

Family: *Melastomataceae*

Taxon: *Tibouchina granulosa*

Synonym: * *Melastoma granulosum* Desr. (basionym), Common Name Brazilian glory tree
purple glory bush
quaresmeira

Questionnaire :	current 20090513	Assessor:	Chuck Chimera	Designation: H(HPWRA)
Status:	Assessor Approved	Data Entry Person:	Chuck Chimera	WRA Score 8
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	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)	n
305	Congeneric weed		n=0, y = 1*multiplier (see Appendix 2)	y
401	Produces spines, thorns or burrs		y=1, n=0	n
402	Allelopathic		y=1, n=0	n
403	Parasitic		y=1, n=0	n
404	Unpalatable to grazing animals		y=1, n=-1	
405	Toxic to animals		y=1, n=0	n
406	Host for recognized pests and pathogens		y=1, n=0	n
407	Causes allergies or is otherwise toxic to humans		y=1, n=0	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	n
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	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	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	y
607	Minimum generative time (years)	1 year = 1, 2 or 3 years = 0, 4+ years = -1	3
701	Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)	y=1, n=-1	n
702	Propagules dispersed intentionally by people	y=1, n=-1	y
703	Propagules likely to disperse as a produce contaminant	y=1, n=-1	n
704	Propagules adapted to wind dispersal	y=1, n=-1	y
705	Propagules water dispersed	y=1, n=-1	n
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/m2)	y=1, n=-1	y
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	y
805	Effective natural enemies present locally (e.g. introduced biocontrol agents)	y=-1, n=1	

Designation: H(HPWRA)

WRA Score 8

Supporting Data:

101	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	No evidence
102	2011. WRA Specialist. Personal Communication.	NA
103	2011. WRA Specialist. Personal Communication.	NA
201	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	"...native to Brazil (Minas Gerais to Parana) and rare in cultivation in Hawaii and Florida."
202	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	"...native to Brazil (Minas Gerais to Parana) and rare in cultivation in Hawaii and Florida."
203	2003. Llamas, K.A.. Tropical Flowering Plants. Timber Press, Portland, OR	"zones 10-11"
203	2010. Tropicos.org. Tropicos [Online Database]. Missouri Botanical Garden, http://www.tropicos.org/	Collected from 250 m - 3000 m within its native range, demonstrating potential environmental versatility
204	1994. Liogier, H.A.. Descriptive Flora of Puerto Rico and Adjacent Islands. Spermatophyta, Volume III. Cyrillaceae to Myrtaceae. La Editorial, UPR, San Juan, Puerto Rico	"native to Brazil and Boliva"
205	1994. Liogier, H.A.. Descriptive Flora of Puerto Rico and Adjacent Islands. Spermatophyta, Volume III. Cyrillaceae to Myrtaceae. La Editorial, UPR, San Juan, Puerto Rico	"Recently introduced and persistent in gardens, in moist regions, PR" [Puerto Rico]
205	2002. Myburg, H./Gryzenhout, M./Heath, R./Roux, J./Wingfield, B.D.. Cryphonectria canker on Tibouchina in South Africa. Mycological Research. 106 (11): 1299-1306.	"... In this study, we report on a similar canker disease that has recently been found in South Africa on <i>T. granulosa</i> , commonly grown as an ornamental tree. ..."
205	2003. Starr, F./Starr, K./Loope, L.L.. Tibouchina granulosa - Glory tree - Melastomataceae. USGS - Biological Resources Haleakala Field Station Maui, www.hear.org/starr/hiplants/reports/pdf/tibouchina_granulosa.pdf	"Global distribution: <i>T. granulosa</i> is cultivated in warm regions, such as Hawai'i and Florida as an ornamental shrub or small tree."
301	1994. Liogier, H.A.. Descriptive Flora of Puerto Rico and Adjacent Islands. Spermatophyta, Volume III. Cyrillaceae to Myrtaceae. La Editorial, UPR, San Juan, Puerto Rico	"Recently introduced and persistent in gardens, in moist regions, PR" [Puerto Rico...naturalizing?]
301	2008. Foxcroft, L.C./Richardson, D.M./Wilson, J.R.U.. Ornamental Plants as Invasive Aliens: Problems and Solutions in Kruger National Park, South Africa. Environmental Management. 41: 32-51.	"Table 2...Tibouchina granulosa...Evidence of naturalization? No" [South Africa]

