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Soybean Diseases Starting to Pop Up

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Abstract
This year's early season rain has increased the risk of soybean disease in Iowa. We knew it was coming and now the waiting is over. For the past month we have seen Septoria brown spot and bacterial blight. This week we identified sudden death syndrome (SDS), frogeye leaf spot, and other diseases for the first time this year.

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Soybean Diseases Starting to Pop Up

July 24, 2015

By Daren Mueller, Department of Plant Pathology and Microbiology, and Tristan Mueller, Iowa Soybean Association On-Farm Network

This year's early season rain has increased the risk of soybean disease in Iowa. We knew it was coming and now the waiting is over. For the past month we have seen Septoria brown spot and bacterial blight. This week we identified sudden death syndrome (SDS), frogeye leaf spot, and other diseases for the first time this year.

Sudden death syndrome

The 2015 season is primed for being another “SDS year” because of the weather conditions experienced to date. As we've learned from SDS outbreaks in years past - this disease likes it wet. The early wet weather helps increase the root rot phase of the disease.
Figure 1. Areas of the state with more rainfall may have a higher risk of disease.

SDS has been identified in different parts of the state, especially in central and southeastern Iowa. SDS foliar symptoms appear as yellowing and death of tissue between leaf veins (Fig. 2). Remember there are a few other diseases that may be confused with SDS such as brown stem rot and stem canker. Look for lesions on the outside (stem canker) and browning in the pith (brown stem rot) to distinguish from SDS.
Figure 2. Yellowing and death of soybean leaf tissue due to sudden death syndrome

Frogeye leaf spot

We do not normally see frogeye leaf spot this early in Iowa, but it has already been identified in a central Iowa field. Frogeye leaf spot is fairly easy to distinguish from other leaf spot diseases of soybean. It has a dark purple ring at the margins of lesions with a light tan center (Fig. 3). Lesions are usually found in the middle to upper canopy.
Figure 3. Frogeye leaf spot lesions on soybean leaves

Phyllosticta leaf spot

Phyllosticta leaf spot is a minor disease; and we've received one report in Iowa so far this year. Look for the dark spots within the lesion to help identify this disease (Fig. 4).
Figure 4. Phyllosticta leaf spot lesion with dark specks

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Category: Crop Production

Crop: Soybean

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