



FIRETHORN (*PYRACANTHA*) SCAB

Scab is a widespread and unsightly disease of the commonly grown shrub firethorn, or *Pyracantha*. The disease, caused by the fungus *Spilocaea pyracanthae*, affects the brilliantly colored orange-red fruits as well as the leaves and stems. It is most likely to occur when spring and summer weather is cool and moist.

Symptoms

Scab appears as velvety, sootlike areas on the shiny green leaves (Figure 1). Affected leaves first turn yellow and then dark brown, and they finally drop prematurely. Black lesions may also form on the newly elongated twig growth and cause girdling and twig dieback. When young fruits are infected, they shrivel and fail to mature. If infection occurs on older, more mature fruit, the brilliant orange-red color turns black and the skin becomes rough, scabby, and unsightly (Figure 2). The blackening of the fruit is the most serious symptom of the disease.

Disease Cycle

The scab fungus overwinters in and on diseased stems, affected fruits, and leaves that remain attached. In spring and early summer, large numbers of microscopic spores (conidia) are formed on the diseased plant parts. The conidia are disseminated mostly by splashing water. Germination of the spores, penetration of host tissues, and disease development occur when the host plant is covered with a film of moisture, such as might be produced by heavy dews or prolonged light rains.

Control

1. Grow adapted, scab-resistant firethorn cultivars. Most firethorn cultivars are adapted to USDA hardiness zones 6 and higher (average annual minimum temperature is -10°F or warmer). However, very hardy cultivars are able to survive into zone 5 (-20 to -10°F). Thus, the southern half of Illinois, or protected areas elsewhere in the state, are best suited for growing firethorn.



Figure 1. *Pyracantha* scab on leaves in home nursery.



Figure 2. Scab infection on ripe orange berries.

For further information concerning diseases of ornamental plants, contact Nancy R. Pataky, Extension Specialist and Director of the Plant Disease Clinic, Department of Crop Sciences, University of Illinois, Urbana-Champaign.

According to Michael Dirr (Manual of Woody Landscape Plants: Their Identification, Ornamental Characteristics, Culture, Propagation, and uses), the cultivars Apache, Fiery Cascade, Rutgers, and Teton have resistance to scab and fireblight and should be hardy in the southern half of Illinois (or protected areas elsewhere in the state). Avoid the scab-susceptible cultivars Kasan, Lalandei, Lalandei Monrovia, Thornless, Wyattii, and Gnome. As always, check with your nearest University of Illinois Extension Educator and garden centers for information about which cultivars are best suited for your particular area.

2. Collect and burn or haul away with the trash all diseased parts during the autumn or winter. Sanitation helps to eliminate overwintering sources of inoculum but will not adequately control the disease.
3. In addition to growing resistant cultivars and practicing sanitation, apply one of the fungicides suggested in the Illinois Commercial Landscape and Turfgrass Pest Management Handbook or Illinois Homeowner's Guide to Pest Management. Thoroughly spray all aboveground parts of each plant, including both surfaces of the leaves. Start as the buds break open in the spring, and continue until about two weeks after the flower petals fall.

The fungicide must be present on the leaves, stems, and fruit prior to rainfall to provide maximum protection from spores that are distributed by splashing water. Spray to the point of runoff (plants begin to drip). When spraying the hard-to-wet leaves, stems, and fruits, add a small amount of a commercial spreader-sticker (surfactant) if your preparation does not already contain a surfactant. Follow the directions on the container label.