Family: ***Moraceae***

Taxon: ***Ficus virens***

Synonym: *Ficus carolinensis Warb.*
Ficus glabella Blume
Ficus infectoria auct.
Ficus lacor
Ficus mariannensis Merr.
Ficus prolixz var. carolinensis (Warb.) Fosbe
Ficus saxophila var. sublanceolata Miq.
Ficus virens var. glabella (Blume) Corner
Ficus virens var. wightiana (Miq) V. Chithra
Ficus wightiana (Miq.) Wall.ex Benth
Urostigma wightianum Miq.

Common Name: spotted fig
white fig

Questionaire : current 20090513 **Assessor:** Patti Clifford **Designation:** EVALUATE
Status: Assessor Approved **Data Entry Person:** Patti Clifford **WRA Score** 5

101	**Is the species highly domesticated?**	**y=-3, n=0**	**n**
102	**Has the species become naturalized where grown?**	**y=1, n=-1**	
103	**Does the species have weedy races?**	**y=1, n=-1**	
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**	**y**
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**	**n**
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**	**n=0, y = 1*multiplier (see Appendix 2)**	**y**
401	**Produces spines, thorns or burrs**	**y=1, n=0**	**n**
402	**Allelopathic**	**y=1, n=0**	
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**	**y=1, n=0**	
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**	
409	**Is a shade tolerant plant at some stage of its life cycle**	**y=1, n=0**	
410	**Tolerates a wide range of soil conditions (or limestone conditions if not a volcanic island)**	**y=1, n=0**	
411	**Climbing or smothering growth habit**	**y=1, n=0**	**n**
412	**Forms dense thickets**	**y=1, n=0**	
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**	
604	**Self-compatible or apomictic**	**y=1, n=-1**	**n**
605	**Requires specialist pollinators**	**y=-1, n=0**	**y**
606	**Reproduction by vegetative fragmentation**	**y=1, n=-1**	**y**
607	**Minimum generative time (years)**	**1 year = 1, 2 or 3 years = 0, 4+ years = -1**	
701	**Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)**	**y=1, n=-1**	**n**
702	**Propagules dispersed intentionally by people**	**y=1, n=-1**	**y**
703	**Propagules likely to disperse as a produce contaminant**	**y=1, n=-1**	**n**
704	**Propagules adapted to wind dispersal**	**y=1, n=-1**	**n**
705	**Propagules water dispersed**	**y=1, n=-1**	**y**
706	**Propagules bird dispersed**	**y=1, n=-1**	**y**
707	**Propagules dispersed by other animals (externally)**	**y=1, n=-1**	**n**
708	**Propagules survive passage through the gut**	**y=1, n=-1**	**y**
801	**Prolific seed production (>1000/m2)**	**y=1, n=-1**	
802	**Evidence that a persistent propagule bank is formed (>1 yr)**	**y=1, n=-1**	**y**
803	**Well controlled by herbicides**	**y=-1, n=1**	
804	**Tolerates, or benefits from, mutilation, cultivation, or fire**	**y=1, n=-1**	**y**
805	**Effective natural enemies present locally (e.g. introduced biocontrol agents)**	**y=-1, n=1**	

Designation: EVALUATE **WRA Score** 5

Supporting Data:

