



Extension FactSheet

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

Eyespot Disease of Corn

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Eyespot appears to be most severe in fields where residues from the previous corn crop are left on the soil surface and in fields in continuous corn for two or more years. Eyespot is favored by long periods of cool, wet weather during the growing season. Therefore, it is more of a problem in the northern regions of the corn belt.

Early and severe leaf blighting from eyespot in no-till and reduced tillage fields have resulted in yield losses when susceptible hybrids were grown. Yield losses can be expected when much of the leaf area is blighted within three to four weeks after silking. Defoliation from leaf blighting also increases the amount of stalk rot, resulting in additional losses from lodged corn.

Symptoms

Generally, affected leaves are covered with numerous small round spots. Spots are about 1/8 inch



Eyespot.

in diameter, oval to circular, and initially they appear water soaked. The central area of the spot soon dies, leaving a tan to cream-colored center surrounded by a distinct brown to purple border. The border is frequently encircled by a yellow halo that is easily seen when the leaf is held to the light. Since the small spot with its distinctive border resembles an eye, the disease was named 'eyespot'.

Causal Organism

The eyespot disease is caused by the fungus, *Kabatiella zae*. Spores produced by this fungus are widely dispersed by the wind. Spores settling on a susceptible corn leaf may germinate and initiate infection within a week, especially during cool, wet weather. Older corn leaves appear to be more susceptible to infection. Under favorable conditions new spores are produced and quickly spread to other plants. When infection is severe, essentially all plants within a field may be killed within two weeks by this fungus. Because the eyespot fungus produces spores during cooler weather, the disease is most prevalent during August, September, and early October. However, during abnormally cool seasons it can attack corn much earlier and cause significant losses. The fungus overwinters and survives between corn crops on residue left on the soil surface. In the spring, the fungus again produces spores that are carried to the new corn crop. The fungus may also be seed-borne, but this source of fungal inoculum is negligible when compared to the number of spores produced on infested crop residues.

Control

1. Plant corn hybrids that have some resistance to eyespot.
2. Crop rotation and clean plow down of corn residues will help reduce the amount of surviving fungus and limit early season disease spread.
3. The use of fungicides for control of eyespot is economically prohibitive except on seed production fields.

Additional information can be obtained from your local Extension office or The Ohio State University web site Ohioline at: <http://ohioline.ag.ohio-state.edu>

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