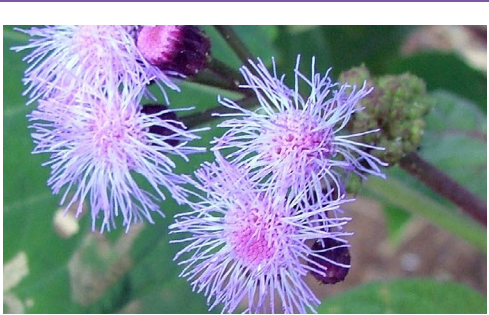


Blue mist plant

Bartlettina sordida



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Summary

Blue mist plant (*Bartlettina sordida*) is an evergreen shrub, up to two metres (m) tall, native to high-elevation areas of Mexico. Reproduction is via wind-dispersed seeds.

Currently, blue mist plant is being cultivated as a garden plant in Queensland, but has not yet naturalised. Since it has a history as a weed in New Zealand, it is reasonable to predict that it will eventually naturalise and become a weed in comparable habitats and climate zones in Queensland.

While most of Queensland is too hot and dry for this species, it could survive in cool, moist, upland rainforest habitats such as Lamington National Park, Mount Tamborine, Mount Glorious, Eungella National Park and eastern parts of the Atherton Tablelands. Given sufficient opportunity and time to develop a large population, *B. sordida* could form dense stands that replace native plants and interfere with natural ecological processes, within suitable habitats.

Identity and taxonomy

Species: *Bartlettina sordida* (Less.) RM King and H Rob.

Other synonyms:

Eupatorium megalophyllum

Eupatorium sordidum

Neobartlettia sordida

Bartlettina matudae

Eupatorium megalophyllum

Eupatorium miradoreense

Eupatorium raffillii

Eupatorium sordidum

Hebeclinium atrorubens

Eupatorium atrorubens

Hebeclinium megalophyllum

Hebeclinium sordidum

Neobartlettia sordida

Common names:

Blue mist plant, purple mist plant, purple torch of the clouds

Reference: Tropicos (2010).

Bartlettina is a genus of about 37 species native to tropical America (Turner 1994). This genus was previously part of *Eupatorium* (King & Robinson. 1987). *B. sordida* is related to a large number of invasive taxa in the *Eupatorium* genus, such as *Eupatorium adenophorum* (crofton weed), *E. riparium* (mist flower), *E. odoratum* (Siam weed) and *E. rugosum* (white snakeroot).

Family: Asteraceae

Description

B. sordida is an evergreen shrub 1–2 m tall (Figure 1).



Figure 1. *Bartlettina sordida* in the Adelaide Botanic Gardens in 2007 (Photo: Biosecurity Queensland).

Leaves are opposite, broadly ovate and large, 11–25 cm long, up to 25 cm wide with long slender petioles and short reddish hairs. They are dark green above with reddish veins, and often purple on the underside. Younger stems are also covered with dense reddish-purple hairs. Flowers are blue, purple or pink and arranged in dense clusters (Figure 2). Each flower contains 8–150 seeds. Seeds are dispersed by wind (Weeds CRC).



Figure 2. Flowers of *Bartlettina sordida* (Photo: Biosecurity Queensland).



Figure 3. Flowers of *Bartlettina sordida* (Photo: Biosecurity Queensland).

Reproduction and dispersal

B. sordida reproduces from seeds as well as from pieces of stems (Auckland Regional Council). Stems that touch the ground often produce roots. Seeds have a fluffy pappus and are dispersed by wind (Figure 4). In New Zealand, *B. sordida* has been dispersed via dumping of garden waste (Weeds CRC)



Figure 4. Seeds of *Bartlettina sordida* (Photo: Biosecurity Queensland).

Preferred habitat and climate

This study was unable to find detailed information on this species preferred habitat. However, in New Zealand, where it has naturalised, it appears to prefer damp sites along semi-shaded forest margins and the margins of clearings. The fact that it has naturalised in shady areas, generally in damp gullies, in Sydney provides another clue on its preferred habitat. Various gardening web sites comment that it tolerates shade and wet conditions, but not frost. Under cultivation, it requires full sun to part shade and moist, but well drained soils. It is reported to be “very easy to grow in part shade, but could be burnt by hot sun.” (Gardening Australia, no date). As such, this study suggests that blue mist plant prefers shady sites in mesic (damp or otherwise high rainfall) habitats generally within warm temperate or cool (upland) subtropical climate zones. This presumably reflects conditions within the species’ native range high in the mountains of Mexico.

Origin and global distribution

B. sordida is native to high elevation areas of Mexico (elevations at collection sites range from 300–2500 m, with many specimens collected from 1500–2500 m) (Tropicos 2010). Some web-sites offering the plant for sale state that it is native to the “cloud forests” of Mexico (eg. Trade Winds Fruit, undated), a term used to describe vegetation types on or near the summits of mountains.

Distribution in Queensland and Australia

In Australia, *B. sordida* is sold as a garden ornamental. In Sydney, *B. sordida* is regularly found as a garden escapee under the canopy of taller vegetation, often in damp areas near drains or creeks. In Queensland, there are three cultivated records: (1) Craters Lake National Park, Atherton Tablelands; (2) Brisbane Botanic Gardens, Mount Coot-tha; (3) the alumni teaching garden at the University of Queensland, Brisbane (Weeds CRC). Herbaria in Australia hold collections from the Atherton Tablelands and Sydney (Figure 5).

