

Family: *Anacardiaceae*

Taxon: *Mangifera casturi*

Synonym: NA

Common Name: Kalimantan mango
kasturi

Questionnaire : current 20090513
Status: Assessor Approved

Assessor: Assessor
Data Entry Person: Assessor

Designation: L

WRA Score -2

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| 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 | 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 | 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 | n |
| 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 |

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| 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 | |
| 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 | y |
| 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 | |
| 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 -2

Supporting Data:

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| 101 | 2012. Kostermans, A.J.G.H.. The Mangoes: Their Botany, Nomenclature, Horticulture and Utilization. Academic Press, London, UK | [Is the species highly domesticated? No] "There exist several forms with distinctive fruits." |
| 102 | 2013. WRA Specialist. Personal Communication. | NA |
| 103 | 2013. WRA Specialist. Personal Communication. | NA |
| 201 | 1998. World Conservation Monitoring Centre. <i>Mangifera casturi</i> . In: IUCN 2013. IUCN Red List of Threatened Species. Version 2013.1. www.iucnredlist.org [Accessed 07 Sep 2013] | [Species suited to tropical or subtropical climate(s) 2-High] "Endemic to Kalimantan, mostly in the south. The species was native to the wet climate area around Banjarmasin, Indonesia." |
| 202 | 1998. World Conservation Monitoring Centre. <i>Mangifera casturi</i> . In: IUCN 2013. IUCN Red List of Threatened Species. Version 2013.1. www.iucnredlist.org [Accessed 07 Sep 2013] | [Quality of climate match data 2-High] |
| 203 | 2012. Kostermans, A.J.G.H.. The Mangoes: Their Botany, Nomenclature, Horticulture and Utilization. Academic Press, London, UK | [Broad climate suitability (environmental versatility)? No] "An excellent fruit, fit for ever wet climates." |
| 204 | 1998. World Conservation Monitoring Centre. <i>Mangifera casturi</i> . In: IUCN 2013. IUCN Red List of Threatened Species. Version 2013.1. www.iucnredlist.org [Accessed 07 Sep 2013] | [Native or naturalized in regions with tropical or subtropical climates? Yes] "Endemic to Kalimantan, mostly in the south. The species was native to the wet climate area around Banjarmasin, Indonesia." |
| 205 | 2005. Imada, C.T./Staples, G.W./Herbst, D.R.. Annotated Checklist of Cultivated Plants of Hawai'i. The Bishop Museum, http://www2.bishopmuseum.org/HBS/botany/cultivatedplants/ | [Does the species have a history of repeated introductions outside its natural range? No] "Locations: Waimea Arboretum & Botanical Garden" |
| 205 | 2009. Botanix. Kalimantan Mango, Kasturi (<i>Mangifera casturi</i>). http://www.botanix.kpr.eu/en/index.php?text=8-kalimantan-mango-kasturi-mangifera-casturi [Accessed 09 Sep 2013] | [Does the species have a history of repeated introductions outside its natural range? No] "Unlike the fast growing tropical fruit trees, the Kalimantan Mango is not planted in large plantations in Indonesia due to its slow growing process. Kalimantan Mango plantations could only be found in the Mataraman area in the Banjar district (the Banjar district is not the same as the Banjarmasin district)." |
| 301 | 1998. World Conservation Monitoring Centre. <i>Mangifera casturi</i> . In: IUCN 2013. IUCN Red List of Threatened Species. Version 2013.1. www.iucnredlist.org [Accessed 07 Sep 2013] | [Naturalized beyond native range? No] "It is now known only from cultivation." |
| 302 | 1998. World Conservation Monitoring Centre. <i>Mangifera casturi</i> . In: IUCN 2013. IUCN Red List of Threatened Species. Version 2013.1. www.iucnredlist.org [Accessed 07 Sep 2013] | [Garden/amenity/disturbance weed? No] "It is now known only from cultivation." |
| 303 | 1998. World Conservation Monitoring Centre. <i>Mangifera casturi</i> . In: IUCN 2013. IUCN Red List of Threatened Species. Version 2013.1. www.iucnredlist.org [Accessed 07 Sep 2013] | [Agricultural/forestry/horticultural weed? No] "It is now known only from cultivation." |
| 304 | 1998. World Conservation Monitoring Centre. <i>Mangifera casturi</i> . In: IUCN 2013. IUCN Red List of Threatened Species. Version 2013.1. www.iucnredlist.org [Accessed 07 Sep 2013] | [Environmental weed? No] "It is now known only from cultivation." |
| 305 | 2012. Randall, R.P.. A Global Compendium of Weeds. 2nd Edition. Department of Agriculture and Food, Western Australia | [Congeneric weed? Yes] <i>Mangifera indica</i> |
| 305 | 2013. WRA Specialist. Personal Communication. | [Congeneric weed? Yes] In addition to being valued as a fruit tree, <i>Mangifera indica</i> is sometimes regarded as a weed in various locations around the world |
| 401 | 2012. Kostermans, A.J.G.H.. The Mangoes: Their Botany, Nomenclature, Horticulture and Utilization. Academic Press, London, UK | [Produces spines, thorns or burrs? No] "Tree, up to 25 m tall with up to 15 m clear bole of up to 40-115 cm diam." [No evidence] |

