

PLANT HEALTH CARE REPORT



Hawthorn

Hawthorns (*Crataegus* sp.) are widely used as specimen trees and shrubs in mass plantings and as hedges. They are small to medium-sized with a mature height of 20 to 40 feet, depending on species. Leaves are dark green in summer, changing to yellow or reddish-purple with the onset of fall. Pink or white flowers are generally borne in early spring; the fruit, a drupe, persists through fall. Some species have showy fruit—one of hawthorn’s most desirable characteristics. Another prominent feature is the presence of 1 to 3 inch thorns along the stems, although some cultivars are thornless. These trees are adaptable to many soil types, but they perform best when soil is well drained.

Hawthorns are durable trees in their native environment, but they are plagued by many pests in the landscape. The two most destructive diseases are rust and fireblight. Multiple rust fungi infect hawthorn, which is a member of the rose family, as part of their complex life cycle. The other host plant is primarily an ornamental juniper or



Hawthorn’s May flowers are edible



Small, lobed leaves with toothed margin

eastern red cedar. In some years, entire crowns of susceptible hawthorn varieties become infected with rust. Infected leaves form yellow-orange spots and drop prematurely. Fruit and green shoots also die. Fireblight is a bacterial disease that infects young, succulent shoots in the spring. The bacteria reproduce quickly once inside, leading to stem death. Some hawthorns are highly susceptible to *Entomosporium* leaf spot fungus, which may cause early defoliation. These other diseases also infect hawthorns: anthracnose, fungal cankers, leaf spots and powdery mildew.

Many species of wood-boring insects attack the stems and twigs of hawthorns. Sucking insects such as lacebugs, aphids, and scale also attack hawthorn. These insects feed on sap from the nutrient-conducting (phloem) tissues and excrete a substance called honeydew, which is a sticky byproduct of their feeding. Spider mites, eriophyid mites, and many caterpillars damage the foliage and reduce vitality.

All of these factors can combine to stress hawthorns. However, if these problems can be addressed, the plant's health and beauty can be maintained.

Monitoring and Treatment Considerations for Hawthorn

Early to mid-winter

Expose and inspect root collar for problems. Add mulch as necessary. Sample soil for nutrient and pH levels, especially if deficiency symptoms are evident.

Late winter

Apply first bactericide treatment for fireblight for trees with a history of the disease. Apply dormant treatment to suppress overwintering insects. Remove dead, dying, diseased, and broken branches.

Mid-spring

Apply second bactericide treatment for fireblight. Apply fungicide treatments to suppress rust, anthracnose, and leaf spots as needed. Apply bark treatment to prevent borers. Monitor for borers, scales and other defoliators; treat as needed.

Late spring

Repeat fungicide treatment as needed. Monitor for borers, leaf-chewers, sucking insects, and mites; treat as needed. Reduce or remove branches to promote appropriate structure. Remove fireblight-infected shoots. Monitor irrigation and soil moisture to minimize water stress and prevent root disease.

Summer

Repeat borer treatment as needed. Monitor for leaf-chewers, sucking insects, and mites; treat as needed.

Fall

Monitor for leaf-chewers, sucking insects, and mites; treat as needed. If leaf-chewing insects were problematic this past growing season, consider treating with an appropriately timed systemic product. Monitor irrigation and soil moisture to reduce winter injury.
