*Family:* ***Phyllanthaceae***

*Taxon:* ***Bridelia insulana***

*Synonym:* *Bridelia insulana var. subnuda*
*Briedelia penangiana Hook.f.*
*Briedelia minutiflora Hook.f.*
*Bridelia nicobarica Chakrab. & Vasudeva Ra*

***Common Name*** Grey Birch
Prickly Bridelia

**Questionaire :** current 20090513 **Assessor:** Chuck Chimera **Designation:** EVALUATE
**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** | **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** | |
| **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)** | **n** |
| **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** | **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** | |

| | | | |
|---|---|---|---|
| **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** | |
| **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** | |
| **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** | **n** |
| **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** | **y** |
| **707** | **Propagules dispersed by other animals (externally)** | **y=1, n=-1** | **n** |
| **708** | **Propagules survive passage through the gut** | **y=1, n=-1** | **y** |
| **801** | **Prolific seed production (>1000/m2)** | **y=1, n=-1** | **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** 1

**Supporting Data:**

| | | |
|---|---|---|
| 101 | 2011. WRA Specialist. Personal Communication. | No evidence |
| 102 | 2011. WRA Specialist. Personal Communication. | NA |
| 103 | 2011. WRA Specialist. Personal Communication. | NA |
| 201 | 2010. CSIRO. Australian Tropical Rainforest Plants [online database] - Bridelia insulana. http://keys.trin.org.au:8080/key-server/data/0e0f0504-0103-430d-8004-060d07080d04/media/Html/taxon/Bridelia_insulana.htm | "Occurs in CYP and NEQ, widespread. Altitudinal range from near sea level to 200 m. Grows in well developed coastal lowland rain forest. Also occurs in SE Asia, Malesia and Sri Lanka." |
| 202 | 2010. CSIRO. Australian Tropical Rainforest Plants [online database] - Bridelia insulana. http://keys.trin.org.au:8080/key-server/data/0e0f0504-0103-430d-8004-060d07080d04/media/Html/taxon/Bridelia_insulana.htm | "Occurs in CYP and NEQ, widespread. Altitudinal range from near sea level to 200 m. Grows in well developed coastal lowland rain forest. Also occurs in SE Asia, Malesia and Sri Lanka." |
| 203 | 2010. Welzen, P.C. van/Chayamarit, K.. Flora of Thailand Euphorbiaceae. Nationaal Herbarium Nederland, Leiden; Forest Herbarium, National Park, Wildlife & Plant Conservation Dept., Bangkok www.nationaalherbarium.nl/thaieuph | "Distribution.— From Myanmar to Vietnam (type) throughout Malesia to the Solomons and N.E. Australia...Altitude: from sea level to 1500 m." [native to tropical climates, but elevation range exceeds 1000 m, demonstrating some environmental versatility] |
| 204 | 2010. CSIRO. Australian Tropical Rainforest Plants [online database] - Bridelia insulana. http://keys.trin.org.au:8080/key-server/data/0e0f0504-0103-430d-8004-060d07080d04/media/Html/taxon/Bridelia_insulana.htm | "Occurs in CYP and NEQ, widespread. Altitudinal range from near sea level to 200 m. Grows in well developed coastal lowland rain forest. Also occurs in SE Asia, Malesia and Sri Lanka." |
| 205 | 2005. CAB International. Forestry Compendium. CAB International, Wallingford, UK | No evidence |
| 205 | 2010. Welzen, P.C. van/Chayamarit, K.. Flora of Thailand Euphorbiaceae. Nationaal Herbarium Nederland, Leiden; Forest Herbarium, National Park, Wildlife & Plant Conservation Dept., Bangkok www.nationaalherbarium.nl/thaieuph | No evidence |
| 205 | 2011. WRA Specialist. Personal Communication. | No evidence of a history of repeated introductions outside its natural range |
| 301 | 1992. Herbst, D.R./Staples, G.W./Medbury, S.. Specimen Details for Bridelia insulana Hance [BISH 627911]. Bishop Museum, http://nsdb.bishopmuseum.org/include/cpop.asp?catnum=21787025 | "Locality: USA, Polynesia, Hawaiian Islands, Oahu,& Kaneohe: Ho'omaluhia Botanical Garden, Malaysian section. Unaccessioned seedlings growing beneath 1 of 4 trees with HBG acc. no. 76.0302. Seedlings of Herbst et al. 9605, listed as Cratoxylon sp., but surely a Flacourtiaceae. Hundreds of seedlings present" [no records of naturalization, but seedling establishing in botanical garden in urban Honolulu suggest tree could naturalize in more wild settings] |
| 301 | 2007. Randall, R.P.. Global Compendium of Weeds - Index [Online Database]. http://www.hear.org/gcw/ | No evidence |
| 302 | 2002. Richards, S.J./Suryadi, S. (eds.). A Biodiversity Assessment of Yongsu - Cyclops Mountains and the Southern Mamberamo Basin, Papua, Indonesia. RAP Bulletin of Biological Assessment 25. Conservation International, Washington, DC | "In disturbed or gap areas, common species include Macaranga mappa, Macaranga sp., Bridelia insulana, Cananga odorata, Endospermum moluccanum, Leucosyke capitelata, Glochidion sp., and Campnosperma auriculata." [description as a colonizer of disturbed and gap areas is from native range. Suggests potential to exploit these areas in introduced range.] |
| 302 | 2007. Randall, R.P.. Global Compendium of Weeds - Index [Online Database]. http://www.hear.org/gcw/ | No evidence |

