

Catclaw Mimosa (Giant Sensitive Plant), *Mimosa pigra* L.¹

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Classification

Common Name: Catclaw Mimosa (Giant Sensitive Plant)

Scientific Name: *Mimosa pigra* L.

Family: Leguminosae (Fabaceae), Bean Family

Seedling

The cotyledons are oblong, about 1 cm long, thick, and blunt at the tip (Figure 1). The stem has a few scattered appressed hairs. The first true leaf is once compound. The next few leaves are twice compound, or divided with two pinnae. Above this, the next leaf or two have 4 pinnae.

Mature Plant

Catclaw Mimosa is a much-branched, hairy, perennial shrub typically 1-4 m tall (Figure 2). The alternate leaves are twice compound with 6-12 paired branches (pinnae) each containing 15-25 pairs of leaflets. The stems, branches and leaves contain prickles or thorns which are slightly bent downwards. The flowers are in heads (puffballs) about 1 cm wide, with numerous pink stamens extending outwards. The fruits are flattened, hairy, and the pods are arranged in clusters. Individual 1-seeded sections of the pod break out at maturity leaving the upper and lower margins intact like



Figure 1. Seedling, Catclaw Mimosa (Giant Sensitive Plant), *Mimosa pigra* L.

a frame. The seeds are gray-brown, about 6 mm long and 3 mm wide.

History

Mimosa is derived from the Greek and refers to the sensitive leaves of this and some of the other species in the genus. *Pigra*, a Latin word, means slow and pertains to the movement of the leaves.

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Figure 2. Mature plant, Catclaw Mimosa (Giant Sensitive Plant), *Mimosa pigra* L.

Habitat

This weed is found in disturbed and waste areas near water, and is widely scattered from Highlands County in central Florida southward. Native in the American Tropics, this weed now extends throughout the tropics of the world.

Biology

This species is able to colonize new areas rapidly because of its complex morphological and physiological characteristics. Although not widely distributed in Asia, it was first introduced into Thailand in 1947.

Once established, this plant can withstand almost total submergence by readily forming adventitious roots from aerial and submerged stems. It can tolerate upland soils and moisture regimes along roadways, in secondary forests, and even in highly saline marine habitats. Along water courses, thickets may block access, restrict water flow and increase levels of sedimentation and nutrients.

Catclaw mimosa seeds are often produced year round in the tropics and a mature plant is capable of producing at least 42,000 seeds per year. The seeds remain viable for many years and are able to germinate under variable environmental conditions. Germinating seeds and seedlings can be killed by water inundation. Germination is induced by ground fires or other processes that can crack the hard outer coat of the seeds. After fires, the seedling has an advantage in the nutrient-rich exposed areas.

This weed is frequently found in disturbed areas. Since these areas are increasing, it is likely the Catclaw Mimosa will increase.

Control

Extensive established populations probably cannot be eradicated. Cutting and burning or mechanical operations can control the spread of this plant, but rapid regrowth reduces the effectiveness. Repeated treatments are necessary for chemical control. Biological control such as plant pathogens and insects are currently being researched. Management will most likely involve all of these efforts. The extensive open wetlands and waterways in Florida are similar to the habitats *Mimosa pigra* has invaded elsewhere. The biological potential of this weed makes it imperative that all populations be reported.

Source of biological treatment: taken from, in part, Deborah White. 1985. Weed Alert - *Mimosa pigra*. Center for Aquatic Weeds, University of Florida.