

Family: *Cucurbitaceae*

Taxon: *Sechium edule*

Synonym: *Chayota edulis* Jacq. [= *Sechium edule* subsp. *cho-cho*]
Sicyos edulis Jacq. [= *Sechium edule* subsp. *e*]

Common Name: chayote
cho-cho
vegetable-pear

Questionnaire :	current 20090513	Assessor:	Patti Clifford	Designation:	H(HPWRA)
Status:	Assessor Approved	Data Entry Person:	Patti Clifford	WRA Score	7
101	Is the species highly domesticated?		y=-3, n=0		y
102	Has the species become naturalized where grown?		y=1, n=-1		y
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		y
301	Naturalized beyond native range		y = 1*multiplier (see Appendix 2), n= question 205		y
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)		y
305	Congeneric weed		n=0, y = 1*multiplier (see Appendix 2)		n
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		n
409	Is a shade tolerant plant at some stage of its life cycle		y=1, n=0		y
410	Tolerates a wide range of soil conditions (or limestone conditions if not a volcanic island)		y=1, n=0		n

411	Climbing or smothering growth habit	y=1, n=0	y
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	y
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	y
605	Requires specialist pollinators	y=-1, n=0	n
606	Reproduction by vegetative fragmentation	y=1, n=-1	
607	Minimum generative time (years)	1 year = 1, 2 or 3 years = 0, 4+ years = -1	1
701	Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)	y=1, n=-1	
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	n
707	Propagules dispersed by other animals (externally)	y=1, n=-1	n
708	Propagules survive passage through the gut	y=1, n=-1	y
801	Prolific seed production (>1000/m2)	y=1, n=-1	n
802	Evidence that a persistent propagule bank is formed (>1 yr)	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: H(HPWRA)

WRA Score 7

Supporting Data:

