

Iowa State University Extension Information for Southeast Iowa

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July 29, 2009

CORN
Corn Diseases

Northern Iowa is seeing much more eyespot than normal this year, which includes some areas north of highway 30. This disease is more common for northern Iowa, and the cool weather is ideal for the development of this disease. Lesions on or above the ear leaf are common in some fields. Gray leafspot is common in the south, although does not appear to be any more common than usual. If the cool weather persists, this might help to keep gray leafspot problems from increasing since warm, moist conditions favor this disease. It is likely that fungicides will provide some yield protection this year, at least in those fields that are starting to see the disease outbreaks. The next week or two will be the ideal time for fungicide applications if they are going to be made, although they should not be applied until all of the field has tasseled. See Alison's Robertson's article for more information at <http://www.extension.iastate.edu/CropNews/2009/0721Robertson.htm>.

Corn Leaf Aphid

It's time to scout for this pest, although I have no reports and have not seen any corn leaf aphids. A July 17, 2009 ICM News article summarizes this pest and includes a simplified scouting and threshold approach. Go to: <http://www.extension.iastate.edu/CropNews/2009/0717hodgson.htm>

Potassium and Nitrogen Deficiency Symptoms

The wet weather has led to nitrogen losses in many fields, which has increased the uneven development in many fields. Potassium deficiency symptoms are also common again this year. Yellowing of the center of the leaf indicates N deficiency, whereas K deficiency is shown by yellowing and browning along the leaf margins. Sometimes there is dramatic stunting along with the leaf symptoms, with no apparent pattern to the stunting. This often indicates that the problem is at least partly environmental. One pattern I often see is that the endrows in a field appear the best, with haphazard areas of stunted K deficient corn in the rest of the field. I

have also often found that it is often easier to get a spade in the ground in the stunted areas and more difficult in the good areas, indicating that some surface soil compaction actually helps to alleviate the problem. It is also common to see big differences among corn varieties in showing these symptoms. We have called this phenomena “stress-induced K deficiency” and think it is likely caused by soil conditions that occurred in the early development of the secondary, nodal root system that prevents the proper function of the root. Although it can occur even where adequate levels of K are in the soil, it is much more common in soils that are marginal or low in K.

SOYBEANS

Japanese Beetles

Japanese beetles have expanded their territory again this year, but fortunately the numbers are much lower than last year. I haven’t seen any soybean fields anywhere near the 20% defoliation that it takes to justify an insecticide treatment for Japanese beetles. Corn fields that are still pollinating need to be watched to make sure the beetles are not interfering with pollination. Fortunately most of the silk clipping that has been done in other years had been after pollination was complete.

Soybean Aphids

Soybean aphid numbers are still very low in the area and throughout most of the Midwest, but last year I did not see any aphids until August, so we need to keep checking fields. You can see what aphid numbers others are finding around the Midwest at http://sba.ipmpipe.org/cgi-bin/sbr/public.cgi?host=All%20Legumes/Kudzu&pest=soybean_aphid. One thing that can cause soybean aphid numbers to explode is to spray a field with low numbers of aphids with an insecticide. I’ve noticed that the numbers of beneficial insects is much higher this year than last year, which may be keeping the aphid numbers in check. Killing the beneficials with an insecticide makes a field ideal to be invaded by aphids.

Sunscald

Sunscald is showing up on the upper leaves in many soybean fields. It is easily confused with cercospora leaf spot, and some have even confused it with soybean rust. It is basically sunburn on the underside of the leaf which occurs when the leaf is flipped over and exposed to the strong sunlight. Dew on the leaf magnifies the sunlight. It is common for only half of the leaf to show the symptoms because only half of the leaf is exposed to the sun and the other half is in the shade. The “burned” portion is brown with dark veins. This condition has virtually no affect on the yield.

Soybean Rust

The risk of an epidemic in Iowa remains very low. Rust development can be monitored at the following USDA web site: <http://sbr.ipmPIPE.org/cgi-bin/sbr/public.cgi>

FOR YOUR CALENDAR

Crop Management and Diagnostic Clinics August-September – Ames

The Field Extension Education Laboratory is a 43-acre teaching and demonstration facility dedicated to providing a hands-on learning experience for crop production professionals. The demonstration plots are used to show a wide range of management problems, solutions, and diagnostic challenges. “We make the mistakes on these plots so you won't in the future!” The clinics and programs are taught by Iowa State University staff and faculty and invited specialists from other institutions and industry. Modern, air-conditioned classroom facilities complement the in-field sessions, all of which are within walking distance. Current open programs for this summer include the following:

Aug 25-27, [Iowa Drainage School](#)

September 2, [Alfalfa Production Clinic](#)

September 3, [Corn Disease Diagnostics and Management](#)

September 15, [Soil Management Clinic](#)

For other Agribusiness Education program information, check out the Homepage at: <http://www.aep.iastate.edu/homepage.html>

Advances in Precision Ag Expo ISU SE Iowa Research & Demonstration Farm – Crawfordsville September 17 10:30 a.m. - 4:30 p.m.

Come see the latest in precision ag technology, including RTK guidance systems, auto-steer, automatic shut-off planters and sprayers. The expo will feature field demonstrations and industry exhibits on the latest technology. More details will be available soon.

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