101	2010. WRA Specialist. Personal Communication.	No evidence.
201	2010. USDA, ARS, National Genetic Resources Program. Germplasm Resources Information Network - (GRIN) [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland. URL: http://www.ars-grin.gov/cgi-bin/npgs/html/genus.pl?1738	China - Fujian, Guangdong, Guangxi, Guizhou [s.w.], Hainan, Hubei, Hunan [s.], Shaanxi [s.], Sichuan, Xizang [s.e.], Yunnan, Zhejiang [s.]; Japan; Taiwan; Bhutan; India; Nepal; Sri Lanka; Cambodia; Laos; Myanmar; Thailand; Vietnam; Indonesia - Celebes, Irian Jaya, Java, Kalimantan, Lesser Sunda Islands, Moluccas, Sumatra; Malaysia; Papua New Guinea; Philippines; Australia - New South Wales [n.e.], Northern Territory [n.], Queensland [e.], Western Australia [n.]; Solomon Islands
202	2010. USDA, ARS, National Genetic Resources Program. Germplasm Resources Information Network - (GRIN) [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland. URL: http://www.ars-grin.gov/cgi-bin/npgs/html/genus.pl?1738	China - Fujian, Guangdong, Guangxi, Guizhou [s.w.], Hainan, Hubei, Hunan [s.], Shaanxi [s.], Sichuan, Xizang [s.e.], Yunnan, Zhejiang [s.]; Japan; Taiwan; Bhutan; India; Nepal; Sri Lanka; Cambodia; Laos; Myanmar; Thailand; Vietnam; Indonesia - Celebes, Irian Jaya, Java, Kalimantan, Lesser Sunda Islands, Moluccas, Sumatra; Malaysia; Papua New Guinea; Philippines; Australia - New South Wales [n.e.], Northern Territory [n.], Queensland [e.], Western Australia [n.]; Solomon Islands
203	2010. Efloras.org. Flora of China: Ficus virens Aiton. Missouri Botanical Gardenand Harvard University Herbaria, http://www.efloras.org/florataxon.aspx?flora_id=2&taxon_id=242322548	Common tree by streamsides in subtropical China; 300-2700 m. Fujian, Guangdong, Guangxi, SW Guizhou, Hainan, Hubei, S Hunan, S Shaanxi, Sichuan, SE Xizang, Yunnan, S Zhejiang [Bhutan, Cambodia, India, Indonesia, Japan, Laos, Malaysia, Myanmar, New Guinea, Philippines, Sikkim, Sri Lanka, Thailand, Vietnam; N Australia].
204	2010. USDA, ARS, National Genetic Resources Program. Germplasm Resources Information Network - (GRIN) [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland. URL: http://www.ars-grin.gov/cgi-bin/npgs/html/genus.pl?1738	China - Fujian, Guangdong, Guangxi, Guizhou [s.w.], Hainan, Hubei, Hunan [s.], Shaanxi [s.], Sichuan, Xizang [s.e.], Yunnan, Zhejiang [s.]; Japan; Taiwan; Bhutan; India; Nepal; Sri Lanka; Cambodia; Laos; Myanmar; Thailand; Vietnam; Indonesia - Celebes, Irian Jaya, Java, Kalimantan, Lesser Sunda Islands, Moluccas, Sumatra; Malaysia; Papua New Guinea; Philippines; Australia - New South Wales [n.e.], Northern Territory [n.], Queensland [e.], Western Australia [n.]; Solomon Islands
205	2010. WRA Specialist. Personal Communication.	No evidence of repeated introductions.
301	2007. Randall, R.P.. Global Compendium of Weeds. http://www.hear.org/gcw/	No evidence of naturalization outside native range.
302	2007. Randall, R.P.. Global Compendium of Weeds. http://www.hear.org/gcw/	No evidence.
303	2007. Randall, R.P.. Global Compendium of Weeds. http://www.hear.org/gcw/	No evidence.
304	2007. Randall, R.P.. Global Compendium of Weeds. http://www.hear.org/gcw/	No evidence.
305	2008. Homes, K.A.. Invasive Fig Trees (Ficus carica) in the Riparian Forests of California's Central Valley: Population Growth, Community Impacts, and Eradication Efforts.	Ficus carica is an invasive species in the riparian forests of California's Central Valley, where it reduces the richness and significantly simplifies the physiognomy of the plant communities.
401	2010. Efloras.org. Flora of China: Ficus virens Aiton. Missouri Botanical Gardenand Harvard University Herbaria, http://www.efloras.org/florataxon.aspx?flora_id=2&taxon_id=242322548	No spines, thorns, burrs.
402	2010. WRA Specialist. Personal Communication.	Unknown.
403	2005. Staples, G. W./Herbst, D. R.. A Tropical Garden Flora - Plants Cultivated in the Hawaiian Islands and Other Tropical Places. Bishop Museum Press, Honolulu, HI.	Not parasitic.
404	2010. Food and Agriculture Organization of the United Nations. Animal Feed Resources Information System Ficus infectoria. FAO.org, http://www.fao.org/ag/Aga/agap/frg/afris/Data/390.HTM	Leaves make good cattle fodder.

