

Bacterial Leaf Spot of English Ivy

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Diagnosis

English ivy (*Hedera helix*) is a very common evergreen ground cover and climbing ivy found in many home landscapes in the southern states. It is often seen climbing virtually any vertical structure. It usually grows best in filtered sun or shade and can flourish in a protected area of the landscape, suffering little from our cold winters. In Arkansas, this ivy is prone to two leaf-spotting diseases, which affect its appearance and overall health. One spot is caused by a fungus and the other by a bacterium (*Xanthomonas campestris*). Both can be very destructive to the characteristic dark green foliage. The bacterial spot of English ivy, sometimes called bacterial blight, is especially severe when the plant is grown under conditions in which the foliage is kept wet for one reason or the other. The disease is common in shady landscape areas that are irrigated overhead. Leaves that keep a film of water on them for extended periods are especially prone to this disease. Wet weather or frequent overhead watering, especially during the evening hours, favor the disease. In many cases, the bacterium may be a normal resident on the leaf surface. Bacteria do not cause disease unless they penetrate the plant. These unique organisms usually enter the plant by wounds or through the stomata (pores on the plant for air exchange) or other natural openings.

Symptoms

The initial evidence of the disease appears as an oily (water-soaked) area on the leaf blade that is most visible from the undersurface. The area soon becomes dark brown or black in appearance (**FIG.1**). Often, the water soaking remains apparent near the edge of the spot. This edge often develops into a yellow border, giving the irregular-shaped spot a yellow halo around it (**FIG.2**). The bacteria can also attack the petioles and stems of the plant, causing them to shrivel and dieback.



FIG. 1 Bacterial leaf spot of *Hedera helix*.



FIG. 2 Yellow halo of bacterial spot.

Prescription

Good sanitation practices can also help homeowners reduce disease incidence and severity. Since a wet environment is essential for bacterial infections and spread of the disease organism, managing overhead water is important. It is best to water these plants from below, but this may not be practical in many

landscapes. If plants are to be irrigated overhead, growers should do this during the early day so as to allow leaves to dry off. Plants should be grown in a well-ventilated area to speed drying time. Weakened plants tend to be more susceptible, thus a program of good fertility and other cultural practices should be practiced to promote plant vigor. If bacterial leaf spot is a problem on established plants, growers should remove and destroy infected leaves and stems. This practice will help minimize other disease problems. Thinning plants before active growth begins in the spring will help with ventilation.

You should always begin with disease-free starter plants if you are establishing an ivy planting. Carefully inspect young plant material for any evidence of the disease.

A fixed, copper-containing fungicide is often effective for many bacterial diseases; however, some may cause injury to our desirable ornamentals. It is best to follow the label instructions carefully. If you are still in doubt, test a few plants with the chemical and look for any injury after a few days.

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