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| 302 | 2009. Oauh Invasive Species Committee. OISC General Meeting - December 8, 2009, Meeting Notes. http://www.hawaiiinvasivespecies.org/iscs/oisc/pdfs/20091208oiscmeetingnotes.pdf | "Honolulu Botanical Gardens, Naomi Hoffman. At Ho'omaluhia we are controlling albizia, macaranga, fiddlewood, Schefflera, we are trying to control a lot of things. A new species we are dealing with is Bridelia, Alex and Danielle identified it. It is a big horrible tree. A farmer next to Ho'omaluhia called Becky Azama at DOA about it. The whole tree has thorns, all the way up. We only have four gardeners and they can barely keep up with the mowing. We have not heard back from Becky. The farmer has mature trees; on our property it is only keikis. If anyone has any ideas how we can control it, let us know. The keikis are maturing. We don't have it as an accession, it could have been an unaccessioned plant. A lot of things were planted at Ho'omaluhia that were not identified. I cannot find it in our database. It seemed like there was a gap in communication, the farmer did not want to talk directly to us." |
| 303 | 2007. Randall, R.P.. Global Compendium of Weeds - Index [Online Database]. http://www.hear.org/gcw/ | No evidence |
| 304 | 2007. Randall, R.P.. Global Compendium of Weeds - Index [Online Database]. http://www.hear.org/gcw/ | No evidence |
| 305 | 2006. Tassin, J./Riviere, J.-N./Cazanove, M./Bruzzese, E.. Ranking of invasive woody plant species for management on Reunion Island. Weed Research. 46: 388–403. | "Bridelia micrantha...known as a coloniser in Reunion Island" [but with no description of impacts] |
| 305 | 2007. Randall, R.P.. Global Compendium of Weeds - Index [Online Database]. http://www.hear.org/gcw/ | No other Bridelia species listed as invasive or as weeds |
| 401 | 2004. Hong Kong Flora and Vegetation. Bridelia insulana. http://www.hkflora.com/v2/leaf/euphor_show_plant.php?plantid=1021 | "Habit: Trees up to 17 m tall, 30 cm in d. b. h.; bark fulvous, nearly smooth; branchlets glabrous, with elevated lenticels" [common name "Prickly Bridelia"] |
| 401 | 2009. Oauh Invasive Species Committee. OISC General Meeting - December 8, 2009, Meeting Notes. http://www.hawaiiinvasivespecies.org/iscs/oisc/pdfs/20091208oiscmeetingnotes.pdf | "The whole tree has thorns, all the way up." |
| 401 | 2010. Welzen, P.C. van/Chayamarit, K.. Flora of Thailand Euphorbiaceae. Nationaal Herbarium Nederland, Leiden; Forest Herbarium, National Park, Wildlife & Plant Conservation Dept., Bangkok www.nationaalherbarium.nl/thaieuph | "Medium to large tree up to 25 m high; branchlets glabrous, lenticels raised and very conspicuous on one but last generation branches, bark then greyish. Stipules very narrowly triangular, up to 5 by 0.8-1.3 mm, sparsely brownish puberulous, early caducous. Leaves: petiole 4-8 mm long, glabrous; blade (broadly) elliptic (to obovate), 4.5-21 by 2.5-8.8 cm, length/width ratio 1.5 2.7, chartaceous (to subcoriaceous), glabrous above, glabrous to puberulous on venation beneath, base obtuse to acute, margin entire, apex shortly acuminate; venation prominent beneath, nerves 9-13(-14) pairs, with a rather moderately acute angle of divergence, not joining marginal vein but closing with next nerve, tertiary veins reticulate." |
| 402 | 2011. WRA Specialist. Personal Communication. | Unknown |
| 403 | 2010. Welzen, P.C. van/Chayamarit, K.. Flora of Thailand Euphorbiaceae. Nationaal Herbarium Nederland, Leiden; Forest Herbarium, National Park, Wildlife & Plant Conservation Dept., Bangkok www.nationaalherbarium.nl/thaieuph | "Medium to large tree up to 25 m high" [not parasitic] |
| 404 | 2011. WRA Specialist. Personal Communication. | Palatability unknown |
| 405 | 2010. Welzen, P.C. van/Chayamarit, K.. Flora of Thailand Euphorbiaceae. Nationaal Herbarium Nederland, Leiden; Forest Herbarium, National Park, Wildlife & Plant Conservation Dept., Bangkok www.nationaalherbarium.nl/thaieuph | "Bridelia stipularis...The plant is said to be poisonous." [Unknown for B. inuslana] |

