

A2594

# Mountain ash disorder: Scab

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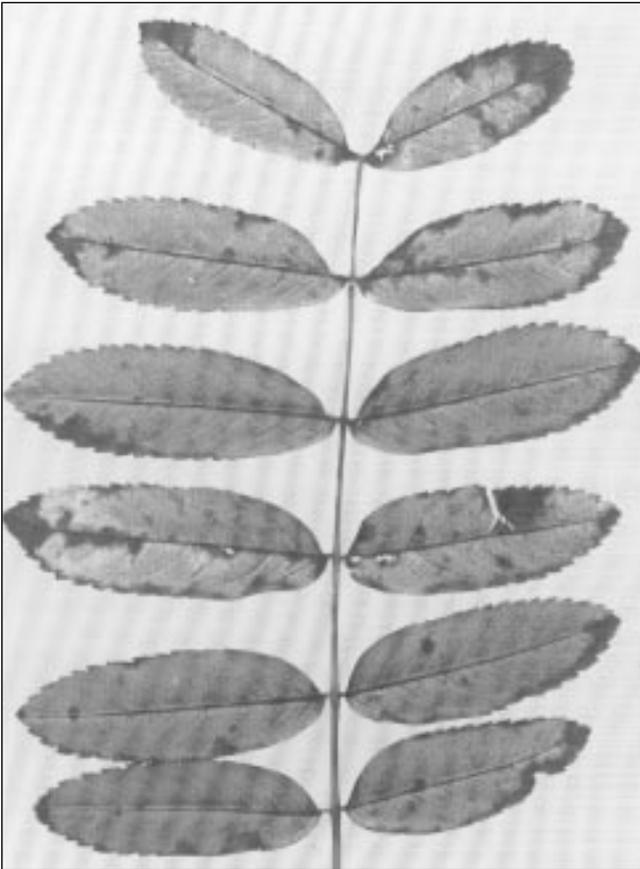
## Symptoms and effects

Mountain ash scab is not always a serious problem in Wisconsin, but in wet years it can reach near-epidemic levels.

Scab disease may infect the foliage or fruit of mountain ashes. Severely infected trees lose their leaves, starting with the lower, inner branches and progressing upward and outward. Leaves usually turn yellow before falling. Either individual leaflets or entire leaves may

fall. Leaf and fruit drop may be slight or heavy depending upon how early the infection develops and how severe it is.

Infected fruit shrivels, has gray or black spots of indefinite shape and size, and falls prematurely, either singly or in clusters. The disease reduces the attractiveness of mountain ash, as the tree becomes bare and the clusters of fruit fail to develop their characteristic, bright, orange-red color.



The gray or black blotches of scab disease on the undersides of these leaflets are not very conspicuous, but they can cause early defoliation.

Unless a tree is severely defoliated early in successive years or is under some other form of stress, scab probably will not kill it.

However, continued heavy loss of leaves predisposes a tree to winter injury and root invasion by decay organisms. You can diagnose this disease in the field by carefully examining the leaves for circular spots—typically  $\frac{1}{8}$ – $\frac{1}{4}$  inch in diameter. Scab leaf spots on mountain ash are usually much smaller than those found on flowering crab or

apple. The spots are gray to black, and this coloration may be more prominent on one side of the leaf than the other, where the spots may appear chocolate brown. If an infection is heavy, the spots will overlap and cause larger and more irregularly shaped diseased areas on the leaf. During wet weather, the surface of the gray or black spots may have a faint velvety appearance.

Scab may be confused with another leaf spot, caused by the fungus *Phyllosticta*. However, this disease has not been observed on mountain ash in Wisconsin. *Phyllosticta* spots also are lighter-colored than scab spots and do not develop a velvety surface.

## Cause

The fungus *Venturia inaequalis* causes scab disease on mountain ash. It also causes scab on apple and flowering crab, on which it is more common and usually regarded as serious. The fungus overwinters in diseased leaves, which release sexual spores (ascospores) the following spring. A different type of spore, produced by an asexual process, proliferates in newly formed leaf spots during wet weather. These spores are responsible for additional spread of the disease during the growing season.

For more information on scab disease of apple and flowering crab see Extension publication *Crabapple Disorder: Scab* (A2173).

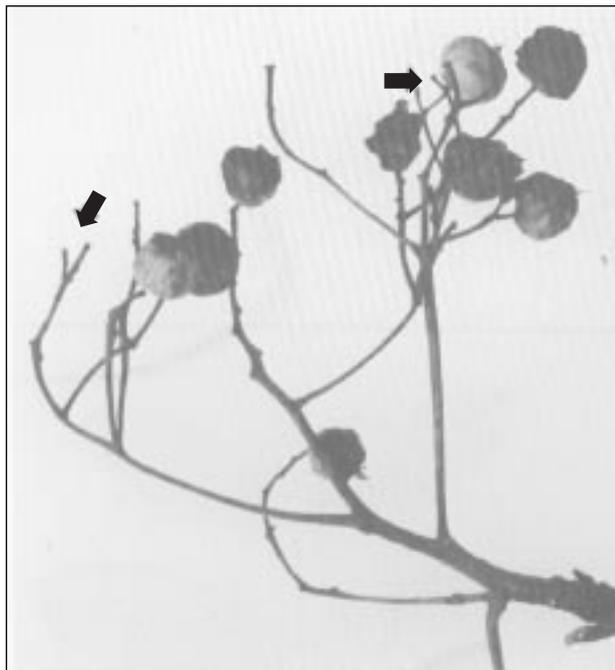
## Control

### Cultural

No effective method of cultural control is known because it is virtually impossible to clean up mountain ash leaves adequately to reduce winter fungus carry-over. However, vacuuming leaves may help.

### Chemical

While several chemicals are registered and effective for scab control on flowering crab, trials have not been conducted on fungicidal control of scab on mountain ash. However, these chemicals probably would control the disease on mountain ash. Fungo and Cleary 3336 are registered for use on mountain ash. Begin treatment at bud break. Make two to three additional applications at 10- to 14-day intervals. Strive for good coverage and apply the fungicide at times when the foliage can dry completely before the next rain occurs.



Fruits of this cluster failed to develop properly. They are black and shrivelled and many have fallen off because of scab disease.

References to products in this publication are for your convenience and are not an endorsement or criticism of one product over other similar products. You are responsible for using chemicals according to the manufacturer's current label directions. Follow directions exactly to protect the environment and people from chemical exposure.

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