



Texas Agricultural Extension Service

The Texas A&M University System

L-1835

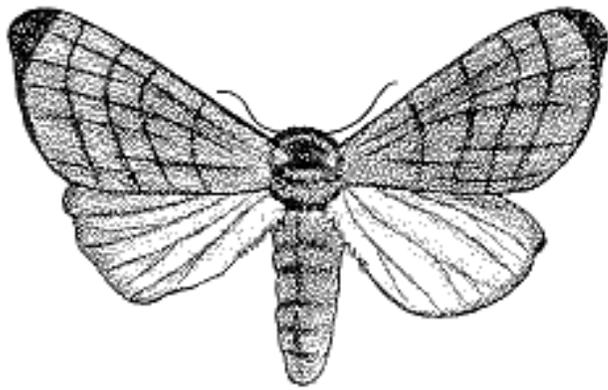
THE WALNUT CATERPILLAR

John A. Jackman
Extension survey entomologist
The Texas A&M University System

The walnut caterpillar is a serious threat to pecan, hickory and walnut trees. It also endangers oak, willow, honey locust and certain woody shrubs. The caterpillars develop in large clusters and rapidly defoliate ornamental and orchard trees if not controlled. Spraying with insecticides is the best control measure. To avoid as much damage as possible, spray the caterpillars when they are still young.

Biology and Description

The adult insect is a moth with a two-inch wing span. It is brown and tan with a dark region on the body behind the head and has wavy, dark lines across the front wings. The adults emerge from pupae which overwinter in the soil at the base of a host tree. The female moth later deposits about 300 eggs on the underside of one of the leaves.



Adult Moth

Caterpillars, or larvae, hatch from the eggs in about 9 days and live together in a group. They are reddish brown to black with white markings and long white hairs. Large larvae are conspicuously fuzzy and may grow up to 50mm (2 inches) long.

Young larvae feed only on soft tissue, leaving a skeletonized leaf behind, while older larvae feed on the entire leaf, including the petiole. The last few stages, or instars, do the majority of the feeding damage. Larvae characteristically arch their heads and tails in a defensive

posture when disturbed. Since they feed together, damage may be localized to just a branch to two. Isolated trees are more subject to attack than forest or orchard trees.

The caterpillars often move in a group to the tree trunk to molt from one stage to the next, leaving a patch of fur-like hair and cast skins. When they finish feeding, they drop to the ground and pupate in the soil. They do not spin a cocoon but form a naked pupal case.

In Texas, at least two generations of the insect develop each year. The second generation is usually larger in number and causes more damage. In some past years, almost all of the native pecan trees in certain areas of the state were defoliated by walnut caterpillars.



Young Larva

Control

Wasp and fly parasites sometimes attack walnut caterpillars but cannot be depended upon, especially in urban areas, for complete control.

The egg masses found on the leaves of small trees can be removed by hand. Groups of caterpillars found on tree trunks or branches during molting can also be destroyed.

For larger trees and plantings, the application of insecticide sprays is the most practical method of control. However, it is more effective if the eggs and immature larvae are detected early and sprayed before extensive damage occurs.

Use products containing carbaryl (Sevin®), malathion, diazinon, acephate (Orthene®), methoxychlor,

trichlorfon (Dylox®, Proxol®) or *Bacillus thuringiensis*. Thoroughly spray leaves, twigs, limbs and tree trunks. Large infested trees may require treatment by commercial applicators with high-pressure sprayers.

Insecticide label clearances are subject to change and changes may have occurred since this publication was printed. The pesticide USER is responsible for the effects of pesticides on his own plants or household goods as well as problems caused by drift from his property to other properties or plants. *Always read and follow carefully the instructions on the container label.*

The information given herein is for educational purposes only. Reference to commercial products or trade names is made with the understanding that no discrimination is intended and no endorsement by the Cooperative Extension Service is implied.

Educational programs conducted by the Texas Agricultural Extension Service are open to all people without regard to race, color, sex, disability, religion, age or national origin.

Issued in furtherance of Cooperative Extension Work in Agriculture and Home Economics, Acts of Congress of May 8, 1914, as amended, and June 30, 1914, in cooperation with the United States Department of Agriculture. Zerle L. Carpenter, Director, Texas Agricultural Extension Service, The Texas A&M University System.

10M--9-81, Reprint



[Return to top of page](#)



[Return to Departmental Home Page](#)

Last modified: January 23, 1997 by Edgar Cross