

Family: *Fabaceae*

Taxon: *Caesalpinia latisiliqua*

Synonym: *Mezoneurum latisiliquum* (Cav.) Merr.
Bauhinia latisiliqua Cav.

Common Name: NA

Questionnaire :	current 20090513	Assessor:	Chuck Chimera	Designation: EVALUATE
Status:	Assessor Approved	Data Entry Person:	Chuck Chimera	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	y	
402	Allelopathic	y=1, n=0		
403	Parasitic	y=1, n=0	n	
404	Unpalatable to grazing animals	y=1, n=-1		
405	Toxic to animals	y=1, n=0		
406	Host for recognized pests and pathogens	y=1, n=0		
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		
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	y	

412	Forms dense thickets	y=1, n=0	y
501	Aquatic	y=5, n=0	n
502	Grass	y=1, n=0	n
503	Nitrogen fixing woody plant	y=1, n=0	y
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	
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	
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	
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	
801	Prolific seed production (>1000/m ²)	y=1, n=-1	n
802	Evidence that a persistent propagule bank is formed (>1 yr)	y=1, n=-1	
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: EVALUATE

WRA Score 5

Supporting Data:

101	1974. Hattink, T.A.. A revision of Malesian <i>Caesalpinia</i> , including <i>Mezoneuron</i> (Leguminosae-Caesalpinaceae). <i>Reinwardtia</i> . 9(1): 1 – 69.	[Is the species highly domesticated? No] No evidence
102	2011. WRA Specialist. Personal Communication.	NA
103	2011. WRA Specialist. Personal Communication.	NA
201	1974. Hattink, T.A.. A revision of Malesian <i>Caesalpinia</i> , including <i>Mezoneuron</i> (Leguminosae-Caesalpinaceae). <i>Reinwardtia</i> . 9(1): 1 – 69.	[Species suited to tropical or subtropical climate(s) 2- high] "Distribution: Indo-China (Tonkin, Annam); in Malesia: Borneo (not from the S.W. part, also Labuan, Bangucy), Philippines, Celebes, E. New Guinea (Morobe Distr., once found)."
202	1974. Hattink, T.A.. A revision of Malesian <i>Caesalpinia</i> , including <i>Mezoneuron</i> (Leguminosae-Caesalpinaceae). <i>Reinwardtia</i> . 9(1): 1 – 69.	[Quality of climate match data? 2-high] "Distribution: Indo-China (Tonkin, Annam); in Malesia: Borneo (not from the S.W. part, also Labuan, Bangucy), Philippines, Celebes, E. New Guinea (Morobe Distr., once found)."
203	1974. Hattink, T.A.. A revision of Malesian <i>Caesalpinia</i> , including <i>Mezoneuron</i> (Leguminosae-Caesalpinaceae). <i>Reinwardtia</i> . 9(1): 1 – 69.	[Broad climate suitability (environmental versatility)? Yes] "Sa bah: to 1500 m...Philippines. All parts, up to 1300 m, 39 coll..." [elevation range >1000 m; demonstrating a degree of environmental versatility]
203	1996. Kalkman, C. et al. (eds.). <i>Flora Malesiana. Series I, Spermatophyta: Flowering plants. Volume 12, part 2. Caesalpinaceae, Geitonoplesiaceae, Hernandiaceae, Lowiaceae. Rijksherbarium / Hortus Botanicus, Leiden, The Netherlands</i>	[Broad climate suitability (environmental versatility)? Yes] "Habitat & Ecology — Rocks on sunny hot dry slopes, riverbanks and roadsides, primary forest and forest fringes, from 100 to 1500 m altitude." [elevation range >1000 m; demonstrating a degree of environmental versatility]
