CMG GardenNotes #108
Lab Worksheet: Diagnosing Insects and Diseases of Trees

The objective of this exercise is to give you experience diagnosing tree insects and diseases. It’s the journey that is important, not the destination.

For this activity, refer to Insects and Diseases of Woody Plants in Colorado. On pages 295 to 314 is a Diagnostic Key to... Woody Plant Disorders. Answer the following questions by using the key and reference pages cited.

1. Douglas fir

   1. Plant ID: Douglas fir

   2a. Describe signs and symptoms:

      On severely stressed to recently killed trees, piles of sawdust and fiber accumulate below trees. Wide galleries, just under the bark, are filled with fibrous frass. The adult beetle is about an inch long, brownish-gray with white speck and very long antennae.

   2b. Possible causes

   2c. Probable cause

2. Aspen

   1. Plant ID: Aspen

   2a. Describe signs and symptoms:

      In the spring, leaves are being eaten by caterpillars with a bright blue strip on the sides and yellow spots on the back. Neighbor said they were tent caterpillars, but they haven’t made any tents.

   2b. What are possible causes?

   2c. What is the probable cause?
3. **Crabapples**

1. **Plant ID: Crabapples**

2a. **Describe signs and symptoms:**

   Four crabapple trees were lost in what the gardener believes is “fireblight”. The trees were planted in the irrigated lawn area three years ago, but never really grew. The first spring (just after planting) the trees bloomed, but new growth was minimal. The second year, the trees looked “blighted” with smaller pale leaves and no new growth. By the third season, the trees went progressively downhill with no blossoms, only tiny pale leaves and no twig growth. Most leaves dropped by mid-summer. This fall, as he removed the dead trees, he noticed a large canker on the trunks just below ground level. He would like to replace them with fireblight resistant cultivars so he won’t loose them again.

2b. **What are possible causes?**

2c. **What is the probable cause?**