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Take Note of Diseases in a Cool Spring

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Abstract

Producers in Iowa have had a good planting season. As of Monday, ISU agronomists reported near completion of corn and 50 percent of soybean planted in Iowa. So far this has been one of the most trouble free planting seasons I remember, with some similarities to last season.

Keywords

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Take Note of Diseases in a Cool Spring

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Producers in Iowa have had a good planting season. As of Monday, ISU agronomists reported near completion of corn and 50 percent of soybean planted in Iowa. So far this has been one of the most trouble free planting seasons I remember, with some similarities to last season.

Before planting, climatologists had predicted that the spring would be cooler than normal. As predicted, May has been cooler and somewhat wet, with frost in the first week, which is a rare experience for me. The cool spring has disadvantages for some producers. Early planted soybean fields in southern Iowa reported frost damage which required replanting. Stress from frost could add root rot problems for soybean plants that were not killed by frost, especially in fields which are wet.

Seedling damping off will be a disease to watch for as it likes a cool and wet planting season. The most common diseases in a cool planting season are Pythium damping off and Fusarium root rot. If replanting has to be done because of frost damage or diseases, fungicide treated seeds should be used because the risk of seedling diseases will be higher, especially in fields that had diseases.

More and more growers are using seed treatment, which has benefits in a cool, wet spring like this year. Producers who use seed treatment are likely to have few seedling disease worries, as seedling diseases have an increased presence in these conditions over a normal season. Years of university data suggest that replanting can be avoided and yields increased with the use of seed treatments in a season when risk of seedling diseases is high. Because of record amount snowfall this winter, many Iowa growers had anticipated a wet spring and made plans to use treated seeds.

Many rules previously used to manage soybean diseases will not work in current growing conditions. One example is the use of planting date to reduce the risk of sudden death syndrome (SDS). In a normal season, the earlier the planting the higher the risk of having SDS in the summer, with later plantings having less SDS. However, this rule did not work in the cool, long spring of 2009, a planting season similar to this year. Soil temperatures were cool after mid-May. In the fall, SDS was found in many fields planted after mid-May. With 50 percent of soybean yet to be planted this spring, late planted soybean may be at risk to be infected by SDS fungus because of the cool soil temperatures. Some growers are likely to see SDS again this fall, but there is not much we can do about it now.

The good news that comes with a cool and wet spring is that this type weather will reduce the risk of insect borne diseases, such as bean pod mottle virus. Cool temperatures will hammer the development of insects, such as bean leaf beetles and therefore reduce the movement of bean leaf beetle virus. Spread of the virus from plant to plant depends on the number of bean leaf beetles. A cooler spring slows beetle population development and, therefore, reduces the risk of the virus it carries.

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