

## *Birch Leaf Miner*



**Symptoms:** Tiny pale yellow spots first appear in spring on the new leaves followed by brown paper-like blisters. A small (up to ¼") whitish larva may be found inside the blister. It is important to control these insects as they may not only destroy your tree's beauty, but may also make it more susceptible to bronze birch borers.

**Analysis:** When the birch leaves are half grown in the spring, the sawfly lays eggs on the leaves. When the eggs hatch the larvae feed between the upper and lower surfaces on the leaves causing blisters. The mature larva chews its way out of the leaf and drops to the ground to pupate. The adult fly emerges and the cycle repeats itself 3-4 more times in the growing season attacking the newly developing leaves.

**Solution:** Larvae are difficult to control once they are protected inside the leaf. Read and follow all label directions! We recommend the following 2 ways to treat.

1. Treat by spraying (works best for small trees) with Malathion. First application should be made in spring as the leaves are unfolding and when the first tiny pale yellow spots first appear. Repeat 2 times, 10 days apart. Then treat again in early July to control larvae of the 2<sup>nd</sup> generation.
2. Treat with granular 2% Di-Syston systemic granules. Correct treatment will use 14 ounces of material per inch of trunk diameter. Add all trunk diameters together on clump birch. To apply, measure the needed dosage and distribute equally in eight to twelve holes. Make the holes four to six inches deep (can use a small shovel), in a pattern around the tree, midway between the trunk and dripline. "Heel" the holes shut after application and water the ground thoroughly. This procedure should be done in early May and again in mid-June.

**Cultural Control:** Insecticide controls may be more effective if overall tree stress symptoms are reduced. Trees should be fertilized in spring and fall. Watering regularly is very important especially during dry periods. Mulching around the tree base is also helpful to increase moisture retention and cool the tree's roots.