TAXON: Lonicera hildebrandiana Collett & Hemsl.

SCORE: *9.0*

RATING: High Risk

Taxon: Lonicera hildebrandiana Collett & Hemsl. Family: Caprifoliaceae

Common Name(s): giant Burmese honeysuckle **Synonym(s):** Lonicera braceana Hemsl.

Assessor: Chuck Chimera Status: In Progress End Date:

WRA Score: 9.0 Designation: H(HPWRA) Rating: High Risk

Keywords: Tropical, Climber, Smothering, Fast Growing, Bird-Dispersed

Qsn #	Question	Answer Option	Answer
101	Is the species highly domesticated?	y=-3, n=0	n
102	Has the species become naturalized where grown?		
103	Does the species have weedy races?		
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	У
204	Native or naturalized in regions with tropical or subtropical climates	y=1, n=0	У
205	Does the species have a history of repeated introductions outside its natural range?	y=-2, ?=-1, n=0	У
301	Naturalized beyond native range		
302	Garden/amenity/disturbance weed	n=0, y = 1*multiplier (see Appendix 2)	У
303	Agricultural/forestry/horticultural weed		
304	Environmental weed	n=0, y = 2*multiplier (see Appendix 2)	n
305	Congeneric weed	n=0, y = 1*multiplier (see Appendix 2)	У
401	Produces spines, thorns or burrs	y=1, n=0	n
402	Allelopathic		
403	Parasitic	y=1, n=0	n
404	Unpalatable to grazing animals	y=1, n=-1	У
405	Toxic to animals		
406	Host for recognized pests and pathogens		
407	Causes allergies or is otherwise toxic to humans	y=1, n=0	У
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		
410	Tolerates a wide range of soil conditions (or limestone conditions if not a volcanic island)	y=1, n=0	У

Qsn #	Question	Answer Option	Answer
411	Climbing or smothering growth habit	y=1, n=0	У
412	Forms dense thickets	y=1, n=0	n
501	Aquatic	y=5, n=0	n
502	Grass	y=1, n=0	n
503	Nitrogen fixing woody plant	y=1, n=0	n
504	Geophyte (herbaceous with underground storage organs bulbs, corms, or tubers)	y=1, n=0	n
601	Evidence of substantial reproductive failure in native habitat	y=1, n=0	n
602	Produces viable seed	y=1, n=-1	У
603	Hybridizes naturally		
604	Self-compatible or apomictic		
605	Requires specialist pollinators	y=-1, n=0	n
606	Reproduction by vegetative fragmentation	y=1, n=-1	У
607	Minimum generative time (years)		
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	У
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	У
707	Propagules dispersed by other animals (externally)	y=1, n=-1	n
708	Propagules survive passage through the gut	y=1, n=-1	У
801	Prolific seed production (>1000/m2)	y=1, n=-1	n
802	Evidence that a persistent propagule bank is formed (>1 yr)		
803	Well controlled by herbicides	y=-1, n=1	У
804	Tolerates, or benefits from, mutilation, cultivation, or fire	y=1, n=-1	У
805	Effective natural enemies present locally (e.g. introduced biocontrol agents)		

SCORE: *9.0*

RATING: *High Risk*

Supporting Data:

Qsn #	Question	Answer
101	Is the species highly domesticated?	n
	Source(s)	Notes
	Wu, Z. Y., P. H. Raven & D. Y. Hong, (eds). 2011. Flora of China. Vol. 19 (Cucurbitaceae through Valerianaceae, with Annonaceae and Berberidaceae). Science Press, Beijing, and Missouri Botanical Garden Press, St. Louis	[No evidence of domestication] "Forests, scrub in moist places of forest margins; 1000–2300 m. Guangxi, Yunnan [Myanmar, Thailand]."
102	Has the species become naturalized where grown?	
102	Source(s)	Notes
		Notes
	WRA Specialist. (2020). Personal Communication	NA
	T	Т
103	Does the species have weedy races?	
	Source(s)	Notes
	WRA Specialist. (2020). Personal Communication	NA
201	Species suited to tropical or subtropical climate(s) - If island is primarily wet habitat, then substitute "wet tropical" for "tropical or subtropical"	High
	Source(s)	Notes
	Wu, Z. Y., P. H. Raven & D. Y. Hong, (eds). 2011. Flora of China. Vol. 19 (Cucurbitaceae through Valerianaceae, with Annonaceae and Berberidaceae). Science Press, Beijing, and Missouri Botanical Garden Press, St. Louis	"Forests, scrub in moist places of forest margins; 1000–2300 m. Guangxi, Yunnan [Myanmar, Thailand]."
202	Quality of climate match data	High
	Source(s)	Notes
	Wu, Z. Y., P. H. Raven & D. Y. Hong, (eds). 2011. Flora of China. Vol. 19 (Cucurbitaceae through Valerianaceae, with Annonaceae and Berberidaceae). Science Press, Beijing, and Missouri Botanical Garden Press, St. Louis	

