Anthracnose in Corn

SITUATION

Anthracnose is a fungal pathogen that affects standability, plant health, and overall yield in corn fields. Symptoms can be seen on leaves and the stalk, both above and below the ear. The anthracnose pathogen can infect the plant through the roots and stalks.

There are three distinct phases of anthracnose: leaf blight, top die-back, and stalk rot.

Leaf blight lesions usually appear in early-to-mid June. As the leaf lesions mature, they are long, irregular shaped, and can expand to encompass large sections of the leaf. Top die-back affects the top of the plant down toward the ear. These symptoms first appear about one to three weeks after tasseling, causing a black discoloration on the stalks. Stalk rot symptoms begin as node discoloration when the plant is split open.

FACTORS TO CONSIDER

Based on the severity of infection and stage of the plant, both grain fill and test weight can be affected. Yield can be reduced very little or as much as 40 percent. Factors to consider with this issue are:

- Weather pattern – This disease prefers high temperatures and humidity.
- Host plants – Anthracnose overwinters on corn residue.
- Hybrid selection – Hybrids vary in susceptibility to anthracnose.
ACTION PLAN

Steps to help alleviate this issue are:

1. If the weather pattern is favorable for this disease, then a proactive fungicide application can be beneficial to prevent plant stress. Decreasing stress makes the plant less susceptible to anthracnose and other yield-robbing fungi.

2. Reducing the amount of overwintering matter that the pathogen can survive on will help reduce the amount of disease pressure next year. Rotating crops away from corn and using conventional tillage methods are two ways to reduce corn residue.

3. Hybrid selection is one of the most important steps for protecting yields where disease pressure exists. Choosing the correct hybrid with great stalk strength and late season plant health will greatly reduce susceptibility of your hybrid to anthracnose. Ask your Legend Seeds team for the hybrid recommendations that will best fit your acre.

4. Early harvest may be needed to minimize the yield loss from lodging or dropped ears that can be caused by anthracnose. During late season scouting, if more than 10 percent of plants show stalk rot symptoms, that field should have harvest priority.

SUMMARY

Anthracnose is a disease that shows a lot of physical symptoms. Scouting is key to determining the severity of the outbreak and any immediate actions needed. Crop rotation and hybrid selection are two of the most important steps in protecting your yield. For more information, contact your Legend Seeds team.

RESOURCES

https://cropwatch.unl.edu/plantdisease/corn/anthracnose