405	2010. Food and Agriculture Organization of the United Nations. Animal Feed Resources Information System Ficus infectoria. FAO.org, http://www.fao.org/ag/Aga/agap/frg/afris/Data/390.HTM	Leaves make good cattle fodder.
406	2010. WRA Specialist. Personal Communication.	Unknown.
407	2010. Babu, K./Gokul Shankar, S./Rai, S.. Comparative pharmacognostic studies on the barks of four Ficus species. Turkish Journal of Botany. 34: 215-224.	"The barks of 4 Ficus species, namely F. racemosa, F. virens, F. religiosa and F. benghalensis, are important ingredients in many Ayurvedic and traditional formulations. The barks are considered to be very effective in various treatments, such as diabetes, skin diseases, ulcers, and nervous disorders."
407	2010. Northern Territory Government Australia. Alcan Gove alumina refinery expansion project draft environmental impact statement Section 15 terrestrial biology. Northern Territory Government Australia, http://www.nt.gov.au/nreta/environment/assessment/r	"The Banyan (Ficus virens) is a tree of cultural significance to the Rirratjingu people who know it as Rripipi or Dawumaka or Dawu. The fruit ot the tree is eaten, the bark of the prop roots is used to make string bags, and when men prepare for sacred ceremonies they sit uner the tree and sing. "
408	2010. WRA Specialist. Personal Communication.	Unknown.
409	2010. WRA Specialist. Personal Communication.	Unknown.
410	2010. WRA Specialist. Personal Communication.	Unknown. [will grow as an epiphyte]
411	2010. Efloras.org. Flora of China: Ficus virens Aiton. Missouri Botanical Gardenand Harvard University Herbaria, http://www.efloras.org/florataxon.aspx?flora_id=2&taxon_id=242322548	Common tree by streamsides in subtropical China; 300-2700 m. Fujian, Guangdong, Guangxi, SW Guizhou, Hainan, Hubei, S Hunan, S Shaanxi, Sichuan, SE Xizang, Yunnan, S Zhejiang [Bhutan, Cambodia, India, Indonesia, Japan, Laos, Malaysia, Myanmar, New Guinea, Philippines, Sikkim, Sri Lanka, Thailand, Vietnam; N Australia].
412	2010. WRA Specialist. Personal Communication.	Unknown.
501	2010. Efloras.org. Flora of China: Ficus virens Aiton. Missouri Botanical Gardenand Harvard University Herbaria, http://www.efloras.org/florataxon.aspx?flora_id=2&taxon_id=242322548	Common tree by streamsides in subtropical China; 300-2700 m. Fujian, Guangdong, Guangxi, SW Guizhou, Hainan, Hubei, S Hunan, S Shaanxi, Sichuan, SE Xizang, Yunnan, S Zhejiang [Bhutan, Cambodia, India, Indonesia, Japan, Laos, Malaysia, Myanmar, New Guinea, Philippines, Sikkim, Sri Lanka, Thailand, Vietnam; N Australia].
502	2010. Efloras.org. Flora of China: Ficus virens Aiton. Missouri Botanical Gardenand Harvard University Herbaria, http://www.efloras.org/florataxon.aspx?flora_id=2&taxon_id=242322548	Moraceae.
503	2005. Staples, G. W./Herbst, D. R.. A Tropical Garden Flora - Plants Cultivated in the Hawaiian Islands and Other Tropical Places. Bishop Museum Press, Honolulu, HI.	Moraceae.
504	2010. Efloras.org. Flora of China: Ficus virens Aiton. Missouri Botanical Gardenand Harvard University Herbaria, http://www.efloras.org/florataxon.aspx?flora_id=2&taxon_id=242322548	Trees, epiphytic when young, with buttress or prop roots, deciduous or semideciduous.
601	2010. WRA Specialist. Personal Communication.	No evidence.
602	2010. Being Plants. Bonsai plants: Ficus virens. Being Plants, http://beingplants.com/zen/	Being Plants has Ficus virens seed for sale for bonsai.
603	1970. Ramirez B., W.. Host specificity of fig wasps (Agaonidae). Evolution. 24: 680-691.	Hybrids are not common in figs.
604	1989. Halevy, A.H.. CRC handbook of flowering, volume 6. CRC Press, http://books.google.com/books?id=ZcTP7Kb01NAC&pg=PA331&lpg=PA331&dq=ficus+%2B+%22apomictic%22&source=bl&ots=b6gjCjzFfY&sig=2NsaSs8rrrXhvLyca1RhepgqEJU&hl=en&ei=wAvbTMafFZKasAPTkZTjBw&sa	Apomictic seeds have not been found in Ficus.

