

PLANT HEALTH CARE REPORT



American Holly

American holly (*Ilex opaca*) is a small-growing tree or shrub that provides year-round, glossy green foliage. It is used as a foundation, border, or accent planting. With more than 1,000 varieties of American holly listed, a wide assortment of flowering, fruiting, and leaf characteristics are available. To encourage fruiting, one male plant should be planted for every two or three females.

American holly grows well in acidic, moist, well-drained soils. In poorly drained soils or over-irrigated sites it will have a short life expectancy. In alkaline soil, iron deficiency occurs causing yellowing between the leaf veins and poor growth.

Most American holly varieties are tolerant of cold winter temperatures. However, if they are grown in sites exposed to winter winds, they may defoliate. Late summer or fall shearing can increase susceptibility to winter injury, eliminating buds essential for the onset of dormancy and new growth in the spring.

While holly is susceptible to several leaf



Ilex opaca 'Carolina Sentinel'



Female holly with berries

diseases, the more damaging diseases are caused by root, root collar, and stem pathogens. Root rots include *Phytophthora*, and black root rot (*Berkeleyomyces basicola*). *Phytophthora* occurs when soils are poorly drained or overwatered. Stem canker infections are more likely to occur when the plant is stressed.

American holly is affected by several biotic agents including leaf miner, scales, spittlebugs, whiteflies, nematodes, and a number of additional pathogens. The native holly leaf miner (*Phytomyza ilicicola*) creates yellow or brown serpentine mines or blotches on leaves by eating through the middle of the leaf blade. Scale insects attack the stem, feeding on sap and reducing plant growth and vitality. Spittlebug feeding can cause yellowing, distortion, and death of leaves and branches. Whiteflies attack leaves feeding on sap and excreting honeydew. When black sooty mold fungi grow on the honeydew, the leaves take on a dark, dirty appearance. Whiteflies are more common on sheared hollies.

Nematodes are microscopic roundworms that can damage grouped or individual hollies. By feeding on roots, they disrupt the uptake of water and nutrients. This results in slower growth and greater susceptibility to disease, insects, and winter injury.

Monitoring and Treatment Considerations for American Holly

Mid-winter

Remove dead, dying, diseased, and broken branches. Reduce or remove branches to promote appropriate structure. Expose and inspect root collar for problems. Add mulch as needed. If decline is evident, submit root samples for *Phytophthora* root rot testing and soil for nematode analysis.

Late winter

Apply dormant treatment to suppress overwintering insects. Sample soil for nutrient and pH levels.

Late spring

Apply soil treatment to suppress *Phytophthora* root rot if needed. Monitor for holly leaf miner; treat as needed. Inspect for winter injury, removing dead branches. Fertilize, adjust pH, and amend soil according to soil analysis.

Early summer

Monitor for scales and whitefly; treat as needed. Monitor irrigation and soil moisture to minimize water stress and prevent root disease.

Mid to late summer

Apply soil treatment to suppress *Phytophthora* root rot if needed. Monitor for scales, spittlebugs, and whitefly; treat as needed. Inspect plant for iron deficiency; sample soil and foliage if needed.

Fall

If leaf miner, scale, and whitefly were problematic this past growing season, consider treating with an appropriately timed systemic product. Protect from winter winds with burlap wraps or other means.