301	2009. Frohlich, D./Lau, A.. Oahu Early Detection Botanist. In prep.. Bishop Museum Occasional Papers.	" <i>Tibouchina granulosa</i> (Desr.) Cogn. New naturalized record. <i>Tibouchina granulosa</i> , a species not frequently cultivated as an ornamental in Hawai'i and not previously collected as naturalized in the state, has now been spotted spreading 20 to 30 meters from a planted tree. The original planting had been uprooted, and then cut into logs, which were resprouting. Several saplings and seedlings of various sizes were seen growing uphill from the original planting. This species can be distinguished from other commonly seen <i>Tibouchina</i> species by its 4-winged branchlets, leathery, elliptic to ovate-lanceolate leaves, evenly purple flowers, wooly filaments, and floral bracts and calyx lobes with broad, smooth marginal bands (Staples and Herbst 2005). Material examined. O'AHU Manoa Valley, mauka of currently managed portions of Lyon Arboretum. UTM 623840, 2359941. 1 meter tall sapling, no fruits or flowers seen. Sapling was found about 50 meters from an uprooted, resprouting tree that had apparently been cut into pieces, which were also sprouting. Seedlings of this species less than 20 cm tall, were found on a ridge nearby, about 20-30 meters from original tree. New naturalized record, 2 Sep 2008, OED 2008090201. O'AHU Manoa Valley, mauka of currently managed portions of Lyon Arboretum. UTM 623840, 2359941. Lowland mesic secondary forest, 20 cm tall seedlings. This species believed not to reproduce by seedlings in Hawai'i. Four other naturalized saplings and small trees noted in the area, about 40 meters from the original planted area, 5 Nov 2008, OED 2008110501."
302	2003. Starr, F./Starr, K./Loope, L.L.. <i>Tibouchina granulosa</i> - Glory tree - Melastomataceae. USGS - Biological Resources Haleakala Field Station Maui, www.hear.org/starr/hiplants/reports/pdf/tibouchina_granulosa.pdf	No evidence
302	2007. Randall, R.P.. Global Compendium of Weeds - <i>Tibouchina granulosa</i> [Online Database]. http://www.hear.org/gcw/species/tibouchina_granulosa/	No evidence
303	2003. Starr, F./Starr, K./Loope, L.L.. <i>Tibouchina granulosa</i> - Glory tree - Melastomataceae. USGS - Biological Resources Haleakala Field Station Maui, www.hear.org/starr/hiplants/reports/pdf/tibouchina_granulosa.pdf	No evidence
303	2007. Randall, R.P.. Global Compendium of Weeds - <i>Tibouchina granulosa</i> [Online Database]. http://www.hear.org/gcw/species/tibouchina_granulosa/	No evidence
304	2003. Starr, F./Starr, K./Loope, L.L.. <i>Tibouchina granulosa</i> - Glory tree - Melastomataceae. USGS - Biological Resources Haleakala Field Station Maui, www.hear.org/starr/hiplants/reports/pdf/tibouchina_granulosa.pdf	" <i>T. granulosa</i> currently is not spreading on Maui and there was no evidence found of it being invasive elsewhere in the world. However, several <i>Tibouchina</i> species are considered highly invasive in Hawai'i and all plants in the genus, <i>Tibouchina</i> , are listed as Hawai'i state noxious weeds."
304	2007. Randall, R.P.. Global Compendium of Weeds - <i>Tibouchina granulosa</i> [Online Database]. http://www.hear.org/gcw/species/tibouchina_granulosa/	No evidence
305	2003. Starr, F./Starr, K./Loope, L.L.. <i>Tibouchina granulosa</i> - Glory tree - Melastomataceae. USGS - Biological Resources Haleakala Field Station Maui, www.hear.org/starr/hiplants/reports/pdf/tibouchina_granulosa.pdf	" <i>T. granulosa</i> currently is not spreading on Maui and there was no evidence found of it being invasive elsewhere in the world. However, several <i>Tibouchina</i> species are considered highly invasive in Hawai'i and all plants in the genus, <i>Tibouchina</i> , are listed as Hawai'i state noxious weeds."
401	1994. Liogier, H.A.. Descriptive Flora of Puerto Rico and Adjacent Islands. Spermatophyta, Volume III. Cyrillaceae to Myrtaceae. La Editorial, UPR, San Juan, Puerto Rico	"Shrub or small tree, to 13 m tall, the trunk diameter to 20 cm; twigs greenish and scabrous to pilose, 4-angled, the angles winged; leaves oblong-ovate to lanceolate, 13-20 cm long; 2.5-8 cm broad, acuminate at apex, obtuse at base, 5-nerved from base, hairy above, pubescent beneath..." [no spines, thorns, or burrs]
402	2011. WRA Specialist. Personal Communication.	No evidence

