

# Hickory bark beetle Scolytus quadrispinosus

## Description

The hickory bark beetle along with the fungus Ceratocystis smalleyii is responsible for hickory wilt. Native to eastern North America.

### Identification

The adult is short, stout, black, almost hairless, and 1/5 inch (5 mm) long. The underside of the posterior is concave and has spines. The larvae are typically white or cream-colored, legless grubs, about the same size as the adults.

### Habitat

Shagbark hickory (Carya ovata), Bitternut hickory (Carya cordiformis) and Pecan (Carya illinoinensis).

# Reproduction

Adults appear in early summer and feed at the base of leaf petioles & twigs before attacking the trunk. 20-60 eggs are deposited in egg galleries. Before reaching maturity, they leave the phloem to pupate in the bark. Winter is spent in the larval





stage and pupation occurs in the spring. Eggs are ellipsoidal, cream colored, & barely visible to the naked eye. The larva is short, curved or C-shaped, legless, yellowish white, & 5-8 mm long. There are 2 generations a year in the United States.

## **Impact**

Adults feed in terminal growth and larvae tunnel into trunks and large branches. Short food tunnels, about body length, mainly at the base of axillary buds and leaf of current and 1 yr old growth. In fall and winter, numerous round holes 3 mm in diameter are often the only sign of attack. During winter and spring, woodpecker holes in bark and sparse/yellowed foliage are indicators. Galleries can girdle a tree. Heavily infested trees turn yellow, then red within a few weeks, and finally brown.

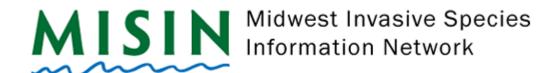
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## **Monitoring and Rapid Response**

Since hickory bark beetles rarely attack healthy trees, good cultural practices such as thinning, pruning, fertilization, and irrigation are important for promoting and maintaining good tree vigor. The most effective means of controlling a hickory bark beetle infestation is by destroying trees in which larvae are overwintering. Infested trees should be cut and burned or submerged in water, have the bark peeled, or be sprayed with an insecticide before beetle emergence begins in May to June. To protect high-value trees, thoroughly spraying the trunks and large branches with an insecticide during early July will curtail most breeding attacks.

#### Credits

The information provided in this factsheet was gathered from the Bugwood.org Wiki, U.S Forest Service and Hickory Wilt: Rapid Crown Decline of Smooth-Bark Hickories by Jennifer Juzwik.Individual



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