



CMG Garden Notes #332

Homework: Plant Pathology

1. What 4 components must be present for biotic disease to develop?
(1) Susceptible plant; (2) organism that causes the disease; (3) correct environment and (4) correct time.
2. Another name for the living cause of disease biotic
3. Another name for the non-living cause of disease abiotic
4. List 3 ways to manage powdery mildew on a shrub.
Possible answers include:
 - Thin/prune properly for good air circulation.
 - Site where there is good air movement.
 - Collect leaves in the fall and dispose.
 - Use appropriate fungicides at the appropriate time.
5. A customer brings you a foot-long branch of an aspen tree. The leaves on the branch tips are dark brown and wilted; the branch tip is bent over. Could this be fire blight? Why or why not?
This cannot be fireblight, as the plant is an aspen which is not a pome fruit of the rose family.
6. List 2 general management strategies for Cytospora canker disease on an aspen.
 1. Prune out the affected tissue.
 2. Choose resistant varieties and grow a healthy plant.
7. How are leaf scorch and winter desiccation similar in terms of how they develop? In symptom expression?
Both are caused by loss of water through the leaves and/or lack of available water. Both appear as necrotic damage; non deciduous plants leaves turn brown from the outside inward and on conifers needles turn brown from the tip inward.
8. A ten-foot row of low growing junipers is planted between the west facing side of an apartment building and a sidewalk. By mid-winter the sidewalk side of the junipers begins to turn completely brown. What symptom supports an abiotic diagnosis? State a possible cause of the juniper symptoms.
The biggest clue is that the entire sidewalk side of the junipers is brown (uniform appearance). The most likely cause of damage is salt injury from de-icer used on the sidewalk.