Boxwood Leafminer

DAVEY Institute

TREE DOCTOR TIPS

Boxwood Leafminer
(Monarthropalpus buxi & Monarthropalpus flavus)

DESCRIPTION:

Boxwood Leafminer are small flies that attack several varieties of boxwood, causing the usually dense foliage to appear weak and lackluster. These pests can kill boxwood twigs and cause mature plants to become susceptible to other diseases, including winter-kill in colder climates. Larvae are yellow maggots approximately 1/8-inch long that consume the green, food-producing tissue within the leaf. Adult gnats are about 1/10-inch long, yellow to orange-red in color, and produce one generation each year.

HOSTS:

Named for the evergreen they infest, Boxwood Leafminer feed on upper and lower sides of boxwood leaves. Some varieties of English boxwood are infestation-resistant, including: Argenteovarigata, Pendula, and Suffruitiosa.

BIOLOGY AND SYMPTOMS:

Look for new leaves to become spotted-yellow by late spring and blistered by mid-summer. Leaves also may drop prematurely. It can take several weeks for Boxwood Leafminer infestation to be noticeable. Signs include egg punctures on the underside of leaves and larvae living inside leaf blisters.

MANAGEMENT:

Apply foliar insecticide shortly after new leaf expansion in spring to prevent adults from laying eggs. Soil systemic treatments are available at other times of the season to control larvae feeding inside of leaves. If there are nutrient deficiencies, proper fertilization will help regenerate new healthy foliage after acceptable leafminer control is achieved.

A

B

FIGURE A. BOXWOOD LEAFMINERS HAVE CAUSED THIS BLISTERING, AND LARVAE ARE FOUND INSIDE THE FRESHLY OPENED LEAF

FIGURE B. BOXWOOD PSYLLID HAS DISTORTED THE LEAVES ON THE SHOOT ON THE TOP; SHOOT ON THE BOTTOM HAS NORMAL LEAF DEVELOPMENT

*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's Plant Health Care Book.*