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| 406 | 2003. Huang, Kun-Wei/Wang, Chin-Fah. Eriophyoid Mites of Taiwan: Description of Thirteen Species of Nothopodinae from Hueysuen (Acari: Eriophyoidea). Formosan Entomology. 23: 313-329. | "In this work, the authors describe and illustrate four genera and 13 species, including ten new species and one new combination and give additional descriptions of two known species, of the Nothopodinae from Hueysuen Experimental Forest, Nantou County, central Taiwan. They are: Colopodacus insulanaus sp. nov. (infesting Bridelia insulanaus), Colopodacus obovataus sp. nov. (infesting Stauntonia obovata and Ficus irisana), Anothopoda zuihoenae sp. nov. (infesting Machilus zuihoensis), Floracarus syzygiae sp. nov. (infesting Syzygium formosanm), Floracarus hypophae sp. nov. (infesting Litsea hypophaea), Floracarus neolitseaus nov. comb. (Huang, 1992) (infesting Neolitsea acuminatissima), Cosella viburniae sp. nov. (infesting Viburnum luzonicum), Cosella formosana sp. nov. (infesting Helicia formosana), Cosella macrocarpae sp. nov. (infesting Mucuna macrocarpa), Cosella castanopiae sp. nov. (infesting Castanopsis kawakamii), Cosella hancei sp. nov. (infesting Lithocarpus hancei), Cosella fleschneri (Keifer, 1959) (infesting Schima superba var. superba), and Cosella championi Huang, 2001 (infesting Bauhinia championii). A key to the genera and species of Nothopodinae of Hueysuen is provided." [importance of pests unknown] |
| 407 | 2010. Welzen, P.C. van/Chayamarit, K.. Flora of Thailand Euphorbiaceae. Nationaal Herbarium Nederland, Leiden; Forest Herbarium, National Park, Wildlife & Plant Conservation Dept., Bangkok www.nationaalherbarium.nl/thaieuph | "Uses. - Timber sometimes used in house building (Sulawesi), as house posts (Bougainville), for knife handles (Lesser Sunda Islands). Bark used for colouring the saguwer (palm wine) red. The fruits are edible. The plant provides native medicine for headache (Sabah, Borneo) and a decoction of the leaves is applied as a lotion against itch (Malay Peninsular). The leaves provide a wrapping for smokes (Papua New Guinea)." [no evidence of toxicity to humans] |
| 408 | 1996. Dressler, S.. Bridelia (Euphorbiaceae) in New Guinea with a Description of a New Species. Kew Bulletin 51(3): 601-607. 51(3): 601-607. | "...the species of subg. Gentilia (B. insulana Hance, incl. B. penangiana Hook. f. and B. glauca Blume) on that island (Map 3) seem to prefer ever-wet rainforest habitats (cf. van Steenis 1979: fig. 4)." [unlikely to create fire hazards] |
| 409 | 2010. Welzen, P.C. van/Chayamarit, K.. Flora of Thailand Euphorbiaceae. Nationaal Herbarium Nederland, Leiden; Forest Herbarium, National Park, Wildlife & Plant Conservation Dept., Bangkok www.nationaalherbarium.nl/thaieuph | "Ecology.— Primary and secondary rain forest, often along rivers, but also on dry land" [shade tolerance unknown, but establishment in primary rain forest suggests tree may be adapted to some degree of shade tolerance] |
| 410 | 2010. Welzen, P.C. van/Chayamarit, K.. Flora of Thailand Euphorbiaceae. Nationaal Herbarium Nederland, Leiden; Forest Herbarium, National Park, Wildlife & Plant Conservation Dept., Bangkok www.nationaalherbarium.nl/thaieuph | "Ecology.— Primary and secondary rain forest, often along rivers, but also on dry land; soil: sandy to loamy, clayey, limestone." |
| 411 | 2010. Welzen, P.C. van/Chayamarit, K.. Flora of Thailand Euphorbiaceae. Nationaal Herbarium Nederland, Leiden; Forest Herbarium, National Park, Wildlife & Plant Conservation Dept., Bangkok www.nationaalherbarium.nl/thaieuph | "Medium to large tree up to 25 m high" [not climbing or smothering] |
| 412 | 2011. WRA Specialist. Personal Communication. | Unknown |
| 501 | 2010. Welzen, P.C. van/Chayamarit, K.. Flora of Thailand Euphorbiaceae. Nationaal Herbarium Nederland, Leiden; Forest Herbarium, National Park, Wildlife & Plant Conservation Dept., Bangkok www.nationaalherbarium.nl/thaieuph | "Medium to large tree up to 25 m high" [terrestrial] |
| 502 | 2011. Tropicos.org. Tropicos [Online Database]. Missouri Botanical Garden, http://www.tropicos.org/ | Phyllanthaceae [formerly Euphorbiaceae] |
| 503 | 2010. Welzen, P.C. van/Chayamarit, K.. Flora of Thailand Euphorbiaceae. Nationaal Herbarium Nederland, Leiden; Forest Herbarium, National Park, Wildlife & Plant Conservation Dept., Bangkok www.nationaalherbarium.nl/thaieuph | Phyllanthaceae [formerly Euphorbiaceae. Not a Nitrogen fixing woody plant] |
| 504 | 2010. Welzen, P.C. van/Chayamarit, K.. Flora of Thailand Euphorbiaceae. Nationaal Herbarium Nederland, Leiden; Forest Herbarium, National Park, Wildlife & Plant Conservation Dept., Bangkok www.nationaalherbarium.nl/thaieuph | "Medium to large tree up to 25 m high" [not a geophyte] |