101	1996. Saade, R.L.. Chayote. <i>Sechium edule</i> (Jacq.) Sw. Promoting the conservation and use of underutilized and neglected crops. 8. Institute of Plant Genetics and Crop Plant Research, Gatersleben/International Plant Genetic Resources Institute, Rome, Ital	[Is the species highly domesticated? Yes] "From the ethnohistorical record, we know that, at least in Mexico, chayote has been cultivated since pre-Colombian times. The first description of chayote was probably that of Francisco Hernández, who was in Mexico from 1550 to 1560."
101	2004. Grubben, G.J.H. (ed.). Vegetables. Volume 2 of Plant resources of tropical Africa. PROTA, Wageningen, Netherlands	[Is the species highly domesticated? Yes] Chayote cultivars do not breed true. Commercially grown chayote consists of two types: one with a medium-sized, pale green, smooth, pear-shaped fruit and one with a small, white, smooth, globular fruit.
102	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.	[Has the species become naturalized where grown? Yes] Naturalized in Hawaii on Kauai, Oahu, Maui and Hawaii Islands.
103	2004. Grubben, G.J.H. (ed.). Vegetables. Volume 2 of Plant resources of tropical Africa. PROTA, Wageningen, Netherlands	[Does the species have weedy races? Unknown]
201	2012. USDA ARS National Genetic Resources Program. Germplasm Resources Information Network - (GRIN). http://www.ars-grin.gov/cgi-bin/npgs/html/index.pl	[Species suited to tropical or subtropical climate(s) - If island is primarily wet habitat, then substitute "wet tropical" for "tropical or subtropical"? 2 - high] Native distribution: Mexico - Hidalgo, Oaxaca, Puebla, Queretaro, Veracruz.
202	2012. USDA ARS National Genetic Resources Program. Germplasm Resources Information Network - (GRIN). http://www.ars-grin.gov/cgi-bin/npgs/html/index.pl	[Quality of climate match data? 2 - high] Native distribution: Mexico - Hidalgo, Oaxaca, Puebla, Queretaro, Veracruz.
203	1996. Saade, R.L.. Chayote. <i>Sechium edule</i> (Jacq.) Sw. Promoting the conservation and use of underutilized and neglected crops. 8. Institute of Plant Genetics and Crop Plant Research, Gatersleben/International Plant Genetic Resources Institute, Rome, Ital	[Broad climate suitability (environmental versatility)? Yes] "The widest variety of cultivated chayote is found in southern Mexico, Guatemala and Costa Rica, at altitudes of 500-1500 m." It is a medium- to high-altitude crop (300-2000 m as), it requires a high relative humidity (80-85%), well-distributed annual precipitation of at least 1500-2000 mm and 12 hours daylight to initiate flowering.
203	2004. Grubben, G.J.H. (ed.). Vegetables. Volume 2 of Plant resources of tropical Africa. PROTA, Wageningen, Netherlands	[Broad climate suitability (environmental versatility)? Yes] In West Africa <i>Sechium edule</i> produces fruit well at 350-2500 m altitude. In the Antilles, chayote produces fruit at sea-level only during the cool season, at medium elevations the whole year, and at 1600 m altitude only during the warmest months.
204	2012. USDA ARS National Genetic Resources Program. Germplasm Resources Information Network - (GRIN). http://www.ars-grin.gov/cgi-bin/npgs/html/index.pl	[Native or naturalized in regions with tropical or subtropical climates? Yes] Native distribution: Mexico - Hidalgo, Oaxaca, Puebla, Queretaro, Veracruz.
205	1996. Saade, R.L.. Chayote. <i>Sechium edule</i> (Jacq.) Sw. Promoting the conservation and use of underutilized and neglected crops. 8. Institute of Plant Genetics and Crop Plant Research, Gatersleben/International Plant Genetic Resources Institute, Rome, Ital	[Does the species have a history of repeated introductions outside its natural range? Yes] <i>Sechium edule</i> is widely cultivated throughout the Americas. It was introduced to South America during the 18th and 19th centuries. During the same time it was introduced into Europe and take to Africa, Asia and Australia. It was introduced to the United States at the end of the 19th century. In 1978 chayote was the fifth most important commercial crop in Brazil.
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? Yes] Naturalized in Hawaii on Kauai, Oahu, Maui and Hawaii Islands.
301	2004. Grubben, G.J.H. (ed.). Vegetables. Volume 2 of Plant resources of tropical Africa. PROTA, Wageningen, Netherlands	[Naturalized beyond native range? Yes] In Reunion and Mauritius <i>Sechium edule</i> is locally naturalized.
302	2008. Biondi, D./Pedrosa-Macedo, J.H.. Plantas invasoras encontradas na area urbana de Curitiba (PR) [Invasive plants observed in the urban area of Curitiba - Brazil. Floresta. 38: 129-144.	[Garden/amenity/disturbance weed?] In this survey of a random sample of areas in the city of Curitiba, Brazil <i>Sechium edule</i> was recorded as one of the invasive species.
302	2012. Randall, R.P.. A Global Compendium of Weeds. 2nd Edition. Department of Agriculture and Food, Western Australia	[Garden/amenity/disturbance weed? No] Scored as an environmental weed.
303	2012. WRA Specialist. Personal Communication.	[Agricultural/forestry/horticultural weed? No] No evidence.