403	1994. Liogier, H.A.. Descriptive Flora of Puerto Rico and Adjacent Islands. Spermatophyta, Volume III. Cyrillaceae to Myrtaceae. La Editorial, UPR, San Juan, Puerto Rico	"Shrub or small tree, to 13 m tall..." [not parasitic]
404	2011. WRA Specialist. Personal Communication.	Unknown
405	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	No evidence of toxicity to animals
406	2011. Farr, D.F./Rossmann, A.Y.. Fungal Databases, Systematic Mycology and Microbiology Laboratory. ARS, USDA, http://nt.ars-grin.gov/fungaldb/index.cfm	"Pests and diseases: Brickell and Zuk (1997) report that <i>Tibouchina</i> spp. are susceptible to gray mold, mushroom root rot, leaf spots, root rot of seedlings, and spider mites." [No evidence regarding associated economic pests.]
406	Oakman, H.. 1995. Harry Oakman's what flowers when: the complete guide to flowering times in tropical and subtropical gardens. Univ. of Queensland Press, St. Lucia, Australia	"pest free"
407	1998. Riffle, R.L.. The Tropical Look - An Encyclopedia of Dramatic Landscape Plants. Timber Press, Portland, OR	No evidence
408	2003. Starr, F./Starr, K./Loope, L.L.. <i>Tibouchina granulosa</i> - Glory tree - Melastomataceae. USGS - Biological Resources Haleakala Field Station Maui, www.hear.org/starr/hiplants/reports/pdf/tibouchina_granulosa.pdf	" <i>Tibouchina</i> species are evergreen plants from the rainforest areas of tropical America." [probably does not create fire hazard based on habitat requirements]
409	2003. Llamas, K.A.. Tropical Flowering Plants. Timber Press, Portland, OR	"Full sun to bright broken light."
409	2005. Desert Tropicals. Purple Glory Tree. Faucon, P., http://www.desert-tropicals.com/Plants/Melastomataceae/Tibouchina_granulosa.html	"Sun Exposure: Full sun"
409	2011. Gardino Nursery. Rare and Unusual Plants - <i>Tibouchina granulosa</i> . http://www.rareflora.com/tibouchinagrulosa.htm	"LIGHT REQUIREMENTS : full sun to broken light"
410	2007. Gilman, E.F.. <i>Tibouchina granulosa</i> - Purple Glory Tree. FPS-581. Institute of Food and Agricultural Sciences, University of Florida, Gainesville, FL edis.ifas.ufl.edu/pdf/FP/FP58100.pdf	"Soil tolerances: clay; acidic; well-drained; sand; loam...Full sun is best for flowering and the plant will thrive on any well-drained soil when regularly watered."
411	1994. Liogier, H.A.. Descriptive Flora of Puerto Rico and Adjacent Islands. Spermatophyta, Volume III. Cyrillaceae to Myrtaceae. La Editorial, UPR, San Juan, Puerto Rico	"Shrub or small tree, to 13 m tall" [not climbing or smothering]
412	2011. WRA Specialist. Personal Communication.	No evidence
501	1994. Liogier, H.A.. Descriptive Flora of Puerto Rico and Adjacent Islands. Spermatophyta, Volume III. Cyrillaceae to Myrtaceae. La Editorial, UPR, San Juan, Puerto Rico	"Shrub or small tree, to 13 m tall" [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	Melastomataceae
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	Melastomataceae [not a nitrogen fixing woody plant]
504	1994. Liogier, H.A.. Descriptive Flora of Puerto Rico and Adjacent Islands. Spermatophyta, Volume III. Cyrillaceae to Myrtaceae. La Editorial, UPR, San Juan, Puerto Rico	"Shrub or small tree, to 13 m tall" [not a geophyte]