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| 402 | 2006. Yan G/Zhu C/Luo Y/Yang Y/Wei J.. Potential allelopathic effects of <i>Piper nigrum</i> , <i>Mangifera indica</i> and <i>Clausena lansium</i> . <i>Ying Yong Sheng Tai Xue Bao</i> . 17(9): 1633-1636. | [Allelopathic? Unknown] "With <i>Piper nigrum</i> , <i>Mangifera indica</i> and <i>Clausena lansium</i> as the donors, this paper studied their potential allelopathic effects on the germination and growth of <i>Zea mays</i> , <i>Glycine max</i> , <i>Cucurbita moschata</i> , <i>Arachis hypogaea</i> , <i>Raphanus sativus</i> , <i>Echinochloa crusgalli</i> , <i>Digitaria sanguinalis</i> and <i>Stylosanthes guianensis</i> . The results showed that the aqueous extracts of these donors could inhibit the germination and growth of <i>Z. mays</i> , <i>G. max</i> , <i>C. moschata</i> , <i>E. crus-galli</i> and <i>D. sanguinalis</i> at high concentration, but stimulate them at low concentration. In rhizosphere soil of <i>P. nigrum</i> and <i>M. indica</i> , the germination and growth of <i>Z. mays</i> L was stimulated, while <i>A. hypogaea</i> was inhibited. The aqueous extracts of the donors were extracted by ethyl acetate and n butanol, respectively, and the inhibitory activity of both aqueous and n-butanol fractions from <i>P. nigrum</i> and <i>M. indica</i> on <i>Z. mays</i> , <i>R. sativus</i> and <i>S. guianensis</i> was stronger than that of ethyl acetate fraction, indicating that <i>P. nigrum</i> and <i>M. indica</i> contained the allelochemicals with high polarity." [Paper in Chinese. <i>Mangifera indica</i> demonstrates allelopathic potential under lab conditions] |
| 403 | 2012. Kostermans, A.J.G.H.. <i>The Mangoes: Their Botany, Nomenclature, Horticulture and Utilization</i> . Academic Press, London, UK | [Parasitic? No] "Tree, up to 25 m tall with up to 15 m clear bole of up to 40-115 cm diam." [Anacardiaceae] |
| 404 | 2013. Evergreen Nursery. <i>Mangifera casturi</i> - Kalimantan Mango. http://www.egnursery.com/mangifera-casturi-kalimantan-mango [Accessed 09 Sep 2013] | [Unpalatable to grazing animals? No] "In India, the leaves from the tree were often fed to the cattle for its rich source of fiber." |
| 405 | 2009. Litz, R.E. (ed.). <i>The Mango: Botany, Production and Uses</i> . CABI, Wallingford, UK | [Toxic to animals? No evidence] "The genus <i>Mangifera</i> is one of the 73 genera (c.850 species) belonging to the family of Anacardiaceae, in the order of Sapindales." ... "It is also a family well known for the dermal irritation produced by some of its members, such as the poison ivies and oaks (<i>Rhus</i> spp.) in North America, rengas (<i>Gluta</i> spp.) in Southeast Asia and other species including some <i>Mangifera</i> species whose resinous sap may induce a mild to strong allergic reaction." [No evidence of toxicity to animals in genus, but sap may cause allergic reactions in animals and/or humans] |