304	2011. Zenni, R.D./Ziller, S.R.. An overview of invasive plants in Brazil. Revista Brasileira de Botânica. 34(3): 431-446.	[Environmental weed? Yes] <i>Sechium edule</i> is listed as an invasive species in the Physiognomic-ecological class of the Alto Paraná Atlantic forests, Araucaria moist forests, Serra do Mar coastal forests Ecoregions in Brazil. [no impacts are mentioned]
305	2012. Randall, R.P.. A Global Compendium of Weeds. 2nd Edition. Department of Agriculture and Food, Western Australia	[Congeneric weed? No] No evidence.
401	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	[Produces spines, thorns or burrs?] "Stems climbing to 40 ft. high; rootstock tuberous. Leaf petioles to 6 inches long; blades broadly ovate, to 10 inches x 10 inches, 3- or 5-angled or shallowly lobed, shortly-rough-hairy, base cordate, lobe apices tapering. Inflorescences (staminate) to 10 inches long. Flower corolla ±0.5 inches in diameter, green; pistillate flower stalks ±0.5 inches long. Fruit pear-shaped, 3-8 inches long, green to white, smooth, furrowed, or sparsely and softly spiny. Seed large, clinging to flesh, protruding from fruit apex"
402	2012. WRA Specialist. Personal Communication.	[Allelopathic? 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	[Parasitic? No] Curcubitaceae.
404	1996. Saade, R.L.. Chayote. <i>Sechium edule</i> (Jacq.) Sw. Promoting the conservation and use of underutilized and neglected crops. 8. Institute of Plant Genetics and Crop Plant Research, Gatersleben/International Plant Genetic Resources Institute, Rome, Ital	[Unpalatable to grazing animals? No] In India and the Americas, the fruit and roots are used as fodder for cattle.
404	2004. Grubben, G.J.H. (ed.). Vegetables. Volume 2 of Plant resources of tropical Africa. PROTA, Wageningen, Netherlands	[Unpalatable to grazing animals? No] Fruits, shoots, and tubers are used as fodder for pigs, poultry and cattle.
405	1996. Saade, R.L.. Chayote. <i>Sechium edule</i> (Jacq.) Sw. Promoting the conservation and use of underutilized and neglected crops. 8. Institute of Plant Genetics and Crop Plant Research, Gatersleben/International Plant Genetic Resources Institute, Rome, Ital	[Toxic to animals? No] In India and the Americas, the fruit and roots are used as fodder for cattle.
405	2004. Grubben, G.J.H. (ed.). Vegetables. Volume 2 of Plant resources of tropical Africa. PROTA, Wageningen, Netherlands	[Toxic to animals? No] Fruits, shoots, and tubers are used as fodder for pigs, poultry and cattle.
406	2004. Grubben, G.J.H. (ed.). Vegetables. Volume 2 of Plant resources of tropical Africa. PROTA, Wageningen, Netherlands	[Host for recognized pests and pathogens?] <i>Sechium</i> is in general not very susceptible to pests and diseases, but is often heavily attacked by root-knot nematodes. The plants sometimes suffer from mosaic virus.
407	1996. Saade, R.L.. Chayote. <i>Sechium edule</i> (Jacq.) Sw. Promoting the conservation and use of underutilized and neglected crops. 8. Institute of Plant Genetics and Crop Plant Research, Gatersleben/International Plant Genetic Resources Institute, Rome, Ital	[Causes allergies or is otherwise toxic to humans? No] The leaves and roots are used for food. The stems are used to make baskets and hats. Leaves, seeds and fruits are used medicinally.
407	2004. Grubben, G.J.H. (ed.). Vegetables. Volume 2 of Plant resources of tropical Africa. PROTA, Wageningen, Netherlands	[Causes allergies or is otherwise toxic to humans? No] Fruits, shoots, leaves and seeds are used as food sources. Reunion had a home industry in the 19th and 20th century using the fibers for hats. <i>Sechium</i> leaves and tubers are used medicinally.
408	2004. Grubben, G.J.H. (ed.). Vegetables. Volume 2 of Plant resources of tropical Africa. PROTA, Wageningen, Netherlands	[Creates a fire hazard in natural ecosystems? No] Herbaceous climber.
409	1994. Ram, J./Glover, N.. Chayote, vegetable pear, choko - <i>Sechium edule</i> . Pacific Islands Farm Manual - Tropical Perennial Vegetable Leaflet. 11: .CTAHR, University of Hawaii, Honolulu	[Is a shade tolerant plant at some stage of its life cycle? Yes] <i>Sechium edule</i> grows in both full and light shade.
410	1994. Ram, J./Glover, N.. Chayote, vegetable pear, choko - <i>Sechium edule</i> . Pacific Islands Farm Manual - Tropical Perennial Vegetable Leaflet. 11: .CTAHR, University of Hawaii, Honolulu	[Tolerates a wide range of soil conditions (or limestone conditions if not a volcanic island)? No] Well-drained sandy loams are preferred, but clay soils are suitable. It does not tolerate waterlogged soils. Soil pH of 5-6 is most appropriate.