Qsn #	Question	Answer
203	Broad climate suitability (environmental versatility)	у
	Source(s)	Notes
	Dave's Garden. (2020). Lonicera hildebrandiana. https://davesgarden.com/guides/pf/go/102066/. [Accessed 3 Sep 2020]	"Hardiness: USDA Zone 9a: to -6.6 °C (20 °F) USDA Zone 9b: to -3.8 °C (25 °F) USDA Zone 10a: to -1.1 °C (30 °F) USDA Zone 10b: to 1.7 °C (35 °F) USDA Zone 11: above 4.5 °C (40 °F)"
	Wu, Z. Y., P. H. Raven & D. Y. Hong, (eds). 2011. Flora of China. Vol. 19 (Cucurbitaceae through Valerianaceae, with Annonaceae and Berberidaceae). Science Press, Beijing, and Missouri Botanical Garden Press, St. Louis	[Elevation range exceeds 1000 m, demonstrating environmental versatility] "Forests, scrub in moist places of forest margins; 1000–2300 m. Guangxi, Yunnan [Myanmar, Thailand]."
204	Native or naturalized in regions with tropical or subtropical climates	у
	Source(s)	Notes
	Wu, Z. Y., P. H. Raven & D. Y. Hong, (eds). 2011. Flora of China. Vol. 19 (Cucurbitaceae through Valerianaceae, with Annonaceae and Berberidaceae). Science Press, Beijing, and Missouri Botanical Garden Press, St. Louis	"Forests, scrub in moist places of forest margins; 1000–2300 m. Guangxi, Yunnan [Myanmar, Thailand]."
	Imada, C. (2019). Hawaiian Naturalized Vascular Plants Checklist (February 2019 update). Bishop Museum Technical Report 69. Bishop Museum, Honolulu, HI	No evidence. Lonicera japonica is the only species recorded as naturalized in the Hawaiian Islands, on the islands of Kauai, Oahu, Maui and Hawaii.
		·
205	Does the species have a history of repeated introductions outside its natural range?	у
	Source(s)	Notes
	Randall, R.P. (2017). A Global Compendium of Weeds. 3rd Edition. Perth, Western Australia. R.P. Randall	"Major Pathway/s: Ornamental Dispersed by: Humans" [Reported from New Zealand and the continental U.S.]
	Webb, C. J., Sykes, W. R., & Garnock-Jones, P. J. 1988. Flora of New Zealand Volume IV. Botany Division, DSIR, Christchurch, New Zealand	[New Zealand] "In addition to those described, a number of spp. of honeysuckle are cultivated in N.Z.; 3 of these are common and long persistent in old abandoned or neglected gardens. L. hildebrandian Collet et Hemsley, Burmese honeysuckle, is a glossy-leaved climber and is the largest-flowered sp. in the genus, with white to yellow corollas, a tube 9-12 cm long, and a 2-lipped limb 4-6 cm diam."
	Starr Environmental. (2009). Lonicera hildebrandiana (Large honeysuckle, giant Burmese honeysuckle). http://www.starrenvironmental.com/. [Accessed 4 Sep 2020]	Image of plants in pots cultivated in Keokea, Maui, Hawaii. Photo taken on May 20, 2009
	(Large honeysuckle, giant Burmese honeysuckle). http://www.starrenvironmental.com/. [Accessed 4 Sep	
301	(Large honeysuckle, giant Burmese honeysuckle). http://www.starrenvironmental.com/. [Accessed 4 Sep	

