

Key Words: Low Risk, Edible Fruit, Ornamental, Dioecious, Fleshy-fruited, Animal-dispersed

Family: *Ebenaceae*

Taxon: *Diospyros blancoi*

Synonym: *Cavanillea philippensis* Desr.
Diospyros discolor Willd.
Diospyros philippensis (Desr.) Gürke

Common Name: mabola tree
 velvet persimmon
 velvet apple
 mabolo

Questionnaire : current 20090513 **Assessor:** Chuck Chimera **Designation:** L
Status: Assessor Approved **Data Entry Person:** Chuck Chimera **WRA Score** -1

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	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	
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	n
403	Parasitic	y=1, n=0	n
404	Unpalatable to grazing animals	y=1, n=-1	
405	Toxic to animals	y=1, n=0	n
406	Host for recognized pests and pathogens	y=1, n=0	n
407	Causes allergies or is otherwise toxic to humans	y=1, n=0	
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	
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	y=1, n=-1	
604	Self-compatible or apomictic	y=1, n=-1	n
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	
706	Propagules bird dispersed	y=1, n=-1	
707	Propagules dispersed by other animals (externally)	y=1, n=-1	
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)	y=1, n=-1	n
803	Well controlled by herbicides	y=-1, n=1	
804	Tolerates, or benefits from, mutilation, cultivation, or fire	y=1, n=-1	
805	Effective natural enemies present locally (e.g. introduced biocontrol agents)	y=-1, n=1	

Designation: L

WRA Score -1

Supporting Data:

101	1987. Morton, J.F.. Fruits of warm climates - Mabolo (<i>Diospyros blancoi</i>). J.F. Morton, Miami, FL http://www.hort.purdue.edu/newcrop/morton/mabolo.html	[Is the species highly domesticated? No. Assessment reports on seeded variety, although seedless forms would reduce or eliminate the ability of the tree to escape] "Mabolo trees vary in the degree of hairiness on the twigs and leaves. Burkill (in Malaya) and Mendiola (in the Philippines) refer to mabolos with red and copper-colored skin as distinct races. A race with purplish-red skin and unusually sweet flavor was long ago introduced into Malaya. In 1921, budded trees of a superior seedless cultivar called 'Manila' were shipped to the United States Department of Agriculture by P.J. Wester, who was then Horticulturist in charge of the Manila Experiment Station. The parent tree in the Philippines had a history of bearing crops of oblate, sweet, juicy fruits, 80% of them seedless, 20% having 1 to 3 seeds. Another seedless Philippine cultivar was named 'Valesca'. Mendiola (1926) wrote that seedless mabolos "are easily distinguished from the seedy ones as they are flatter. It is believed by some horticulturists and growers that these seedless fruits come from branches that are bud sports . . . it is impossible to confirm or deny this claim until it is known how much parthenocarpic has to do with . . . These seedless forms . . . the genus <i>Diospyros</i> is, in a number of cases, parthenocarpic."
101	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	[Is the species highly domesticated? No] "Little selection has been done with mabolo, and trees sold in local nurseries are likely to vary in the quality of their fruit."