| 406 | 2012. Kostermans, A.J.G.H.. <i>The Mangoes: Their Botany, Nomenclature, Horticulture and Utilization</i> . Academic Press, London, UK | [Host for recognized pests and pathogens? No] "Seems not to suffer from anthracnose and the fruit is not (or rarely) attacked by beetles." |
| 407 | 1998. World Conservation Monitoring Centre. <i>Mangifera casturi</i> . In: IUCN 2013. IUCN Red List of Threatened Species. Version 2013.1. www.iucnredlist.org [Accessed 07 Sep 2013] | [Causes allergies or is otherwise toxic to humans? No evidence] "This tree produces delicious purple-black mango like fruits with very sweet, excellent flavored dark orange pulp." |
| 407 | 2009. Litz, R.E. (ed.). <i>The Mango: Botany, Production and Uses</i> . CABI, Wallingford, UK | [Causes allergies or is otherwise toxic to humans? Unknown] "The genus <i>Mangifera</i> is one of the 73 genera (c.850 species) belonging to the family of Anacardiaceae, in the order of Sapindales." ... "It is also a family well known for the dermal irritation produced by some of its members, such as the poison ivies and oaks (<i>Rhus</i> spp.) in North America, rengas (<i>Gluta</i> spp.) in Southeast Asia and other species including some <i>Mangifera</i> species whose resinous sap may induce a mild to strong allergic reaction." [No evidence of toxicity to animals in genus, but sap may cause allergic reactions in animals and/or humans] |
| 408 | 1998. World Conservation Monitoring Centre. <i>Mangifera casturi</i> . In: IUCN 2013. IUCN Red List of Threatened Species. Version 2013.1. www.iucnredlist.org [Accessed 07 Sep 2013] | [Creates a fire hazard in natural ecosystems? No] "Endemic to Kalimantan, mostly in the south. The species was native to the wet climate area around Banjarmasin, Indonesia." |
| 408 | 2012. Kostermans, A.J.G.H.. <i>The Mangoes: Their Botany, Nomenclature, Horticulture and Utilization</i> . Academic Press, London, UK | [Creates a fire hazard in natural ecosystems? No] "An excellent fruit, fit for ever wet climates." |
| 409 | 2013. Evergreen Nursery. <i>Mangifera casturi</i> - Kalimantan Mango. http://www.egnursery.com/mangifera-casturi-kalimantan-mango [Accessed 09 Sep 2013] | [Is a shade tolerant plant at some stage of its life cycle? No] "Exposure : Full Sun" |
| 410 | 2011. Flora Fauna World. <i>Mangifera casturi</i> - Mascot of South Kalimantan. http://08hachi.blogspot.com/2011/08/mangifera-casturi-mascot-of-south.html [Accessed 09 Sep 2013] | [Tolerates a wide range of soil conditions? Unknown] "Kasturi can grow well in lowlands on alluvial soil and adequate water lateral." |
| 411 | 2013. Sub-Tropical Fruit Club of Qld. <i>Kasturi Mango</i> - <i>Mangifera casturi</i> . http://stfc.org.au/kasturi-mango-mangifera-casturi [Accessed 06 Sep 2013] | [Climbing or smothering growth habit? No] "Kalimantan Mango (<i>Mangifera casturi</i>) or locally known as Kasturi is a tropical fruit tree about 10–30 m tall which is endemic to very small area around Banjarmasin in Southern Borneo (Indonesia)." |

