

Root and Stem Rot of *Vinca Minor*

Dr. Green Thumb
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By: Stephen Vann

Diagnosis

Vinca (Vinca minor) is an excellent broadleaf evergreen that is grown primarily as a groundcover. It often forms a dense mat or carpet in rock gardens and rock walls. In Arkansas, it occurs most commonly in the northern-tier counties. This glossy-leaved, vine-like plant prefers sun to partial shade and is usually maintained at a 3”–6” height. Under warm, humid conditions, this plant becomes susceptible to root and stem rot caused by the fungus *Rhizoctonia solani*. This fungus is a common soil inhabitant that can attack a wide variety of woody and herbaceous plants. This fungus is particularly aggressive on stressed plants.

Symptoms

Since this species of vinca is often found growing low to the ground and at a fairly close spacing, air circulation can be impeded, thus creating a favorable environment for root and stem rot to develop and spread. Wilt symptoms are usually the first obvious visual evidence of the disease. Close examination of the affected plants reveals dark brown- to black-colored areas (lesions) on the lower stems that are in close proximity to the soil surface or decaying leaf litter. These areas represent dying tissues that are infected with the fungus. Infected roots will also have a darkened color. Early foliar symptoms may be confused with winter desiccation. After initial infection occurs, the fungus rapidly spreads from plant to plant, especially when plant surfaces remain wet from overhead watering. Fallen leaves from overhead trees that remain on the ground cover will promote leaf wetness and provide a very favorable environment for disease development. Overhead watering, crowded plants, and heavy shade contribute significantly to more disease and allows the fungus to over-winter more efficiently for further disease outbreaks. Large patches of this ground cover may become infected and die during rainy periods of April and May.

Prescription

Heavy shaded and protected locations where foliage may remain wet for extended periods should be avoided when establishing a new planting. Select planting locations that get several hours of full sun and good air circulation. Some selective pruning of adjacent plants may become necessary to encourage good air circulation. If plants are irrigated overhead, watering should be done early in the day so as to allow leaves to dry quickly. This will discourage disease activity. For an established planting that is diseased, remove and discard diseased plants immediately to keep the disease from spreading to healthy plants. It is also helpful to clean up fallen leaves and debris that may have accumulated on top of the ground cover. This will aid in air circulation and encourage drier foliage and stems. Thinning of the plantings in early spring may also be helpful to improve air circulation. Avoid excessive nitrogen fertilization that causes dense, succulent growth that is more susceptible to infection.

In addition to good sanitation and irrigation management, several fungicides are useful in protecting healthy plant material from the fungus. Those materials that contain the active ingredients myclobutanil, chlorothalonil, or propiconazole are most effective when applied prior to or at the first

evidence of disease symptoms. Complete coverage and timing of an appropriate fungicide is very important to disease management. Application information is provided on individual fungicide labels.

BYLINE: Stephen Vann is an associate professor and Extension plant pathologist with the University of Arkansas, Cooperative Extension Service.

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