101	2012. Lim, T.K.. Edible Medicinal and Non-Medicinal Plants. Volume 2, Fruits. Springer, New York	[Is the species highly domesticated?? No] No evidence
102	2012. WRA Specialist. Personal Communication.	NA
103	2012. WRA Specialist. Personal Communication.	NA
201	1976. Collins, R.P./Halim, A.F.. Characterization of the Volatile Compounds of <i>Diospyros blancoi</i> . <i>Economic Botany</i> . 30(4): 313-316.	[Species suited to tropical or subtropical climate(s) 2-High] " <i>Diospyros blancoi</i> A. DC. is a member of the Ebenaceae (ebony family) and is native to the Philippine Islands where the common name mabolo persimmon or velvet apple originated. The taxonomic status of this plant is confusing, and it has generally been called <i>D. discolor</i> Willd. Unfortunately, however, as Howard (1971, 1972) has pointed out, this name is illegitimate."
201	2012. Lim, T.K.. Edible Medicinal and Non-Medicinal Plants. Volume 2, Fruits. Springer, New York	[Species suited to tropical or subtropical climate(s) 2- High] "Mabola is indigenous to the low and medium altitude forests of the Philippine Islands from the island of Luzon to the southernmost of the Sulu Islands, and is also found in southern Taiwan (Guishan Dao, Hengchun peninsula, Lanyu) and Celebes in Indonesia. The tree was introduced into Java, Malaysia, India and subsequently elsewhere in the tropics."
202	1976. Collins, R.P./Halim, A.F.. Characterization of the Volatile Compounds of <i>Diospyros blancoi</i> . <i>Economic Botany</i> . 30(4): 313-316.	[Quality of climate match data 2-High]
203	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	[Broad climate suitability (environmental versatility)? No] "Mabolo thrives in low elevations in Hawaii and requires no special care."
203	2012. Lim, T.K.. Edible Medicinal and Non-Medicinal Plants. Volume 2, Fruits. Springer, New York	[Broad climate suitability (environmental versatility)? No] "Mabolo thrives in areas with a tropical, monsoonal climate and is not fastidious of soil type. It can withstand typhoons. It is very common and widely distributed in primary and secondary forests at low and medium altitudes, from sea level to 800 m altitude in its native range. In Taiwan, it is found in coastal forests up to 200 m above sea level."
204	1976. Collins, R.P./Halim, A.F.. Characterization of the Volatile Compounds of <i>Diospyros blancoi</i> . <i>Economic Botany</i> . 30(4): 313-316.	[Native or naturalized in regions with tropical or subtropical climates? Yes] "In the Philippines the tree is commonly found in forests at low altitudes and is planted along the roadsides for shade."
204	1978. Woodson, Jr., R.E./Schery, R.W./White, F.. Flora of Panama. Part VIII. Family 155. Ebenaceae. <i>Annals of the Missouri Botanical Garden</i> . 65(1): 145-154.	[Native or naturalized in regions with tropical or subtropical climates? Yes] " <i>Diospyros blancoi</i> A. DC., a native of the Philippines which also has an edible fruit has been planted in a few places in Panama. It is much better known under the illegitimate name <i>D. discolor</i> Willd."

