



"The Tree Doctors"

Four Seasons Tree Care and Service Ltd.

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BIRCH LEAF MINER

(Fenusa pusilla)

HOST PLANTS:

Birch trees

DAMAGE:

Feeding between the upper and lower surfaces of the leaf cause papery brown blotches to appear on the leaves. Severely infested trees have the appearance of being scorched as the leaves turn brown where the larvae have fed. Successive attacks may weaken the tree making it more susceptible to Bronze Birch Borer and other pests. The second flush of growth is also attacked.

DESCRIPTION AND LIFECYCLE:

Adult emergence occurs in the spring when the leaves are half grown and may continue for two weeks. The adult is a black, four winged sawfly approximately 3 mm long. Adult males are rare. The adult females lay eggs in leaf tissue with their ovipositors when leaves are about half grown. Eggs are laid singly but several may be laid in a single leaf. Eggs soon hatch and larvae begin feeding. Full grown larvae measure about 6 mm long, translucent, yellowish-white with greatly reduced prolegs, are flat and have four black spots on their undersides. The larval development period is about 10-15 days. The larvae leave their mines by cutting a hole in the leaf, then falling to the ground and burrowing to a depth of 2-5 cm. An oval pupal cell is constructed using soil or debris and a sticky secretion. Depending on the time of year it will either overwinter as a pre-pupal larva or begin pupation which takes 2-3 weeks for transformation to the adult stage. Depending on the length of the growing season there can be two to four generations per year, the first two generations being the most injurious to the tree.

CONTROL MEASURES:

1. Maintain good health through regular fertilization and proper irrigation.
2. Clean up old leaves/debris below the tree and dispose of it.
3. When mines first appear use any approved insecticides in mid-May (when vanhoutte spirea or European cranberry-bush viburnum are blooming), and about 6 weeks later when the second flush of leaves is attacked.



Reference: Publication 383, Insects that Feed on Trees and Shrubs By Warren T. Johnson and Howard H. Lyons

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