Walnut caterpillar

Datana integerrima
Order Lepidoptera, Family Notodontidae; prominents
Native pest

Host plants: Apple, birch, hickory, honeylocust, oak, pecan, walnut, and willow

Description: Moths are stout bodied, approximately 31 mm long with wings folded, have brown forewings with irregular dark cross lines and a wingspan of approximately 50 mm. Larvae are about 50 mm long when mature and black with white hairs. Younger larvae are reddish brown with longitudinal light yellow stripes.

Life history: Adults are present during spring and summer, laying eggs on the underside of leaves beginning in June. Larvae are gregarious feeders. Mature larvae drop to the ground to pupate. There are one or two generations a year.

Overwintering: Pupae in the soil.

Damage symptoms: Young larvae skeletonize leaves, and older larvae consume leaves. Isolated trees and trees in small groups are more subject to attack. High density infestations can lead to complete defoliation, and successive defoliations of two years or more can cause serious injury or tree death.

Monitoring: Look for groups of larvae feeding together on terminals, beginning in June. Look later in the summer, for mature larvae feeding along or on the ground under host plants.

Physical control: Remove groups of young larvae feeding.

Chemical control: Spray light infestations of younger larvae with horticultural oil *or Bacillus thuringiensis* var. *kurstaki.* Heavier infestations and older larvae may require the use of a residual insecticide.

Biological control: Eggs are attacked by several parasitoids. The fly, *Archytas metallicas,* parasitizes the larvae.

Plant mortality risk: Low to medium

Biorational pesticides: *Bacillus thuringiensis* var. *kurstaki*, diflubenzuron, insecticidal soap, pyrethrins, spinosad, tenbufenozide

Conventional pesticides: acephate, bifenthrin, carbaryl, chlorpyrifos (nursery only), cyfluthrin, deltamethrin, fluvalinate, lambda-cyhalothrin, malathion, permethrin

Walnut caterpillar larva. (257)
Photo: John Davidson