410	1996. Saade, R.L.. Chayote. <i>Sechium edule</i> (Jacq.) Sw. Promoting the conservation and use of underutilized and neglected crops. 8. Institute of Plant Genetics and Crop Plant Research, Gatersleben/International Plant Genetic Resources Institute, Rome, Ital	[Tolerates a wide range of soil conditions (or limestone conditions if not a volcanic island)? No] Chayote productivity is greater in deep soil with plenty of organic matter but is affected negatively by clay or sandy soils. On commercial plantations, lime is often applied as are nematicides and fertilizers rich in nitrogen and organic matter.
411	1996. Saade, R.L.. Chayote. <i>Sechium edule</i> (Jacq.) Sw. Promoting the conservation and use of underutilized and neglected crops. 8. Institute of Plant Genetics and Crop Plant Research, Gatersleben/International Plant Genetic Resources Institute, Rome, Ital	[Climbing or smothering growth habit? Yes] "The chayote is a herbaceous, perennial, monoecious, vigorous creeper or climbing plant. It grows from a single, thick root, which produces adventitious tuberous roots. The stems are angular-grooved and glabrous, and several grow simultaneously from a single root, at least in the cultivated plants."
411	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	[Climbing or smothering growth habit? Yes] "Stems climbing to 40 ft. high; rootstock tuberous."
412	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	[Forms dense thickets? No] Climbing vine.
501	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	[Aquatic? No] Terrestrial.
502	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	[Grass? No] Curcubitaceae.
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	[Nitrogen fixing woody plant? No] Perennial climber. Curcubitaceae.
504	1996. Saade, R.L.. Chayote. <i>Sechium edule</i> (Jacq.) Sw. Promoting the conservation and use of underutilized and neglected crops. 8. Institute of Plant Genetics and Crop Plant Research, Gatersleben/International Plant Genetic Resources Institute, Rome, Ital	[Geophyte (herbaceous with underground storage organs -- bulbs, corms, or tubers)? Yes] "The chayote is a herbaceous, perennial, monoecious, vigorous creeper or climbing plant. It grows from a single, thick root, which produces adventitious tuberous roots.
504	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	[Geophyte (herbaceous with underground storage organs -- bulbs, corms, or tubers)? Yes] "Stems climbing to 40 ft. high; rootstock tuberous.
601	1996. Saade, R.L.. Chayote. <i>Sechium edule</i> (Jacq.) Sw. Promoting the conservation and use of underutilized and neglected crops. 8. Institute of Plant Genetics and Crop Plant Research, Gatersleben/International Plant Genetic Resources Institute, Rome, Ital	[Evidence of substantial reproductive failure in native habitat? No] There are wild populations of <i>Sechium edule</i> in southern Mexico. [widely cultivated species]
601	2012. WRA Specialist. Personal Communication.	[Evidence of substantial reproductive failure in native habitat? No] No evidence.
602	1996. Saade, R.L.. Chayote. <i>Sechium edule</i> (Jacq.) Sw. Promoting the conservation and use of underutilized and neglected crops. 8. Institute of Plant Genetics and Crop Plant Research, Gatersleben/International Plant Genetic Resources Institute, Rome, Ital	[Produces viable seed? Yes] "The seed is ovoid, compressed and smooth, and germinates within the fruit; in cultivated plants the seed germinates when the fruit is still on the plant, while in wild plants only once the fruit becomes detached."
602	2004. Grubben, G.J.H. (ed.). Vegetables. Volume 2 of Plant resources of tropical Africa. PROTA, Wageningen, Netherlands	[Produces viable seed? Yes] "The seed germinates in the ripe fruit while still on the mother plant. The stem of the seedling grows out from the fruit apex and curves upwards. It produces roots which abort when they do not make contact with the soil."