Qsn #	Question	Answer
	Webb, C. J., Sykes, W. R., & Garnock-Jones, P. J. 1988. Flora of New Zealand Volume IV. Botany Division, DSIR, Christchurch, New Zealand	[Lonicera hildebrandiana listed as persisting in cultivation] "In addition to those described, a number of spp. of honeysuckle are cultivated in N.Z.; 3 of these are common and long-persistent in old abandoned or neglected gardens. L. hildebrandiana Collet et Hemsley, Burmese honeysuckle, is a glossy-leaved climber and is the largest-flowered sp. in the genus, with white to yellow corollas, a tube 9-12 cm long, and a 2-lipped limb 4-6 cm diam. L. standishii Jacques is a deciduous or semi-evergreen, erect, glabrous or hairy shrub with arching branches, broad-ovate lvs, and very fragrant irregular white fls in winter. L. tatarica L. is an erect, deciduous shrub with a white or pink, 2-lipped corolla, and is mainly grown in eastern parts of the South Id."
	Los Angeles Times. (2004). Home and garden online Magazine: September: Week 39, Pest Plants. http://www.latimes.com/extras/homeandgarden/garden_wk39.html. [Accessed 3 Sep 2020]	[Possible garden escape] "Giant Burmese honeysuckle (Lonicera hildebrandiana): "I found it growing in flower beds 100 feet from the original plant," said a Palos Verdes reader." [The cited url is no longer active. It was accessed using the The Wayback Machine Internet Archive: https://web.archive.org/]
	Randall, R.P. (2017). A Global Compendium of Weeds. 3rd Edition. Perth, Western Australia. R.P. Randall	An unconfirmed reported of potential naturalization in New Zealand is documented in the following citation: Enwright, P. (2003). Adventive species of the Wellington Conservancy ecological district. (pers. comm.).
	Imada, C. (2019). Hawaiian Naturalized Vascular Plants Checklist (February 2019 update). Bishop Museum	No evidence. Lonicera japonica is the only species recorded as
	Technical Report 69. Bishop Museum, Honolulu, HI	naturalized in the Hawaiian Islands, on the islands of Kauai, Oahu, Maui and Hawaii.
302	1	
302	Technical Report 69. Bishop Museum, Honolulu, HI	Maui and Hawaii.
302	Technical Report 69. Bishop Museum, Honolulu, HI Garden/amenity/disturbance weed	Waui and Hawaii. y Notes "Beware: this plant can become invasive and is found growing wild, smothering trees and shrubs, especially in the Southeast."
302	Technical Report 69. Bishop Museum, Honolulu, HI Garden/amenity/disturbance weed Source(s) Backyard Gardener. (2020). Lonicera hildebrandiana (Giant Burmese Honeysuckle). https://www.backyardgardener.com. [Accessed 4 Sep	Wotes "Beware: this plant can become invasive and is found growing wild, smothering trees and shrubs, especially in the Southeast." [Identified as a garden weed in some locations. No evidence found in literature] [Possible garden escape] "Giant Burmese honeysuckle (Lonicera hildebrandiana): "I found it growing in flower beds 100 feet from the
	Garden/amenity/disturbance weed Source(s) Backyard Gardener. (2020). Lonicera hildebrandiana (Giant Burmese Honeysuckle). https://www.backyardgardener.com. [Accessed 4 Sep 2020] Los Angeles Times. (2004). Home and garden online Magazine: September: Week 39, Pest Plants. http://www.latimes.com/extras/homeandgarden/garden_wk39.html. [Accessed 4 Sep 2020]	Wotes "Beware: this plant can become invasive and is found growing wild, smothering trees and shrubs, especially in the Southeast." [Identified as a garden weed in some locations. No evidence found in literature] [Possible garden escape] "Giant Burmese honeysuckle (Lonicera hildebrandiana): "I found it growing in flower beds 100 feet from the original plant," said a Palos Verdes reader." [The cited url is no longer active. It was accessed using the The Wayback Machine Internet
302	Garden/amenity/disturbance weed Source(s) Backyard Gardener. (2020). Lonicera hildebrandiana (Giant Burmese Honeysuckle). https://www.backyardgardener.com. [Accessed 4 Sep 2020] Los Angeles Times. (2004). Home and garden online Magazine: September: Week 39, Pest Plants. http://www.latimes.com/extras/homeandgarden/garden_wk39.html. [Accessed 4 Sep 2020] Agricultural/forestry/horticultural weed	Wotes "Beware: this plant can become invasive and is found growing wild, smothering trees and shrubs, especially in the Southeast." [Identified as a garden weed in some locations. No evidence found in literature] [Possible garden escape] "Giant Burmese honeysuckle (Lonicera hildebrandiana): "I found it growing in flower beds 100 feet from the original plant," said a Palos Verdes reader." [The cited url is no longer active. It was accessed using the The Wayback Machine Internet Archive: https://web.archive.org/]
	Garden/amenity/disturbance weed Source(s) Backyard Gardener. (2020). Lonicera hildebrandiana (Giant Burmese Honeysuckle). https://www.backyardgardener.com. [Accessed 4 Sep 2020] Los Angeles Times. (2004). Home and garden online Magazine: September: Week 39, Pest Plants. http://www.latimes.com/extras/homeandgarden/garden_wk39.html. [Accessed 4 Sep 2020]	Wotes "Beware: this plant can become invasive and is found growing wild, smothering trees and shrubs, especially in the Southeast." [Identified as a garden weed in some locations. No evidence found in literature] [Possible garden escape] "Giant Burmese honeysuckle (Lonicera hildebrandiana): "I found it growing in flower beds 100 feet from the original plant," said a Palos Verdes reader." [The cited url is no longer active. It was accessed using the The Wayback Machine Internet
303	Garden/amenity/disturbance weed Source(s) Backyard Gardener. (2020). Lonicera hildebrandiana (Giant Burmese Honeysuckle). https://www.backyardgardener.com. [Accessed 4 Sep 2020] Los Angeles Times. (2004). Home and garden online Magazine: September: Week 39, Pest Plants. http://www.latimes.com/extras/homeandgarden/garden_wk39.html. [Accessed 4 Sep 2020] Agricultural/forestry/horticultural weed Source(s) Randall, R.P. (2017). A Global Compendium of Weeds. 3rd Edition. Perth, Western Australia. R.P. Randall	Waui and Hawaii. Y Notes "Beware: this plant can become invasive and is found growing wild, smothering trees and shrubs, especially in the Southeast." [Identified as a garden weed in some locations. No evidence found in literature] [Possible garden escape] "Giant Burmese honeysuckle (Lonicera hildebrandiana): "I found it growing in flower beds 100 feet from the original plant," said a Palos Verdes reader." [The cited url is no longer active. It was accessed using the The Wayback Machine Internet Archive: https://web.archive.org/] Notes No evidence
	Garden/amenity/disturbance weed Source(s) Backyard Gardener. (2020). Lonicera hildebrandiana (Giant Burmese Honeysuckle). https://www.backyardgardener.com. [Accessed 4 Sep 2020] Los Angeles Times. (2004). Home and garden online Magazine: September: Week 39, Pest Plants. http://www.latimes.com/extras/homeandgarden/garden_wk39.html. [Accessed 4 Sep 2020] Agricultural/forestry/horticultural weed Source(s) Randall, R.P. (2017). A Global Compendium of Weeds. 3rd	Wotes "Beware: this plant can become invasive and is found growing wild, smothering trees and shrubs, especially in the Southeast." [Identified as a garden weed in some locations. No evidence found in literature] [Possible garden escape] "Giant Burmese honeysuckle (Lonicera hildebrandiana): "I found it growing in flower beds 100 feet from the original plant," said a Palos Verdes reader." [The cited url is no longer active. It was accessed using the The Wayback Machine Internet Archive: https://web.archive.org/]