205	1987. Morton, J.F.. Fruits of warm climates - Mabolo (<i>Diospyros blancoi</i>). J.F. Morton, Miami, FL http://www.hort.purdue.edu/newcrop/morton/mabolo.html	[Does the species have a history of repeated introductions outside its natural range? Yes] "The mabolo is indigenous to the low and medium altitude forests of the Philippine Islands from the island of Luzon to the southernmost of the Sulu Islands, and is commonly cultivated for its fruit and even more as a shade tree for roadsides. The tree was introduced into Java and Malaya, and, in 1881, into Calcutta and the Botanical Garden in Singapore, though it existed in Singapore before that date. In recent times, it has been decreasing in numbers in Malaya. It is only occasionally planted in India and then mainly as an ornamental because of the attractiveness of the foliage and the fruits." ... "Seeds were sent to the United States Department of Agriculture by W.S. Lyon, of the Philippine Bureau of Agriculture, in 1906, with a note of admiration for the tree and the exterior of the fruit but not the interior; still, more seeds were sent in 1909 and the seedlings thrived at the Plant Introduction Station in Miami. There are occasional specimens grown elsewhere in southern Florida and some scattered around the Caribbean area, in Jamaica, Puerto Rico, Cuba, Trinidad and the Lancetilla Experimental Garden in Honduras where plants were received from the Philippines in 1926 and seeds from Cuba in 1927. There are a few in Bermuda and in Hawaii where the mabolo first fruited in 1928. Nowhere has the mabolo gained the favor it enjoys in its homeland."
205	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	[Does the species have a history of repeated introductions outside its natural range? Yes] "Native throughout the Philippines and in southernmost Taiwan and cultivated here and there throughout the tropics, velvet persimmon has never gained widespread popularity as an edible fruit."
205	2012. Lim, T.K.. Edible Medicinal and Non-Medicinal Plants. Volume 2, Fruits. Springer, New York	[Does the species have a history of repeated introductions outside its natural range? Yes] "The tree was introduced into Java, Malaysia, India and subsequently elsewhere in the tropics."
301	1999. Wagner, W.L./Herbst, D.R./Sohmer, S.H.. Manual of the flowering plants of Hawaii. Revised edition.. University of Hawai'i Press and Bishop Museum Press, Honolulu, HI.	[Naturalized beyond native range? Possibly Naturalizing] " <i>Diospyros blancoi</i> A. DC [D. discolor Willd.], mabolo, from the Philippine Islands, has been planted by state foresters. It persists and sometimes escapes in areas such as the Tantalus-Roundtop area, Oahu."
301	2007. McCormack, G.. Cook Islands Biodiversity Database, Version 2007.2.. Cook Islands Natural Heritage Trust, Rarotonga http://cookislands.bishopmuseum.org	[Naturalized beyond native range? No evidence] "Introduced - Recent, Not naturalised; Land, lowlands"
301	2011. Teo, S./Yeo, R.K.H./Chong, K.Y./Chung, Y.F./Neo, L./Tan, H.T.W.. The Flora of Pulau Semakau: A Project Semakau Checklist. Nature In Singapore. 4: 263–272.	[Naturalized beyond native range? Possibly Naturalizing in Singapore] "On a separate note, this paper recommends the upgrading of the status of <i>Diospyros blancoi</i> A.DC. from "cultivated only" (Chong et al., 2009) to casual, as there were many saplings found in the secondary forest patch."
301	2012. Wagner, W.L./Herbst, D.R./Khan, N./Flynn, T.. Hawaiian Vascular Plant Updates: A Supplement to the Manual of the Flowering Plants of Hawai'i & Hawai'i's Ferns & Fern Allies. http://botany.si.edu/pacificislandbiodiversity/hawaiianflora/supplement.htm	[Naturalized beyond native range? No evidence]
302	2007. Randall, R.P.. Global Compendium of Weeds - Index. http://www.hear.org/gcw/	[Garden/amenity/disturbance weed? No evidence]
303	2007. Randall, R.P.. Global Compendium of Weeds - Index. http://www.hear.org/gcw/	[Agricultural/forestry/horticultural weed? No evidence]
304	2007. Randall, R.P.. Global Compendium of Weeds - Index. http://www.hear.org/gcw/	[Environmental weed? No evidence]
305	2007. Randall, R.P.. Global Compendium of Weeds - Index. http://www.hear.org/gcw/	[Congeneric weed? Yes] Several species of <i>Diospyros</i> listed as weeds of some type
401	2012. Lim, T.K.. Edible Medicinal and Non-Medicinal Plants. Volume 2, Fruits. Springer, New York	[Produces spines, thorns or burrs? No] "A dioecious, much-branched, evergreen tree, 7-32 m high, with a stout, dark-brown to black, furrowed trunk 50-80 cm diameter and a conical crown. Branchlets green when young, sericeous, becoming gray and glabrous. Leaves are alternate, oblong, 8-30 cm by 2.5-12 cm, entire, coriaceous with obtuse base and acuminate apex, upper surface dark green, glossy, glabrous...and lower surface silvery hairy, petiole up to 1.7 cm long and densely pubescent."
402	2008. Janick, J./Paull, R.E.. The encyclopedia of fruit & nuts. Cabi Publishing, Wallingford, UK	[Allelopathic? No] No evidence
402	2012. Lim, T.K.. Edible Medicinal and Non-Medicinal Plants. Volume 2, Fruits. Springer, New York	[Allelopathic? No] No evidence

