

Healthy Garden Tips

napamg.ucanr.edu 707-253-4221

TIPS FOR DIAGNOSING PLANT DISEASE PROBLEMS

By Dean Donaldson, Farm Advisor

- 1. Most major plant problems result from poor growing conditions or poor drainage.
- 2. Most diseases occur in 'waves' and cycles as host, pathogen and weather interact.
- 3. Diseases are favored by both plant sensitivity and general garden conditions.
- 4. By the time many people notice the condition and seek advice, it is often too late that season to take corrective action. It is important to distinguish between 'inactive' and 'active' plant symptoms.
- 5. Fungicides are preventive: timing and coverage are more important than rate used. The application of a pesticide is not the solution to every plant problem.
- 6. Bacteria feed by dissolving plant tissue, producing slime and smelly residue. They are favored by warm wet conditions when plants are growing rapidly.
- 7. Fungi grow into and erupt from plant tissue. Look for old fruiting bodies or cankers. Most fungi are favored by free moisture or high humidity, although some require dry conditions.
- 8. Common disease symptoms occur each year. Check UC publications and "Pest Notes" handouts for specific control measures. Most signs and symptoms of disease activity fit into one or more of the following categories:

COMMON SYMPTOM OR SIGN

Collapsed, bleeding or slimy parts Parts may show sudden collapse Leaf spots melt into 'scorch'

Wilted plant tips, stained vascular tissues, fruiting bodies may erupt through tissue, may produce cankers, leaf spots have distinct margins

Galls on branches, stems, and roots Gray or white deposits on leaves or stems, new growth may be twisted.

Bright bands of leaf color, stunted growth, poor pollination, 'tattered' leaves, weird growth

PROBABLE DISEASE TYPE

Bacterial diseases: blight, scorch

Fungus diseases:

wilts, blights, cankers, leaf spots, rots

Bacteria or Fungus (sometimes insects) Fungus disease (mildew)

Virus diseases

It is the policy of the University of California (UC) and the UC Division of Agriculture & Natural Resources not to engage in discrimination against or harassment of any person in any of its programs or activities (Complete nondiscrimination policy statement can be found at http://ucanr.edu/sites/anrstaff/files/215244.pdf) Inquiries regarding ANR's nondiscrimination policies may be directed to UCANR, Affirmative Action Compliance & Title IX Officer, University of California, Agriculture and Natural Resources, 2801 Second Street, Davis, CA 95618, (530) 750-1343.