204	1974. Hattink, T.A.. A revision of Malesian <i>Caesalpinia</i> , including <i>Mezoneuron</i> (Leguminosae-Caesalpinaceae). <i>Reinwardtia</i> . 9(1): 1 – 69.	[Native or naturalized in regions with tropical or subtropical climates? Yes] "Distribution: Indo-China (Tonkin, Annam); in Malesia: Borneo (not from the S.W. part, also Labuan, Bangucy), Philippines, Celebes, E. New Guinea (Morobe Distr., once found)."
205	2011. WRA Specialist. Personal Communication.	[Does the species have a history of repeated introductions outside its natural range? No] No evidence
301	2005. Wagner, W.L./Herbst, D.R./Lorence, D.H.. <i>Flora of the Hawaiian Islands website. Smithsonian Institution, Washington, D.C. http://botany.si.edu/pacificislandbiodiversity/hawaiianflora/index.htm</i>	[Naturalized beyond native range? No]
301	2011. Lau, A.. <i>Oahu Early Detection Botanist. Pers. Comm. 20 May 2011.</i>	[Naturalized beyond native range? No evidence on Oahu] "Dry to mesic lowland agricultural roadside setting. Sprawling, thicket forming woody vine, sometimes reaching up to 5 m. Stems and leaf rachises with recurved prickles. Elongated inflorescence stems red pink. Calyx lobes green, concealing the yellow, bilobed standard petal. Fruits immature, pinkish. Presumably planted in this locality as a barrier plant, forming a long row/thicket along a fence line. Producing a significant amount of fruit. No evidence of spread seen in area."
302	2007. Randall, R.P.. <i>Global Compendium of Weeds - Index [Online Database]. http://www.hear.org/gcw/</i>	[Garden/amenity/disturbance weed? No] No evidence
303	2007. Randall, R.P.. <i>Global Compendium of Weeds - Index [Online Database]. http://www.hear.org/gcw/</i>	[Agricultural/forestry/horticultural weed? No] No evidence
304	2007. Randall, R.P.. <i>Global Compendium of Weeds - Index [Online Database]. http://www.hear.org/gcw/</i>	[Environmental weed? No] No evidence
305	2003. Weber, E.. <i>Invasive Plant Species of the World. A Reference Guide to Environmental Weeds. CABI Publishing, Wallingford, UK</i>	[Congeneric weed? Yes] " <i>Caesalpinia decapetala</i> ... This species is invasive because it forms dense impenetrable thickets and climbs over shrubs and trees, impeding their growth and regeneration."
401	1994. Pinard, M.A./Putz, F.E.. <i>Vine infestation of large remnant trees in logged forest in Sabah, Malaysia: Biomechanical facilitation in vine succession. Journal of Tropical Forest Science. 6(3): 302 - 309.</i>	[Produces spines, thorns or burrs? Yes] " <i>Caesalpinia latisiliqua</i> climbs with the aid of branches that grow more-or-less perpendicularly to the stem and coil around the host tree. Recurved spines on the branches and petioles increase attachment security. The stem grows straight up the side of trees less than approximately 40 cm DBH and can span gaps up to 1.5 m between supports."

