

Cercospora Leaf Blight

By Andy Luke, Regional Agronomy Specialist

Producers may be surprised this fall when they look in their hoppers and see soybeans with large purple spots. This is the result of a fungus called *Cercospora kikuchii*, which can infect soybean seeds, pods stems and leaves. It is commonly referred to as Cercospora leaf blight or purple seed stain.

Cercospora leaf blight is quite common in many areas of the southern United States, but can also appear in the upper Midwest and into Canada. Symptoms generally show up during seed set and seed fill on soybeans, and will appear as red or purple spots or patches on the upper surface of leaves. Leaves in the upper canopy that receive direct sunlight will show symptoms before those in the lower canopy. The leaves will appear leathery or sun-burned, and eventually will fall off, resembling early maturity. The leaf petioles may also display long, dark-red lesions that will grow together and potentially discolor the entire petiole as the disease progresses. Once the pathogen infects the seeds, it is labeled as purple seed stain, and the seed coats develop a pink or purple tint. The discoloration may appear as small spots or could cover the entire surface of the seed coat.

Infection and development of cercospora leaf blight primarily occurs in warm and wet weather conditions. As soybeans began to fill pods in late August and early September, heavy rainfall followed by warm temperatures allowed the disease to infect soybeans in the area. While early infestations can cause yield losses, the most common result of purple seed stain is seed-quality issues and downgrading of food-grade soybeans.

If you notice purple seed stain in your soybeans this harvest, there are things you can do to manage the disease in upcoming years. Fungicides labeled to control cercospora leaf blight are available as both seed treatments or foliar fungicides. The pathogen overwinters on infested debris or seed, so rotating to a non-host crop such as corn or wheat will be helpful. Tillage to bury infested debris will also limit the incidence in future years. Some varieties of soybeans are less susceptible to the disease and should be planted into areas where infestations are known to have occurred. Finally, do not plant seeds that have been harvested in infested fields, as this may lead to diseased seedlings and stand problems.

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