

RESEARCH LABORATORY TECHNICAL REPORT



Apple Scab

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Scab is a leafspot disease that causes premature defoliation of crabapple and apple. Other species in the rose family including pyracantha and hawthorn may also be affected by scab fungi.

Symptoms

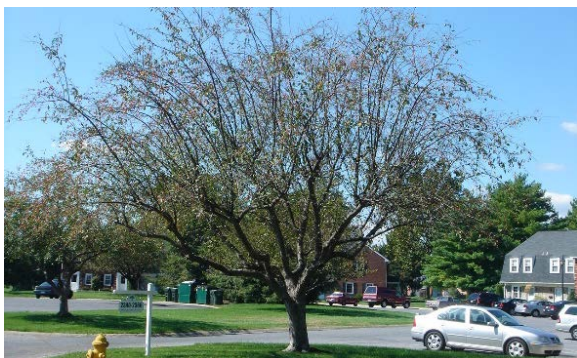
Apple scab is caused by the fungus *Venturia inaequalis* which infects leaves, petioles and fruit of its host. Initial symptoms appear as olive-green, sooty spots on leaf blades and petioles on young, developing foliage.

As leaves age, the infected areas form definite spots which are slightly raised, black, and velvety in appearance (Figure 1). The lower sides of leaves become depressed and may cause leaf cupping. As the infection develops, the leaves turn yellow

Figure 1: Apple scab leaf lesions



Figure 2: Premature defoliation from scab



can also develop and drop prematurely (Figure 2). Scab lesions on fruit which can deform it and cause fruit drop prior to ripening.

Disease Cycle

Venturia inaequalis overwinters in infected, fallen leaves. Fruiting structures, known as perithecia, form on the dead, fallen leaves in late winter. Spores are produced in the fruiting structures that are forcibly discharged into the air in spring with rainfall and warm temperatures. Spores are carried by wind currents to developing leaves and fruit where infection occurs. Since all perithecia do not mature at the same time, spores are produced over a period of several months and as late as June. Secondary spores are also produced on leaf lesions which can cause infections later in the growing season.

Control

Some varieties of crabapple and apple have demonstrated resistance to apple scab. Locally adopted resistant varieties, which have the desired aesthetic foliage, fruit, and flower characteristics, should be planted when possible.

Fungicide sprays will effectively suppress apple scab if applied at the proper intervals with good coverage. Optimally, three treatments at fourteen day intervals during leaf development in the spring will prevent premature defoliation from scab.