402	2011. WRA Specialist. Personal Communication.	[Allelopathic? Unknown]
403	1974. Hattink, T.A.. A revision of Malesian <i>Caesalpinia</i> , including <i>Mezoneuron</i> (Leguminosae-Caesalpinaceae). <i>Reinwardtia</i> . 9(1): 1 – 69.	[Parasitic? No] "Climber or small tree, up to 20 m" [Fabaceae]
404	1994. Pinard, M.A./Putz, F.E.. Vine infestation of large remnant trees in logged forest in Sabah, Malaysia: Biomechanical facilitation in vine succession. <i>Journal of Tropical Forest Science</i> . 6(3): 302 - 309.	[Unpalatable to grazing animals? Unknown] "Recurved spines on the branches and petioles increase attachment security." [No direct evidence, but presence of spines/prickles may deter browsing by animals]
405	1990. Spoerke, D.G./Smolinske, S.C.. Toxicity of houseplants. CRC Press, Boca Raton, FL	[Toxic to animals? Unknown] "Caesalpinia species...The seeds of these plants contain tannins ... Tannins are cytotoxic protein precipitants ... Eating the seeds may cause nausea, then vomiting of a profuse and persistent nature ... Ingestion of the seeds or pods by five children aged 2 to 5 resulted in vomiting and diarrhea requiring hospitalization. If children or pets are in the home, and might ingest the seeds, the developing pods should be picked from the plant after blooming." [Refers to <i>Caesalpinia</i> species, but unknown for <i>C. latisiliqua</i>]
406	2011. WRA Specialist. Personal Communication.	[Host for recognized pests and pathogens? Unknown]
407	1990. Spoerke, D.G./Smolinske, S.C.. Toxicity of houseplants. CRC Press, Boca Raton, FL	[Causes allergies or is otherwise toxic to humans? Unknown] "Caesalpinia species...The seeds of these plants contain tannins ... Tannins are cytotoxic protein precipitants ... Eating the seeds may cause nausea, then vomiting of a profuse and persistent nature ... Ingestion of the seeds or pods by five children aged 2 to 5 resulted in vomiting and diarrhea requiring hospitalization. If children or pets are in the home, and might ingest the seeds, the developing pods should be picked from the plant after blooming." [Refers to <i>Caesalpinia</i> species, but unknown for <i>C. latisiliqua</i>]
408	1974. Hattink, T.A.. A revision of Malesian <i>Caesalpinia</i> , including <i>Mezoneuron</i> (Leguminosae-Caesalpinaceae). <i>Reinwardtia</i> . 9(1): 1 – 69.	[Creates a fire hazard in natural ecosystems? Unknown] "Climber or small tree, up to 20 m...Ecology: Rocks on sunny hot dry slopes, river banks and road sides, primary forests and forest fringes." [If able to form thickets similar to other <i>Caesalpinia</i> species, could increase fire risk in drier areas, and could act as a fuel ladder by climbing into canopy of other trees]
409	1974. Hattink, T.A.. A revision of Malesian <i>Caesalpinia</i> , including <i>Mezoneuron</i> (Leguminosae-Caesalpinaceae). <i>Reinwardtia</i> . 9(1): 1 – 69.	[Is a shade tolerant plant at some stage of its life cycle? Unknown] "Ecology: Rocks on sunny hot dry slopes, river banks and road sides, primary forests and forest fringes." [Distribution suggests plant inhabits areas with high light levels. May not tolerate dense shade]
409	1996. Kalkman, C. et al. (eds.). <i>Flora Malesiana. Series I, Spermatophyta: Flowering plants. Volume 12, part 2. Caesalpinaceae, Geitonoplesiaceae, Hernandiaceae, Lowiaceae.</i> Rijksherbarium / Hortus Botanicus, Leiden, The Netherlands	[Is a shade tolerant plant at some stage of its life cycle? Unknown] "Habitat & Ecology — Rocks on sunny hot dry slopes, riverbanks and roadsides, primary forest and forest fringes, from 100 to 1500 m altitude." [Distribution suggests plant inhabits areas with high light levels. May not tolerate dense shade]
410	2011. WRA Specialist. Personal Communication.	[Tolerates a wide range of soil conditions (or limestone conditions if not a volcanic island)? Unknown]
411	1994. Pinard, M.A./Putz, F.E.. Vine infestation of large remnant trees in logged forest in Sabah, Malaysia: Biomechanical facilitation in vine succession. <i>Journal of Tropical Forest Science</i> . 6(3): 302 - 309.	[Climbing or smothering growth habit? Yes] " <i>Caesalpinia latisiliqua</i> climbs with the aid of branches that grow more-or-less perpendicularly to the stem and coil around the host tree. Recurved spines on the branches and petioles increase attachment security. The stem grows straight up the side of trees less than approximately 40 cm DBH and can span gaps up to 1.5 m between supports."
412	2003. Weber, E.. <i>Invasive Plant Species of the World. A Reference Guide to Environmental Weeds.</i> CABI Publishing, Wallingford, UK	[Forms dense thickets? Yes] " <i>Caesalpinia decapetala</i> ...This species is invasive because it forms dense impenetrable thickets and climbs over shrubs and trees, impeding their growth and regeneration." [<i>C. latisiliqua</i> has a similar in growth habit]
412	2011. Lau, A.. Oahu Early Detection Botanist. Pers. Comm. 20 May 2011.	[Forms dense thickets? Yes] "Dry to mesic lowland agricultural roadside setting. Sprawling, thicket forming woody vine, sometimes reaching up to 5 m."
501	1974. Hattink, T.A.. A revision of Malesian <i>Caesalpinia</i> , including <i>Mezoneuron</i> (Leguminosae-Caesalpinaceae). <i>Reinwardtia</i> . 9(1): 1 – 69.	[Aquatic? No] "Climber or small tree, up to 20 m" [Terrestrial]
502	1974. Hattink, T.A.. A revision of Malesian <i>Caesalpinia</i> , including <i>Mezoneuron</i> (Leguminosae-Caesalpinaceae). <i>Reinwardtia</i> . 9(1): 1 – 69.	[Grass? No] Fabaceae