403	2012. Lim, T.K.. Edible Medicinal and Non-Medicinal Plants. Volume 2, Fruits. Springer, New York	[Parasitic? No] "A dioecious, much-branched, evergreen tree, 7-32 m high, with a stout, dark-brown to black, furrowed trunk 50-80 cm diameter and a conical crown." [Ebenaceae]
404	2012. World Agroforestry Center. Agroforestry Tree Database - Diospyros blancoi. http://www.worldagroforestry.org/sea/products/afd_bases/af/asp/SpeciesInfo.asp?SpID=18079	[Unpalatable to grazing animals? Palatability of foliage unknown] "Production statistics are not available. Filipinos are not fond of the fruit and the bulk of production is fed to animals or not even harvested. In Bogor (Indonesia), the fruits are sold in the market."
405	2008. Janick, J./Paull, R.E.. The encyclopedia of fruit & nuts. Cabi Publishing, Wallingford, UK	[Toxic to animals? No] No evidence
405	2012. Lim, T.K.. Edible Medicinal and Non-Medicinal Plants. Volume 2, Fruits. Springer, New York	[Toxic to animals? No] No evidence
406	2008. Janick, J./Paull, R.E.. The encyclopedia of fruit & nuts. Cabi Publishing, Wallingford, UK	[Host for recognized pests and pathogens? No] "A number of bees, leaf rollers, caterpillars and red scales have been reported on shoots and leaves. No major pest of disease has been identified."
406	2012. World Agroforestry Center. Agroforestry Tree Database - Diospyros blancoi. http://www.worldagroforestry.org/sea/products/afd_bases/af/asp/SpeciesInfo.asp?SpID=18079	[Host for recognized pests and pathogens? No] "Diseases: No serious disease has been reported. Pests: Some insects have been reported to feed on shoots and leaves: toy beetles, leaf rollers, slug and tussock caterpillars, bagworms and red scales. These are minor pests, however."
407	1976. Collins, R.P./Halim, A.F.. Characterization of the Volatile Compounds of Diospyros blancoi. Economic Botany. 30(4): 313-316.	[Causes allergies or is otherwise toxic to humans? No] "In the Philippines the tree is commonly found in forests at low altitudes and is planted along the roadsides for shade. The fruit, which is about four inches in diameter, has edible white flesh but is covered by a dense mat of brown, velvety hairs. The tree is also used for timber in the Philippines, and according to Burkill (1966) the best combs in the Philippines are made from it." [No evidence]
407	1987. Morton, J.F.. Fruits of warm climates - Mabolo (Diospyros blancoi). J.F. Morton, Miami, FL http://www.hort.purdue.edu/newcrop/morton/mabolo.html	[Causes allergies or is otherwise toxic to humans? Possibly Minor Irritation] "Toxicity - The hairs may be somewhat irritating to sensitive skin."
