

Twig Pruners, Anelaphus spp. (including Oak Twig Pruner)



Hosts

Hardwood species. The taxonomy, and therefore our understanding of life history and hosts of this species, is in flux. Recent work indicates that what was formerly considered *Anelaphus parallelus* may be the same species as *A. villosus*. Oak, hickory, elm, walnut, and several fruit trees were considered hosts of *A. parallelus*. A. *villosus* was considered to have had a broader host range, including birch and maple, and was said to prefer declining and dead hosts. Thus, feeding activity and larval development in this complex occur in a wide variety of healthy, declining, and dead hardwood hosts. It may feature the clean pruning cuts as described below or not, depending on the host condition. The remainder of this document covers information related to regularly reported concerns: flagged branches in healthy trees or fallen branches with leaves attached littering the ground under infested trees.

General Information

This species takes two years to mature. The adults are active around the time the oak leaves are beginning to form and deposit eggs near the tips of host twigs. The young larvae mine down the stems, increasing in size until late summer. They spend the first winter within the twig, usually near a node or thickened area. They resume feeding during the second season and soon begin their pruning cuts beneath the bark. Larvae cut around the branch except for the thin bark so that the branches break with the wind and fall to the ground. The larvae remain in the fallen branches for up to several months, pupating in the fall. Adults emerge the following spring. Damage is most noticeable in alternate years.



Dissecting a fallen oak branch can often reveal a twig pruner larva within, as shown in this image.

Symptoms and Signs

Dry, browned branch tips, 1/4 inch to 2 inches in diameter, hanging in the trees or littering the ground is usually indicative of this species complex.

The adult is a brownish, elongate beetle, 3/8 to 3/4 inch in length. The larva is white and legless and resides within oak twigs, causing the damage. The larvae feed in the branches of many hardwoods, but the principal damage is on oak. Infested branches are weakened by the larva so that they break off and fall to the ground. Damage is never severe enough to kill or severely damage trees. On ornamental oaks, however, the hanging dead twigs may be unsightly, and the tree's shape may be altered.



Twig pruner damage in a healthy oak host. A small hole on the end of the branch provides evidence of the larva within.

Management

Chemical controls have not been developed for this insect. Control in woodland situations is not normally necessary or feasible. The severity of damage on ornamental trees can be reduced, however, by gathering and burning all fallen branches. This must be thoroughly done and extended some distance in the surrounding area to be effective. It should be done soon after the branches fall to avoid harming beneficial parasitoids of the pruner.

Further Reading

Bugguide.net, Species *Anelaphus villosus* – Twig Pruner, https://bugguide.net/node/view/116416, accessed July 21, 2022

Lingafelter, S.W. 2020. Review of species of *Anelaphus* Linsley and its new synonym *Gymnopsyra* Linsley from the United States and Canada with description of a new species, synonymies, distributional notes and an illustrated identification key (Coleoptera: Cerambycidae: Elaphidiini). Insecta Mundi 0798: 1-30

Solomon, J.D. 1995. Guide to Insect Borers in North American Broadleaf Trees and Shrubs. <u>Agric. Handbk. 706</u>. Washington, DC: USDA Forest Service pp 429-433



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Revised July 2022

The Maine Forest Service is partially funded by the USDA. The Maine Forest Service and our funding partners are equal opportunity providers and employers.