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| 412 | 1998. World Conservation Monitoring Centre. <i>Mangifera casturi</i> . In: IUCN 2013. IUCN Red List of Threatened Species. Version 2013.1. www.iucnredlist.org [Accessed 07 Sep 2013] | [Forms dense thickets? No] "It is now known only from cultivation." |
| 501 | 1998. World Conservation Monitoring Centre. <i>Mangifera casturi</i> . In: IUCN 2013. IUCN Red List of Threatened Species. Version 2013.1. www.iucnredlist.org [Accessed 07 Sep 2013] | [Aquatic? No] "Systems: Terrestrial" |
| 502 | 2013. USDA ARS National Genetic Resources Program. Germplasm Resources Information Network - (GRIN). http://www.ars-grin.gov/cgi-bin/npgs/html/index.pl | [Grass? No] Anacardiaceae |
| 503 | 2013. USDA ARS National Genetic Resources Program. Germplasm Resources Information Network - (GRIN). http://www.ars-grin.gov/cgi-bin/npgs/html/index.pl | [Nitrogen fixing woody plant? No] Anacardiaceae |
| 504 | 2012. Kostermans, A.J.G.H.. <i>The Mangoes: Their Botany, Nomenclature, Horticulture and Utilization</i> . Academic Press, London, UK | [Geophyte (herbaceous with underground storage organs -- bulbs, corms, or tubers)? No] "Tree, up to 25 m tall with up to 15 m clear bole of up to 40-115 cm diam." [Anacardiaceae] |
| 601 | 1998. World Conservation Monitoring Centre. <i>Mangifera casturi</i> . In: IUCN 2013. IUCN Red List of Threatened Species. Version 2013.1. www.iucnredlist.org [Accessed 07 Sep 2013] | [Evidence of substantial reproductive failure in native habitat? Unknown] "It is now known only from cultivation." |
| 602 | 2013. Sub-Tropical Fruit Club of Qld. <i>Kasturi Mango - Mangifera casturi</i> . http://stfc.org.au/kasturi-mango-mangifera-casturi [Accessed 06 Sep 2013] | [Produces viable seed? Yes] "You should sow freshly harvested seeds to get the best germination results. Soak the seeds in water with a temperature of around 20–25 °C for about 2–6 hours. After soaking, sow the seeds in the soil (light, sandy soil) and keep the temperature of the pot at a temperature of at least 20–25 °C. Seeds sprout within 1–3 weeks. Young seedlings should be kept in a moderate sunny position." |
| 603 | 2009. Litz, R.E. (ed.). <i>The Mango: Botany, Production and Uses</i> . CABI, Wallingford, UK | [Hybridizes naturally? Unknown] "From our observations in Borneo, natural interspecific hybridization involving various cultivated <i>Mangifera</i> species can occasionally occur." [No hybrids of <i>M. casturi</i> have been reported] |
| 603 | 2012. Kostermans, A.J.G.H.. <i>The Mangoes: Their Botany, Nomenclature, Horticulture and Utilization</i> . Academic Press, London, UK | [Hybridizes naturally? Unknown. Hybridization documented in genus, but no reports of hybrids with <i>M. casturi</i>] |
| 604 | 2012. Kostermans, A.J.G.H.. <i>The Mangoes: Their Botany, Nomenclature, Horticulture and Utilization</i> . Academic Press, London, UK | [Self-compatible or apomictic? Yes] "Flowers are self-compatible." [Genus description] |
| 605 | 2012. Kostermans, A.J.G.H.. <i>The Mangoes: Their Botany, Nomenclature, Horticulture and Utilization</i> . Academic Press, London, UK | [Requires specialist pollinators? No] "Pollinators are mainly house flies, but also bats, wasps, butterflies, beetles, ants, thrips, etc., in addition to self-pollination." |
| 606 | 2012. Kostermans, A.J.G.H.. <i>The Mangoes: Their Botany, Nomenclature, Horticulture and Utilization</i> . Academic Press, London, UK | [Reproduction by vegetative fragmentation? No] "Propagation - Mostly by seed in traditional farming conditions." ... "Vegetative propagation by cuttings, layering and marcotting is not very successful." |
| 607 | 2012. Kostermans, A.J.G.H.. <i>The Mangoes: Their Botany, Nomenclature, Horticulture and Utilization</i> . Academic Press, London, UK | [Minimum generative time (years)? 10] "A tree, planted from seed in the Bogor Botanic Gardens was bearing fruit after 10 years and is now regularly doing so twice a year." |
| 607 | 2013. Sub-Tropical Fruit Club of Qld. <i>Kasturi Mango - Mangifera casturi</i> . http://stfc.org.au/kasturi-mango-mangifera-casturi [Accessed 06 Sep 2013] | [Minimum generative time (years)? 4+] "Dwight in Guatemala says that his seedlings of <i>Mangifera casturi</i> started to bear in four or five years. This is the most consistent bearer of mango fruit under rainy conditions that I have found." |
| 701 | 2012. Kostermans, A.J.G.H.. <i>The Mangoes: Their Botany, Nomenclature, Horticulture and Utilization</i> . Academic Press, London, UK | [Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)? No] "Ripe fruit like a small mango, little compressed, c. 6 x 4.5-5 x 3.5-4.2 cm, nose slight but distinct, rarely a point; skin thin, smooth, glossy green with dark spots which multiply and at maturity make a fruit completely or partly black. Pulp dark orange, very sweet and palatable, juicy. Stone c. 5 x 4.5 x 3 cm; endocarp rather hard with rather few, short (up to 2 cm) thin fibres." [Fruits and stones relatively large and unlikely to be inadvertently dispersed] |
| 702 | 2012. Kostermans, A.J.G.H.. <i>The Mangoes: Their Botany, Nomenclature, Horticulture and Utilization</i> . Academic Press, London, UK | [Propagules dispersed intentionally by people? Yes] "An excellent fruit, fit for ever wet climates,." |

