

Tibouchina granulosa

Glory tree
Melastomataceae

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OVERVIEW

Tibouchina granulosa, native to western Brazil and eastern Bolivia, is a small tree that is cultivated for its numerous attractive purple flowers (Riffle 1998). In Hawai'i, *T. granulosa* is rarely cultivated. On the island of Maui, *T. granulosa* is rarely cultivated and has been observed in a few gardens in Pukalani and Kula. *T. granulosa* currently is not spreading on Maui and there was no evidence found of it being invasive elsewhere in the world. However, several *Tibouchina* species are considered highly invasive 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 granulosa* (Desr.) Cogn. (Wagner et al. 1999).

Synonyms: *Melastoma granulosum* Desr. (GRIN 2003).

Common names: Glory tree, purple glory tree (Dehgan 1998, Riffle 1998).

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. multiflora* and *T. urvilleana*. *Tibouchina* species that have naturalized in Hawai'i include *T. herbacea*, *T. longifolia*, and *T. urvilleana*.

DESCRIPTION

"Broadly 4-winged young branches, basally acute leaves, villous filaments, and uniformly purple petals." (Wagner et al. 1999).

"It grows quickly to as much as 40 feet in its native habitat but is usually about half that height in cultivation. The stems are four-angled, and the new growth is clothed in a reddish bronze felt. The wonderful 8-inch-long leaves are narrowly elliptic to lanceolate in shape and a dark green in color, pubescent beneath but usually smooth and almost glossy above...The flowers are in erect terminal panicles and each five-petaled 2-inch-wide blossom is a deep rose to violet in color." (Riffle 1998).

BIOLOGY & ECOLOGY

Cultivation: *T. granulosa* forms a small tree that is cultivated in warm regions of the world for its attractive profusion of purple flowers.

Invasiveness: None known. Though other *Tibouchina* species are considered invasive weeds in areas such as 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. granulosa* is native to western Brazil and eastern Bolivia where it grows up to 40 feet in height (Riffle 1998). GRIN (2003) reports that *T. granulosa* is native to the following areas of South America: Brazil - Minas Gerais, Parana, Rio de Janeiro, and Sao Paolo.

Global distribution: *T. granulosa* is cultivated in warm regions, such as Hawai'i and Florida as an ornamental shrub or small tree (Riffle 1998, Wagner et al. 1999).

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

Island of Maui distribution: *T. granulosa* is rarely cultivated on Maui. A few spectacular trees can be observed in Kula and Pukalani. In Kula, the tree is planted in an agriculture station, elevation 3,000 ft (914 m), and has been there for several years without showing any signs of reproduction (Dave Oka pers. comm.). The climate in this area is relatively mild and dry. *T. granulosa* was also observed in Pukalani in a residential garden, planted near the driveway, elevation 1,600 ft (488 m). This area is also relatively dry. At these sites, *T. granulosa* grows as a small woody tree to about 3-4 m (9-12 ft) tall. Leaves are rough, like sand paper, and flowers covered the tree in terminal panicles.

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. granulosa is known from a few plantings in gardens on Maui. It is not yet known to spread in Hawai'i. There is not much evidence of *T. granulosa* being invasive elsewhere in the world. While *T. granulosa* is not yet known to be invasive in Hawai'i, several related species, such as *T. herbacea*, *T. longifolia*, and *T. urvilleana* are considered pests. All *Tibouchina* spp. are declared noxious in the state of Hawai'i.

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