603	1991. Newstrom, L.E.. Evidence for the origin of chayote, <i>Sechium edule</i> (Cucurbitaceae). <i>Economic Botany</i> . 45: 410-428.	[Hybridizes naturally?] "Circumstantial evidence for hybridization supports the affinity of <i>Sechium compositum</i> to <i>Sechium edule</i> . In 1984, a putative hybrid population appeared spontaneously in the compost heap on a steep riverbank at the margin of the chayote gene bank at C.A.T.I.E. Its intermediate flower and fruit characters suggested that the hybrid arose from <i>S. compositum</i> plants and chayote cultivars.
603	1996. Saade, R.L.. Chayote. <i>Sechium edule</i> (Jacq.) Sw. Promoting the conservation and use of underutilized and neglected crops. 8. Institute of Plant Genetics and Crop Plant Research, Gatersleben/International Plant Genetic Resources Institute, Rome, Ital	[Hybridizes naturally?] Based on the morphological variation found in wild populations (Veracruz) and their proximity to cultivated areas the populations could be of hybrid origin.
603	2012. WRA Specialist. Personal Communication.	[Hybridizes naturally? Unknown]
604	1996. Saade, R.L.. Chayote. <i>Sechium edule</i> (Jacq.) Sw. Promoting the conservation and use of underutilized and neglected crops. 8. Institute of Plant Genetics and Crop Plant Research, Gatersleben/International Plant Genetic Resources Institute, Rome, Ital	[Self-compatible or apomictic? Yes] Additionally, there appears to be no difference in fruit production rates between plants with open pollination and those which are self- or cross-pollinated."
605	1996. Saade, R.L.. Chayote. <i>Sechium edule</i> (Jacq.) Sw. Promoting the conservation and use of underutilized and neglected crops. 8. Institute of Plant Genetics and Crop Plant Research, Gatersleben/International Plant Genetic Resources Institute, Rome, Ital	[Requires specialist pollinators? No] "The fact that chayote pollination depends on insects may be one of the reasons why it has spread so successfully, but it also makes it very difficult to preserve pure strains, which is important not only for commercial or traditional plantation, but also for genebanks. The relative importance of chayote pollinators has been observed to increase not just with ecogeographical and environmental factors such as altitude and latitude, but also with the use of pesticides. Thus, some species of bees of the genus <i>Trigona</i> that have been identified as very efficient chayote pollinators are found mostly at medium to high altitudes, which are pesticide-free. In contrast, other important pollinators, such as <i>Apis mellifera</i> , are most commonly found mainly in commercial plantations, where pesticides are frequently used. Secondary pollinators of chayote include wasps from the genera <i>Polybia</i> , <i>Synoeca</i> and <i>Parachrataegus</i> as well as other smaller species of <i>Trigona</i> ."
605	2004. Grubben, G.J.H. (ed.). Vegetables. Volume 2 of Plant resources of tropical Africa. PROTA, Wageningen, Netherlands	[Requires specialist pollinators? No] Flowers are pollinated by insects.
606	1996. Saade, R.L.. Chayote. <i>Sechium edule</i> (Jacq.) Sw. Promoting the conservation and use of underutilized and neglected crops. 8. Institute of Plant Genetics and Crop Plant Research, Gatersleben/International Plant Genetic Resources Institute, Rome, Ital	[Reproduction by vegetative fragmentation?] The main method of propagation is by planting the seeds/fruits. Vegetative propagation by planting basal shoots is sometimes used.
606	2012. WRA Specialist. Personal Communication.	[Reproduction by vegetative fragmentation? Unknown]
607	2004. Grubben, G.J.H. (ed.). Vegetables. Volume 2 of Plant resources of tropical Africa. PROTA, Wageningen, Netherlands	[Minimum generative time (years)? 1] Flowering starts one to two months after germination. Plants start production of fruit 3-5 months after planting.
701	2012. WRA Specialist. Personal Communication.	[Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)? Unknown]
702	1996. Saade, R.L.. Chayote. <i>Sechium edule</i> (Jacq.) Sw. Promoting the conservation and use of underutilized and neglected crops. 8. Institute of Plant Genetics and Crop Plant Research, Gatersleben/International Plant Genetic Resources Institute, Rome, Ital	[Propagules dispersed intentionally by people? Yes] <i>Sechium edule</i> is widely cultivated throughout the Americas. It was introduced to South America during the 18th and 19th centuries. During the same time it was introduced into Europe and take to Africa, Asia and Australia. It was introduced to the United States at the end of the 19th century. In 1978 chayote was the fifth most important commercial crop in Brazil.
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] Widely cultivated for its fruit and shoot tips.
703	2012. WRA Specialist. Personal Communication.	[Propagules likely to disperse as a produce contaminant? No] No evidence.

