

# Black (Catclaw) Mimosa

(*Mimosa pigra* L., Syn. *Mimosa pellita* Kunch ex Willd.)

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Managed Forests



Fig. 1. Black, catclaw, or lollipop mimosa is a sprawling shrub native to Central America.

Fig. 2. Black Mimosa Showing Hairy Stems and Bipinnate Leaves (USDA APHIS PPQ Archive, USDA APHIS PPQ, Bugwood.org).

Fig. 3. Black Mimosa Showing Flowerhead and Bristly Fruit (USDA APHIS PPQ Archive, USDA APHIS PPQ, Bugwood.org).

## Introduction

### Problems Caused

Black, catclaw, or lollipop mimosa (*Mimosa pigra* L., Syn. *Mimosa pellita* Kunch ex Willd.) is a sprawling shrub native to Central America. Other common names include giant sensitive-plant and shamebush. It was introduced into Florida sometime prior to 1953 and escaped. It is not clear if it was introduced into Florida as an ornamental or the introduction was accidental. It has proved to be a serious invasive plant in wetlands in Thailand, Australia, and Florida. Having spines and forming dense thickets to 20' high, it can displace native species and form a barrier to animal and human activity. Although it can be a serious weed in wetlands, it may also inhabit drier sites. The presence of spines on stems and leaves may implicate it as a threat in pastures.

### Regulations

Black mimosa is a Federal Noxious weed in the United States. It is a Class A noxious weed in Alabama, North Carolina, and Vermont and a Noxious weed in Florida and Hawaii. It is also a Class 1 Prohibited aquatic plant in Florida. It is a Quarantine pest in California and Oregon and is Prohibited in Massachusetts and Minnesota. It is a Plant Pest in South Carolina.

## Description

### Vegetative Growth

Black mimosa is a sprawling shrub reaching 20' tall with hairy stems bearing recurved spines approximately 0.3" long. Leaves are alternate, bipinnately compound, and have straight, vertical prickles at each junction. Each leaf has 5-12 pairs of pinnae and each pinna has 24 to 31 pairs of leaflets which are about 0.3" long.

### Flowering

Flowering occurs all year in Florida, but it is not clear how cool MidSouth winters would affect flowering. Black mimosa flowers are small, about 0.5" in diameter, in spherical heads like 'lollipops'. Heads are stalked and bear about 100 mauve to pink flowers. The segmented, flat pod fruit are about 3" long and 0.5" wide and have brown bristles. There are 9 to 24 segments per fruit, each breaking free and containing one seed. Each head or 'lollipop' usually produces seven pods. Seed can be set within 5 weeks after flowering. Seed apparently germinate best on damp, not dry or saturated soil. Germination can occur year-round in warmer climates, although some seed do not germinate and remain viable in the seed bank for long periods of time.

### Dispersal

The main mechanisms for black mimosa dispersal are water and human activity. Fruit segments will float on water for short periods of time, allowing dispersal.

### Spread By

Black mimosa is spread primarily by water and human activity.

## Habitat

Black mimosa can be a serious problem in wetlands, however, it may also grow on drier sites. The presence of spines and prickles may implicate it as a potential pest in pastures and other habitats. Black mimosa forms dense thickets, replacing the surrounding native vegetation. Although these thickets may provide habitat for certain wildlife, they are a difficult barrier for human and animal activity.

## Distribution

### United States

In the United States, black mimosa has escaped in Florida, Texas and Puerto Rico.

### MidSouth

Black mimosa has not been found in the MidSouth.

## Control Methods

### Biological

Currently there are no known biological controls for black mimosa.

### Chemical

Some chemical control options are available for black mimosa. High volume, frill, basal, or cut stump applications can be made with 2,4-D+2,4-DP. Low volume applications of Escort, Garlon 4, and Garlon 3A can be utilized for black mimosa control. Escort at high volume can also be used. Garlon 4, Garlon 3A, and Pathfinder II can be applied as basal, cut stump, and frill applications. Herbicides listed are labeled to control mimosa and have not been specifically tested for control of black mimosa.

### Mechanical

Mechanical controls can be successful for small infestations of black mimosa. Small infestations may be removed mechanically. If by removal is by hand, take caution to avoid from prickles and spines. However, this method can be slow and labor intensive. Mechanical removal by equipment may be more feasible since human contact is avoided and removal is much more rapid. Multiple approaches may be more feasible for larger populations. Remove plants before fruit is ripe to avoid seed dispersal. Because seed can remain in the seed bank for long periods of time, follow-up inspections may be necessary.

### Physical

Since black mimosa grows in a wide range of conditions, physical control methods are generally not utilized. Care should be taken to avoid introduction of this invasive plant in areas not currently infested and prevent movement of seed on to new sites.

Table 1. Suggested chemical control methods for black mimosa.

| Herbicide     | Method                  | Rate                 |
|---------------|-------------------------|----------------------|
| 2,4-D+2,4-DP  | High volume             | 1 to 1.5%            |
|               | Frill, basal, cut stump | 3 to 4% in oil       |
| Escort        | Low volume              | 1 to 3 oz/A          |
|               | High volume             | 0.5 to 2 oz/A        |
| Garlon 4      | Low volume              | 2%                   |
|               | Basal, cut stump, frill | 20% in diesel or oil |
| Garlon 3A     | Low volume              | 2%                   |
|               | Basal, cut stump, frill | 20% in diesel or oil |
| Pathfinder II | Basal, cut stump, frill | Ready-to-use         |

## References

- Langeland, K.A., and K. Craddock Burks. 1998. Identification and biology of non-native plants in Florida's natural areas. University of Florida, Gainesville, FL 32611.
- Mabberley, D.J. 1997. The plant-book: A portable dictionary of the vascular plants. 2nd ed. Cambridge University Press, NY.
- USDA, NRCS. 2007. The PLANTS Database (<http://plants.usda.gov>, 6 August 2007). National Plant Data Center, Baton Rouge, LA 70874-4490 USA.

## More Information

The Genus *Mimosa* belongs to the Legume (Fabaceae) Family. There are 480 species worldwide found in warmer climates, especially the Americas. Mimosa is not native to the MidSouth. Sensitive plant (*Mimosa pudica* L.) is occasionally grown indoors as a novelty. Like black mimosa, the leaves fold at night or when touched, hence the name sensitive plant.

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