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| 703 | 2012. Kostermans, A.J.G.H.. The Mangoes: Their Botany, Nomenclature, Horticulture and Utilization. Academic Press, London, UK | [Propagules likely to disperse as a produce contaminant? No] "Ripe fruit like a small mango, little compressed, c. 6 x 4.5-5 x 3.5-4.2 cm, nose slight but distinct, rarely a point; skin thin, smooth, glossy green with dark spots which multiply and at maturity make a fruit completely or partly black. Pulp dark orange, very sweet and palatable, juicy. Stone c. 5 x 4.5 x 3 cm; endocarp rather hard with rather few, short (up to 2 cm) thin fibres." [Fruit and stones large and unlikely to be inadvertently dispersed] |
| 704 | 1998. World Conservation Monitoring Centre. <i>Mangifera casturi</i> . In: IUCN 2013. IUCN Red List of Threatened Species. Version 2013.1. www.iucnredlist.org [Accessed 07 Sep 2013] | [Propagules adapted to wind dispersal? No] "This tree produces delicious purple-black mango like fruits with very sweet, excellent flavored dark orange pulp." |
| 705 | 2012. Kostermans, A.J.G.H.. The Mangoes: Their Botany, Nomenclature, Horticulture and Utilization. Academic Press, London, UK | [Propagules water dispersed? No] "Ripe fruit like a small mango, little compressed, c. 6 x 4.5-5 x 3.5-4.2 cm, nose slight but distinct, rarely a point; skin thin, smooth, glossy green with dark spots which multiply and at maturity make a fruit completely or partly black. Pulp dark orange, very sweet and palatable, juicy. Stone c. 5 x 4.5 x 3 cm; endocarp rather hard with rather few, short (up to 2 cm) thin fibres." [Although fruit may float for short distances, they are relatively large and this is not likely to be an important mechanism of dispersal] |
| 706 | 2012. Kostermans, A.J.G.H.. The Mangoes: Their Botany, Nomenclature, Horticulture and Utilization. Academic Press, London, UK | [Propagules bird dispersed? Possibly Yes] "Ripe fruit like a small mango, little compressed, c. 6 x 4.5-5 x 3.5-4.2 cm, nose slight but distinct, rarely a point; skin thin, smooth, glossy green with dark spots which multiply and at maturity make a fruit completely or partly black. Pulp dark orange, very sweet and palatable, juicy. Stone c. 5 x 4.5 x 3 cm; endocarp rather hard with rather few, short (up to 2 cm) thin fibres." [Fleshy-fruited, and presumably adapted for bird or mammal dispersal, but birds in the Hawaiian Islands, with the exception of game birds, are unlikely to transport the seeds. Game birds may secondarily disperse seeds of fruit that have fallen from trees.] |
| 707 | 2012. Kostermans, A.J.G.H.. The Mangoes: Their Botany, Nomenclature, Horticulture and Utilization. Academic Press, London, UK | [Propagules dispersed by other animals (externally)? No] "Ripe fruit like a small mango, little compressed, c. 6 x 4.5-5 x 3.5-4.2 cm, nose slight but distinct, rarely a point; skin thin, smooth, glossy green with dark spots which multiply and at maturity make a fruit completely or partly black. Pulp dark orange, very sweet and palatable, juicy. Stone c. 5 x 4.5 x 3 cm; endocarp rather hard with rather few, short (up to 2 cm) thin fibres." [Fleshy-fruited, and presumably adapted for bird or mammal dispersal, but birds in the Hawaiian Islands, with the exception of game birds, are unlikely to transport the seeds. Frugivorous animals may carry fruit to consume pulp without ingesting relatively large seeds, or spit out seeds while consuming pulp] |