503	1974. Hattink, T.A.. A revision of Malesian <i>Caesalpinia</i> , including <i>Mezoneuron</i> (Leguminosae-Caesalpinaceae). <i>Reinwardtia</i> . 9(1): 1 – 69.	[Nitrogen fixing woody plant? Yes] "Climber or small tree, up to 20 m" [Fabaceae]
504	1974. Hattink, T.A.. A revision of Malesian <i>Caesalpinia</i> , including <i>Mezoneuron</i> (Leguminosae-Caesalpinaceae). <i>Reinwardtia</i> . 9(1): 1 – 69.	[Geophyte (herbaceous with underground storage organs -- bulbs, corms, or tubers)? No] "Climber or small tree, up to 20 m"
601	1974. Hattink, T.A.. A revision of Malesian <i>Caesalpinia</i> , including <i>Mezoneuron</i> (Leguminosae-Caesalpinaceae). <i>Reinwardtia</i> . 9(1): 1 – 69.	[Evidence of substantial reproductive failure in native habitat? No] No evidence
601	1996. Kalkman, C. et al. (eds.). <i>Flora Malesiana. Series I, Spermatophyta: Flowering plants. Volume 12, part 2. Caesalpinaceae, Geitonoplesiaceae, Hernandiaceae, Lowiaceae.</i> Rijksherbarium / Hortus Botanicus, Leiden, The Netherlands	[Evidence of substantial reproductive failure in native habitat? No] No evidence
602	1974. Hattink, T.A.. A revision of Malesian <i>Caesalpinia</i> , including <i>Mezoneuron</i> (Leguminosae-Caesalpinaceae). <i>Reinwardtia</i> . 9(1): 1 – 69.	[Produces viable seed? Yes] "In fruit the pedicel 15- 32 mm; receptacle 4-7 mm long, 7- 18 mm on median section, the widest part at the winged side of the pod; pod 2- 3 ½ times as long as wide, 10- 16 by 3-5 cm, including the 10-15 mm wide wing at the dorsal side, base cuneate, hidden in the calyx-tube, top variable (see fig. 6). surfaces sometimes reticulate-nerved. Seeds 6-9 (-13). placed separate from each other, ellipsoid in outline, flat, ca 9-12 by 6-7 by 1 mm, brown, dull; albumen none."
603	2011. Clark, R.. Royal Botanic Gardens, Kew. Pers. Comm..	[Hybridizes naturally? Unknown] "I am not aware of any hybridization occurring amongst <i>Mezoneurons</i> – however, it is almost certain that hybridisation does occur amongst <i>Caesalpinias</i> , and by extension is likely to occur amongst <i>Mezoneurons</i> also. I would say that there is therefore a reasonable chance that the introduced species could hybridise with <i>M. kauaiense</i> ."
604	1974. Bawa, K.S.. Breeding systems of tree species of a lowland tropical community. <i>Evolution</i> . 28: 85-92.	[Self-compatible or apomictic? Unknown] "Table 1. <i>Caesalpinia eriostachys</i> ...Nature of the breeding system...Self-incompatible" [Suggests <i>Caesalpinia latisiliqua</i> may be self-incompatible]
604	2004. Li, S.-J./Zhang, D.-X./Li, L./Chen, Z.-Y.. Pollination ecology of <i>Caesalpinia crista</i> (Leguminosae: Caesalpinioideae). <i>Acta Botanica Sinica</i> 46 (3): 271-278. 46 (3): 271-278.	[Self-compatible or apomictic? Unknown] " <i>Caesalpinia crista</i> ...The breeding system was self-incompatible, and protogynous xenogamy." [Suggests <i>Caesalpinia latisiliqua</i> may be self-incompatible]
605	1974. Hattink, T.A.. A revision of Malesian <i>Caesalpinia</i> , including <i>Mezoneuron</i> (Leguminosae-Caesalpinaceae). <i>Reinwardtia</i> . 9(1): 1 – 69.	[Requires specialist pollinators? No] "Flowers in all parts punctate (secretory cavities), in bud ovoid, pubescent to glabrous; receptacle oblique, 3-5 mm long, 7- 12 mm wide; sepals: the lowest one cucullate in bud, in open flower twice as long as the others, 7- 15 by 6-8 mm, the other 4 sepals ciliate, top rounded, the lowest two 4-7 by 3- 5 mm, the highest two semi-orbicular, 4-7 mm Ø. Petals very unequal, standard vaulted, bilobed, 8-12 (- 19) by 6-10 (-14) mm, at the base 1-2 mm wide, sinus for ca 1/3-3/4 of the length and sometimes with a short stipitate process, the other 4 petals: length 1/5 to 1/2 of the standard, 2-6 by 1 1/2 - 3 mm, short-clawed or sessile, widest above the middle, top acuminate to tridentate, in the latter case the central dent acuminate, the lateral ones rounded; often ciliate. Stamens far exserted; filament ca 14 (-22) mm, more or less hairy to about the middle; anther 1- 2 by 1/4 mm. Pistil pubescent or glabrous, 0- 1/2 mm stalked, ovary ca 5 by 1 mm, flat, ovules 6-13; style ca 8 mm, stigma oblique, hairy along the margin." [Floral morphology similar to other insect-pollinated <i>Caesalpinia</i> species]
605	2011. Borneo Bird Images. Brown-throated Sunbird. http://borneobirdimages.com/bird/brown-throated_sunbird/1751	[Requires specialist pollinators? No] "Female on <i>Caesalpinia latisiliqua</i> , Caesalpinaceae. A common endemic thorny vine found throughout Borneo. Both the flower stalks and the bean pods which follow are bright red hence the name Red Bean Climber. The whole plant flowers simultaneously attracting hordes of sunbirds, spiderhunters, flowerpeckers, bulbuls, leafbirds and white eyes to feed on the copious nectar." [visited by numerous bird species, including white-eyes, that may pollinate the plant]
606	2011. WRA Specialist. Personal Communication.	[Reproduction by vegetative fragmentation? Unknown] Unknown if liana will root when in contact with ground, as other <i>Caesalpinia</i> spp. are capable of doing
607	2011. WRA Specialist. Personal Communication.	[Minimum generative time (years)? Unknown]

