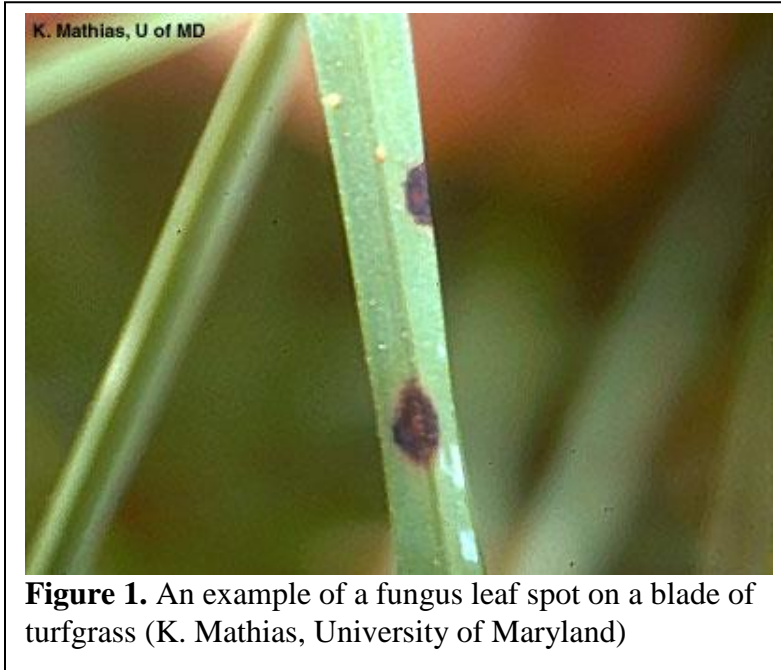




## Drechlera Leafspot *Drechlera* sp.



**Figure 1.** An example of a fungus leaf spot on a blade of turfgrass (K. Mathias, University of Maryland)

**Introduction:** These common leafspots encountered in New York are most destructive during cold, wet, overcast weather such as occurs during spring and fall. They are also common where turf is sprinkled with water frequently. Leafspots cause gradual browning and thinning or melting-out of grasses and, if severe, the entire turf may be lost. Crown and root rotting often follow leafspotting as the season progresses and temperatures rise. Diseases caused by the species of *Drechlera* and *Bipolaris* were formerly grouped together as *Helminthosporium* leafspot, crown rot, and root rot. Now, however, they have been segregated out. Many species of *Drechlera* cause what is known today as *Drechlera* leafspot, crown rot, and root rot.

**Symptoms:** Small, dark-brown, purplish, or purplish-red colored spots (**Fig.1**) appear on the

leaves from the early spring to late fall. As these leafspot lesions increase in size their centers may fade to a straw or light-brown color. The spots are usually surrounded by narrow dark reddish-brown to purplish-black borders. As the disease progresses in favorable weather, the spots run together and girdle the leaf blades. The crown rot stage appears with the first warm weather, causing a reddish-brown decay of the crown, rhizome, and root tissues. Plants lack vigor and wilt during mid-day (**Fig. 2**) as the roots are destroyed.

**Disease Cycle:** The fungi which cause the disease survive from year to year in dead clippings or infected grass plants. Spores are produced in the spring and carried to new leaves by air currents, mowers, splashing water, feet, etc. The spores germinate in a film of moisture and infect the leaves, causing spotting. New leaf infections may occur as long as the weather remains moist and the temperatures are favorable. With the arrival of relatively dry weather in the summer, the leafspot phase decreases and crowns and roots are attacked. Crown and root infections in midsummer lead to the melting-out phase of the disease and large patches of turf may be killed.

**Management Strategies:** Mow grasses at the recommended maximum height for satisfactory turf use. Mowing should be done frequently so that no more than 1/3 of the leaf surface is removed at any one time. Avoid letting thatch accumulate over 1/2 inch in depth. Fertilize on a regular program to maintain as uniform a level of soil nutrients as possible. Use a balanced fertilizer, and avoid applications before late May or early June. Avoid excess nitrogen, especially in the spring.

In dry weather, apply enough water to soak the soil to at least six to eight inches deep. Frequently sprinkling and water-logging the soils should be avoided. Many Kentucky bluegrass varieties are resistant to this disease

(Bonnieblue, Bristol, Challenger, Eclipse, and Midnight) whereas most fescues are susceptible. Reliant, a hard fescue, has excellent tolerance to leafspot diseases. Spartan, Tournament, and Waldina (all hard fescues), and Shadow (chewing fescue) have good tolerance to such diseases.



**Figure 2.** A lawn infected with a fungus leaf spot disease that is wilting due to crown and root infection infections. (HGIC, University of Maryland)

For homeowners, several fungicides may be used to aid in disease management. These include Heritage or some fungicides containing the active ingredients chlorothalonil, myclobutanil, or propiconazole. Before purchasing, be sure the specific product is labeled for the intended use; apply fungicides at intervals recommended on the packaging label during cool moist weather from April to June. September and October applications may be necessary if favorable weather persists. Avoid the use of "systemic fungicides" such as thiophanate-methyl or triadimefon on leafspot-affected turf. These fungicides will tend to increase the severity of disease. Reprinted from: *Dreschlera Leafspot Dreschlera sp*, The Plant Disease Diagnostic Clinic at Cornell University, Ithaca, NY; Created by KLS, 8/99; updated, SLJ, 4/09.

The Pesticide Management Education Program (PMEP), in cooperation with the New York State Department of Environmental Conservation (NYSDEC), maintains a web site with a searchable database for pesticide products currently registered in New York State. Homeowners who have Internet access can locate currently registered products at <http://pims.psur.cornell.edu/>. Several different queries are available that will produce a summary for the product(s) that the system locates. If the system fails to locate the product in question, then that product is not currently registered in New York State. The database also provides a summary of important information related to every product currently registered. Two data fields "Status" and "Expiration Date" are provided in each summary. Products with a status of "Registered - Discontinued" are currently registered but will probably be discontinued for use, sale, and distribution in New York State after the date noted in the "Expiration Date" field.

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.**

TK/AW: 5/2009, AW:1/2012