| 708 | 2012. Kostermans, A.J.G.H.. The Mangoes: Their Botany, Nomenclature, Horticulture and Utilization. Academic Press, London, UK | [Propagules survive passage through the gut? Presumably Yes] "Ripe fruit like a small mango, little compressed, c. 6 x 4.5-5 x 3.5-4.2 cm, nose slight but distinct, rarely a point; skin thin, smooth, glossy green with dark spots which multiply and at maturity make a fruit completely or partly black. Pulp dark orange, very sweet and palatable, juicy. Stone c. 5 x 4.5 x 3 cm; endocarp rather hard with rather few, short (up to 2 cm) thin fibres." [Feral pigs could consume fruit and transport seeds] |
| 801 | 2012. Kostermans, A.J.G.H.. The Mangoes: Their Botany, Nomenclature, Horticulture and Utilization. Academic Press, London, UK | [Prolific seed production (>1000/m ²)? No] "Ripe fruit like a small mango, little compressed, c. 6 x 4.5-5 x 3.5-4.2 cm, nose slight but distinct, rarely a point; skin thin, smooth, glossy green with dark spots which multiply and at maturity make a fruit completely or partly black. Pulp dark orange, very sweet and palatable, juicy. Stone c. 5 x 4.5 x 3 cm; endocarp rather hard with rather few, short (up to 2 cm) thin fibres." [Seeds relatively large and unlikely to be produced in such high densities] |
| 802 | 2009. Litz, R.E. (ed.). The Mango: Botany, Production and Uses. CABI, Wallingford, UK | [Evidence that a persistent propagule bank is formed (>1 yr)? No] "Mango seeds are considered to be recalcitrant, and cannot survive for more than a few days or weeks at ambient temperatures (Parisot, 1988). This important characteristic of mango seeds would have inhibited the long distance dispersal of mango by seed until recent times." [Genus description] |
| 803 | 2013. WRA Specialist. Personal Communication. | [Well controlled by herbicides? Unknown] No information on herbicide efficacy or chemical control of this species |
| 804 | 2013. WRA Specialist. Personal Communication. | [Tolerates, or benefits from, mutilation, cultivation, or fire? Unknown] |
| 805 | 2013. WRA Specialist. Personal Communication. | [Effective natural enemies present locally (e.g. introduced biocontrol agents)? Unknown] |

Summary of Risk Traits

High Risk / Undesirable Traits

- Thrives in tropical climates
- Self-compatible
- Fleshy fruited, and seeds may possibly be dispersed by birds and mammals

Low Risk Traits

- No reports of naturalization or invasiveness of this species
- Unarmed
- Produces edible fruit
- Reaches maturity in 4+ years
- Does not spread vegetatively
- Large fruit and seeds unlikely to be inadvertently dispersed