601	2010. Tropicos.org. Tropicos [Online Database]. Missouri Botanical Garden, http://www.tropicos.org/	Probably not - Flowering specimens collected from native range
602	2005. Lopes, J.C./Dias, P.C./Pereira, M.D.. Physiological maturity of quaresmeira seeds. <i>Pesquisa Agropecuária Brasileira</i> . 40(8): 811-816.	"The objective of this work was to study the maturation process of <i>Tibouchina granulosa</i> Cogn. seeds. Each inflorescence was identified in the day of its respective anthesis. Samples of fruits and seeds were collected weekly, and diameter, weight, color, moisture content and dry matter were determined. After seed extraction, analyzes were made for coloring, moisture content, dry matter, 1,000 seeds mass, speed and percentage of germination. Experimental design was carried out in a completely randomized block with four replications. Analysis of data obtained led to the following conclusions: seeds physiological maturity occurred 84 to 105 days, and seed harvest should be done between 84 to 98 days after the anthesis. The parameters which best characterized seed physiological maturity and the time for harvesting were moisture content and dry matter weight. The largest germination percentage was verified in extracted seeds from 77 until 105 days after the anthesis, and seeds vigor increased until 91 days. The size and color of fruits and seeds demonstrated efficiency as maturation parameters. Fruits initial dehiscences occurred after 105 days of the anthesis. <i>Tibouchina granulosa</i> presented seed dormancy after maturation. "
603	1992. Almeda, F./Chuang, T.I.. Chromosome Numbers and Their Systematic Significance in Some Mexican Melastomataceae. <i>Systematic Botany</i> . 17(4): 583-593.	Unknown. No evidence regarding hybridization in the genus <i>Tibouchina</i> - also other than a cytological study the reproductive ecology of the genus does not seem to be very well studied.
604	2009. Campos, C.C.F./Duarte, J.F./Borém, R.A.T./de Castro, D.M.. Floral biology and breeding mechanisms of <i>Tibouchina heteromalla</i> Cogn. In rocky outcrops in the south of Minas Gerais. <i>Brazilian Journal of Ecology</i> . 13(1/2): .	"Even though <i>T. heteromalla</i> is self-compatible, a flowering pattern favoring cross pollination would be more advantageous for a species that depends on external vectors for pollen transportation" [related species self-compatible, but unknown for <i>T. granulosa</i>]
605	1989. Renner, S.S.. A Survey of Reproductive Biology in Neotropical Melastomataceae and Memecylaceae. <i>Annals of the Missouri Botanical Garden</i> . 76(2): 496-518.	"The first reports on nectar production in melastomes are by Ule (1895, 1896). In three species of <i>Tibouchina</i> (Table 4) growing on the Brazilian Itatiaia mountain range, he observed that nectar was produced by the staminal vascular bundle and secreted either directly from the filaments or sometimes through a slit in the filaments. He suggested bumblebees as the probable pollinators of these species. At Ule's request, the chemist T. Peckolt analyzed the stamens of another species that did not secrete nectar (Ule gave the name as <i>T. glareosa</i> Cogn.; there is no such name, and he probably meant <i>T. granulosa</i> Cogn.). Peckolt found that sugar was present "in great quantity," which suggested to Ule (1896) that this was likely true for other species of <i>Tibouchina</i> as well."
605	2005. Kraus, J.E./Hofling, E./Rodrigues, M.T./Amaral de Sampaio, M.R.. Fauna and flora of the campus of the Cidade Universitária Armando de Salles Oliveira. EdUSP, Sao Paulo, Brazil	"Flowering occurs twice each year, from February to April, and August to October, and they attract bees."
606	2009. Frohlich, D./Lau, A.. Oahu Early Detection Botanist. In prep.. Bishop Museum Occasional Papers.	" <i>Tibouchina granulosa</i> (Desr.) Cogn. New naturalized record. <i>Tibouchina granulosa</i> , a species not frequently cultivated as an ornamental in Hawai'i and not previously collected as naturalized in the state, has now been spotted spreading 20 to 30 meters from a planted tree. The original planting had been uprooted, and then cut into logs, which were resprouting. Several saplings and seedlings of various sizes were seen growing uphill from the original planting. This species can be distinguished from other commonly seen <i>Tibouchina</i> species by its 4-winged branchlets, leathery, elliptic to ovate-lanceolate leaves, evenly purple flowers, wooly filaments, and floral bracts and calyx lobes with broad, smooth marginal bands (Staples and Herbst 2005). Material examined. O'AHU Manoa Valley, mauka of currently managed portions of Lyon Arboretum. UTM 623840, 2359941. 1 meter tall sapling, no fruits or flowers seen. Sapling was found about 50 meters from an uprooted, resprouting tree that had apparently been cut into pieces, which were also sprouting. Seedlings of this species less than 20 cm tall, were found on a ridge nearby, about 20-30 meters from original tree. New naturalized record, 2 Sep 2008, OED 2008090201. O'AHU Manoa Valley, mauka of currently managed portions of Lyon Arboretum. UTM 623840, 2359941. Lowland mesic secondary forest, 20 cm tall seedlings. This species believed not to reproduce by seedlings in Hawai'i. Four other naturalized saplings and small trees noted in the area, about 40 meters from the original planted area, 5 Nov 2008, OED 2008110501."
607	1998. Riffle, R.L.. The Tropical Look - An Encyclopedia of Dramatic Landscape Plants. Timber Press, Portland, OR	"It grows quickly to as much as 40 feet in its native habitat but is usually about half that height in cultivation."

