Alternaria Leaf Spot of Schefflera

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Cause and Symptoms

Alternaria leaf spot of Schefflera (*Brassaia actinophylla*) is caused by the fungus *Alternaria* sp. and occurs throughout Florida. The disease is primarily a problem of young seedlings and nursery plants that are rapidly growing. Mature plants growing in the ground seldom exhibit symptoms. Great losses may occur in nurseries due to leaf spotting and defoliation during prolonged periods of conditions favoring disease.

Spores of the fungus that are present on leaf surfaces germinate and penetrate when the leaves are wet. The leaf spots first appear as tan to dark brown pinhead-sized spots (Fig. 1) that may enlarge to 1-2 in. (3-5 cm) or more in diameter (Fig. 2). Leaflets abscise when many spots occur or when a few spots enlarge.

The fungus produces spores on dead leaf tissue. The spores can be splashed into the air by water from rain or sprinklers or picked up directly by air currents. Air currents can carry spores or water droplets containing spores to leaves several feet above the ground, and the cycle may be repeated if the disease is not controlled. The fungus is active over a wide temperature range of 64-86°F (18-30°C), but 75-

 $81^{\circ}F$ (24-27°C) is most favorable. Infection of leaves can occur from $64-86^{\circ}F$ (18 to $30^{\circ}C$).

The fungus also infects 'Dwarf Schefflera' (*Schefflera arboricola*). Spots on leaflets of *S. arboricola* begin as those in *B. actinophylla* but maximum size is only about 0.4 in. (1 cm) in diameter, and the spots are sometimes surrounded by a yellow halo (Fig. 3).

Control

Spores cannot germinate and penetrate leaf surfaces unless the surfaces are wet. Therefore, practices that promote drying of leaf surfaces should be adopted. Rain and overhead irrigation encourage new infections and remove protectant fungicides. If overhead sprinklers are used, irrigation should be timed to allow leaves to dry as rapidly as possible. Space plants far enough apart to allow air flow and leaf drying. Remove severely diseased plants and fallen leaves from the nursery. Plants grown in full sun are not as severely affected by Alternaria leaf spot as are those grown in shade. Fungicide applications are usually necessary as one part of the total control program. Consult your county agent for specific fungicide recommendations.

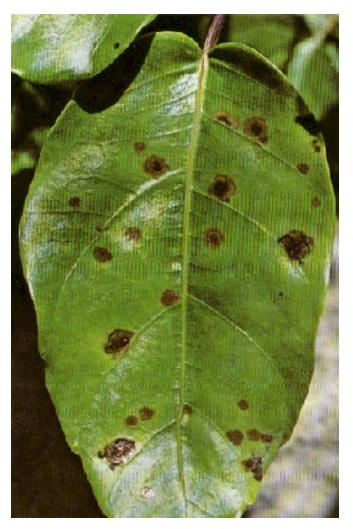


Figure 1. Small lesions of Alternaria leaf spot in Schefflera (*Brassaia actinophylla*).



Figure 2. Large lesions of Alternaria leaf spot in Schefflera (*Brassaia actinophylla*).



Figure 3. Alternaria leaf spot in *Schefflera* arboricola.