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| 601 | 2010. Welzen, P.C. van/Chayamarit, K.. Flora of Thailand Euphorbiaceae. Nationaal Herbarium Nederland, Leiden; Forest Herbarium, National Park, Wildlife & Plant Conservation Dept., Bangkok www.nationaalherbarium.nl/thaieuph | No evidence of substantial reproductive failure in native habitat |
| 602 | 2010. Welzen, P.C. van/Chayamarit, K.. Flora of Thailand Euphorbiaceae. Nationaal Herbarium Nederland, Leiden; Forest Herbarium, National Park, Wildlife & Plant Conservation Dept., Bangkok www.nationaalherbarium.nl/thaieuph | "Seeds ovoid, tapering at apex, 6-7 by 3.5-4.5 mm in diameter, greenish brown." |
| 603 | 2011. WRA Specialist. Personal Communication. | Unknown |
| 604 | 2011. WRA Specialist. Personal Communication. | Unknown |
| 605 | 1994. Murali, K.S./Sukumar, R.. Reproductive Phenology of a Tropical Dry Forest in Mudumalai, Southern India. Journal of Ecology 82(4): 759-767. 82(4): 759-767. | "Appendix I...Bridelia retusa…wind pollinated" [related species does not require specialized pollinator] |
| 605 | 2005. Kawakita, A.. Evolution of obligate pollination mutualism in the tribe Phyllantheae (Phyllanthaceae). Plant Species Biology. 25: 3-19. | "Pollination systems in other Phyllanthaceae tribes are still poorly known, but available evidence suggests that non-Phyllantheae plants also have bee and fly pollinators (Ngulube et al. 1998; Kato et al. 2008; Luo 2006; Luo et al. 2007; Li & Zhang 2007). These observations indicate that the ancestral pollination system for the Phyllantheae tribe is likely to be generalist bee/fly pollination, from which arose the specialized Epicephala pollination." [Bridelia insulana in the tribe Bridelieae, which is likely fly/bee pollinated] |
| 605 | 2007. Luo, S./Zhang, D./Renner, S.S.. Duodichogamy and androdioecy in the Chinese Phyllanthaceae Bridelia tomentosa. American Journal of Botany. 94(2): 260–265. | "Pollination was by flies, and experimental pollen supplementation of a subset of a tree's flowers did not increase fruit set, suggesting high levels of insect visitation and possible resource limitation." [related species B. tomentosa is fly-pollinated] |
| 605 | 2010. Welzen, P.C. van/Chayamarit, K.. Flora of Thailand Euphorbiaceae. Nationaal Herbarium Nederland, Leiden; Forest Herbarium, National Park, Wildlife & Plant Conservation Dept., Bangkok www.nationaalherbarium.nl/thaieuph | "Inflorescences: glomerules with 15-30 sessile to shortly pedicelled flowers. Staminate flowers 2-2.5 mm in diameter, creamy yellow; pistillate ones 2-3(-3.5) mm in diameter, whitish cream with red disc; pedicel 0-1.5 mm long. Sepals triangular, c. 1.2 by 1.2 mm, puberulous outside. Petals variable in shape, tiny, 0.3-0.5 by 0.3-0.5 mm, base cuneate. Stamens: staminal column c. 1 mm long; free part of filaments up to 0.8 mm long; anthers ovoid to semigloboid, c. 0.4 mm in diameter. Ovary ovoid, c. 1 by 0.7 mm in diameter; styles 2, basally united, together with stigmas 1-1.5 mm long, exserting flower, stigmas shortly bifid." |