Qsn #	Question	Answer
305	Congeneric weed	у
	Source(s)	Notes
	Weber, E. 2017. Invasive Plant Species of the World, 2nd Edition: A Reference Guide to Environmental Weeds. CABI Publishing, Wallingford, UK	"L. japonica is a serious invader of forest communities, smothering shrubs and trees, and blanketing the floor with a mat of trailing stems (Schierenbeck, 2004; Larson et al., 2007). The liana grows quickly into the canopies at forest edges and in gaps where light reaches the floor. Seeds are dispersed by frugivorous birds. The dense curtain of vines prevents growth and regeneration of native woody plants, eventually killing them."
	Randall, R.P. (2017). A Global Compendium of Weeds. 3rd Edition. Perth, Western Australia. R.P. Randall	A number of Lonicera species are listed as naturalized and/or invasive

401	Produces spines, thorns or burrs	n
	Source(s)	Notes
	Wu, Z. Y., P. H. Raven & D. Y. Hong, (eds). 2011. Flora of China. Vol. 19 (Cucurbitaceae through Valerianaceae, with Annonaceae and Berberidaceae). Science Press, Beijing, and Missouri Botanical Garden Press, St. Louis	[No evidence] "Climbers, evergreen to semievergreen, glabrous throughout. Branches solid, glabrous, sometimes with bristles. Winter buds with several pairs of broad, shortly acuminate scales. Petiole 1–2.5 cm; leaf blade elliptic to oblong, 7–15 × 4–7.5 cm, leathery, base broadly cuneate to rounded, sometimes slightly decurrent, apex acute to acuminate. Flowers fragrant, paired, axillary, toward apices of branchlets, sometimes shortly paniculate; peduncle 4–15 mm; bracts triangular, ca. 1.5 mm; bracteoles ovate-triangular, 0.5–1 mm. Neighboring 2 ovaries free. Calyx cupular; lobes triangular, 0.5–2 mm. Corolla bilabiate, white, becoming yellow and tinged with pink, 7.5–12 cm; tube 4.5–7 cm, ca. 4 mm in diam., not gibbous at base; upper lip 4-lobed, 2 lateral ones split to middle, middle ones only slightly lobed. Stamens and style exserted from corolla tube; filaments pubescent; anthers linear, 7–8 mm. Style and stamens shorter to equaling corolla, pubescent. Berries green, globose to pyriform, large, ca. 2.5 cm; seeds few, ca. 8 mm."

402	Allelopathic	
	Source(s)	Notes
	Edition: A Reference Guide to Environmental Weeds. CABI	[Unknown. Related species demonstrates allelopathy] "Japanese honeysuckle exhibits allelopathic effects. Leaf extracts added to the soil have been shown to strongly reduce growth of seedlings of Pinus taeda and Pinus echinata (Skulman et al., 2004)."

403	Parasitic	n
	Source(s)	Notes
		"Climbers, evergreen to semievergreen, glabrous throughout." [Caprifoliaceae. No evidence]

