Tibouchina multiflora

Tibouchina Melastomataceae

Forest Starr, Kim Starr, and Lloyd Loope United States Geological Survey--Biological Resources Division Haleakala Field Station, Maui, Hawai'i

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OVERVIEW

Tibouchina multiflora, native to Brazil, is rarely cultivated in Hawai'i as an ornamental shrub. On Maui, a few plants are cultivated in gardens and are not yet known to spread. There is not much evidence of this species being invasive elsewhere in the world. However, other *Tibouchina* species, such as *T. herbacea*, *T. longifolia*, and *T. urvilleana* are considered invasive pests in Hawai'i and all plants in the genus, *Tibouchina*, are listed as Hawai'i state noxious weeds.

TAXONOMY

Family: Melastomataceae (Melastoma family) (Wagner et al. 1999). **Latin name:** *Tibouchina multiflora* (Gardn.) Cogn. (Wagner et al. 1999). **Synonyms:** None known.

Common names: Tibouchina, yesterday - today - tomorrow Tibouchina (local name). **Taxonomic notes:** The genus, *Tibouchina*, is made up of about 350 species, many native to Brazil, but also ranging from Mexico and the West Indies to northern Argentina (Wagner et al. 1999).

Nomenclature: The generic name is derived from a native name of the plants in Guiana (Wagner et al. 1999).

Related species in Hawai'i: Several other *Tibouchina* species are also cultivated in Hawai'i, including *T. granulosa* and *T. urvilleana*. *Tibouchina* species that have naturalized in Hawai'i include *T. herbacea*, *T. longifolia*, and *T. urvilleana*.

DESCRIPTION

"Quadrate young branches, basally rounded or subcordate leaves, glabrous filaments, and purple petals with white basal "eyes" that turn red as the flowers age." (Wagner et al. 1999).

"Shrub, to 6 ft., brs. 4-angled-winged; leaves ovate, to 6 in. long, to about 3 in. wide, 5-7nerved, densely villous-velvety above, densely tomentose and ashy-gray beneath; panicle to 20 in. long; fls. violet, petals to 5/8 in. long." (Bailey and Bailey 1976).

BIOLOGY & ECOLOGY

Cultivation: *T. multiflora* forms a small shrub that is cultivated in warm regions of the world for its attractive profusion of purple flowers with white centers that turn red and soft attractive foliage.

Invasiveness: None known. Though other *Tibouchina* species are considered invasive weeds in Hawai'i.

Pollination: Not known.

Propagation: Tibouchina species are propagated from cuttings (Riffle 1998).

Dispersal: *Tibouchina* plants are spread long distances by humans who cultivate the plant.

Pests and diseases: Brickell and Zuk (1997) report that *Tibouchina* spp. are susceptible to gray mold, mushroom root rot, leaf spots, root rot of seedlings, and spider mites.

DISTRIBUTION

Native range: *Tibouchina* species are evergreen plants from the rainforest areas of tropical America (Brickell and Zuk 1997). *T. multiflora* is native to Brazil (Bailey and Bailey 1976).

Global distribution: *T. multiflora* is cultivated in warm regions of the world.

State of Hawai'i distribution: *T. multiflora* is occasionally cultivated in Hawai'i (Wagner et al. 1999).

Island of Maui distribution: *T. multiflora* is known from a few plantings in gardens on Maui in at least Kula, elevation 3,000 ft (914 m), and Makawao, elevation 1,600 ft (488 m). No reproduction has been observed yet.

CONTROL METHODS

Physical control: Not known. It is likely that the tree could be dug up.

Chemical control: Not known.

Biological control: None known.

Cultural control: The public could be discouraged from planting noxious weeds such as *Tibouchina* spp.

Noxious weed acts: Plants in the genus, *Tibouchina*, are listed as Hawai'i State noxious weeds (HDOA 1992).

MANAGEMENT RECOMMENDATIONS

T. multiflora is known from a few plantings in gardens on Maui. It is not yet known to spread in Hawai'i. There is currently not much evidence of *T. multiflora* being invasive elsewhere in the world. While *T. multiflora* is not yet spreading in Hawai'i, several related species, such as *T. herbacea*, *T. longifolia*, and *T. urvilleana* are considered

invasive pest plants. All *Tibouchina* spp. are declared noxious weeds in the state of Hawai'i.

REFERENCES

Bailey, L.H. and E.Z. Bailey. 1976. *Hortus*. 3rd ed. Macmillan General Reference, NY.

Brickell, C. and J.D. Zuk. 1997. *The American Horticultural Society A-Z Encyclopedia of Garden Plants*. DK Publishing, Inc., NY.

Dehgan, B. 1998. *Landscape Plants for Subtropical Climates*. University Press of Florida, Gainesville, FL.

GRIN (Germplasm Resources Information Network). 2003. Online Database. United States Department of Agriculture, Agricultural Research Service, National Germplasm Resources Laboratory, Beltsville, MD. Available: http://www.ars-grin.gov/ (Accessed: April 14, 2003).

HDOA (Hawai'i Department of Agriculture). 1992. *List of Plant Species Designated as Noxious Weeds for Eradication or Control Purposes* (June 18, 1992). Hawaii Department of Agriculture. Available: http://www.botany.hawaii.edu/cpsu/-strawgua/other/noxious/noxious.html (Accessed: July 25, 2001).

Riffle, R.L. 1998. The Tropical Look. Timber Press, Portland, OR.

Wagner, W.L., D.R. Herbst, and S.H. Sohmer. 1999. *Manual of the Flowering Plants of Hawai'i*. 2 vols. Bishop Museum Special Publication 83, University of Hawai'i and Bishop Museum Press, Honolulu, HI.