407	2012. Dave's Gardern. PlantFiles: Velvet Apple, Mabolo - Diospyros blancoi. http://davesgarden.com/guides/pf/go/102570/	[Causes allergies or is otherwise toxic to humans? Possibly] "Danger: Handling plant may cause skin irritation or allergic reaction"
408	2012. Lim, T.K.. Edible Medicinal and Non-Medicinal Plants. Volume 2, Fruits. Springer, New York	[Creates a fire hazard in natural ecosystems? No] "Mabolo thrives in areas with a tropical, monsoonal climate and is not fastidious of soil type. It can withstand typhoons. It is very common and widely distributed in primary and secondary forests at low and medium altitudes, from sea level to 800 m altitude in its native range. In Taiwan, it is found in coastal forests up to 200 m above sea level." [No evidence that this is plant is part of a fire prone ecosystem or otherwise increases fire risks]
409	2003. Llamas, K.A.. Tropical Flowering Plants. Timber Press, Portland, OR	[Is a shade tolerant plant at some stage of its life cycle? Possibly No] "Full sun"
409	2007. McLaughlin, J./Balerdi, C./Beckford, M.. Small Trees for Miami-Dade Landscapes. UF-IFAS/Miami-Dade County Extension Service, Homestead, FL	[Is a shade tolerant plant at some stage of its life cycle? Possibly] "Full sun/ light shade"
409	2012. Dave's Gardern. PlantFiles: Velvet Apple, Mabolo - Diospyros blancoi. http://davesgarden.com/guides/pf/go/102570/	[Is a shade tolerant plant at some stage of its life cycle? Possibly No] "Sun Exposure: Full Sun"
410	1987. Morton, J.F.. Fruits of warm climates - Mabolo (Diospyros blancoi). J.F. Morton, Miami, FL http://www.hort.purdue.edu/newcrop/morton/mabolo.html	[Tolerates a wide range of soil conditions? Yes] "The tree does best in loam but flourishes very well in almost any soil with little care. It is rarely fertilized and seems to need no protective spraying."
410	2012. Lim, T.K.. Edible Medicinal and Non-Medicinal Plants. Volume 2, Fruits. Springer, New York	[Tolerates a wide range of soil conditions? Yes] "Maboloa thrives in areas with a tropical, monsoonal climate and is not fastidious of soil type."
411	2012. Lim, T.K.. Edible Medicinal and Non-Medicinal Plants. Volume 2, Fruits. Springer, New York	[Climbing or smothering growth habit? No] "A dioecious, much-branched, evergreen tree, 7-32 m high, with a stout, dark-brown to black, furrowed trunk 50-80 cm diameter and a conical crown."
412	1999. Wagner, W.L./Herbst, D.R./Sohmer, S.H.. Manual of the flowering plants of Hawaii. Revised edition.. University of Hawai'i Press and Bishop Museum Press, Honolulu, HI.	[Forms dense thickets? No evidence]