404	Unpalatable to grazing animals	у
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Qsn #	Question	Answer
	Source(s)	Notes
	Backyard Gardener. (2020). Lonicera hildebrandiana (Giant Burmese Honeysuckle). https://www.backyardgardener.com. [Accessed 4 Sep 2020]	[Tolerates deer and rabbits, suggesting plants are unpalatable] "Tolerances: deer, drought, heat & humidity, pollution, rabbits, seashore, slope, wind,"
405	Toxic to animals	
103	Source(s)	Notes
	The National Gardening Association. (2020). Giant Burmese Honeysuckle (Lonicera hildebrandiana). https://garden.org/plants/. [Accessed 7 Sep 2020]	"Fruit is poisonous Other: The berries are mildly toxic" [Unknown if animals could be poisoned by ingesting fruit. Presumably adapted for bird or other animal dispersal]
406	Uset for a second and settlement	
406	Host for recognized pests and pathogens	Nata
	Source(s)	Notes
	Backyard Gardener. (2020). Lonicera hildebrandiana (Giant Burmese Honeysuckle). https://www.backyardgardener.com. [Accessed 7 Sep 2020]	"Beware: this plant can become invasive and is found growing wild smothering trees and shrubs, especially in the Southeast. This fact attests to the plant's disease and insect free nature, however."
	Shoot Gardening. (2020). Lonicera hildebrandiana (Giant Burmese honeysuckle). https://www.shootgardening.co.uk/plant/lonicerahildebrandiana. [Accessed 4 Sep 2020]	"Specific pests - Aphids , Thrips Specific diseases - Powdery mildew "
	<u>†</u>	•
407	Causes allergies or is otherwise toxic to humans	У
	Source(s)	Notes
	The National Gardening Association. (2020). Giant Burmese Honeysuckle (Lonicera hildebrandiana). https://garden.org/plants/. [Accessed 4 Sep 2020]	"Toxicity: Fruit is poisonous Other: The berries are mildly toxic"
408	Creates a fire hazard in natural ecosystems	n
	Source(s)	Notes
	Wu, Z. Y., P. H. Raven & D. Y. Hong, (eds). 2011. Flora of China. Vol. 19 (Cucurbitaceae through Valerianaceae, with Annonaceae and Berberidaceae). Science Press, Beijing, and Missouri Botanical Garden Press, St. Louis	"Forests, scrub in moist places of forest margins; 1000-2300 m." [I evidence. Unlikely. Occurs in moist habitats]
409	Is a shade tolerant plant at some stage of its life cycle	
	Source(s)	Notes
	Shoot Gardening. (2020). Lonicera hildebrandiana (Giant Burmese honeysuckle).	"Light Full Sun"

Qsn #	Question	Answer
	Backyard Gardener. (2020). Lonicera hildebrandiana (Giant Burmese Honeysuckle). https://www.backyardgardener.com. [Accessed 4 Sep 2020]	"Light Range: Part Shade to Sun"
	Dave's Garden. (2020). Lonicera hildebrandiana. https://davesgarden.com/guides/pf/go/102066/. [Accessed 4 Sep 2020]	"Sun Exposure: Sun to Partial Shade"
410	Tolerates a wide range of soil conditions (or limestone conditions if not a volcanic island)	у
	Source(s)	Notes
	Backyard Gardener. (2020). Lonicera hildebrandiana (Giant Burmese Honeysuckle). https://www.backyardgardener.com. [Accessed 7 Sep 2020]	"pH Range: 4.5 to 8 Soil Range: Mostly Sand to Mostly Clay"
	Shoot Gardening. (2020). Lonicera hildebrandiana (Giant Burmese honeysuckle). https://www.shootgardening.co.uk/plant/lonicerahildebrandiana. [Accessed 7 Sep 2020]	"Soil type Loamy Soil drainage Moist but well-drained Soil pH Acid, Alkaline, Neutral"
		Τ
411	Climbing or smothering growth habit	У
	Source(s) Wu, Z. Y., P. H. Raven & D. Y. Hong, (eds). 2011. Flora of China. Vol. 19 (Cucurbitaceae through Valerianaceae, with Annonaceae and Berberidaceae). Science Press, Beijing, and Missouri Botanical Garden Press, St. Louis	"Climbers, evergreen to semievergreen, glabrous throughout. Branches solid, glabrous, sometimes with bristles."
412	Forms dense thickets	T
412	Source(s)	Notes
	Backyard Gardener. (2020). Lonicera hildebrandiana (Giant Burmese Honeysuckle). https://www.backyardgardener.com. [Accessed 7 Sep 2020]	"Beware: this plant can become invasive and is found growing wild smothering trees and shrubs, especially in the Southeast."
	Wu, Z. Y., P. H. Raven & D. Y. Hong, (eds). 2011. Flora of China. Vol. 19 (Cucurbitaceae through Valerianaceae, with Annonaceae and Berberidaceae). Science Press, Beijing, and Missouri Botanical Garden Press, St. Louis	"Forests, scrub in moist places of forest margins; 1000-2300 m." [Climbing/smothering habit]
F04	A	<u> </u>
501	Aquatic	n Natas
	Source(s)	Notes
	Wu, Z. Y., P. H. Raven & D. Y. Hong, (eds). 2011. Flora of China Vol. 19 (Cucurhitaceae through Valerianaceae with	[Terrestrial] "Forests, scrub in moist places of forest margins;1000-

