

RESEARCH LABORATORY TECHNICAL REPORT



Birch Leafminer

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In the 20th century, five species of birch-leafmining sawflies were inadvertently introduced from Europe to North America. The most common of these are birch leafminer (*Fenusa pumila*) and ambermarked birch leafminer, (*Profenusa thomsoni*).

Damage

Mining by these leafminers causes birch leaves to dry out and turn brown (Figure 1). When viewed from a distance, heavily infested birches appear scorched as if burned by fire (Figure 2). Severe damage can result in stress, reduction in growth, and dieback. The first indication of a birch leafminer infestation is distinct gray spots that develop around eggs deposited in succulent leaf tissue. Often, the foliage on the upperbranches of trees is most severely infested.

Figure 1



Description

Each species of leafminer is slightly different but, in general, the life cycle requires five to six weeks. Three to four generations occur each year in some regions. Only the first two generations, present in greatest numbers in early spring, cause appreciable damage since adults only lay eggs in the succulent leaf tissue.

Control

Birches should be inspected annually for leafminers and bronze birch borer. However, birch leafminers are no longer damaging to birches in most regions of North America. In the 1970s, the Delaware Beneficial Insects Rearing Lab introduced several European wasps to control leafminers, and one of them, *Lathrolestes nigricollis*, has become a success in many areas.

When needed, birch leafminers can be controlled with foliar applied products or with systemic, soil applied treatments.

Figure 2

