eo, 10 m tall tree originally an epiphyte on Acacia koa, now rooted terrestrially, 457 m, 21 Aug 1998, Oppenheimer H89807; Mokupe'a Gulch, on A. koa, 427 m, 19 May 1999, Oppenheimer H59911; East Maui, Häna District, Ko'olau F.R., vicinity of Kapä'ula Gulch, starting as an epiphyte on Psychotria mariniana, now rooted terrestrially, 378 m, 22 Aug 1999, Oppenheimer H89930; on Metrosideros polymorpha var. glaberrima, same date and location, Oppenheimer H89931."

Forms dense thickets	n
Source(s)	Notes
Oppenheimer, Hank L. 2003. New plant records from Maui and Hawai'i Counties. Bishop Museum Occasional Papers. 73: 3-30	[No evidence] "First documented as a naturalized taxon in the Hawaiian Islands on O'ahu and Maui (Oppenheimer & Bartlett 2000: 7), this banyan is also sparingly naturalized in the Kohala Mountains on Hawai'i. Examination of fruits collected revealed the pollinator wasp, Pleistodontes imperialis Saunders. Nishida (2002: 148) did not list this species from the island, and these specimens (in Bishop Museum) represent a new island record for this fig wasp. Wasps continued to emerge from the fruits for 10 days after collection. Most of the trees observed at this location were growing terrestrially and are likely the original forestry plantings, but a few were supported solely by prop roots"
Oppenheimer, H.L. & Bartlett, R.T. (2000). New plant records from Maui, Oʻahu, and the Hawaiʻi Islands. Bishop Museum Occasional Papers 64: 1-10	[No evidence] "Material examined: O'AHU: Ko'olauloa District, limestone ridge in hills above Punamanö, 46 m, 27 Dec 1988, Nagata 3946. MAUI: West Maui, Lahaina District, Honolua Valley, west side of valley near Pu'u Ka'eo, 10 m tall tree originally an epiphyte on Acacia koa, now rooted terrestrially, 457 m, 21 Aug 1998, Oppenheimer H89807; Mokupe'a Gulch, on A. koa, 427 m, 19 May 1999, Oppenheimer H59911; East Maui, Häna District, Ko'olau F.R., vicinity of Kapä'ula Gulch, starting as an epiphyte on Psychotria mariniana, now rooted terrestrially, 378 m, 22 Aug 1999, Oppenheimer H89930; on Metrosideros polymorpha var. glaberrima, same date and location, Oppenheimer H89931."
Western Australian Herbarium (1998–2019). FloraBase—the Western Australian Flora. Department of Parks and Wildlife. https://florabase.dpaw.wa.gov.au/. [Accessed 15 Nov 2019]	[No evidence] "Monoecious shrub or tree, 1-9 m high. Fl. Apr to Oct. Sand, alluvium, loam, limestone, sandstone, granite. Cliffs, hills, screes, uplands, granite rock pockets."
Chew, WL. (1989) Moraceae, Flora of Australia 3: 15-68	[No evidence] "Widely distributed in the northern half of Australia, with an extension to the Lesser Sunda Islands in Indonesia."

501	Aquatic	n
	Source(s)	Notes
	Chew, WL. (1989) Moraceae, Flora of Australia 3: 15-68	[Terrestrial or epiphytic] "Spreading shrub or tree to 6 m."

	_	
502	Grass	n

Qsn #	Question	Answer
	Source(s)	Notes
	Information Network (GRIN-Taxonomy). National	Section: Malvanthera Family: Moraceae Tribe: Ficeae

503	Nitrogen fixing woody plant	n
	Source(s)	Notes
	USDA, Agricultural Research Service, National Plant Germplasm System. (2019). Germplasm Resources Information Network (GRIN-Taxonomy). National Germplasm Resources Laboratory, Beltsville, Maryland. https://npgsweb.ars-grin.gov/. [Accessed 14 Nov 2019]	Section: Malvanthera Family: Moraceae Tribe: Ficeae

504	Geophyte (herbaceous with underground storage organs bulbs, corms, or tubers)	n
	Source(s)	Notes
	Chew, WL. (1989) Moraceae, Flora of Australia 3: 15-68	"Spreading shrub or tree to 6 m."

