

## Algal Leafspot

Bruce R. Fraedrich, PhD, Plant Pathology

Algal leafspot is a common disease on Southern magnolia and camellia in the Southeast and Gulf Coast States. This disease is unique in that it is caused by a parasitic alga, *Cephaleuros virescens*. This pathogen disfigures leaves and may lead to premature defoliation, especially on plants that have been weakened from other environmental stress or insect and disease infestations.

### Symptoms

Infection and symptoms begin to develop in late summer (late August/early September in coastal South Carolina). Spots are initially light green and superficial on the leaf tissue. As lesions grow in size, they become gray-green to brown and develop a velvety texture (Figures 1 and 2). Individual lesions can grow to a half-inch in diameter. The algae may be colonized by fungi creating a lichenized leaf spot that contains dark brown to black spots within the lesions. Plant tissue beneath the lesion may die and heavily infested leaves may drop prematurely.

Algal leafspot is favored by warm temperatures, high humidity and frequent rainfall. Even in drought years, magnolias are subject to heavy infection in areas where humidity is high. Spores produced by *Cephaleuros* move in a film of water on the leaf surface and can be windblown to other plants to produce new infections. This alga survives adverse conditions on diseased leaves, including fallen ones.

**Figure 1: Algal leafspot on Southern magnolia**



**Figure 2: Close-up of algal leafspots**



### Management

Raking and removing fallen leaves from beneath infested plants will help reduce the amount of inoculum for new infections. Improving air flow by removing undesirable competing vegetation and pruning overstory plants will reduce humidity around plants and help suppress disease development. Irrigation should be applied early in the day to allow rapid drying of the site and avoid wetting foliage of susceptible plants.

Algaecides are very effective at protecting foliage from new infections. Apply spray treatments beginning in late summer and repeat monthly until the onset of cool weather (early October).

Maintaining plant health by proper mulching and irrigation will lessen the impact of this disease. Fertilization is recommended based on soil analysis results.

