

# Landscape and Ornamental

Department of Entomology

## MIMOSA WEBWORM

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Mimosa webworms attack both mimosa and honeylocust trees in Indiana. Widespread use of thornless honeylocusts as ornamentals has heightened interest in the control of this insect, because all varieties of the tree are susceptible to attack.

Damage is done by webworm caterpillars, which web foliage together and skeletonize leaflets. The insect has two generations each year. However, injury is most noticeable by August when second generation larvae are at the peak of activity. Continued feeding may cause infested trees to turn brown as if scorched by fire.

### DESCRIPTION AND LIFE HISTORY

Adult mimosa webworms are small, silvery-gray moths which have wings stippled with black dots. Moths of the first generation appear in early June, while those of the second generation are seen in late July and early August. Adults lay eggs on foliage and in old webbing. Eggs are tiny, oval and at first pearly-white, but turn pink as hatching time nears. Full-grown caterpillars are about 1 inch long and grayish-brown in color with five lime green stripes running lengthwise down the body. They have a dark head, and the body is sometimes tinged with pink.

First generation caterpillars spin their cocoons between the folded leaves that they have webbed together. Second generation caterpillars leave the tree canopy to find a site where they can spend the winter in cocoons protected from cold temperatures. In urban areas, this is often on tree trunks near buildings and paved areas or on the buildings themselves.



Browned leaves that have been tied together by mimosa webworm.



Late instar mimosa webworm caterpillar



Newly laid egg of mimosa webworm on surface of webbed leaves

<b>Table 1. Pesticide List</b>					
<b>Insecticide</b>	<b>Formulation</b>	<b>Amount per 100 gallons</b>	<b>Amount per gallon</b>	<b>Suggested Use</b>	<b>General Use Restriction (Check label) H=Homeowner C=Commercial</b>
Acephate (Orthene)	75% S 15.6% EC	1/3 lb. 1 1/5 cup	1/3 tsp. 1 1/2 Tbsp.	Rescue	H, C
Acetamiprid (TriStar)	30 SG	2.7-5.3 oz.	-	Rescue	H, C
Azadirachtin (Azatrol, Azatin-o and others)	1.2% SEC	96-160 fl. oz.	1-1.6 fl. oz.	Biorational	H, C
<i>Bacillus thuringiensis</i> (Kurstaki) (Dipel, Biotrol, others)	See label	See label	See label	Biorational	H, C
Beta-Cyflurin (Tempo)	20 WP 0.75 EC	1.9 oz. -	- 1 Tbsp.	Rescue	C H (Bayer)
Bifenthrin (Talstar L&T and other site specific products)	0.7 F	5.5 - 10.9 oz.	1/3 - 2/3 tsp.	Rescue	H, C
Carbaryl (Sevin and others)	4 F 2 F	1 qt. 2 qt.	2 tsp. 4 tsp.	Rescue	H, C
Chlorantraniliprol (Acelepryn)	1.67 SC	1-2 fl. oz.	-	Biorational	C
Cyfluthrin (Decathalon) (Bayer Lawn & Garden)	20 WP 0.75 EC	1.9 oz. -	- 1 Tbsp.	Rescue	C H (Bayer)
Deltamethrin (Deltagard T&O) (Suspend SC)	4.75% EC	4 - 8 oz.	1/4 - 1/2 tsp.	Rescue	H, C
Fluvalinate (Mavrik)	2 F	5 - 10 oz.	1/4 - 1/2 tsp.	Rescue	H, C
Indoxacarb (Provaunt)	2.4 SC	1.2-2.5 fl. oz.	-	Biorational	C
Lambda-cyhalothrin (Scimitar, Demand)	9.7% EC	1.5 - 5 oz.	-	Rescue	H, C
Malathion	57% EC	2 - 4 pt.	2 tsp.	Rescue	H, C
Permethrin (Astro EC) (Spectracide Bug Stop) (Eight)	36.8% EC 2.5% EC	4 - 8 oz. -	1/4 - 1/2 tsp. 2 Tbsp.	Rescue Rescue	C H
Spinosad (Conserve) Bulls-Eye Bioinsecticide Fertilome Borer, Bagworm, Leafminer & Tent Caterpillar Spray	SC SC	6 oz. -	1/2 tsp. 4 Tbsp. 4 Tbsp.	Biorational	C H H
Tebufenozide (Confirm)	25% EC	4 - 8 oz.	1/4 - 1/2 Tsp.	Biorational	C

The white cocoons resemble puffed rice and are often found in groups.

### SUSCEPTIBILITY OF HONEYLOCUST

Due to their inability to survive cold temperatures, mimosa webworm tends to be a problem in urban areas. Of all thornless honeylocust clones, Sunburst seems to be the most susceptible to webworm attack. Other varieties including Shademaster, Skyline, Moraine and Imperial are less susceptible but still subject to severe injury. Mass plantings of ANY of the thornless varieties should be avoided unless the trees can be sprayed.

### CONTROL RECOMMENDATIONS

In the absence of pesticide use, mimosa webworm problems occur in sheltered urban areas or along roadsides. The many insects and birds that feed on the caterpillars are likely to prevent the injury from harming tree health. To prevent

unsightly amounts of webbing, trees can be sprayed with insecticides that target young caterpillars in mid-late June and in late July to early August.

When selecting one of the pesticides from the table below, it is important to consider that early season use of long lasting, broad spectrum pesticides can cause honey locust spider mites to become a problem later in the year. You can avoid this problem by using a biorational insecticide such as: acelepryn, *Bacillus thuringiensis*, indoxacarb, spinosad, or tebufenozide. These materials do not kill mite predators and are not likely to cause spider mite outbreaks. Use the other insecticides to rescue trees when problems are severe and webbing is more extensive.

Scientific Name: Mimosa webworm - *Homadaula anisocentra* Meyrick

READ AND FOLLOW ALL LABEL INSTRUCTIONS. THIS INCLUDES DIRECTIONS FOR USE, PRECAUTIONARY STATEMENTS (HAZARDS TO HUMANS, DOMESTIC ANIMALS, AND ENDANGERED SPECIES), ENVIRONMENTAL HAZARDS, RATES OF APPLICATION, NUMBER OF APPLICATIONS, REENTRY INTERVALS, HARVEST RESTRICTIONS, STORAGE AND DISPOSAL, AND ANY SPECIFIC WARNINGS AND/OR PRECAUTIONS FOR SAFE HANDLING OF THE PESTICIDE.

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