| 606 | 2011. WRA Specialist. Personal Communication. | Unknown |
| 607 | 2011. WRA Specialist. Personal Communication. | Unknown |
| 701 | 2010. Welzen, P.C. van/Chayamarit, K.. Flora of Thailand Euphorbiaceae. Nationaal Herbarium Nederland, Leiden; Forest Herbarium, National Park, Wildlife & Plant Conservation Dept., Bangkok www.nationaalherbarium.nl/thaieuph | "Seeds ovoid, tapering at apex, 6-7 by 3.5-4.5 mm in diameter, greenish brown." [seeds without any means of external attachment] |
| 702 | 2010. Welzen, P.C. van/Chayamarit, K.. Flora of Thailand Euphorbiaceae. Nationaal Herbarium Nederland, Leiden; Forest Herbarium, National Park, Wildlife & Plant Conservation Dept., Bangkok www.nationaalherbarium.nl/thaieuph | "Uses. - Timber sometimes used in house building (Sulawesi), as house posts (Bougainville), for knife handles (Lesser Sunda Islands). Bark used for colouring the saguwer (palm wine) red. The fruits are edible. The plant provides native medicine for headache (Sabah, Borneo) and a decoction of the leaves is applied as a lotion against itch (Malay Peninsular). The leaves provide a wrapping for smokes (Papua New Guinea)." [tree with multiple uses, but no evidence of cultivation within or outside native range] |
| 703 | 2011. WRA Specialist. Personal Communication. | No evidence that tree is grown with commercial produce |
| 704 | 2010. Welzen, P.C. van/Chayamarit, K.. Flora of Thailand Euphorbiaceae. Nationaal Herbarium Nederland, Leiden; Forest Herbarium, National Park, Wildlife & Plant Conservation Dept., Bangkok www.nationaalherbarium.nl/thaieuph | "Fruits up to 10 per glomerule, ellipsoid to ovoid, pointed at apex, 6-11 by 4-6 mm in diameter, 1-locular, bluish black; endocarp 1, woody. Seeds ovoid, tapering at apex, 6-7 by 3.5-4.5 mm in diameter, greenish brown." [fleshy-fruited; no adaptations for wind dispersal] |
| 705 | 2010. Welzen, P.C. van/Chayamarit, K.. Flora of Thailand Euphorbiaceae. Nationaal Herbarium Nederland, Leiden; Forest Herbarium, National Park, Wildlife & Plant Conservation Dept., Bangkok www.nationaalherbarium.nl/thaieuph | "Ecology.— Primary and secondary rain forest, often along rivers, but also on dry land; soil: sandy to loamy, clayey, limestone. Altitude: from sea level to 1500 m." [fruits may potentially be dispersed by water along river courses] |

