Humid, Wet Conditions Increase Risk For Foliar Diseases In Soybeans

Scouting fields can help determine if a foliar fungicide is needed

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igher soybean prices make yield-enhancing crop inputs during the growing season more attractive. One potential input on many growers' minds is foliar fungicides to help manage several common foliar diseases if the need arises. DuPont Pioneer researchers provide tips to help you determine if a foliar fungicide is warranted this season.

"Before using a foliar fungicide, it's very important to scout and determine the type of disease or diseases present," says Steve Schnebly, DuPont Pioneer senior research manager. "Only fungal pathogens can be controlled with these products."

Scouting for foliar diseases in soybeans should be done prior to R3, especially if the weather has been rainy and/or humid, as these conditions prove most favorable to foliar diseases.

"If rainy and humid conditions continue, these diseases spread faster, so scouting becomes vital to help reduce damage," Schnebly reports.

Two diseases to scout for this summer are frogeye leaf spot and septoria brown spot. Frogeye leaf spot symptoms appear as light gray lesions surrounded by dark borders. These lesions may coalesce to form larger irregular spots on leaves. Lesion development on pods is similar to that on the leaves, appearing as light gray centers with distinct dark borders. Reddish brown lesions also can be observed on stems. This disease can significantly reduce yields, especially when left untreated.

Symptoms for septoria brown spot include small, angular, red-brown spots on unifoliate leaves. Spots are more pronounced on lower leaf surfaces, but they also develop on upper leaf surfaces. Numerous spots cause leaves to yellow and drop off. On trifoliate leaves, the disease develops numerous, irregular, tan lesions that later turn dark brown. Defoliation of severely diseased trifoliate leaves is common during wet seasons and begins at the bottom of the plant and moves to the top. This disease can cause

economic losses if left untreated.

"When scouting, keep in mind that river bottoms, low areas and fields surrounded by trees may be more prone to foliar diseases," Schnebly says.

The risk of foliar diseases also increases when a field is continuously planted with soybeans, because foliar pathogens overwinter in soybean stubble. The more stubble that exists, the greater the chance for foliar disease to appear the next year.

To help manage frogeye leaf spot and septoria brown spot, application of a foliar fungicide is recommended if disease levels exceed thresholds. Thresholds can be found by contacting you local DuPont Pioneer agronomist or state extension specialist. One foliar fungicide option is DuPont™ Aproach™ fungicide. Aproach™ fungicide provides effective plant disease control of foliar diseases, including soybean white mold, frogeye leaf spot, brown spot and Asian soybean rust. Other management options include tilling to help reduce leftover infected residue, selecting a resistant variety for the next growing season and rotating crops to help break the disease cycle.

"We can easily control these diseases with a combination of good crop scouting, good management and good variety [genetic] selection," Schnebly states.

One tool that can assist with scouting this season is the new Pioneer® Field360™ Notes app, which helps you track field notes on foliar diseases. This tool streamlines and organizes field-by-field agronomic information for communication among DuPont Pioneer agronomists, sales professionals and growers, and it is compatible with all iOS and Android tablets and mobile devices.

For more information on scouting for foliar disease and foliar fungicide applications, contact your local DuPont Pioneer agronomist or Pioneer sales professional, or visit pioneer.com. Δ