

## APPLE SCAB DISEASE OF CRABAPPLES

*Venturia inaequalis*



Figure 1. Leaf spots from infection by the apple scab fungus.



Figure 2. The 'Hopa' crabapple tree on the left was not treated the previous year. Due to defoliation caused by scab disease, it has very poor flowering. The tree on the right was treated and is contributing to the beauty of the landscape.

**SYMPTOMS:** Olive-green or brown spots develop on leaves in May through early June. On older leaves the spots are slightly raised, velvety and dark colored (Figure 1). As the disease develops, the leaves turn yellow and drop prematurely. The symptoms on the blossoms and fruit are similar to those on the leaves. Fruit may be deformed if heavily infected. Typical fruit lesions are circular brown spots with black margins and a corky appearance.

**CAUSE:** Apple scab, caused by the fungus *Venturia inaequalis*, is one of the most devastating diseases of ornamental crabapples. It also can be a problem on cotoneaster, firethorn and mountainash. This fungus overwinters on infected fallen leaves, or, rarely, on twigs of the tree. Spores, which infect the new leaves in the spring, are produced on the fallen leaves during warm rains in April and May.

Trees can be defoliated by late June with only a few leaves remaining for the rest of the summer. Not only does this alter the aesthetic appeal of the property, but it also reduces the vigor of the tree making it more susceptible to other disorders. Flowering may be reduced the next season because of this year's defoliation. Defoliation minimizes carbohydrates available for flower bud production. Some varieties exhibit flower decline more than others (Figure 2).

**SOLUTION:** Fungicide treatments in the spring will help minimize infection. During prolonged, wet spring conditions, which favor fungal growth, some infections will occur but fungicide treatments will help keep leaves on the trees. Additional applications may be purchased if there is an unusually wet growing season.

Rake and remove infected fallen leaves in autumn to reduce the potential for infection the following spring. Also, many cultivars of crabapple are resistant to apple scab and should be planted whenever possible. Check with your local extension service or call your Davey technical advisor for a current listing.