Grass

502

n

Qsn #	Question	Answer
Q311 II	Source(s)	Notes
	USDA, Agricultural Research Service, National Plant Germplasm System. (2020). Germplasm Resources Information Network (GRIN-Taxonomy). National Germplasm Resources Laboratory, Beltsville, Maryland. https://npgsweb.ars-grin.gov/. [Accessed 4 Sep 2020]	Family: Caprifoliaceae Subfamily: Caprifolioideae
503	Nitrogen fixing woody plant	n
	Source(s)	Notes
	USDA, Agricultural Research Service, National Plant Germplasm System. (2020). Germplasm Resources Information Network (GRIN-Taxonomy). National Germplasm Resources Laboratory, Beltsville, Maryland. https://npgsweb.ars-grin.gov/. [Accessed 4 Sep 2020]	Family: Caprifoliaceae Subfamily: Caprifolioideae
504	Geophyte (herbaceous with underground storage organs bulbs, corms, or tubers)	n
	Source(s)	Notes
	Wu, Z. Y., P. H. Raven & D. Y. Hong, (eds). 2011. Flora of China. Vol. 19 (Cucurbitaceae through Valerianaceae, with Annonaceae and Berberidaceae). Science Press, Beijing, and Missouri Botanical Garden Press, St. Louis	"Climbers, evergreen to semievergreen, glabrous throughout. Branches solid, glabrous, sometimes with bristles."
	•	
601	Evidence of substantial reproductive failure in native habitat	n
	Source(s)	Notes
	Wu, Z. Y., P. H. Raven & D. Y. Hong, (eds). 2011. Flora of China. Vol. 19 (Cucurbitaceae through Valerianaceae, with Annonaceae and Berberidaceae). Science Press, Beijing, and Missouri Botanical Garden Press, St. Louis	[No evidence] "Forests, scrub in moist places of forest margins; 1000–2300 m. Guangxi, Yunnan [Myanmar, Thailand]."
602	Produces viable seed	у

Wu, Z. Y., P. H. Raven & D. Y. Hong, (eds). 2011. Flora of

Annonaceae and Berberidaceae). Science Press, Beijing,

and Missouri Botanical Garden Press, St. Louis

China. Vol. 19 (Cucurbitaceae through Valerianaceae, with Berries green, globose to pyriform, large, ca. 2.5 cm; seeds few, ca.

8 mm."

Qsn #	Question	Answer
	Dave's Garden. (2020). Lonicera hildebrandiana. https://davesgarden.com/guides/pf/go/102066/. [Accessed 4 Sep 2020]	"Propagation Methods: From leaf cuttings From softwood cuttings From seed; direct sow outdoors in fall From seed; winter sow in vented containers, coldframe or unheated greenhouse From seed; stratify if sowing indoors Direct sow as soon as the ground can be worked From seed; sow indoors before last frost From seed; direct sow after last frost From seed; germinate in a damp paper towel From seed; germinate in vitro in gelatin, agar or other medium By budding By simple layering"
	Shoot Gardening. (2020). Lonicera hildebrandiana (Giant Burmese honeysuckle). https://www.shootgardening.co.uk/plant/lonicerahildebrandiana. [Accessed 4 Sep 2020]	"Propagation Sow seed at 13-18C in spring. Propagation methods Seed, Layering, Semi-ripe cuttings"

603	Hybridizes naturally	
	Source(s)	Notes
	Plants in the United States. Agriculture Handbook No.	[Unknown. Hybrids documented in genus] "Because most species hybridize rather freely, it is better to collect fruits from isolated bushes or groups."

Qsn #	Question	Answer
604	Self-compatible or apomictic	
	Source(s)	Notes
	Wu, Z. Y., P. H. Raven & D. Y. Hong, (eds). 2011. Flora of China. Vol. 19 (Cucurbitaceae through Valerianaceae, with Annonaceae and Berberidaceae). Science Press, Beijing, and Missouri Botanical Garden Press, St. Louis	"Flowers fragrant, paired, axillary, toward apices of branchlets, sometimes shortly paniculate; peduncle 4–15 mm; bracts triangular, ca. 1.5 mm; bracteoles ovate-triangular, 0.5–1 mm. Neighboring 2 ovaries free. Calyx cupular; lobes triangular, 0.5–2 mm. Corolla bilabiate, white, becoming yellow and tinged with pink, 7.5–12 cm; tube 4.5–7 cm, ca. 4 mm in diam., not gibbous at base; upper lip 4-lobed, 2 lateral ones split to middle, middle ones only slightly lobed. Stamens and style exserted from corolla tube; filaments pubescent; anthers linear, 7–8 mm. Style and stamens shorter to equaling corolla, pubescent."
		[Self-compatibility documented in genus] "Abstract: Breeding experiments with 3 introduced species, L. deflexicalyx, L. gracilipes and L. tatarica, revealed them to be partially self compatible, but the capacity for outcrossing and successful open-pollination was significantly greater than that for selfing. Stigma receptivity during the entire period of flowering in all 3 species suggested an exception to the protandrous condition previously suggested for this genus. Interspecific crosses between the species resulted in a fruit set which ranged from 25 to 91% (in L. gracilipes × L. deflexicalyx and L. tatarica × L. deflexicalyx, respectively). The ease with which the species hybridized may account for the morphological variation observed between the cultivated individuals of the species studied."