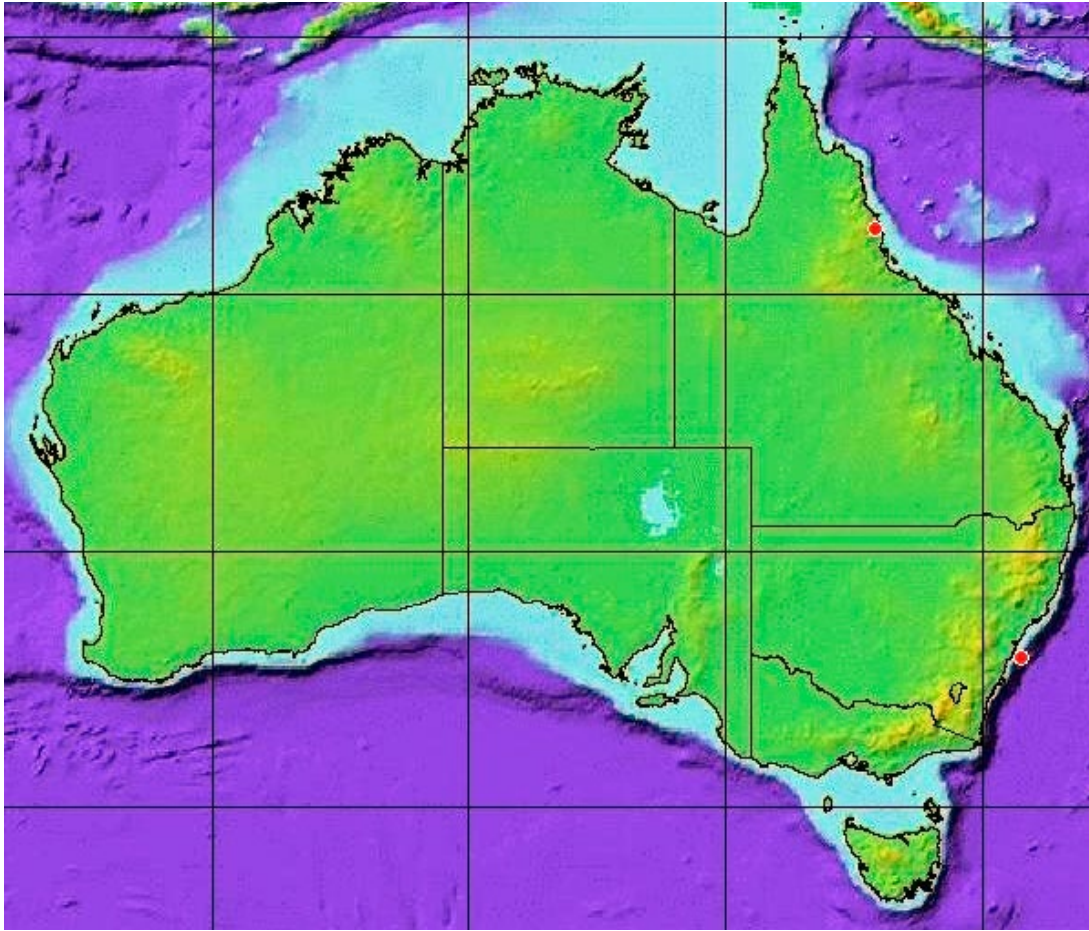


Figure 5. Locations in Australia where specimens of *Bartlettina sordida* have been collected (Specimen data reproduced from Australia’s Virtual Herbarium with permission of the Council of Heads of Australasian Herbaria Inc.) (AVH 2010).

History as a weed overseas

B. sordida is listed as a ‘naturalised ecological weed’ in New Zealand, where it forms dense clumps that shade out other plants (Auckland Regional Council). It is on New Zealand’s National Pest Plant Accord and is prohibited from propagation, sale and distribution within New Zealand (Weeds CRC). USDA (2010) lists it as ‘naturalised’ in Java, but does not provide details.

Current impact in Queensland

Currently, *B. sordida* is restricted to gardens in Queensland. As such, it is not having any impact. However, it has the potential to escape gardens and become a problem, as discussed in the following section.

Potential impact in Queensland

Since *B. sordida* has a history as a weed in New Zealand, it is reasonable to predict that it will naturalise and become a weed in comparable habitats and climate zones in Queensland. While most of Queensland is too hot and dry for this species, it could survive in cool, moist, upland rainforest habitats such as Lamington National Park, Mount Tamborine, Mount Glorious, Eungella National Park and eastern parts of the Atherton Tablelands. Its potential range may be comparable to *Hedygium gardnerianum* (kahili ginger) another highly invasive weed of New Zealand that has successfully naturalised in Queensland's upland rainforests (Csurhes and Hannan-Jones 2008). Given sufficient opportunity and time to develop a large population, *B. sordida* could form dense stands that replace native plants and interfere with natural ecological processes.

Use

B. sordida is an attractive plant that is sold as a garden ornamental.

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