701	1974. Hattink, T.A.. A revision of Malesian <i>Caesalpinia</i> , including <i>Mezoneuron</i> (Leguminosae-Caesalpinaceae). <i>Reinwardtia</i> . 9(1): 1 – 69.	[Propagules likely to be dispersed unintentionally? No] "In fruit the pedicel 15- 32 mm; receptacle 4-7 mm long, 7- 18 mm on median section, the widest part at the winged side of the pod; pod 2- 3 ½ times as long as wide, 10- 16 by 3-5 cm, including the 10-15 mm wide wing at the dorsal side, base cuneate, hidden in the calyx-tube, top variable (see fig. 6). surfaces sometimes reticulate-nerved. Seeds 6-9 (-13). placed separate from each other, ellipsoid in outline, flat, ca 9-12 by 6-7 by 1 mm, brown, dull; albumen none." [Pods and seeds rather large and without means of external attachment. Unlikely to be inadvertently dispersed]
702	2011. Lau, A.. Oahu Early Detection Botanist. Pers. Comm. 20 May 2011.	[Propagules dispersed intentionally by people? Yes] "Presumably planted in this locality as a barrier plant, forming a long row/thicket along a fenceline."
703	1974. Hattink, T.A.. A revision of Malesian <i>Caesalpinia</i> , including <i>Mezoneuron</i> (Leguminosae-Caesalpinaceae). <i>Reinwardtia</i> . 9(1): 1 – 69.	[Propagules likely to disperse as a produce contaminant? No] "In fruit the pedicel 15- 32 mm; receptacle 4-7 mm long, 7- 18 mm on median section, the widest part at the winged side of the pod; pod 2- 3 ½ times as long as wide, 10- 16 by 3-5 cm, including the 10-15 mm wide wing at the dorsal side, base cuneate, hidden in the calyx-tube, top variable (see fig. 6). surfaces sometimes reticulate-nerved. Seeds 6-9 (-13). placed separate from each other, ellipsoid in outline, flat, ca 9-12 by 6-7 by 1 mm, brown, dull; albumen none." [Pods and seeds rather large. No direct evidence, and unlikely to be inadvertently dispersed]
704	1974. Hattink, T.A.. A revision of Malesian <i>Caesalpinia</i> , including <i>Mezoneuron</i> (Leguminosae-Caesalpinaceae). <i>Reinwardtia</i> . 9(1): 1 – 69.	[Propagules adapted to wind dispersal? Probably not] "In fruit the pedicel 15- 32 mm; receptacle 4-7 mm long, 7- 18 mm on median section, the widest part at the winged side of the pod; pod 2- 3 ½ times as long as wide, 10- 16 by 3-5 cm, including the 10-15 mm wide wing at the dorsal side, base cuneate, hidden in the calyx-tube, top variable (see fig. 6). surfaces sometimes reticulate-nerved. Seeds 6-9 (-13). placed separate from each other, ellipsoid in outline, flat, ca 9-12 by 6-7 by 1 mm, brown, dull; albumen none." {Possible that flattened, winged pods may be wind-dispersed over short distances, but gravity is the most likely means of dispersal]
705	1974. Hattink, T.A.. A revision of Malesian <i>Caesalpinia</i> , including <i>Mezoneuron</i> (Leguminosae-Caesalpinaceae). <i>Reinwardtia</i> . 9(1): 1 – 69.	[Propagules water dispersed? Possibly] "Ecology: Rocks on sunny hot dry slopes, river banks and road sides, primary forests and forest fringes." [distribution along river suggests seed pods may be able to float and disperse by water]
