Apple Scab Control in Home Gardens

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Apples, including crabapples, affected by scab show blotchy brown to black scabby or scurfy spots on the surface of the fruits. Often these scurfy areas crack. When the spots are numerous and overlap, the cracking may be severe and the fruit worthless.

Progress of the disease

The disease appears first on the blossoms and leaves, in the spring, as olive-green spots with uneven feathery margins. Affected blossoms often fall to the ground. The spots on the leaves become raised, brown-black in color, and velvety in appearance. On the fruit, scab spots appear as rough, dark green areas on the end or side of the fruit, causing it to be misshapen, dwarfed, cracked, and unattractive. Apple scab spreads quickly from early scab infections to other leaves and young fruits, causing leaves and fruits to drop.

Scab will continue to spread throughout the growing season whenever moisture is present from rains, irrigation, or dew. Although scab results in unattractive fruit, the fruit is safe for eating.

Overwintering fungus

The fungus overwinters in the diseased leaves on the ground and produces spores the following spring. The spores are carried by winds and cause infections of young leaves and fruits. The fungus in the new infections also produces numerous spores (summer spores) which may continue to cause new infections throughout the summer.

Control

Since it is almost impossible at the end of the growing season to find and rake up all of the diseased leaves under the trees, and, since spores may be carried by wind into your trees from other orchards, the best method of controlling scab is by the application of fungicides. Spraying with a fungicide several times in the spring, starting just before the buds open, will provide protection from the disease.

Several sprays are necessary because the leaves and fruit are continually enlarging, and within a few days of the last spray there will be new leaf and fruit tissue which is not covered by a fungicide and will require the protection of a spray. The key to successful scab control is the application of early sprays. Good results can be obtained by using the following spray schedule:

Apple scab on winter Bana apples.
1. **Dormant spray.** Early spring just before buds open (middle to end of February). Use lime sulfur,* 1\(\frac{1}{2}\) cups per gallon of water.

2. **Pink stage spray.** When blossom buds show pink (just before blossoms open). Use lime sulfur, 1 cup per gallon of water.

3. **Petal fall spray.** When most blossom petals have fallen. Use wettable sulfur powder, 6 tablespoons per gallon of water.

4. **Three weeks after petal fall spray.** Repeat petal fall spray.

**Spraying**

For safety, spray from the ground rather than from ladders. Inexpensive hand-spray equipment is available which will spray to the top of trees 20 to 30 feet high. Trombone-type sprayers which are pumped by hand and some of the better hose-end sprayers with adequate water pressure and without deflector tips will reach this height. Small power sprayers are available for use where hand-sprayers are inadequate.

* Lime sulfur will discolor paint on houses or other buildings. Use a large piece of cardboard, canvas, or other sheeting to prevent the lime sulfur spray or spray drift from settling on adjacent painted buildings.

**Amount of spray**

Thoroughness of spraying is essential for disease control. Spraying should be continued until all parts of the tree—limbs, branches, twigs, leaves, and fruits—are thoroughly wetted.

The amount required to do a thorough job will vary with the size of tree and amount of foliage, e.g., a dormant 8-year-old apple tree will require approximately one and a half gallons of spray, whereas the same tree in full foliage may require 3 gallons of spray. For trees on standard rootstocks, in leaf, a good rule-of-thumb guide is to apply to each tree at every spray period one gallon of spray for each apple box of fruit harvested from the tree.

**Use pesticides safely**

- Read the label on each pesticide container before use.
- Store pesticides in their original labeled containers. Keep them out of the reach of children and irresponsible people.
- Apply pesticides only as directed on the label.
- Dispose of empty containers safely. It is almost impossible to remove all materials from a container, “Empty” containers contain small amounts of pesticide which could harm animals or children who might get into them.

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