

June 12, 2020
Tough Spring

It's been a tough spring for tree leaves. Freezing temperatures, disease and bugs have all caused issues with leaves.

On a hot day this past week I parked my car under the sugar maple tree for its annual waxing. In my younger days that would be a monthly occurrence but now annually seems to be the best I can do. Also, under that trees I found about 100 leaves that had broken midway through the petiole. Although it was a very windy day, leaves do not just fall from a tree without a reason. This time the wind had simply hastened the falling, due to damage caused by an insect known as the maple petiole borer. All that can be seen when the leaf is picked up is a brown area on the end of the petiole. By searching further up in the tree canopy, you will find the other part of the petiole with a small white larva inside.

A maple petiole borer is a non-stinging wasp commonly called a sawfly. Adults lay eggs in the petioles of maple leaves, especially sugar maples, in the spring. After larvae hatch, they tunnel into leaf petioles and feed there for 20-30 days causing leaves to fall, often very suddenly.

A maple tree won't be hurt by this insect as they have plenty of leaves to keep them alive. In fact, as I examined the leaves the early disease symptom of another leaf destroyer and dropper known as anthracnose was developing.

I always joke that the plant disease people have no imagination, as it seems like every time a disease comes along they call it anthracnose. We have anthracnose of many trees, tomatoes, melons, corn, turfgrass and much more. All caused by similar, but different fungal species.

In the case of maple there are even several different organisms that are lumped together under the anthracnose heading. It is a spring disease where high humidity and rain spreads spores to the newly emerging foliage. They cause irregular brown areas on the leaf mainly along the veins. It also can kill areas of the petiole and can lead to leaf drop. Again, a maple tree can handle this disease without severe issues.

Another tree that is virtually leafless right now is the sycamore. Anthracnose hits them early almost every year, many times with total defoliation, but they will come back.

It is amazing how well trees can handle what nature throws at them. Two species that were hit very hard by the May freeze were mulberry and catalpa. Both of these trees are just now starting to leaf out after having their leaves froze.

Other people reported their Japanese maple damaged by the cold. This species is more tender in our area and the damage can have longer lasting effects. I am not a fan of this tree for our yards due to its susceptibility to cold damage.

Leaf drop can be caused by a lot of factors and rarely are any of them fatal. It is fatal when you see a tree that wilts down and hangs onto it leaves. That is when we have a problem.

The cause of leaves falling, all boils down to something called leaf abscission. At the base of the leaf petiole and the branch there are a few layers of cells. One layer is made of a weak cell and the other is made of cells that when given the right hormonal message from the tree, will enlarge and push the weak leaf cell away allowing the leaf to fall to the ground. A dead branch cannot produce that hormone so the leaf does not fall off.

On the positive side, the falling leaves are a sign that your trees hormonal health is in good shape. I am sure you wanted to know you are dealing with hormonal trees. Every living thing has their problems.

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