706	1974. Hattink, T.A.. A revision of Malesian <i>Caesalpinia</i> , including <i>Mezoneuron</i> (Leguminosae-Caesalpinaceae). <i>Reinwardtia</i> . 9(1): 1 – 69.	[Propagules bird dispersed? No] "In fruit the pedicel 15- 32 mm; receptacle 4-7 mm long, 7- 18 mm on median section, the widest part at the winged side of the pod; pod 2- 3 ½ times as long as wide, 10- 16 by 3-5 cm, including the 10-15 mm wide wing at the dorsal side, base cuneate, hidden in the calyx-tube, top variable (see fig. 6). surfaces sometimes reticulate-nerved. Seeds 6-9 (-13). placed separate from each other, ellipsoid in outline, flat, ca 9-12 by 6-7 by 1 mm, brown, dull; albumen none." [Not fleshy-fruited]
707	1974. Hattink, T.A.. A revision of Malesian <i>Caesalpinia</i> , including <i>Mezoneuron</i> (Leguminosae-Caesalpinaceae). <i>Reinwardtia</i> . 9(1): 1 – 69.	[Propagules dispersed by other animals (externally)? No] "In fruit the pedicel 15- 32 mm; receptacle 4-7 mm long, 7- 18 mm on median section, the widest part at the winged side of the pod; pod 2- 3 ½ times as long as wide, 10- 16 by 3-5 cm, including the 10-15 mm wide wing at the dorsal side, base cuneate, hidden in the calyx-tube, top variable (see fig. 6). surfaces sometimes reticulate-nerved. Seeds 6-9 (-13). placed separate from each other, ellipsoid in outline, flat, ca 9-12 by 6-7 by 1 mm, brown, dull; albumen none." [Pods and seeds rather large and without means of external attachment. Unlikely to be externally dispersed by animals]
708	2011. WRA Specialist. Personal Communication.	[Propagules survive passage through the gut? Unknown] Unknown. They might remain viable post-passage if they, like other <i>Caesalpinia</i> species, have a hard outer coat that must be scarified prior to germination. However, it is unknown whether or not the seed is consumed by any animal
801	1974. Hattink, T.A.. A revision of Malesian <i>Caesalpinia</i> , including <i>Mezoneuron</i> (Leguminosae-Caesalpinaceae). <i>Reinwardtia</i> . 9(1): 1 – 69.	[Prolific seed production (>1000/m ²)? No.] "In fruit the pedicel 15- 32 mm; receptacle 4-7 mm long, 7- 18 mm on median section, the widest part at the winged side of the pod; pod 2- 3 ½ times as long as wide, 10- 16 by 3-5 cm, including the 10-15 mm wide wing at the dorsal side, base cuneate, hidden in the calyx-tube, top variable (see fig. 6). surfaces sometimes reticulate-nerved. Seeds 6-9 (-13). placed separate from each other, ellipsoid in outline, flat, ca 9-12 by 6-7 by 1 mm, brown, dull; albumen none." [Relatively large, few seeded pods unlikely to reach such high seed densities]
802	2008. Royal Botanic Gardens Kew. Seed Information Database (SID). Version 7.1. http://data.kew.org/sid/	[Evidence that a persistent propagule bank is formed (>1 yr)? Unknown] Several <i>Caesalpinia</i> species have long-lived, hard coated seeds, but no information was found for <i>C. latisiliqua</i>

