



Twig Girdler/Twig Pruner

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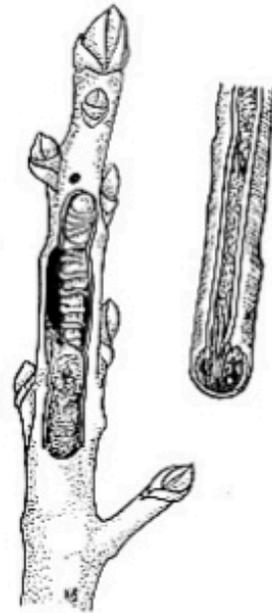


Photo of Twig Girdler from Clemson University. Line drawing of Twig Pruner inside twig by Kathy Borne.

Plants Attacked: Pecan, hickory, and oak are the most commonly attacked, but persimmon, elm, poplar, gum, basswood, honey-locust, dogwood, and some fruit trees can be damaged as well.

Description of Damage: These beetles cause very conspicuous damage in late summer. The leaves on large numbers of twigs and branches will be observed to turn brown prematurely. These twigs and branches sometimes fall from trees in great numbers and accumulate. On close examination, the twigs have one of two kinds of damage. Twigs damaged by the twig girdler are cut as neatly as by a knife. The cut end has been gnawed almost straight across with a faint rounding and is slightly roughened by the chewing. The twig girdler is more commonly found on pecan and hickory. The twig pruner causes a slightly different type of cut. The twig will be observed to have a hollowed out space at the cut end filled with sawdust like frass. The twig when split open will have a long tunnel through most of its length. The twig pruner is more commonly found on oak.

Identification: In the larval stage, both the twig girdler and twig pruner are creamy white in color and up to 2 inches in length. They look like typical roundheaded borers in that their heads and bodies are cylindrical in shape and they have legs that are reduced to very small claws. The adult twig girdler is

about 5/8 inch long and has a pair of long antennae. The color is brown with irregular patches of fine gray hairs and the antennae are spines on the segments closest to the head. Coleoptera, Cerambycidae: *Oncideres cingulata* (twig girdler) and *Elaphidionoides villosus* (twig pruner)

Life History: The adult female twig girdler prepares twigs for egg laying in a very distinctive manner. She selects a small twig with thin bark about 3/8 inch in diameter and very carefully cuts a circular incision through the bark and deep into the wood. In the section of the twig above the girdle, a small hole is gnawed and the egg is placed inside. The twig soon dies and will remain on the tree for a period of time. Eventually, the twig falls from the tree. The egg nevertheless hatches soon after being laid, and the larva starts development in the late summer and fall and the partially grown larvae overwinter in the twig. The larva development continues again in the spring until the middle of the next summer when it is completed and the twig is filled with fibrous frass. This development cycle takes place even if the twig falls off the tree. The larvae pupate in the twig and the adults emerge in late summer. Twig pruner eggs are deposited near the tip of the twigs in the axil of a leaf. The young larva mines down the stem, increasing in size as it goes. Late in the summer it severs the branch by several concentric cuts from the center outward, leaving the thin bark. Infested branches 1/4 to 2 inches in diameter break with the wind and fall to the ground. In the fall, within the stem the larva positions itself between two wads of fibrous frass, where it pupates to the following spring or fall.

Control: Since the twig cutter larva is in the twig when it falls from the tree, gathering and burning of the girdled twigs is the most satisfactory means of preventing further damage. This control works provided it is thoroughly done and extended some distance in the surrounding area. This form of control, however, is of limited value if the trees are growing adjacent to wood lots, where these girdlers are abundant, but should still be practiced. Spraying has not shown much promise for control of these species.

Remarks: Several closely related species of beetles damage twigs in a similar manner but are less common. In Virginia mulberry bark borers, oak stem borers, spined bark borer, and the mulberry borer may all cause the same damage as the twig pruner and girdler. Fortunately, control is the same for all species - pick up fallen branches and burn them.