604	2005. Staples, G. W./Herbst, D. R.. A Tropical Garden Flora - Plants Cultivated in the Hawaiian Islands and Other Tropical Places. Bishop Museum Press, Honolulu, HI.	Dioecious.
605	1970. Ramirez B., W.. Host specificity of fig wasps (Agaonidae). Evolution. 24: 680-691.	Studies of New World figs have shown that each species of fig (about 40) collected in Venezuela, Panama', Costa Rica, San Andres Island, Mexico, and Florida has its own specific pollinator, with the exception of Ficus tuerckheimii which is always the host of two species of Blastophaga and the equivocal case of F. costaricana. It is also well known that in the Old World each species of fig has its own agaonid symbiont, with only a few known exceptions (in which one species of fig is the host of two agaonids
605	2005. Yao, J./Zhao, N./Chen, Y./Jia, X./Deng, Y./Yu, H.. Seed and wasp production in the mutualism of figs and fig wasps. Forestry Studies in China. 7: 25-28.	"Figs (Moracea: Ficus) and fig wasps (Hymenoptera: Chlocloids: Agaonideae) depend on each other to complete their reproduction. Monoecious fig species and their pollinating wasps are in conflict over the use of fig ovaries which can either produce one seed or one wasp. From observation on Ficus virens Ait., we showed that female flowers with outer layer of ovaries (near to the wall of syconium) had no significant difference from that with inner and interval layer of ovaries (near to the syconium cavity), in which most seeds and wasps were produced. This meant that fig tree provided the same potential resource for seed and wasps production. Observation indicated that there was usually only one foundress in syconium at female flower phase and no competition pollinators."
606	2004. Bo, Z./Zhang-Cheng, Z./Xiao-Ping, Z.. Position-dependent shoot production of two subtropical fig tree species following crown damage. Acta Botanica Sinica. 46: 907-914.http://www.jipb.net/pubsoft/content/2/3524/x030414.pdf	The shoot production pattern of Ficus microcarpa and Ficus virens var. sublanceolata was investigated to assess the impacts of crown damage on the shoot production of lateral branches of both species. “Crown damage, conducted either in spring or in autumn, did not affect the number and density of new shoots on the newly grown upper stem parts and the branched stem parts within the residual crown, but facilitated the shoot production on the bare stem parts beneath the residual crown in terms of both shoot number and density. Shoot production on the bare stem parts increased with damage intensity. In addition, it was found that damage in autumn led to a stronger emergence of shoots from the bare stem parts than spring damage." [reproduction from suckers]
607	2010. WRA Specialist. Personal Communication.	Unknown.
701	2010. WRA Specialist. Personal Communication.	Unlikely [needs pollinator in Hawaii to produce seed]
702	2010. Babu, K./Gokul Shankar, S./Rai, S.. Comparative pharmacognostic studies on the barks of four Ficus species. Turkish Journal of Botany. 34: 215-224.	The shoot production pattern of Ficus microcarpa and Ficus virens var. sublanceolata was investigated to assess the impacts of crown damage on the shoot production of lateral branches of both species. “Crown damage, conducted either in spring or in autumn, did not affect the number and density of new shoots on the newly grown upper stem parts and the branched stem parts within the residual crown, but facilitated the shoot production on the bare stem parts beneath the residual crown in terms of both shoot number and density. Shoot production on the bare stem parts increased with damage intensity. In addition, it was found that damage in autumn led to a stronger emergence of shoots from the bare stem parts than spring damage.”
702	2010. Being Plants. Bonsai plants: Ficus virens. Being Plants, http://beingplants.com/zen/	Being plants has Ficus virens for sale.
702	2010. Northern Territory Government Australia. Alcan Gove alumina refinery expansion project draft environmental impact statement Section 15 terrestrial biology. Northern Territory Government Australia, http://www.nt.gov.au/nreta/environment/assessment/r	"The Banyan (Ficus virens) is a tree of cultural significance to the Rirratjingu people who know it as Rripipi or Dawumaka or Dawu. The fruit ot the tree is eaten, the bark of the prop roots is used to make string bags, and when men prepare for sacred ceremonies they sit uner the tree and sing. "
703	2010. WRA Specialist. Personal Communication.	No evidence of produce contamination.
704	2001. Ganesh, T./Davidar, P.. Dispersal modes of tree species in the wet forests of southern Western Ghats. Current Science. 80: 394-399.	According to experiments done on the dispersal modes of tree species in a wet evergreen forest at Kakachi in the Kalakad–Mundanthurai Tiger Reserve, southern India, Ficus virens is dispersed by birds and mammals.