601	Evidence of substantial reproductive failure in native habitat	n
	Source(s)	Notes
	Western Australian Herbarium (1998–2019). FloraBase—the Western Australian Flora. Department of Parks and Wildlife. https://florabase.dpaw.wa.gov.au/. [Accessed 14 Nov 2019]	"Conservation Code: Not threatened"
	II DOM M IN I LIUXUI MOTOCOSO FIOTS OF MICTESIS 3. 12-6X	[No evidence] "Widely distributed in the northern half of Australia, with an extension to the Lesser Sunda Islands in Indonesia."

602	Produces viable seed	у
	Source(s)	Notes
	Oppenheimer, H.L. & Bartlett, R.T. (2000). New plant records from Maui, Oʻahu, and the Hawaiʻi Islands. Bishop Museum Occasional Papers 64: 1-10	"Nagata (1995: 12) first documented this species naturalized on O'ahu as F. rubiginosa Desf. According to Berg (in Staples & Herbst, ir press), F. rubiginosa, F. platypoda, and F. obliqua form a species complex and may better be treated as subspecies or varieties. They all share the same pollinator, Pleistodontes imperialis Saunders, which was introduced to Hawai'i in 1922 (Wagner et al., 1999: 924)," "Seedlings have also been observed on old wooden fenceposts in pastures, indicating probable dispersal by frugivorous birds."
	Tropical Plants Database, Ken Fern. (2019). Ficus platypoda. http://tropical.theferns.info/viewtropical.php?id=Ficus+platypoda. [Accessed 14 Nov 2019]	"Propagation - Seed"

603	Hybridizes naturally	
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TAXON: Ficus platypoda (Miq.) A. Cunn. ex Mia.

SCORE: *10.0*

RATING: High Risk

Qsn #	Question	Answer
QSII #	Source(s)	Notes
	Chew, WL. (1989) Moraceae, Flora of Australia 3: 15-68	Unknown. No evidence found
	Criew, WL. (1969) Moraceae, Flora of Australia 5. 15-08	Officiowii. No evidence found
604	Self-compatible or apomictic	
	Source(s)	Notes
	Western Australian Herbarium (1998–2019). FloraBase—the Western Australian Flora. Department of Parks and Wildlife. https://florabase.dpaw.wa.gov.au/. [Accessed 15 Nov 2019]	"Monoecious shrub or tree, 1-9 m high." [Unknown if self-compatible]
605	Requires specialist pollinators	У
	Source(s)	Notes
	Oppenheimer, H.L. & Bartlett, R.T. (2000). New plant records from Maui, Oʻahu, and the Hawaiʻi Islands. Bishop Museum Occasional Papers 64: 1-10	[Yes, although pollinator Is present in the Hawaiian Islands] "Nagata (1995: 12) first documented this species naturalized on O'ahu as F. rubiginosa Desf. According to Berg (in Staples & Herbst, in press), F. rubiginosa, F. platypoda, and F. obliqua form a species complex and may better be treated as subspecies or varieties. They all share the same pollinator, Pleistodontes imperialis Saunders, which was introduced to Hawai'i in 1922 (Wagner et al., 1999: 924), although Nishida (1994: 142) does not list this wasp from Maui."
606	Reproduction by vegetative fragmentation	n
	Source(s)	Notes
	Tropical Plants Database, Ken Fern. (2019). Ficus platypoda. http://tropical.theferns.info/viewtropical.php? id=Ficus+platypoda. [Accessed 15 Nov 2019]	"Propagation. Seed"
607	Minimum generative time (years)	
	Source(s)	Notes
	Gardeners and Graziers. (2019). Desert Rock Native Fig Tree Seedlings. https://www.gardenersandgraziers.com.au/native-fig- trees-for-sale. [Accessed 15 Nov 2019]	"Growth Rate: In frost free areas up to 3 metres tall within 5 years.
	To 1 111 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Γ
701	Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)	n
	Source(s)	Notes
	Chew, WL. (1989) Moraceae, Flora of Australia 3: 15-68	"Figs globular, 1–1.5 cm diam., glabrous" [Adapted for frugivory]
	Propagules dispersed intentionally by people	у
702		

