



Introduction

The disease name is derived from the dead straw-colored spots about the size of a silver dollar on closecut bentgrass putting greens. Dollar spot may persist from early summer until early fall, and its incidence seems to be higher in seasons with low rainfall, presumably from the adverse effect of low soil moisture on host plants. It occurs on bluegrasses, bentgrasses, fescues, and zoysia. The classification of the pathogen that causes dollar spot has undergone numerous changes.

Symptoms

The pattern of symptoms depends largely on mowing practices. Under close mowing conditions the circular straw-colored spots (3 to 6 cm in diameter) are distinctly outlined in the early stages of disease development (Fig. 1). With higher cutting heights, the bleached turf spots are irregularly shaped. In the early morning, when dew is still on the grass, a white cobwebby growth of the fungus may be seen over the spot. Spots coalesce to cover large areas when the disease becomes severe.

On individual grass blades the damaged tissues are first water-soaked and dark colored. As they dry, the lesions turn light tan to straw-colored with a reddish-brown border (Fig. 2). The lesions first occur randomly on the leaf blade, and then frequently extend across the entire blade. Older lesions may become quite long and cause blighting of the entire leaf or cut leaf end.



Figure 1: Physical damage of a ball mark vs. symptoms of dollar spot. (provided by Karen L. Snover-Clift, Cornell University)



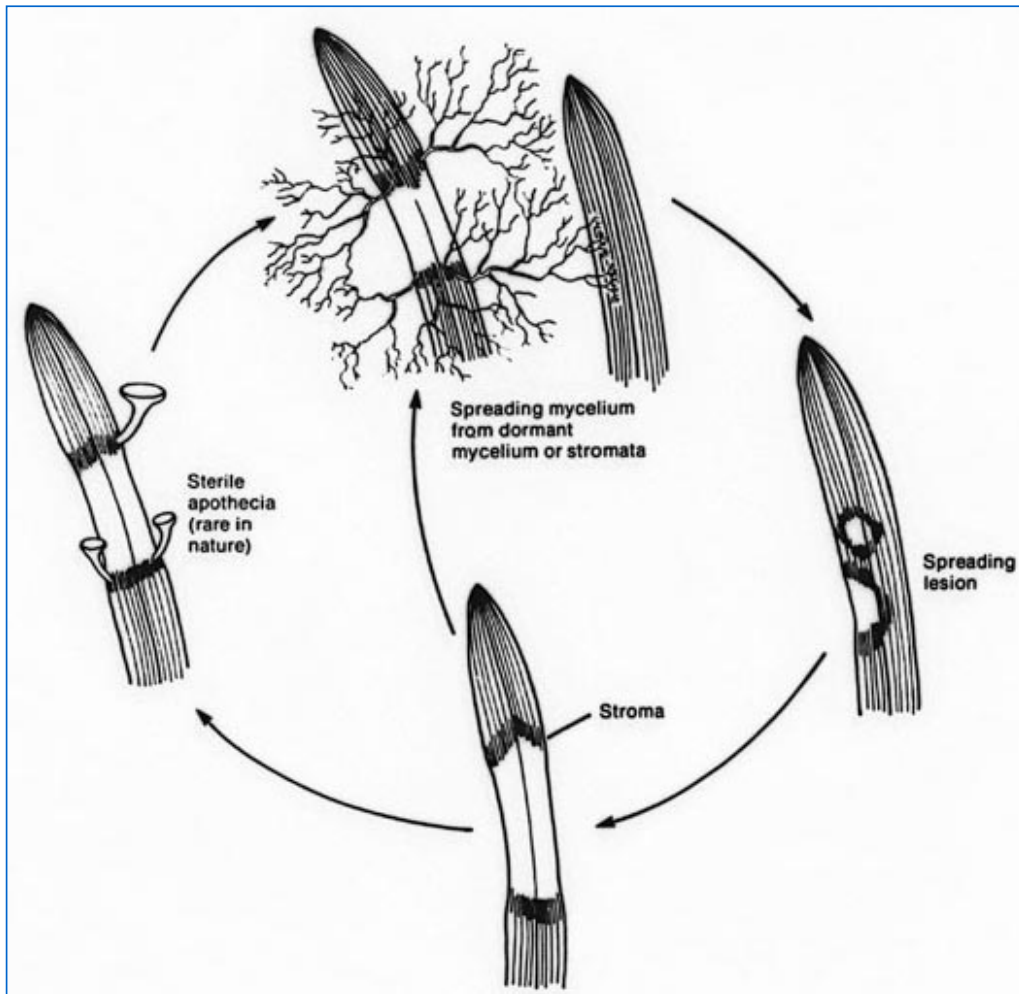
Figure 2: Disease symptoms on individual blades. (provided by Dr. Eric B. Nelson, Cornell University)