605	Requires specialist pollinators	n
	Source(s)	Notes
	Genera of Vascular Plants. Volume XIV. Flowering Plants. Eudicots: Aquifoliales, Boraginales, Bruniales, Dipsacales, Escalloniales, Garryales, Paracryphiales, Solanales (except Convolvulaceae), Icacinaceae, Metteniusaceae, Vahliaceae, Springer International Publishing, Switzerland	[Hawkmoth pollinated. Native and introduced species present in the Hawaiian Islands] "In Lonicera, some white-flowered species—e.g. the European L. caprifolium and L. periclymenum, or the Asian L. hildebrandiana and L. japonica, with a long, narrow corolla tube and spreading lips, and a strong odour when open in the evening—are pollinated by hawkmoths. Here, stamens and style are exserted from the corolla tube. The white flowers turn yellow after pollination."

606	Reproduction by vegetative fragmentation	у
	Source(s)	Notes
	The National Gardening Association. (2020).Giant Burmese Honeysuckle (Lonicera hildebrandiana). https://garden.org/plants/. [Accessed 7 Sep 2020]	"Propagation: Other methods: Division Stolons and runners" [Propagation methods suggest possibility of vegetative spread]
	Weber, E. 2017. Invasive Plant Species of the World, 2nd Edition: A Reference Guide to Environmental Weeds. CABI Publishing, Wallingford, UK	[Related species, Lonicera japonica, spreads vegetatively and resprouts from root and stem fragments] "Stem nodes coming into contact with the soil easily root and allow the plant to spread vegetatively." "The root system is extensive, and pieces of roots and stems resprout easily."

	607	Minimum generative time (years)	
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Qsn #	Question	Answer
	Source(s)	Notes
	Palmer, G.D. (2020). Germination of the Giant Burmese Honeysuckle. Home Guides SF Gate. https://homeguides.sfgate.com. [Accessed 7 Sep 2020]	[Unknown. Grows extremely fast] "This tropical vine has an extremely fast growth rate and can reach lengths of up to 60 feet, making it a popular addition to many warm-climate gardens. Most honeysuckle plants are grown from cuttings, but you can also germinate your own giant Burmese honeysuckle seeds at home."

701	Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)	n
	Source(s)	Notes
	Brinkman, K. A. (1974). Pp. 515-519 in Seeds of Woody Plants in the United States. Agriculture Handbook No. 450. Forest Service, U. S. Department of Agriculture, Washington, D. C.	"Seed dispersal is primarily by birds and animals."

702	Propagules dispersed intentionally by people	У
	Source(s)	Notes
	Backyard Gardener. (2020). Lonicera hildebrandiana (Giant Burmese Honeysuckle). https://www.backyardgardener.com. [Accessed 7 Sep 2020]	[Cultivated intentionally as an ornamental] "Vigorous semi- evergreen to evergreen climber with deep green, oval or ovate shaped leaves, with creamy white flowers aging to orange. Flowers begin in late spring and continue sporadically until fall, depending on zone. This is an extremely fragrant vine especially suited to entryways. Evergreen in milder areas, partly or wholly deciduous in colder regions. Beware: this plant can become invasive and is found growing wild, smothering trees and shrubs, especially in the Southeast. This fact attests to the plant's disease and insect free nature, however."

703	Propagules likely to disperse as a produce contaminant	n
	Source(s)	Notes
	Brinkman, K. A. (1974). Pp. 515-519 in Seeds of Woody Plants in the United States. Agriculture Handbook No. 450. Forest Service, U. S. Department of Agriculture, Washington, D. C.	"Seed dispersal is primarily by birds and animals."

704	Propagules adapted to wind dispersal	n
	Source(s)	Notes
	, ·	"Berries green, globose to pyriform, large, ca. 2.5 cm; seeds few, ca. 8 mm."
	Brinkman, K. A. (1974). Pp. 515-519 in Seeds of Woody Plants in the United States. Agriculture Handbook No. 450. Forest Service, U. S. Department of Agriculture, Washington, D. C.	"Seed dispersal is primarily by birds and animals."

Qsn #	Question	Answer
705	Propagules water dispersed	n
	Source(s)	Notes
	Wu, Z. Y., P. H. Raven & D. Y. Hong, (eds). 2011. Flora of China. Vol. 19 (Cucurbitaceae through Valerianaceae, with Annonaceae and Berberidaceae). Science Press, Beijing, and Missouri Botanical Garden Press, St. Louis	"Forests, scrub in moist places of forest margins; 1000–2300 m." [Not identified as a riparian species]
	Brinkman, K. A. (1974). Pp. 515-519 in Seeds of Woody Plants in the United States. Agriculture Handbook No. 450. Forest Service, U. S. Department of Agriculture, Washington, D. C.	"Seed dispersal is primarily by birds and animals."

706	Propagules bird dispersed	у
	Source(s)	Notes
	I =	"Berries green, globose to pyriform, large, ca. 2.5 cm; seeds few, ca. 8 mm." [Presumably yes based on morphology]
	Brinkman, K. A. (1974). Pp. 515-519 in Seeds of Woody Plants in the United States. Agriculture Handbook No. 450. Forest Service, U. S. Department of Agriculture, Washington, D. C.	"Seed dispersal is primarily by birds and animals."