607	2007. Gilman, E.F.. Tibouchina granulosa - Purple Glory Tree. FPS-581. Institute of Food and Agricultural Sciences, University of Florida, Gainesville, FL edis.ifas.ufl.edu/pdffiles/FP/FP58100.pdf	"Growth rate: moderate"
607	2011. WRA Specialist. Personal Communication.	Probably 2 to 3 years. A moderate sized tree, cultivated for its flowers
701	2011. WRA Specialist. Personal Communication.	Probably not - no evidence that the species grows in heavily trafficked areas.
702	2003. Llamas, K.A.. Tropical Flowering Plants. Timber Press, Portland, OR	Popular ornamental
703	2011. WRA Specialist. Personal Communication.	Probably not - no evidence that the species grows near seed crop fields.
704	1997. Guimaraes, P.J.F./Martins, A.Bo.. Tibouchina sect. Pleroma (D. Don) Cogn. (Melastomataceae) no estado de São Paulo. Revista Brasileira de Botânica. 20 (1): 11-33.	"ABSTRACT - (Tibouchina sect. Pleroma (D. Don) Cogn. (Melastomataceae) in São Paulo state). Tibouchina Aubl. (Melastomeae), with about 308 species occupies a central position among neotropical Melastomataceae with capsular fruits."
704	2004. Oliveira Filho, A.T./Carvalho, D.A./Vilela, E.A./Curi, N./Fontes, M.A.L.. Diversity and structure of the tree community of a fragment of tropical secondary forest of the Brazilian Atlantic Forest domain 15 and 40 years after logging. Revista Brasile	"Table 3. Tree species sampled on seven 1,125 m2 plots of secondary forest in Itambé do Mato Dentro, south-eastern Brazil, followed by brackets containing their classification into species guilds and the number of individuals recorded in the 15- and 40-year-old plots (N15 and N40), respectively. Regeneration guilds: PI = pioneer, LD = light demanding, ST = shade-tolerant. Stratification guilds: L = large, M, medium, S = small. Dispersion guilds: Ane = anemochorous, Aut = autochorous, Zoo = zoochorous. Species are given per family and listed in alphabetical order." [Tibouchina granulosa = anemochorous, wind-dispersed]
705	2004. Oliveira Filho, A.T./Carvalho, D.A./Vilela, E.A./Curi, N./Fontes, M.A.L.. Diversity and structure of the tree community of a fragment of tropical secondary forest of the Brazilian Atlantic Forest domain 15 and 40 years after logging. Revista Brasile	"Table 3. Tree species sampled on seven 1,125 m2 plots of secondary forest in Itambé do Mato Dentro, south-eastern Brazil, followed by brackets containing their classification into species guilds and the number of individuals recorded in the 15- and 40-year-old plots (N15 and N40), respectively. Regeneration guilds: PI = pioneer, LD = light demanding, ST = shade-tolerant. Stratification guilds: L = large, M, medium, S = small. Dispersion guilds: Ane = anemochorous, Aut = autochorous, Zoo = zoochorous. Species are given per family and listed in alphabetical order." [Tibouchina granulosa = anemochorous, wind-dispersed; Probably not water dispersed- no evidence that the species grows near waterways]
