### Problem Diagnosis Scenario #35
(Avocado Scab)

#### Problem
My avocados are having all kinds of problems.

#### Description (Early August)
Many of my avocado trees are affected by some kind of disease. Some of the avocados have cracks in them. Others have black, velvety spots on them.

#### Questions and Answers

**Question**: Have you been pruning? How aggressively?
**Answer**: Yes, occasionally, but not much.

**Question**: How are you watering the trees?
**Answer**: They pretty much get water whenever I water the garden. Overhead sprinklers.

**Question**: How have you been dealing with the fallen leaves?
**Answer**: I generally rake them up and compost them.

**Question**: Any other similar problems in other fruit trees?
**Answer**: Well, actually, my pear tree has a few discolored fruits, too.

#### Reference(s)
PNW Disease Management Handbook; University of California IPM

#### Diagnosis
**Apple scab**: Fungal disease. In spring, leaves are pale, chlorotic, with pinhead-sized spots. Leaves have irregular brown-colored infections. Leaves can curl, become distorted and drop early—weakening tree. On fruit, small brown/black round areas appear. Later, skin ruptures. Exposed tissue has black velvet-like appearance surrounded by whitish ring or torn cuticle tissue.

#### Recommendations
**Cultural**: 1) Grow scab resistant cultivars. 2) Reduce disease pressure by raking and disposing of leaves after they fall. Better not to compost the leaves. 3) Prune your apple trees to open up branching and allow more air circulation. 4) When watering your apple trees, avoid getting foliage wet. 5) Apply dolomitic lime in the fall, after leaf drop, to increase pH and to help reduce fungal spores in the spring.

**Chemical**: Apply fungicides early and thoroughly to protect new growth. Hi-Yield Captan Fungicide 50 WP and Lime sulfur products such as Polysul, Lily Miller Dormant Spray for Disease and Bonide Lime Sulfur Spray are registered for home use. Always follow label instructions. The first susceptible tissues exposed in opening cluster buds are the tips of the leaves and sepals. The most critical period for scab development is from the breaking of the cluster buds until leaves are fully expanded. Apply sprays at prepink, pink, calyx, and first cover. If the disease was a problem last year, begin applications at green-tip. Forecasting based on temperature and moisture also can be used to time fungicide sprays. Scab resistance to certain fungicides can occur.