

Southern Leaf Blight (SLB) Facts

- Fungal disease caused by *Cochliobolus heterostrophus* (also known as *Bipolaris maydis*)
- Thrives in warm-temperate or subtropical corn-growing environments, including the southeastern U.S.
- Overwinters primarily in surface debris from the previous corn crop
- Spores are windblown or splashed by water to new crop leaves where they germinate and infect the plant
- Development is favored by warm (70 to 85° F), moist weather and free water on the leaf
- Under ideal conditions, the fungus is able to complete its life cycle in only 60 to 72 hours

Impact on Crop

- Can cause significant loss of corn leaf area when conditions favor the disease
- Loss of leaf area results in reduced photosynthesis, lowering yield potential and increasing risk of stalk rots
- The earlier the disease begins in the growing season, the greater the potential for yield reduction
- Ear and cob rots may also occur due to this fungus



Symptoms

- Lesions are generally:
 - from 1/8 to 1/4 inch wide by 1/8 to 1 inch long
 - tan in color
 - rectangular to oblong in shape
 - usually found on leaves
 - variable, making identification more difficult than for other diseases
- Lesion type may depend on hybrid genetics
- Lesions usually develop first on lower leaves and work up the plant



SCLB may resemble gray leaf spot, but these characteristics differentiate lesions:

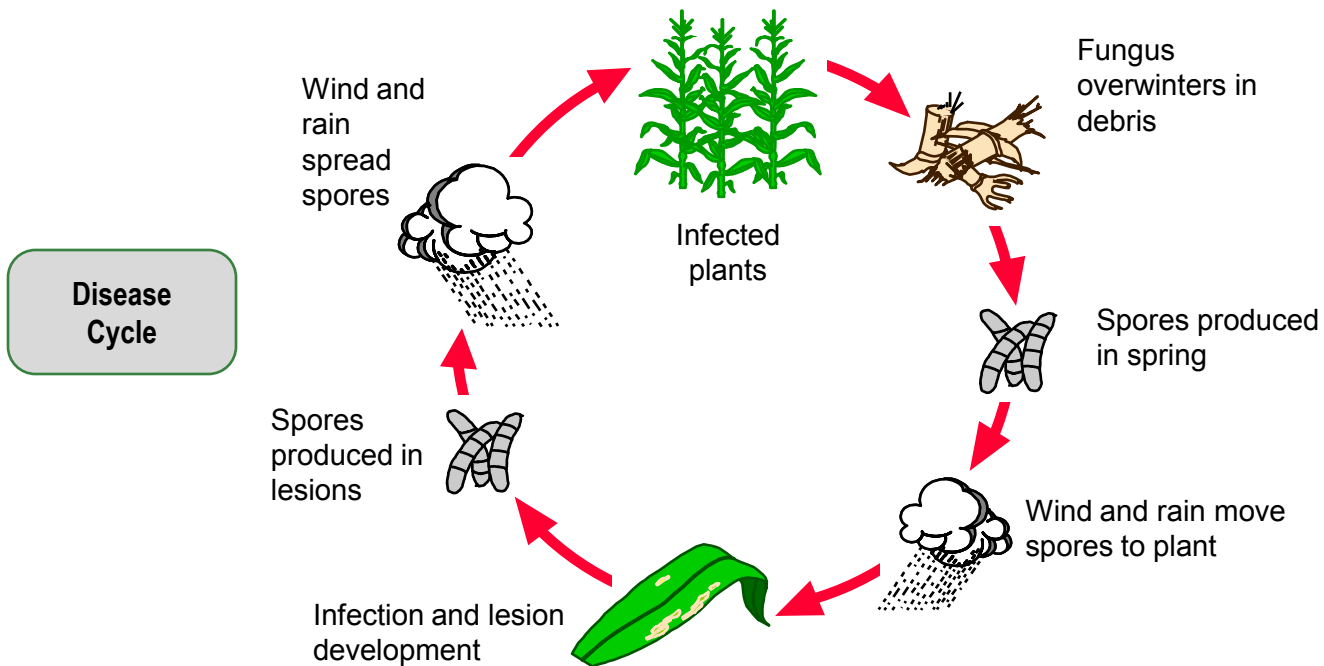
Southern Leaf Blight

Much less uniform than gray leaf spot. Irregular shapes extend beyond leaf veins.

Gray Leaf Spot

Uniformly shaped, do not extend beyond leaf veins. Young lesions have yellow halo around brown center





Management

- Genetic resistance
 - Most effective form of management
 - Pioneer breeders have selected for resistant parent lines and hybrids for over 30 years
 - Hybrid ratings range from “3” to “7” on Pioneer’s 1 to 9 scale (9 = resistant)
 - Growers in high-risk areas with a history of SLB occurrence in their fields should choose hybrids with a “6” or “7” rating for SLB resistance
- Crop rotation to reduce corn residue level and help break disease cycle
- Tillage to encourage breakdown of crop residue
- Fungicide application

Fungicide Application

- Scout corn to detect SLB early
- Monitor disease development, crop growth stage, and weather forecast
- Apply a foliar fungicide if:
 - Disease is spreading rapidly or likely to spread and yield may be affected
 - Disease level exceeds threshold established by your state extension plant pathologist
- Common fungicides include Headline, Quadris, Quilt, PropiMax EC, Stratego and Tilt



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