Helminthosporium leaf spot is caused by the fungus *Helminthosporium sorokinianum*. The disease occurs most commonly on bluegrasses, bentgrasses, fescues, and ryegrasses.

**SYMPTOMS.-** On bluegrasses, the leaf spots are first seen as small, purplish light tan with purplish brown borders. Primary damage caused by the disease comes from blighting of the leaf tissue. This occurs as a rapid collapse and drying of the leaves--after which they fade to a light straw color. During warm, humid weather of mid-summer, the whole process may occur within a period of 4-5 days from time of infection. The overall disease pattern appears as a brownish fading-out of turfgrass areas of various sizes.

On bentgrasses, the disease is first seen as smoky-blue, irregularly shaped turf areas, varying from 1 to 4 feet in diameter. Soon after, yellowing and complete killing of the grass plants takes place. Finally, these areas appear water-soaked and matted down. On the leaves, the first symptoms are minute yellow flecks, which soon progress to irregularly shaped, water-soaked blotches.

**DISEASE CYCLE.-** The causal organisms survive the winter in infected plants and infested debris from the previous year's stand. During the growing season, the organism also develops on grass clippings and dead tissues of living grass plants. On Kentucky bluegrass leaves, spores germinate in 30 to 40 minutes if weather conditions are favorable. At 78°F, a period of 8 to 10 hours with 100 percent relative humidity is all that is required for a high level of infection to occur.

The first leaf spots usually appear in late spring. Disease severity increases with the onset of warm summer weather and decreases with the cooler fall weather.

Along with the leaf spot phase of disease development, there is frequently a severe crown and root rot, which reduces the vigor and drought tolerance of the plants.

Severity of the disease is directly related to air temperature. At 68°F, leaf spotting occurs, with no leaf blighting; at 75°F, leaf spotting is predominant with a slight blighting occurring; and 85°F, leaf blighting is severe with very little leaf spotting; and at 95°F, leaf blighting is severe with no leaf spots appearing.

**CONTROL.- Resistant Varieties** - The Merion variety of Kentucky bluegrass is more susceptible to *Helminthosporium* leaf spot than common Kentucky bluegrass. (over)
Chemical Control - Helminthosporium leaf spot may be controlled by the use of certain fungicides. For specific control recommendations, see Control Series 76.