412	2012. Lim, T.K.. Edible Medicinal and Non-Medicinal Plants. Volume 2, Fruits. Springer, New York	[Forms dense thickets? No] "Diospyros blancoi A. DC., a native of the Philippines which also has an edible fruit has been planted in a few places in Panama. It is much better known under the illegitimate name D. discolor Willd."
501	2012. Lim, T.K.. Edible Medicinal and Non-Medicinal Plants. Volume 2, Fruits. Springer, New York	[Aquatic? No] Terrestrial tree
502	2012. Lim, T.K.. Edible Medicinal and Non-Medicinal Plants. Volume 2, Fruits. Springer, New York	[Grass? No] Ebenaceae
503	2012. Lim, T.K.. Edible Medicinal and Non-Medicinal Plants. Volume 2, Fruits. Springer, New York	[Nitrogen fixing woody plant? No] Ebenaceae
504	1987. Morton, J.F.. Fruits of warm climates - Mabolo (Diospyros blancoi). J.F. Morton, Miami, FL http://www.hort.purdue.edu/newcrop/morton/mabolo.html	[Geophyte (herbaceous with underground storage organs -- bulbs, corms, or tubers)? No] "The mabolo varies in form from a small straggly tree with drooping branches, to an erect, straight tree to 60 or even 100 ft (18-33 m), with stout, black, furrowed trunk to 50 in (80 cm) thick."
601	2012. Lim, T.K.. Edible Medicinal and Non-Medicinal Plants. Volume 2, Fruits. Springer, New York	[Evidence of substantial reproductive failure in native habitat? No] "It is very common and widely distributed in primary and secondary forests at low and medium altitudes, from sea level to 800 m altitude in its native range."
602	1976. Collins, R.P./Halim, A.F.. Characterization of the Volatile Compounds of Diospyros blancoi. Economic Botany. 30(4): 313-316.	[Produces viable seed? Yes] "Mabola is usually propagated by seeds but it can also be vegetatively propagated from budding, grafting and marcotting."
603	2012. Lim, T.K.. Edible Medicinal and Non-Medicinal Plants. Volume 2, Fruits. Springer, New York	[Hybridizes naturally? Unknown] No evidence
604	1987. Morton, J.F.. Fruits of warm climates - Mabolo (Diospyros blancoi). J.F. Morton, Miami, FL http://www.hort.purdue.edu/newcrop/morton/mabolo.html	[Self-compatible or apomictic? No] "Male trees must be planted near the female trees for effective pollination and fruit production."
604	2012. Lim, T.K.. Edible Medicinal and Non-Medicinal Plants. Volume 2, Fruits. Springer, New York	[Self-compatible or apomictic? No] "A dioecious, much-branched, evergreen tree, 7-32 m high, with a stout, dark-brown to black, furrowed trunk 50-80 cm diameter and a conical crown."
605	1987. Morton, J.F.. Fruits of warm climates - Mabolo (Diospyros blancoi). J.F. Morton, Miami, FL http://www.hort.purdue.edu/newcrop/morton/mabolo.html	[Requires specialist pollinators? No. Floral structure does not suggest need for specialized pollinators] "The tubular, 4-lobed, waxy, faintly fragrant blooms are short-stalked, creamy white, downy. Male flowers 1/4 in (6 mm) wide, in small clusters, and female flowers, 1/2 in (12.5 mm) wide, and solitary, are borne on separate trees."
605	2010. LaFrankie, J.V.. Trees of Tropical Asia. Black Tree Publications, Baroro. Philippines	[Requires specialist pollinators? No] "The cultivated species of the northern latitudes are pollinated by bees. However, the tropical diversity of floral form is great and the single species included in the pollination study at Lambir, Sarawak (of more than two dozen) was beetle pollinated. More than a few of our species are night-blooming and intensely fragrant. In all we might anticipate a mix of beetle, bee and moth pollination."
606	2012. Lim, T.K.. Edible Medicinal and Non-Medicinal Plants. Volume 2, Fruits. Springer, New York	[Reproduction by vegetative fragmentation? No] "Mabola is usually propagated by seeds but it can also be vegetatively propagated from budding, grafting and marcotting."
607	1987. Morton, J.F.. Fruits of warm climates - Mabolo (Diospyros blancoi). J.F. Morton, Miami, FL http://www.hort.purdue.edu/newcrop/morton/mabolo.html	[Minimum generative time (years)? Slow-growing] "The mabolo varies in form from a small straggly tree with drooping branches, to an erect, straight tree to 60 or even 100 ft (18-33 m), with stout, black, furrowed trunk to 50 in (80 cm) thick. It is rather slow-growing."
607	2008. Janick, J./Paull, R.E.. The encyclopedia of fruit & nuts. Cabi Publishing, Wallingford, UK	[Minimum generative time (years)? 6+] "Seedling trees bear fruit in 6-7 years and grafted trees in 3-4 years."
701	2012. Lim, T.K.. Edible Medicinal and Non-Medicinal Plants. Volume 2, Fruits. Springer, New York	[Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)? No] "Fruit is a globose or oblate berry, 5-12 cm by 8-10 cm, velvety, orange or brown-reddish" ... "Seeds 0-10, three sided, up to 4 x 2.5 x 1.5 cm and dark brown." [Relatively large fruits & seeds lack means of external attachment and are unlikely to be inadvertently dispersed]
702	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	[Propagules dispersed intentionally by people? Yes] "The trees are attractive ornamentals and have been set out as street trees in some Honolulu neighborhoods, though the cleanup required for ripe fruit is a drawback"

