Weeds of Australia - Biosecurity Queensland Edition Fact Sheet

**Mimosa diplotricha var. diplotricha**

**Scientific Name**
*Mimosa diplotricha* C. Wright ex Sauvalle var. *diplotricha*

**Synonyms**
*Mimosa invisa* Mart. ex Colla
*Mimosa invisa* Mart. ex Colla forma *inermis* Adelb.
*Mimosa invisa* Mart. ex Colla var. *inermis* (Adelb.) Verdc.

**Family**
Fabaceae: sub-family Mimoseae (New South Wales)
Leguminosae (South Australia)
Mimosaceae (Queensland, the ACT, Victoria, Tasmania, Western Australia and the Northern Territory)

**Common Names**
creeping sensitive plant, giant sensitive plant, nila grass, tropical blackberry

**Origin**
This species is native to Mexico, Central America (i.e. Costa Rica, El Salvador, Guatemala, Honduras and Panama), the Caribbean (i.e. Cuba, Haiti, Jamaica and Puerto Rico) and tropical South America (i.e. French Guiana, Guyana, Venezuela, Brazil, Bolivia, Colombia, Ecuador, Peru and Paraguay).

**Naturalised Distribution**
Giant sensitive weed (*Mimosa diplotricha* var. *diplotricha*) is currently mostly confined to the coastal regions of northern Queensland, but is also present in central Queensland and on Christmas Island.

Also naturalised in tropical Africa (i.e. Burundi, Cameroon, Ethiopia, Ghana, Mozambique, Nigeria, Rwanda, Tanzania, Togo, Zaire and Zimbabwe), southern Asia (i.e. India, Sri Lanka, Laos, Cambodia, Malaysia, Taiwan, Thailand and Vietnam) and Oceania (i.e. American Samoa, Western Samoa, Cook Islands, Fiji, French Polynesia, Guam, New Caledonia, Niue, Palau, the Solomon Islands and Papua New Guinea).

**Habitat**
This species is mainly found in wetter habitats in tropical and sub-tropical regions. It is usually a weed of roadsides, waste areas, disturbed sites, waterways, pastures and plantation crops (e.g. sugarcane).

**Habit**
This species may exhibit several different growth forms and can develop into very dense thickets. It varies from being a relatively short-lived (i.e. annual, biennial or perennial) shrub with upright (i.e. erect or ascending) stems (2-3 m tall) to a climbing plant with creeping (i.e. prostrate) or scrambling stems (occasionally reaching up to 6 m long).

**Distinguishing Features**
- a short-lived or long-lived shrub or a climbing plant that can be upright, creeping or scrambling in habit.
- its stems are angled and armed with numerous small backwards-curved prickles (3-6 mm long).
- its twice-compound leaves have prickly stalks and consist of 4-9 pairs of branchlets, each bearing 12-30 pairs of small leaflets.
- these leaves fold together when touched (hence the name ‘sensitive plant’).
- its pink or purplish flowers are arranged in fluffy globular clusters (about 12 mm across).
its flattened pods have small prickles on their edges and break up into several (usually 3-5) one-seeded segments when mature.

**Stems and Leaves**

The stems become somewhat woody with age and are much-branched from the base of the plant. They are strongly four or five-angled and armed with numerous small backwards-curved (i.e. recurved) prickles (3-6 mm long).

The bright green leaves (10-20 cm long) are twice-compound (i.e. bipinnate) and alternately arranged along the stems. They are borne on prickly stalks (i.e. petioles) and consist of 4-9 pairs of branchlets (i.e. pinnae). Each branchlet (i.e. pinna) bears 12-30 pairs of small leaflets (i.e. pinnules). These leaflets (6-12 mm long and about 1.5 mm wide) are stalkless (i.e. sessile), elongated (i.e. lanceolate) in shape, and have pointed tips (i.e. acute apices). The leaves usually fold together at night and when touched, hence the name “sensitive plant”.

**Flowers and Fruit**

Numerous small pink or purplish coloured flowers are arranged in globular (i.e. spherical) clusters (about 12 mm across). These flower clusters are borne singly or in small groups on stalks (i.e. peduncles) 3.5-16 mm long that arise from the leaf forks (i.e. axils). Individual flowers have four tiny sepals, four inconspicuous petals (1-2.5 mm long), and eight prominent pink stamens that give the flower clusters a fluffy appearance. Flowering occurs mostly during autumn.

The fruit is an elongated and flattened pod (8-35 mm long and 3-10 mm wide) containing 3-5 one-seeded segments that break apart when the fruit is mature. These fruit have small prickles on their edges and are borne in dense clusters (usually about 10 in each cluster). The seeds (2-3.6 mm long and 1.9-2.7 mm wide) are light brown in colour, glossy in appearance, and egg-shaped in outline (i.e. ovate) but flattened (i.e. compressed).

**Reproduction and Dispersal**

This species reproduces by seed. These seeds usually remain in the prickly fruit segments and can float on water or become attached to animals and clothing. They may also be spread by machinery or as a contaminant of soil or agricultural produce.

**Environmental Impact**

Giant sensitive weed (*Mimosa diplotricha* var. *diplotricha*) is regarded as an environmental weed in northern Queensland.

**Legislation**

This species is declared under legislation in the following states and territories:

- Northern Territory: C - not to be introduced into the Territory.
- Queensland: Class 2 - landowners must take all reasonable steps to keep land free of this species (throughout the entire state). It is also illegal to sell a declared plant or its seed in this state.
- Western Australia: P1 - trade, sale or movement into the state prevented, and P2 - to be eradicated (throughout the entire state).

**Management**

For information on the management of this species see the following resources:

- the *Biosecurity Queensland* Fact Sheet on this species, which is available online at [http://www.dpi.qld.gov.au](http://www.dpi.qld.gov.au).
- the *Northern Territory Department of Natural Resources, Environment and The Arts* Agnote on this species, which is available online at [http://www.nt.gov.au/weeds](http://www.nt.gov.au/weeds).

**Similar Species**

Giant sensitive weed (*Mimosa diplotricha* var. *diplotricha*) is very similar to giant sensitive tree (*Mimosa pigra*) and common sensitive plant (*Mimosa pudica*), which both also produce globular pink flower clusters. These species can be distinguished by the following differences:

- giant sensitive weed (*Mimosa diplotricha* var. *diplotricha*) is an upright (i.e. erect) shrub, creeper or climbing plant that has much-branched leaves (i.e. 4-9 pairs of pinnae). It produces relatively small pods (1-3.5 cm long) that contain a few (3-5) one-seeded segment.
- **giant sensitive tree** (*Mimosa pigra*) is a large shrub with an upright (i.e. erect) growth habit that has large much-branched leaves (i.e. 6-16 pairs of pinnae). It produces relatively large pods (3-12 cm long) that contain numerous (14-26) one-seeded segments.

- **common sensitive plant** (*Mimosa pudica*) is a smaller plant, with a more low-growing (i.e. prostrate) habit, that has few-branched leaves (i.e. 1-2 pairs of pinnae). It produces relatively small pods (1-2.5 cm long) that contain a few (1-5) one-seeded segments.