



# Mimosa pigra

**DECLARED CLASS 1**

## Problem

Mimosa pigra forms dense, impenetrable thickets, 3–6 metres high, establishing on waterways, flood plains and wetlands.

Accessibility to water for stock, irrigation and recreation purposes is affected. Pastures are smothered, reducing available grazing area and stock mustering is difficult.

Dense growth eliminates most other species and alters the natural habitat in conservation areas. In the Northern Territory some 80 000 ha of floodplains have been covered by Mimosa pigra.

Mimosa pigra's invasiveness is due to its aggressive growth. Once seedlings are established growth is rapid; one-year-old plants with a stem diameter of 2.5 cm often attain a diameter of 7cm in the second year.

In experiments in the Northern Territory, regrowth from young plants severed at ground level reached a height of 2.5 metres and covered an area of 6.3 square metres within 12 weeks.

## Description

As a young plant *Mimosa pigra* grows as a single prickly stem. Mature *Mimosa pigra* tends to be a branched shrub with rose-like thorns. The plant can reach a height of up to 6 m with a branching tap root extending 1–2 m deep.

Leaves are green, feathery and fern-like, with the central leaf stalk being prickly and 20–25 cm long. Each leaf contains up to 16 opposite segments, each segment 5 cm long and divided into pairs of leaflets which fold up at nightfall or when touched or injured.

The flowers are round, fluffy, pink or mauve balls 1–2 cm across.

Each flower head produces a cluster of 1–30 seed pods which are 3–8 cm long and covered with dense hairs. The pods turn brown when mature and break into segments, which fall away from the pod leaving a skeletal outline. Each segment contains an oblong shaped seed 4–5 mm long and 2 mm wide.

## Habitat

*Mimosa pigra* favours a wet-dry tropical climate, in areas with above 750 mm annual rainfall and higher temperatures. In areas with less than 750 mm of annual rainfall it could still occur as a problem in wetlands and around dams and waterways.

*Mimosa pigra* will establish in a range of soil types and is found in moist situations such as floodplains and river banks.

## Declaration details

*Mimosa pigra* is a declared Class 1 plant under the *Land Protection (Pest and Stock Route Management) Act 2002*. A **Class 1** pest is one that has the **potential** to become a very serious pest in Queensland in the future. We need to prevent the import, possession and sale of these species so that they can't escape to become pests. All landholders are required by law to keep their land free of Class 1 pests. It is a serious offence to introduce, keep or sell Class 1 pests without a permit.

## Life cycle

In the Northern Territory *Mimosa pigra* germinates as flood waters recede in the dry season, or in the wet season between November and March.

The first flowers tend to appear 4–12 months after germination with the main flowering period occurring between January and March, sometimes continuing longer if sufficient moisture is available.

Experience at the Peter Faust Dam site in Queensland has shown that flowering can occur in

as little as two months after germination and podding as early as 4 months after germination.

Seeding occurs approximately 3–6 weeks after the flower bud is formed.

The seeds have an extremely hard, often impermeable seed coat. Some are able to germinate as soon as conditions permit, while others remain dormant for many years. In the Northern Territory seeds have remained dormant for up to 23 years.

## Dispersal

The one seeded, hairy segment, of *Mimosa pigra*'s pods are easily spread by humans, animals, and water.

The segments stick to the fur of animals and can pass unharmed through their digestive tract. Segments may become attached to people's hair, shoes and clothing. Vehicles, boats and machinery also transport seed either in mud or loose as a result of brushing up against plants.

The hairs also enable the pods to effectively float on water, enabling them to be easily spread downstream and onto floodplains adjacent to rivers.

## Origin and distribution

*Mimosa pigra* is a native of tropical America where it occurs in Mexico and Central and South America.

It has been introduced into a number of other tropical countries as an ornamental or a cover crop, where it is now a serious weed.

In Australia *Mimosa pigra* is found in the Top End of the Northern Territory where it was introduced in the early 1890's. It is now one of the worst weeds of the Top End, and has the potential to colonise all the wetlands of tropical Australia.

In February 2001, the first recorded infestation outside of the Northern Territory was confirmed at Peter Faust Dam, near Proserpine Queensland. The Department of Natural Resources and Water, SunWater, Whitsunday Shire Council, Mackay Whitsunday Natural Resource Management Group and the Australian Government are working together to eradicate this infestation.

No other infestations are known to exist in Australia outside of the Northern Territory.

## Further information

Further information is available from the vegetation management/weed control/environmental staff at your local government. ■