Creation Date: 15 Nov 2019

Qsn #	Question	Answer
	and Hawai'i Counties. Bishop Museum Occasional Papers.	[Planted intentionally] "Most of the trees observed at this location were growing terrestrially and are likely the original forestry plantings, but a few were supported solely by prop roots"
	Dave's Garden. (2019). Australian Rock Fig. Ficus platypoda. https://davesgarden.com/guides/pf/go/71113/. [Accessed 15 Nov 2019]	Cultivated intentionally as an ornamental, bonsai and landscaping tree

704	Propagules adapted to wind dispersal	n
	Source(s)	Notes
	Chew, WL. (1989) Moraceae, Flora of Australia 3: 15-68	"Figs globular, 1–1.5 cm diam., glabrous" [Adapted for frugivory]

705	Propagules water dispersed	n
	Source(s)	Notes
	Chew, WL. (1989) Moraceae, Flora of Australia 3: 15-68	"Figs globular, 1–1.5 cm diam., glabrous" [Adapted for frugivory]

706	Propagules bird dispersed	У
	Source(s)	Notes
	Chew, WL. (1989) Moraceae, Flora of Australia 3: 15-68	"Figs globular, 1–1.5 cm diam., glabrous"
	Moran, C. (2007). Consequences of rainforest fragmentation for frugivorous vertebrates and seed dispersal. PhD Dissertation. Griffith University, South Bank	"In subtropical Australia, Green (1993) compared visitation by frugivorous bird species at two species of fig (Ficus platypoda and F. superba), Ehretia acuminate (Boraginaceae) and Diploglottis australis (Sapindaceae) in more-forested upland areas and less-forested valleys. This study found that fewer frugivorous bird species visited the fig trees in the valleys than in the mountain areas, whereas similar numbers of bird species were recorded at the other two plant species." "Only four plant species, all figs, were consumed by at least half of the 38 bird species: Ficus macrophylla (consumed by 26 bird species), F. platypoda (25), F. obliqua (23) and F. fraseri (21)."
	Oppenheimer, H.L. & Bartlett, R.T. (2000). New plant records from Maui, Oʻahu, and the Hawaiʻi Islands. Bishop Museum Occasional Papers 64: 1-10	"Seedlings have also been observed on old wooden fenceposts in pastures, indicating probable dispersal by frugivorous birds."
	Johnstone, R. E. (1981). Notes on the distribution, ecology and taxonomy of the Red-crowned Pigeon (Ptilinopus regina) and Torres Strait Pigeon (Ducula bicolor) in Western Australia. Records of the Western Australian Museum, 9(1): 7-22	"The crop of a specimen collected in mangal on Augustus Island in May 1972 contained seeds of Randia cochinchinensis and mangrove buds. They also feed on the fruits of Ficus platypoda, F. virens and Eugenia spp."

707	Propagules dispersed by other animals (externally)	n
	Source(s)	Notes
	ICNEW W - I CLYXYLWOTACEAE FIOTA OF AUSTRALIA 3. 12-6X	"Figs globular, 1–1.5 cm diam., glabrous" [Adapted for frugivory and endozoochory]

		708	Propagules survive passage through the gut	У
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Creation Date: 15 Nov 2019