706	1994. Liogier, H.A.. Descriptive Flora of Puerto Rico and Adjacent Islands. Spermatophyta, Volume III. Cyrillaceae to Myrtaceae. La Editorial, UPR, San Juan, Puerto Rico	"capsules 5-celled, pinkish, pubescent, 1 cm long; seeds many, minute, brown." [not fleshy-fruited; no adaptations for bird dispersal]
707	2011. WRA Specialist. Personal Communication.	Probably not - no evidence that the propagules have any means of attachment.
708	2011. WRA Specialist. Personal Communication.	Unknown, but capsular fruit & wind-dispersed seeds unlikely to be consumed
801	1994. Liogier, H.A.. Descriptive Flora of Puerto Rico and Adjacent Islands. Spermatophyta, Volume III. Cyrillaceae to Myrtaceae. La Editorial, UPR, San Juan, Puerto Rico	"capsules 5-celled, pinkish, pubescent, 1 cm long; seeds many, minute, brown."
801	2005. Lopes, J.C./Dias, P.C./Pereira, M.D.. Physiological maturity of quaresmeira seeds. Pesquisa Agropecuária Brasileira. 40(8): 811-816.	"The seeds presented a continuous trial of changes in his coloring, passing from blanks in the first weeks, for yellow, brown, until acquire the brown-dark coloring, to the 91 days after anthesis, remaining with that coloring up to last collection. The number of seeds by fruit did not present alteration during the phase of ripening, maintaining itself on average with around 760±21 seeds, by fruit, what suggests that the number of formed seeds in the fruit is more related with the rate of pollination and fertilization than with the age of the fruit." [Translated online from Portuguese - species seems to be a prolific seeder if it averages around 760 seeds per fruit].
802	2005. Lopes, J.C./Dias, P.C./Pereira, M.D.. Physiological maturity of quaresmeira seeds. Pesquisa Agropecuária Brasileira. 40(8): 811-816.	"... The size and color of fruits and seeds demonstrated efficiency as maturation parameters. Fruits initial dehiscences occurred after 105 days of the anthesis. Tibouchina granulosa presented seed dormancy after maturation." [Probably yes but no evidence regarding the longevity of the seeds under field conditions]
802	2008. Royal Botanic Gardens Kew. Seed Information Database (SID). Version 7.1. http://data.kew.org/sid/	"Storage Conditions: 54% germination after 15 months open storage at room temperature (Reis et al., 1980)"
803	2011. WRA Specialist. Personal Communication.	Unknown. No information on control of Tibouchina granulosa

804	2007. Gilman, E.F.. Tibouchina granulosa - Purple Glory Tree. FPS-581. Institute of Food and Agricultural Sciences, University of Florida, Gainesville, FL edis.ifas.ufl.edu/pdffiles/FP/FP58100.pdf	"It is the easiest tibouchina to train into a tree. It can be trimmed to any size and still put on a vivid flower display...Trees can become nicely shaped with some early pruning to provide for strong, upright trunks. The canopy will need to be pruned regularly to keep lower branches from drooping to the ground." [tolerates regular trimming]
805	2011. WRA Specialist. Personal Communication.	Unknown