Disease Cycle

The fungus, *Sclerotinia homoeocarpa*, survives unfavorable periods as dormant mycelium in infected plants, therefore, fungal movement is brought about by equipment, people, animals, wind or water. When daytime temperatures reach 16°C to 27°C (60°F to 80°F), the dormant mycelium resumes growth from the infected leaves to nearby healthy leaves, causing new infections.

If night-time conditions become cool and dry soon after infection has occurred, or if control measures are exercised quickly, infection may not progress beyond scattered leaf lesions. If the grass is growing

rapidly, the problems may disappear after one or two mowings. If favorable weather persists after infection such as warm nights, with dew forming on leaves, and if control is not achieved, entire grass plants may be killed and typical "dollar spots" may appear on the turf.



Dollar spot disease cycle.
(provided by **Dr. Eric B. Nelson, Cornell University**)

Management Strategies

Mow grasses at the recommended maximum height if possible. Try not to remove more than 1/3 of the leaf surface in any one mowing. Maintain adequate soil moisture, but avoid sprinkling in the late afternoon or evening. Do not overwater. The incidence of dollar spot is lower than on nitrogen-deficient turf. Adequate nitrogen fertilization in the late spring and summer may help prevent dollar spot, but excess applications may encourage other turf problems (e.g., brown patch, summer patch, and drought stress).

Varieties of bluegrasses and fescues differ in susceptibility to dollar spot. Bluegrasses which exhibit greater resistance include the improved varieties Adelphi, America, Aquila, Bonnieblue, Bristol, Eclipse, Midnight, Touchdown, Vantage, and Victa. Greater susceptibility is exhibited by varieties which include Ram I, Mystic, Estar, Gnome, and Pennstar. Fescues which are more resistant include Jamestown, Agram, Checker, and Shadow chewings, Biljart, Reliant, Scaldis, and Tournament hard fescues.

Many fungicides are available for dollar spot management. For homeowners use in New York State, these may include some systemic fungicides containing the active ingredients: *Bacillus subtilis*, thiophanate-methyl, triadimefon, propiconazole, or myclobutanil, or some protectant fungicides containing chlorothalonil. Systemics should be drenched into the turf for longer lasting control. Foliar

protectants must be reapplied as the product label recommends. Be certain any formulation(s) of pesticide(s) you purchase are registered for the intended use. Additional products containing other active ingredients may be available for use by commercial applicators. Refer to the appropriate commercial pest management guidelines, or contact your local Cooperative Extension Office for more information on currently registered products.

Updated, SLJ, 4/09

This publication contains pesticide recommendations. Changes in pesticide regulations occur constantly, some materials mentioned may no longer be available, and some uses may no longer be legal. 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. **READ THE LABEL BEFORE APPLYING ANY PESTICIDE.**

The Plant Disease Diagnostic Clinic at Cornell University is located at **334 Plant Science Building, Ithaca, NY, 14853.**
Phone: 607-255-7850, Fax: 607-255-4471, Email: ks13@cornell.edu or slj2@cornell.edu