705	2010. Efloras.org. Flora of China: Ficus virens Aiton. Missouri Botanical Gardenand Harvard University Herbaria, http://www.efloras.org/florataxon.aspx?flora_id=2&taxon_id=242322548	Common tree by streamsides in subtropical China; 300-2700 m. Fujian, Guangdong, Guangxi, SW Guizhou, Hainan, Hubei, S Hunan, S Shaanxi, Sichuan, SE Xizang, Yunnan, S Zhejiang [Bhutan, Cambodia, India, Indonesia, Japan, Laos, Malaysia, Myanmar, New Guinea, Philippines, Sikkim, Sri Lanka, Thailand, Vietnam; N Australia].
706	2001. Ganesh, T./Davidar, P.. Dispersal modes of tree species in the wet forests of southern Western Ghats. Current Science. 80: 394-399.	According to experiments done on the dispersal modes of tree species in a wet evergreen forest at Kakachi in the Kalakad–Mundanthurai Tiger Reserve, southern India, Ficus virens is dispersed by birds and mammals.
707	2001. Ganesh, T./Davidar, P.. Dispersal modes of tree species in the wet forests of southern Western Ghats. Current Science. 80: 394-399.	According to experiments done on the dispersal modes of tree species in a wet evergreen forest at Kakachi in the Kalakad–Mundanthurai Tiger Reserve, southern India, Ficus virens is dispersed by birds and mammals. [no means of external attachment].
708	2001. Ganesh, T./Davidar, P.. Dispersal modes of tree species in the wet forests of southern Western Ghats. Current Science. 80: 394-399.	According to experiments done on the dispersal modes of tree species in a wet evergreen forest at Kakachi in the Kalakad–Mundanthurai Tiger Reserve, southern India, Ficus virens is dispersed by birds and mammals.
801	2010. WRA Specialist. Personal Communication.	Unknown.
802	1994. Russell-Smith, J./Lucas, D.E.. Regeneration of monsoon rain forest in Northern Australia: the dormant seed bank. Journal of Vegetation Science. 5: 161-168.	This study documented the size, composition, and spatial variability of the dormant soil seed bank in a range of monsoon rain forest vegetation types in the Northern Territory, Australia. "60 % of species sampled here comprise trees and shrubs including, conspicuously, nine species of Ficus. The importance of Ficus species in the soil seed bank is reinforced by their numerical dominance at moist sites, their ubiquity in soils across the whole spectrum of monsoon rain forest vegetation types, and that three of the ten most abundant sampled seed bank taxa are figs (F. virens, F. racemosa, F. scobina).
803	2010. WRA Specialist. Personal Communication.	Unknown.
804	2004. Bo, Z./Zhang-Cheng, Z./Xiao-Ping, Z.. Position-dependent shoot production of two subtropical fig tree species following crown damage. Acta Botanica Sinica. 46: 907-914.http://www.jipb.net/pubsoft/content/2/3524/x030414.pdf	The shoot production pattern of Ficus microcarpa and Ficus virens var. sublanceolata was investigated to assess the impacts of crown damage on the shoot production of lateral branches of both species. “Crown damage, conducted either in spring or in autumn, did not affect the number and density of new shoots on the newly grown upper stem parts and the branched stem parts within the residual crown, but facilitated the shoot production on the bare stem parts beneath the residual crown in terms of both shoot number and density. Shoot production on the bare stem parts increased with damage intensity. In addition, it was found that damage in autumn led to a stronger emergence of shoots from the bare stem parts than spring damage.”
805	2010. WRA Specialist. Personal Communication.	Unknown.