704	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 adapted to wind dispersal? No] Fruit pear-shaped 3-8" long.
705	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 water dispersed? Unknown]
706	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 bird dispersed? No] Fruit 3- 8".
707	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 by other animals (externally)? No] Fruit pear-shaped 3-8" long.
708	1935. Docters van Leeuwen, W.M.. The dispersal of plants by fruit-eating bats. Gardens Bulletin. 9: 58-63.	[Propagules survive passage through the gut? Yes] Fruit-eating bats have been observed to feed on <i>Sechium edule</i> .
801	1996. Saade, R.L.. Chayote. <i>Sechium edule</i> (Jacq.) Sw. Promoting the conservation and use of underutilized and neglected crops. 8. Institute of Plant Genetics and Crop Plant Research, Gatersleben/International Plant Genetic Resources Institute, Rome, Ital	[Prolific seed production (>1000/m2)? No] One plant can produce more than 300 fruits per year. Each fruit has one seed.
801	2004. Grubben, G.J.H. (ed.). Vegetables. Volume 2 of Plant resources of tropical Africa. PROTA, Wageningen, Netherlands	[Prolific seed production (>1000/m2)? No] Annual yields may range from 75-300 or more per plant.
802	1996. Saade, R.L.. Chayote. <i>Sechium edule</i> (Jacq.) Sw. Promoting the conservation and use of underutilized and neglected crops. 8. Institute of Plant Genetics and Crop Plant Research, Gatersleben/International Plant Genetic Resources Institute, Rome, Ital	[Evidence that a persistent propagule bank is formed (>1 yr)? No] <i>Sechium edule</i> has endocarpic and precocious germination.
802	2004. Grubben, G.J.H. (ed.). Vegetables. Volume 2 of Plant resources of tropical Africa. PROTA, Wageningen, Netherlands	[Evidence that a persistent propagule bank is formed (>1 yr)? No] Seed cannot be stored for much longer than one month since it is viviparous and has no dormancy.
803	2012. WRA Specialist. Personal Communication.	[Well controlled by herbicides? Unknown]
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:

- Naturalized in Hawaii, Reunion and Mauritius
- Environmental weed in Brazil
- Disturbance weed (urban) in Brazil
- Shade tolerant
- Smothering growth form (creeper/climber)
- Geophyte (underground tuber)
- Self-compatible (one plant can reproduce)
- Reproduces in less than one year
- Widely cultivated by humans
- Possibly bat dispersed

Low Risk:

- Domesticated (limited dispersal mechanisms)
- Unarmed (no spines, thorns, burrs)
- Palatable to animals
- Non-toxic to humans or animals
- Intolerant of many soil types
- Not a prolific seed producer
- No seed bank