



# Entomological Notes

Department of Entomology

## RHODODENDRON BORER

*Synanthedon rhododendri* (Beutenmuller)

The rhododendron borer is one of the smallest clearwing borers found in Pennsylvania. It is a key pest of rhododendron, sometimes attacking mountain laurel and deciduous azaleas growing adjacent to infested host plants in the eastern United States. The widespread use of rhododendron and susceptible azalea cultivars may be contributing to an increase in injury caused by this pest in arboreta, community gardens, home landscapes, parks, and ornamental nurseries.

### DESCRIPTION

This native pest was first described from specimens collected in Pennsylvania in 1909. Larvae are yellowish white with a reddish brown head and thoracic legs. At maturity the larval stage is 10 mm long. The pupal stage is brown and 5-9 mm long. This life stage is enclosed in a cocoon that is surrounded by frass and other debris. The adult's abdomen is steel blue or black with the top of segments 2, 4, and 5 each having a thin, yellow, transverse band (Fig. 1). The forewings and hindwings are transparent with a few scales on the veins. Adults have a 10-15 mm wingspread.

### LIFE HISTORY

This species overwinters in the larval stage that is located shallowly in a gallery in the host sapwood. Pupation occurs in the spring, and adults begin emerging from pupal cases during the morning from mid-May through June. Adults do not feed and live for only a day or two. Females attract males with their pheromone during late morning and early afternoon. Females contain an average of 40 eggs, and lay them at old pruning sites, narrow branch crotches, and bark crevices from mid-May through June. Young larvae hatch and bore into cambial tissue and then sapwood. Larvae continue to grow until they prepare to overwinter. They resume feeding in late March, undergoing seven instars until they are fully grown. Mature larvae cut exit holes through the bark, then retreat in the gallery, plugging it with frass. Pupation lasts about two weeks. One generation occurs each year in Pennsylvania.

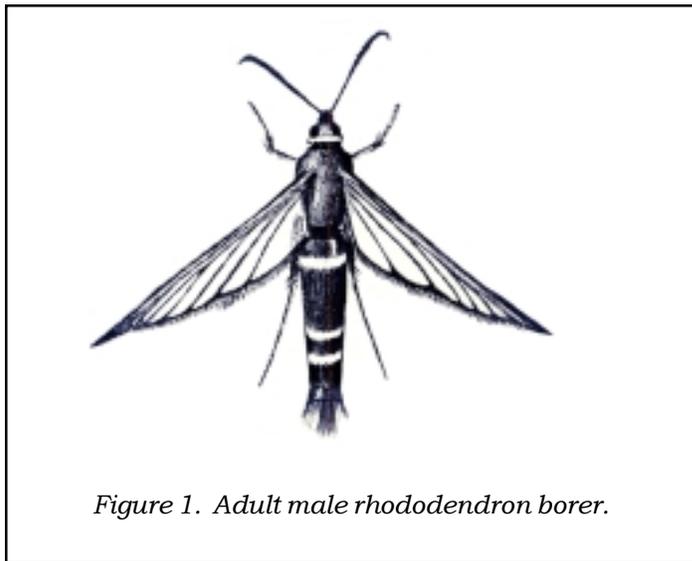


Figure 1. Adult male rhododendron borer.

### DAMAGE

Injury caused by this key pest in ornamental plantings of rhododendron tends to increase from year to year if an infestation is not effectively managed. Small host plants are susceptible and may be killed by a light infestation. Branches may be girdled, causing the leaves to turn yellow, then brown and die. Areas of the bark are killed and sawdust-like castings may exude from holes. Growth of infested plants is restricted and fewer blooms may be produced. Infestations can be detected by the presence of shallow, longitudinal scars in the bark on twigs and branches.

### MANAGEMENT

Prune and destroy infested portions of the host plant from fall through early spring. Heavily infested plants should be removed from a landscape or nursery. Fast-growing cultivars seem to be more susceptible to attack by this species of clearwing borer. Good plant health care practices may minimize damage caused by this key pest. The use of pheromone traps will assist in determining if an infestation is present in your landscape or nursery. Additionally, the use of these traps will help better time an effective insecticide application. An insecticide application should be made 7-10 days after the first male is captured in a pheromone trap. A registered insecticide should be applied

according to label directions to the trunk and larger twigs sometime during the period from mid-May through early July. Woodpeckers and two species of hymenopterous parasitoids are the most important natural enemies of this pest.

## **WARNING**

Pesticides are poisonous. Read and follow directions and safety precautions on labels. Handle carefully and store in original labeled containers out of the reach of children, pets, and livestock. Dispose of empty containers right away, in a safe manner and place. Do not contaminate forage, streams, or ponds.

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