803	2003. Motooka, P./Castro, L./Nelson, D./Nagai, G./Ching, L.. Weeds of Hawaii's Pastures and Natural Areas: An Identification and Management Guide. CTAHR, UH Manoa, Honolulu, HI http://www.ctahr.hawaii.edu/invweed/weedsHi.htm	[Well controlled by herbicides? Unknown] "Caesalpinia decapetala...Sensitive to foliar applications of glyphosate and triclopyr, and to soil applications of tebuthiuron. Adequate coverage of catsclaw foliage in dense infestations is difficult. Timely repeat applications (3-9 months) of triclopyr ester at 0.25 lb/acre allows gradual reductions and opening of the canopy and eventual control. This strategy not only stresses the catsclaw over a longer period but also controls newly germinated catsclaw seedlings. Accessible stems may be treated basal bark with triclopyr ester at 20% product in diesel or crop oil in very-low volume applications" [Unknown for <i>C. latisiliqua</i> , but methods for control of <i>C. decapetala</i> may be effective]
804	1992. Aronson, J./Toledo, C.S.. <i>Caesalpinia paraguariensis</i> (Fabaceae): Forage Tree for All Seasons. <i>Economic Botany</i> . 46(2): 121-132.	Tolerates, or benefits from, mutilation, cultivation, or fire? Unknown for <i>C. latisiliqua</i> , but ability to resprout after cutting has been documented in related species] " <i>Caesalpinia paraguariensis</i> ...resprouts vigorously when coppiced, which leads to its being suitable for long-term management as a renewable source of wood and other products"
804	2011. WRA Specialist. Personal Communication.	[Tolerates, or benefits from, mutilation, cultivation, or fire? Unknown]
805	2011. WRA Specialist. Personal Communication.	[Effective natural enemies present locally (e.g. introduced biocontrol agents)? Unknown]