Qsn #	Question	Answer
	Source(s)	Notes
	Calviño-Cancela, M., R. Dunn, R., Van Etten, E. J., & B. Lamont, B. (2006). Emus as non-standard seed dispersers and their potential for long-distance dispersal. Ecography, 29(4), 632-640	"When considering the frequency of seeds dispersed, which reflects more directly the quantitative role of emus as seed dispersers, endozoochores were again the most frequent (Fig. 2b), but there were differences among sites. Endozoochory accounted for 97% of all seeds at CR, mainly belonging to Ficus platypoda (81%)."
	Moran, C. (2007). Consequences of rainforest fragmentation for frugivorous vertebrates and seed dispersal. PhD Dissertation. Griffith University, South Bank	[Presumably yes. Consumed by birds] "In subtropical Australia, Green (1993) compared visitation by frugivorous bird species at two species of fig (Ficus platypoda and F. superba), Ehretia acuminate (Boraginaceae) and Diploglottis australis (Sapindaceae) in moreforested upland areas and less-forested valleys. This study found that fewer frugivorous bird species visited the fig trees in the valleys than in the mountain areas, whereas similar numbers of bird species were recorded at the other two plant species." "Only four plant species, all figs, were consumed by at least half of the 38 bird species: Ficus macrophylla (consumed by 26 bird species), F. platypoda (25), F. obliqua (23) and F. fraseri (21)."
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801	Prolific seed production (>1000/m2)	
	Source(s)	Notes
	WRA Specialist. (2019). Personal Communication	Unknown
	Evidence that a persistent propagule bank is formed (>1	
802	yr)	
	Source(s)	Notes
	Royal Botanic Gardens Kew. (2019) Seed Information Database (SID). Version 7.1. Available from: http://data.kew.org/sid/. [Accessed 15 Nov 2019]	"Storage Behaviour: Orthodox?" [Longevity of seedbank in soil unknown]
803	Well controlled by herbicides	
	Source(s)	Notes
	Motooka, P., Castro, L., Nelson, D., Nagai, G. & Ching,L. 2003. Weeds of Hawaii's Pastures and Natural Areas: An Identification and Management Guide. CTAHR, UH Manoa, Honolulu, HI	[Methods to control F. microcarpa may be effective] "The most effective way to kill large Chinese banyans is by placing 0.10-0.17 fl oz (3-5 ml) of herbicide into holes drilled into the trunk each foot around trunk. Because of the compartmentalization of the trunks from the rooted and merged adventitious roots, the trunks must be drilled at each segment to ensure effective control. This can best be done by making follow- up treatments after symptoms from earlier treatments reveal unaffected stem segments. Banyans strangling a host tree can be treated in this way with glyphosate without killing the host. Triclopyr and dicamba were also effective in killing banyan by applications to drilled holes."
804	Tolerates, or benefits from, mutilation, cultivation, or fire	
004	Tolerates, or benefits from, mutilation, cultivation, or fire	
	Source(s)	Notes

TAXON: Ficus platypoda (Miq.) A. Cunn. ex Miq.

Qsn #	Question	Answer
	in the central Australian rangelands, 1970-1980. Journal of	[Suggests trees do not tolerate fire] "Fire-sensitive trees and shrubs, such as the pine (Callitris columellaris F. Muell.) and fig (Ficus platypoda (Miq.) A. Cunn. ex Miq.) grow in protected habitats along cliff edges, boulder-strewn areas and sheltered gullies."
	WRA Specialist. (2019). Personal Communication	Possibly yes. Other Ficus species are able to resprout following

SCORE: *10.0*

805	Effective natural enemies present locally (e.g. introduced biocontrol agents)	
	Source(s)	Notes
	Oppenheimer, Hank L. 2003. New plant records from Maui and Hawai'i Counties. Bishop Museum Occasional Papers.	[Unknown, but ability to naturalize suggests that any potential natural enemies may not be preventing spread] "First documented as a naturalized taxon in the Hawaiian Islands on O'ahu and Maui (Oppenheimer & Bartlett 2000: 7), this banyan is also sparingly naturalized in the Kohala Mountains on Hawai'i."

RATING: High Risk

TAXON: Ficus platypoda (Miq.) A. Cunn. ex Mia.

Summary of Risk Traits:

High Risk / Undesirable Traits

- Thrives in tropical climates
- Naturalized on Oahu, Maui and Hawaii (Hawaiian Islands)
- · Establishes as an epiphyte on native trees, potentially strangling them and threatening native forest diversity
- · Other Ficus species are invasive
- Shade tolerant
- · Tolerates many soil types
- · Able to establish as an epiphyte and strangle host trees
- Reproduces by seeds (wasp pollinator present in Hawaiian Islands)
- Seeds dispersed by birds and intentionally by people

Low Risk Traits

- Unarmed (no spines, thorns, or burrs)
- Provides fodder for livestock (palatable despite reports of toxicity)
- Not reported to spread vegetatively
- Requires specific wasp pollinator (which is established in the Hawaiian Islands)
- Herbicides have provided effective control of other Ficus species, and would probably be effective in controlling Ficus platypoda

SCORE: 10.0

Creation Date: 15 Nov 2019 (Ficus platypoda (Miq.) A.

Cunn. ex Mia.)

RATING: High Risk