

## Linden borer

Saperda vestita Order Coleoptera, Family Cerambycidae; longhorned beetles, roundheaded borers Native pest

## Host plants: Linden, basswood, and poplar

**Description:** Adults are about 19 mm reddish-brown to black, densely covered with fine olive-green to yellow-brown hairs. Each wing cover has small, denuded black areas, two placed obliquely above the middle and one below. The spots may be absent. The tips of the antennae are brown. The larvae are creamy, white and about 26 mm.

Life history: Adults may be found from June to September. Adults occasionally feed on the petioles and larger veins of leaves, as well as the tender bark of twigs. Eggs are laid in groups of two or three, in areas chewed by females in the bark. The larvae feed in the cambium, although some may be in the heartwood. There is a two to three year life cycle.

Overwintering: Larvae and pupa in the cambium.

**Damage symptoms:** Nursery, landscape, healthy, stressed, large, and small trees are attacked. First symptoms are thinning of the tree canopy. As the damage progresses dieback and tree death results. Structural weakening caused by larval feeding often results in broken trunks or limbs. Larvae are found at the base of the trunk downward to the surface roots; 1.2 m above the ground. Lower branches can also be infested, especially if previously damaged.

**Monitoring:** Regularly inspect for larval and adult activity from June to September. Similarly with other longhorn borers, frass flows from holes in the bark. Adults create round exit holes, approximately 6 mm diameter.

**Cultural control:** Keep trees watered during drought. Remove and chip infested trees to prevent further spread.

**Biological control:** Braconid wasp parasitoids, but not reported to provide control.

## Plant mortality risk: High

## Biorational pesticides: None

**Conventional pesticides:** Foliar sprays: acephate, bifenthrin, carbaryl, chlorpyrifos (nursery only), cyfluthrin, deltamethrin, lambda-cyhalothrin, malathion, permethrin; bark sprays: bifenthrin, chlorpyrifos (nursery only), permethrin; soil injection or drench: imidacloprid; trunk injection: bidrin, imidacloprid



Damage caused by linden borer larvae. Photo: Chris Williamson, University of Wisconsin



Linden borer larvae and galleries. Photo: Chris Williamson, University of Wisconsin



Linden borer adult. Photo: Chris Williamson, University of Wisconsin