



CMG GardenNotes #108

Worksheet: IPM & Diagnostics Practice Lab

Practice diagnosing tree insects and diseases.

For this activity, refer to *CSU Extension Bulletin 506A, Insects and Diseases of Woody Plants in Colorado*. On pages 295 to 314 is a diagnostic key to common disorders; answer the following questions by using the key and reference pages cited therein.

Plant One

1. Plant ID: Douglas fir.
2. Describe signs and symptoms:
 - a. In severely stressed to recently killed trees, you find piles of sawdust and fiber accumulating beneath them. Wide galleries, just under the bark, are filled with fibrous material. You also find adult beetles that are about an inch long, brownish gray with white specks and very long antennae.
 - b. What is the most likely (probable) insect causing the sawdust and fibrous material?
 - c. Is management warranted in this situation?



Plant One Photo

Plant Two

1. Plant ID: Aspen.
2. Describe signs and symptoms:
 - a. In the spring, leaves are found being eaten by caterpillars. They have a bright blue stripe on their side and yellow, keyhole shaped spots on their back. Your neighbor thought they might be tent caterpillars, but you cannot find any tents.
 - b. What are the possible insects that could be causing the problem?
 - c. Which insect do you think is causing the damage?
 - d. Are control measures warranted in this situation?



Plant Two Photo

Plant Three

1. Plant ID: Crabapple (In key, looking under Pome Fruit, page 308).
2. Describe signs and symptoms:
 - a. Four crabapple trees were lost to what a gardener believes is fire blight. The trees were planted in an irrigated lawn area three years ago, but never really grew well. The first spring (just after planting) the trees bloomed, but the new growth was minimal. The second year, the trees grew smaller pale leaves and no new twigs. By the third season, the trees progressively declined, having no blossoms, tiny pale leaves, and no twig growth. Most leaves dropped by mid-summer. In fall as the homeowner removed the dead trees, he discovered a large, discolored area on the trunks just below ground level. He would like to replace the trees with fire blight resistant cultivars, so he will not have this problem again. Note: Progressive decline, leaves yellow, no growth, early leaf drop, and a discolored crown.
 - b. What are the possible causes of this problem?
 - c. What is the probable (likely) cause?



Plant Three Photos

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