707	Propagules dispersed by other animals (externally)	n
	Source(s)	Notes
	Brinkman, K. A. (1974). Pp. 515-519 in Seeds of Woody Plants in the United States. Agriculture Handbook No. 450. Forest Service, U. S. Department of Agriculture, Washington, D. C.	"Seed dispersal is primarily by birds and animals." [Presumably internally dispersed]

708	Propagules survive passage through the gut	у
	Source(s)	Notes
	,	"Berries green, globose to pyriform, large, ca. 2.5 cm; seeds few, ca. 8 mm."
	Brinkman, K. A. (1974). Pp. 515-519 in Seeds of Woody Plants in the United States. Agriculture Handbook No. 450. Forest Service, U. S. Department of Agriculture, Washington, D. C.	"Seed dispersal is primarily by birds and animals." [Presumably yes]

Qsn #	Question	Answer
801	Prolific seed production (>1000/m2)	n
	Source(s)	Notes
	· · · · · · · · · · · · · · · · · · ·	[Seeds few] "Berries green, globose to pyriform, large, ca. 2.5 cm; seeds few, ca. 8 mm."

802	Evidence that a persistent propagule bank is formed (>1 yr)	
	Source(s)	Notes
	Palmer, G.D. (2020). Germination of the Giant Burmese Honeysuckle. Home Guides SF Gate. https://homeguides.sfgate.com. [Accessed 7 Sep 2020]	"When sown directly in soil or peat moss, giant Burmese honeysuckle germinates very erratically. It usually takes around 6 months for seeds to sprout and begin to grow. Seeds that have been cold stratified, or exposed to low temperatures in order to simulate the cool season, grow more readily. After stratification, a higher percentage of seeds should sprout, and the germination process should take about one month."
	Brinkman, K. A. (1974). Pp. 515-519 in Seeds of Woody Plants in the United States. Agriculture Handbook No. 450. Forest Service, U. S. Department of Agriculture, Washington, D. C.	[Unknown] "Although air-dried seeds probably can be stored at room temperature for several years without serious losses in germination, one trial showed that germination of L. oblongifolia decreased 20 percent after 1 year." "With the possible exception of L. canadensis and L. dioica, seeds of all species show some dormancy."

803	Well controlled by herbicides	у
	Source(s)	Notes
	Weber, E. 2017. Invasive Plant Species of the World, 2nd Edition: A Reference Guide to Environmental Weeds. CABI Publishing, Wallingford, UK	[Herbicides effectively control Lonicera japonica. Would likely be effective on Lonicera hildebrandiana] "Chemical control of larger stems can be done using the cut stump treatment or the drill-fill method. Foliar sprays are best applied during active growth and are also suitable to treat regrowth of cut stems. Glyphosate or triclopyr are effective herbicides."

804	Tolerates, or benefits from, mutilation, cultivation, or fire	У
	Source(s)	Notes
	Shoot Gardening. (2020). Lonicera hildebrandiana (Giant Burmese honeysuckle). https://www.shootgardening.co.uk/plant/lonicera-hildebrandiana. [Accessed 4 Sep 2020]	"Pruning - Pruning group 11 after flowering" [Pruning group 11: Vigorous climbers This group of vigorous climbers flower on previous or current year's growth and don't need regular pruning. However trimming may be needed to keep them to the space available. Examples include honeysuckle (Lonicera), Parthenocissus and Trachelospermum.]
	Flint, H.L. & Lyverse, J.M. (1997). Landscape plants for eastern North America: exclusive of Florida and the immediate Gulf Coast. John Wiley and Sons, New York, NY	[Resprouts after being killed to the ground] "This extremely vigorous evergreen twining and high-climbing vine probably is not cold-hardy in our area, but it might be tried in sheltered sites in Zone 9a, since it returns rapidly after being killed back to the ground."

TAXON: Lonicera hildebrandiana Collett & Hemsl.

SCORE: *9.0*

RATING: High Risk

Qsn #	Question	Answer
805	Effective natural enemies present locally (e.g. introduced biocontrol agents)	
	Source(s)	Notes
	WRA Specialist. (2020). Personal Communication	Unknown

TAXON: Lonicera hildebrandiana Collett & Hemsl.

Summary of Risk Traits:

High Risk / Undesirable Traits

- Elevation range exceeds 1000 m, demonstrating environmental versatility
- Thrives in tropical climates
- Possibly naturalizing or persisting from cultivation in New Zealand and the southeastern USA (confirmation needed)

SCORE: *9.0*

- · Described as invasive in southeastern USA
- · Other Lonicera species are invasive
- · Unpalatable to deer and rabbits and possibly other browsing animals
- Berries reported to be mildly toxic
- Tolerates many soil types
- Climbing and smother growth habit
- Reproduces by seeds and vegetatively by rooting stems
- · Seeds dispersed by birds, other fruit-eating animals, and intentionally by people
- · Resprouts after cutting or top kill

Low Risk Traits

- Unarmed (no spines, thorns, or burrs)
- Herbicides may provide effective control

Creation Date: 7 Sep 2020

RATING: High Risk