



Borers are generally the larvae of various beetles, butterflies, or moths that feed inside stems, trunks, branches or twigs of plants. There are also a few adult beetles will bore into plants. Borers are destructive pests in trees, shrubs, annuals, perennials and vegetables as well. Some common borers in this area attack dogwood, cherry, lilac, pine and rhododendron. Borers are among the most destructive and difficult to control insect pests in the landscape.

The borer life cycle begins when eggs are laid in the cracks and crevices of bark, preferably in open wounds and protected locations, i.e. under tree wraps or mulch. Once the eggs hatch, the larvae begin to chew its way into the plant. This is when the damage occurs.

When borers feed, they destroy the tissues in the plant needed to conduct water and nutrients. The result is slow, stunted growth, branch dieback or death of the entire plant. Sap or sawdust may be visible at the entry or exit holes of the borer. When the borer reaches maturity, the adult moth or beetle will chew an exit hole, emerge from the plant and begin looking for a mate. This process, from egg to adult can take several weeks or several years, depending on the type of borer.

# CONTROL

#### **Non-Chemical Controls**

Borers will infest weak, stressed plants. To reduce borer infestation, maintain plant health through watering, fertilizing and pest control.

- · Remove any mulch piled up against the base of trees and shrubs
- Avoid wounding the bark and closely monitor any existing wounds for signs of borer activity
- Remove and destroy heavily infested plants
- Inject Parasitic nematodes into borer galleries as a biological control
- Use floating row covers to prevent borers in vegetable crops

# **CHEMICAL CONTROLS**

**Bonide Borer-Miner Killer** - Spray the stem, trunk, branches or twigs of the susceptible plant during the egg-laying season of the borer. Timing is critical to successfully controlling borers. Once the borer has gained entry into the plant, pesticide applications are ineffective. **The accompanying** *chart lists the treatment dates for several of the most common borers.* 

**Bayer Advanced Tree & Shrub Insect Control**: Applied to the soil and absorbed by the roots. Controls *Flathead, Roundhead and Bronze Birch Borers (beetles) only.* **Not for food crops.** 

Please bring plant or insect samples to Merrifield Garden Centers' Plant Clinic for assistance identifying borers and selecting pest control products.

#### ALWAYS READ AND FOLLOW LABEL DIRECTIONS WHEN USING PESTICIDES.

BORER	TREATMENT DATES *	PRIMARY HOST PLANTS
Banded Ash Borer	Mid Jul – Early Sep	Ash
Bronze Birch Borer	Mid May – Early Jul	Birch
Conifer Bark Beetle	Early Apr – Mid Aug	Cypress, Pine, Spruce
Dogwood Borer	Early May – Early Jul	Birch Cherry, Dogwood, Hickory, Willow, Oak, etc.
Dogwood Twig Borer	Early May – Early Jul	Blueberry, Dogwood, Crabapple, Viburnum, etc.
Elm Bark Beetle	Early Apr – Mid Jun	Elm, Zelkova
Iris Borer	Apr – when fans are 6" tall	Bearded Iris
Lilac Borer	Early May – Early Jul	Ash, Ligustrum, Lilac, Privet
Oak Borer	Early Jun	Oak
Pine Shoot Borer	Early Apr – Early Jun	White Pine, Mugo Pine
Peach Tree Borer	Early Jul – Late Aug	Apple, Cherry, Cherry Laurel, Peach, Plum
Rhododendron Borer	Mid Jun	Rhododendron, Mtn. Laurel, Azalea
Round-headed & Flat-headed	Early May – Early Jul	Fruit, Ornamental and Shade Trees
Shot-hole Borer	Mid Apr – Early Jun	Apple, Cherry, Plum, Mtn. Ash, Serviceberry
Two-Lined Chestnut Borer	Early May – Late Jun	Oak
Willow Borer	Jun - Sep	Birch, Poplar, Willow
European Corn Borer	At first sign of damage	Corn and peppers
Squash Vine Borer	When vines begin to run	Squash

\* Treatment dates are approximate for Northern Virginia, Washington D.C. and Central Maryland. Pesticide applications need to be repeated throughout the treatment times at regular intervals as directed on the product label.

MERRIFIELD

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