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|---|---|---|
| 706 | 2002. Au, A.Y.Y./Corlett, R.T./Hau, B.C.H.. Seed rain into upland plant communities in Hong Kong, China. Plant Ecology. 186: 13 –22. | "Appendix...Bridelia insulana" [observed as being bird-dispersed] |
| 706 | 2002. Kitamura, S./Yumoto, T./Poonswad, P./Chuailua, P./Plongmai, K./Maruhashi, T./Noma, N.. Interactions between fleshy fruits and frugivores in a tropical seasonal forest in Thailand. Oecologia. 133: 559–572. | "The minimum number of frugivore groups recorded for a given fruit species was two (hornbills and squirrels) for Sterculia balanghas and three (mostly pigeons, hornbills and/or squirrels) for 9 species. The most widely consumed fruits were Ficus altissima and F. subcordata (10 groups each), Elaeagnus latifolia (9 groups), and Bridelia insulana and Syzygium cumini (9 groups each). Of these, the Ficus species bear soft fruits with many small seeds, E. latifolia bears large soft fruit with a single large seed, and B. insulana and S. cumini bear small soft fruits with a single seed." |
| 706 | 2008. Kitamura, S./Yumoto, T./Noma, N./Chuailua, P./Maruhashi, T./Wohandee, P./Poonswad, P.. Aggregated seed dispersal by wreathed hornbills at a roost site in a moist evergreen forest of Thailand. Ecological Research. 23: 943–952. | "Table 2...Bridelia insulana...R regurgitated by hornbills" |
| 707 | 2010. Welzen, P.C. van/Chayamarit, K.. Flora of Thailand Euphorbiaceae. Nationaal Herbarium Nederland, Leiden; Forest Herbarium, National Park, Wildlife & Plant Conservation Dept., Bangkok www.nationaalherbarium.nl/thaieuph | "Fruits up to 10 per glomerule, ellipsoid to ovoid, pointed at apex, 6-11 by 4-6 mm in diameter, 1-locular, bluish black; endocarp 1, woody. Seeds ovoid, tapering at apex, 6-7 by 3.5-4.5 mm in diameter, greenish brown." [no means of external attachment] |
| 708 | 2002. Kitamura, S./Yumoto, T./Poonswad, P./Chuailua, P./Plongmai, K./Maruhashi, T./Noma, N.. Interactions between fleshy fruits and frugivores in a tropical seasonal forest in Thailand. Oecologia. 133: 559–572. | "Appendix: Bu bulbuls, Pi pigeons, Ho hornbills, Ci civets, Gi gibbons, Ma macaques, Be bears" [all of these vertebrate animals are documented as dispersers of Bridelia insulana; seeds presumed to survive passage through guts of animals] |
| 801 | 2002. Kitamura, S./Yumoto, T./Poonswad, P./Chuailua, P./Plongmai, K./Maruhashi, T./Noma, N.. Interactions between fleshy fruits and frugivores in a tropical seasonal forest in Thailand. Oecologia. 133: 559–572. | "...B. insulana and S. cumini bear small soft fruits with a single seed." |
| 802 | 2011. WRA Specialist. Personal Communication. | Unknown |
| 803 | 2011. WRA Specialist. Personal Communication. | Unknown [no information on control with herbicides] |
| 804 | 2011. WRA Specialist. Personal Communication. | Unknown |
| 805 | 2011. WRA Specialist. Personal Communication. | Unknown |