



# Extension FactSheet

Plant Pathology, 2021 Coffey Road, Columbus, OH 43210-1087

## Diseases of Ground Cover Plants

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Ground cover plants are often planted in areas where weed control or masses of color are necessary. Ground covers are also used in areas where conditions are such that grass or other plants will not grow. Environmental stress factors associated with such sites can favor certain infectious diseases. The major diseases of ground cover plants and their controls are described below.

### Leaf Blight and Stem Canker of Pachysandra

Leaf and stem canker are caused by the fungus, *Volutella pachysandricola*. The leaves of affected plants at first develop brown, target-like blotches on them, often on areas of the leaves previously damaged by stresses such as sunscorch. They later become generally blighted. Stem cankers and blackish discoloration will develop and cause a die-back of the plants. Cankers may be located anywhere on the stem. When conditions are moist for extended periods, orangish-pink spore masses of the *Volutella* fungus may develop. Circular, spreading areas of diseased plants will be noticeable in the planting. The disease will be especially severe when plants are crowded and weather is wet.



Figure 1. *Volutella* leaf blight on Pachysandra.



Figure 2. *Volutella* blight on Pachysandra.

Fungicides containing copper (Phyton 27, Kocide), Thiophanate-methyl + mancozeb (Zyban, Duosan), chlorothalonil (Daconil 2787), and mancozeb (FORE) are labeled for control of this disease. Spray affected plants every two weeks from bud break in the spring until plant growth slows in mid or late summer. Cultural control measures (described below) are also important.

### Canker and Die-Back of Vinca

The fungi causing this disease (*Phoma* sp. and *Phomopsis* sp.) cause the shoot tips to become dark brown, wilt, and die back to the surface of the soil. Some affected stems are black in color. Small, black, dot-like, fruiting bodies develop on the surface of the diseased stem tissue.

Wet weather or frequent overhead watering favors the disease. Cultural control (see below) is very important. For chemical control, some copper (Phyton 27, Kocide) or mancozeb (FORE) containing fungicides are labeled and can be used according to labeled instructions. Spray affected plants once a month from bud break in the spring until plant growth slows in mid or late summer.



Figure 3. Leaf and stem canker and dieback of Vinca.



Figure 4. Closeup of bacterial leaf spot on English ivy.

### Bacterial Leaf Spot of English Ivy

Leaf spots, caused by the bacterium *Xanthomonas campestris* pathovar *hederae*, will appear light green and watersoaked (oily) at first. Later, they enlarge and become dark brown or black. The watersoaking will still be evident on the edge of the spot. This is especially visible when viewed from the leaf undersurface. Petiole and stem cankers may develop, causing leaf yellowing and shoot die-back.

Wet weather or frequent overhead watering, particularly in the evening, favors the disease. A fixed copper spray (Phyton 27, Kocide) can be used for control. Copper fungicides may be toxic to some English ivy. If in doubt, treat only a few plants and wait 2 days to check for damage. Follow the cultural control practices mentioned below.

### Crown Rot of Ajuga

The crown rot fungus, *Sclerotium rolfsii*, infects the plants and causes a sudden wilting and death. Examination of wilted plants reveals that the stem is rotted near the soil. During hot, humid weather a white mold growth may be seen on the stem or ground around the stem. Later, small tan resting bodies of the fungus will form on the stem. These resting bodies look

almost exactly like mustard seeds.

Diseased plants must be removed to prevent further spread. Remove the plants and four to five inches of surrounding soil, and drench the bare spot with PCNB (Terraclor) fungicide before replanting. Follow the labeled instructions for use. Be sure to follow the cultural control practices outlined below.

### Cultural Control Measures for Infectious Groundcover Diseases

Infectious plant diseases are best managed via an integrated approach employing many strategies. Some of these strategies are aimed toward sanitation and removal of infected plant tissue or the pathogen. Other strategies are aimed at enhancing the vigor and natural resistance of the plants.

1. Always select and plant high quality plant material. Select plants that are growing well and are free of nutritional deficiencies. If any disease is noted in the plants, do not purchase them.
2. For established beds, remove infected plants and prune out diseased parts of plants. Discard or burn infected material.
3. Thin planting to remove dense growth. Thin in fall during dry weather.



Figure 5. Bacterial leaf blight of English ivy.



Figure 6. Crown rot of Ajuga caused by *Sclerotium rolfsii*.



Figure 7. Closeup of crown rot on Ajuga.

4. Fertilize appropriately to maintain plant vigor. If excess fertilization causes dense growth, plants may need to be thinned.
5. Remove dead leaves and other accumulated plant debris. Do this very early in the spring.
6. Water to prevent weakened, drought stressed plants. Water early in the day so that drying occurs before evening. Avoid splashing of water.
7. Use fungicides as already mentioned above. Spray to thoroughly wet the plants. Use a spreader-sticker spray additive if the fungicide you have selected is a powder. Many of the products mentioned above may not be available in small packages for home landscape use. If such is the case, home horticulturists should contract a professional plant care service to make the applications.

This publication contains pesticide recommendations that are subject to change at any time. These recommendations are provided only as a guide. It is always the pesticide applicator's responsibility, by law, to read and follow all current label directions for the specific pesticide being used. Due to constantly changing labels and product registration, some of the recommendations given in this writing may no longer be legal by the time you read them. If any information in these recommendations disagrees with the label, the recommendation must be disregarded. No endorsement is intended for products mentioned, nor is criticism meant for products not mentioned. The author, The Ohio State University and Ohio State University Extension assume no liability resulting from the use of these recommendations.

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