

Cornell University College of Agriculture and Life Sciences **Plant Disease Diagnostic Clinic** Plant Pathology and Plant-Microbe Biology Section 334 Plant Science Building Ithaca, NY 14853-5904

# Leaf Blight of Pachysandra: Volutella pachysandrae

### Introduction

Leaf blight can be a very destructive disease on pachysandra. The disease is caused by the fungus *Volutella pachysandrae*, and may be worse where plants are under stress.

## Symptoms and Signs

Irregular spots or lesions are first seen in the early summer (**Fig. 1**). Infected leaves and stems exhibit brown blotches on leaves and/or brown shriveled stems. The planting of pachysandra may become thin as the disease progresses (**Fig. 2**). The leaves may appear orange due to the presence of spores of the fungus.



Figure 1: Characteristic of leaf blight symptoms

#### **Disease Cycle**

In the spring, the fungus produces pinkish spores (in sporodochia) on infected tissue. During wet weather

in summer and fall, buff to orange colored masses of spores are produced in fruiting structures known as perithecia. Both spore types cause new infections and help spread the fungus. They are carried by splashing or running water or during wet weather. Weak or injured plant material is much more susceptible than healthy tissue, so damage may be very severe when plants have been stressed by excessive sunlight, winter injury, drought, or insect attack. Spread of the fungus is also more rapid in dense plantings or where heavy mulches are used.



Figure 2: Damage to a mass planting of pachysandra

New infections may occur any time during the growing season. These are apparent on the undersides of leaf lesions and along stem lesions. Small lesions develop and may continue to expand until the entire plant is killed. If blight is suspected, but fruiting bodies are not evident for diagnosis, placing infected material in a plastic bag with a moist paper towel for several days should cause them to develop.

### **Management Strategies**

Always work in plantings when they are DRY to reduce the spread of the disease. Remove and destroy all severely infected plants. These should be buried or thrown out with the garbage. General thinning of the planting to promote good air circulation will help reduce spread by allowing plants to dry out more quickly after rain.

When feasible disinfest pruning tools by swabbing the cutting blades with a solution of 7 parts rubbing alcohol and 3 parts water between each cut. Avoid the use of mulches that promote high moisture around the plants, and remove tree leaves that cover the planting in the fall. After the above cultural practices are completed, fungicide sprays may still be needed in some cases to prevent further spread of the disease.

Homeowners in New York State may use a labeled fungicide containing the active ingredient chlorothalonil according to label directions when new growth begins in the spring. Some home garden products currently registered for this use include: Fruit Tree, Vegetable & Ornamental Fungicide (EPA Reg # 60063-9-54705) or Ortho Max Garden Disease Control Conc. (EPA Reg # 239-2522). Additional products may also be available for commercial use. Commercial applicators should refer to the appropriate pest management guidelines or contact their local Cooperative Extension Office for more information on currently registered products.

Since insect infestation can weaken plants and thus cause more severe leaf blight, management of insect

pests is advised. The insect that most commonly causes this sort of problem is euonymus scale. If scale infestations are small, prune out affected plant parts.

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**READ THE LABEL BEFORE APPLYING ANY PESTICIDE!** Changes in pesticide regulations occur constantly. All pesticides distributed, sold, and/or applied in New York State must be registered with the New York State Department of Environmental Conservation (DEC). Questions concerning the legality and/or registration status for pesticide use in New York State should be directed to the appropriate Cornell Cooperative Extension Specialist or your regional DEC office.

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