

# Birch Leafminer

## TREE DOCTOR TIPS

### Birch Leafminer (*Fenusa pusilla*)

#### DESCRIPTION:

Birch leaves develop brown, inflated blotches by mid to late spring. Leaves may be killed by small larvae inside the leaves that devour green tissues between the upper and lower surfaces. A severely infested tree canopy takes on a tan-brown appearance and defoliates prematurely. Repeated years of infestation can cause branch die-back and leave trees more vulnerable to borers and environmental stress.

#### HOSTS:

Birch trees.

#### BIOLOGY AND SYMPTOMS:

The adult birch leafminer is a 1/8-inch long, black, gnat-like insect referred to as a sawfly. The female deposits eggs into young leaves. Larvae hatch and begin feeding inside the leaves, causing damage. They mature within a few weeks, drop to the ground to pupate and emerge as sawflies. There are one to two generations per year.

#### MANAGEMENT:

Foliar applications are effective when the birch leaves are about half-grown in spring. A second application in about three to four weeks may be needed to minimize damage from the second generation of birch leafminers.

For season-long results, inject an application into the soil from August through October the year prior to birch leafminer activity. This new product accumulates slowly in the tree.

Before planting, select a site where birch trees will prosper, such as in moist, well-drained sandy or loamy soils. Trees will fail and become more stressed by leafminer damage when they are planted in heavy clay-type soils.

Fertilizing, mulching and watering also will help birch trees recover from birch leafminer damage.



A



B

FIGURE A. A BROWN LEAF INFESTED WITH BIRCH LEAFMINER

FIGURE B. THE ADULT BIRCH LEAFMINER DEPOSITS EGGS INTO YOUNG LEAVES (Photo credit: Steven Katovich, Bugwood.org)

*The scientists at **The Davey Institute** laboratory and research facility support our arborists and technicians in diagnosing and prescribing based on the latest arboricultural science. For specific treatment and application details, your arborist may consult *The Davey Institute PHC Handbook*.*

