

## BOXWOOD LEAFMINER *Diptera: Cecidomyiidae Monarthropalpus buxi*

### DESCRIPTION

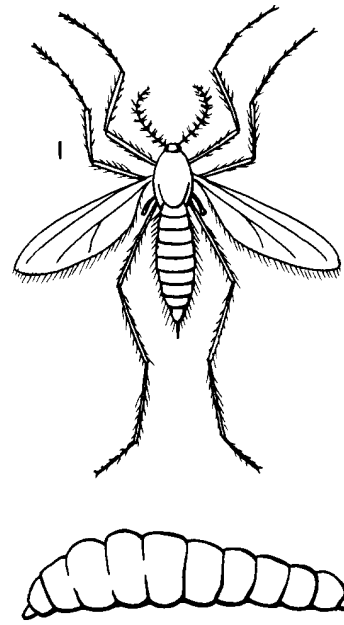
**Adults** resemble small gnats and are orange-yellow and about 2 to 3 mm long. **Larvae** are yellowish-white to green and are found between the upper and lower leaf surfaces.

### ECONOMIC IMPORTANCE

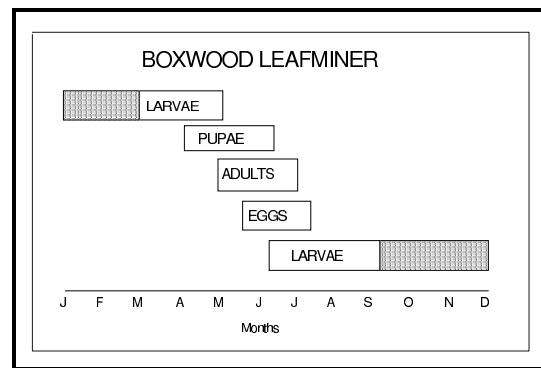
This insect is considered the most serious pest of boxwood in the United States. Larvae mine in leaves giving them a bleached, yellow appearance from above. The lower surface of the leaf has green flat blisters with a small central depressed area. Infested plants grow slowly and lack the healthy dense foliage of healthy boxwood. Continuous infestations result in dead twigs and weakened plants, which are susceptible to winter injury in colder climates.

### DISTRIBUTION AND LIFE HISTORY

This insect occurs throughout the United States wherever boxwood is grown. The boxwood leafminer overwinters as a larva within tissues of the leaf. Larvae begin feeding during April and complete development in about two to three weeks, then pupates. Females begin emerging in late April and early May, mate, and lay eggs in the undersides of young leaves, inserting each egg deep into the tissue. Eggs hatch into larvae in about three weeks, and the larvae begin mining in the leaves. Larvae continue feeding in the leaves during the fall before overwintering. There is one generation each year.



(original, Hall)



### MANAGEMENT AND CONTROL

English boxwood is tolerant to attack by this pest and should be grown where possible. Control with insecticides may be necessary if infestations are severe, but timing of application is very critical. The first application should be made at the time of adult emergence (late April or early May), followed by two additional treatments at seven-day intervals.