702	2012. Lim, T.K.. Edible Medicinal and Non-Medicinal Plants. Volume 2, Fruits. Springer, New York	[Propagules dispersed intentionally by people? Yes] "The tree is also planted as ornamentals, wind-breaks, or roadside shade trees. Mabola seedlings are used as rootstock for Japanese persimmon."
703	2012. Lim, T.K.. Edible Medicinal and Non-Medicinal Plants. Volume 2, Fruits. Springer, New York	[Propagules likely to disperse as a produce contaminant? No] "Fruit is a globose or oblate berry, 5-12 cm by 8-10 cm, velvety, orange or brown-reddish" ... "Seeds 0-10, three sided, up to 4 x 2.5 x 1.5 cm and dark brown." [Relatively large fruits & seeds are unlikely to become a contaminant of produce]
704	2012. Lim, T.K.. Edible Medicinal and Non-Medicinal Plants. Volume 2, Fruits. Springer, New York	[Propagules adapted to wind dispersal? No] "Fruit is a globose or oblate berry, 5-12 cm by 8-10 cm, velvety, orange or brown reddish, crowned with the persistent stiff, pale green calyx, the skin is thin and densely villous (coated with short golden-brown hairs)...The fruit pulp is whitish, firm, rather dry, sweet, astringent and aromatic. Seeds 0-10, three sided, up to 4 x 2.5 x 1.5 cm and dark brown."
705	2000. Langenberger, G.. Ecology of Tropical Forest Systems: Forest Vegetation Studies on the Foothills of Mt. Pangasugan, Leyte/ The Philippines. Deutsche Gesellschaft für Technische Zusammenarbeit, Eschborn, Germany	[Propagules water dispersed? Possibly No] "Two common species which could not be observed along streams were the medium sized Calophyllum blancoi (Bitanghol) and Diospyros blancoi (Kamagong)."
706	2012. Lim, T.K.. Edible Medicinal and Non-Medicinal Plants. Volume 2, Fruits. Springer, New York	[Propagules bird dispersed? Potentially Yes] "Fruit is a globose or oblate berry, 5-12 cm by 8-10 cm, velvety, orange or brown-reddish, crowned with the persistent stiff, pale green calyx, the skin is thin and densely villous (coated with short golden-brown hairs)...The fruit pulp is whitish, firm, rather dry, sweet, astringent and aromatic. Seeds 0-10, three-sided, up to 4 x 2.5 x 1.5 cm and dark brown." [Potentially bird-dispersed, although large fruit & seed size would limit the ability of most birds to consume or transport the seeds]
707	2010. LaFrankie, J.V.. Trees of Tropical Asia. Black Tree Publications, Baroro. Philippines	[Propagules dispersed by other animals (externally)? Unknown. Fruits & seeds may possibly be carried, rather than consumed, due to their large size] "In some species the inner pericarp eventually softens and is eaten by mammals, and these include the cultivated persimmons. More than a few species bear fruit or seeds that are rich in saponins, and are used as fish poisons. Dispersal is probably effected most often by understory mammals and primates."
708	2010. LaFrankie, J.V.. Trees of Tropical Asia. Black Tree Publications, Baroro. Philippines	[Propagules survive passage through the gut? Presumably Yes] "In some species the inner pericarp eventually softens and is eaten by mammals, and these include the cultivated persimmons. More than a few species bear fruit or seeds that are rich in saponins, and are used as fish poisons. Dispersal is probably effected most often by understory mammals and primates."
801	1987. Morton, J.F.. Fruits of warm climates - Mabolo (Diospyros blancoi). J.F. Morton, Miami, FL http://www.hort.purdue.edu/newcrop/morton/mabolo.html	[Prolific seed production (>1000/m ²)? No] "There may be 4 to 8 brown, smooth, wedge shaped seeds, about 1 1/2 in (4 cm) long and 1 in (2.5 cm) wide, standing in a circle around the central core, though the fruits are often completely seedless."
802	2011. Gamboa-Lapitan, P. et al.. Conservation of Valuable & Endangered Forest Tree Species in Protected Areas in the Philippines. Asia & the Pacific Workshop – Multinational & Transboundary Conservation of Valuable & Endangered Forest Tree Species. 5-7 De	[Evidence that a persistent propagule bank is formed (>1 yr)? No] "has recalcitrant seeds, lose viability 1-2 wks after seed dispersal, available in August"
803	2012. WRA Specialist. Personal Communication.	[Well controlled by herbicides? Unknown] No information on herbicide efficacy or chemical control of this species.
804	2012. WRA Specialist. Personal Communication.	[Tolerates, or benefits from, mutilation, cultivation, or fire? Unknown]
805	2012. WRA Specialist. Personal Communication.	[Effective natural enemies present locally (e.g. introduced biocontrol agents)? Unknown]

Summary of Risk Traits

High Risk / Undesirable Traits

- Possibly naturalized on Oahu, in the Tantalus-Roundtop area
- Thrives in tropical climates
- The hairs on the fruit may be somewhat irritating to sensitive skin
- Tolerates many soil conditions (and potentially able to exploit many different habitat types)
- Cleanup required for ripe fruit is a drawback
- Viable seeds may be dispersed by mammals and possibly birds

Low Risk / Desirable Traits

- Widely planted in the tropics with no history of negative impacts or weediness
- Unarmed (no spines, thorns, or burrs)
- Non-toxic
- Edible fruit
- Dioecious (requires male & female trees to produce viable seed)
- Slow growth rate and long time to reproductive maturity (6+ years)
- Ornamental and medical uses
- Timber tree