

**Iowa State University Extension Information for Southeast Iowa**

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**SOYBEAN**  
**Soybean Aphid**

Soybean aphid numbers have increased dramatically in some fields in the last 10 days and have become easy to find in many soybean fields. While populations are generally below threshold, some fields have exceeded thresholds and have been sprayed. Fields where a “preventive insecticide” (killing the beneficial insects) was included in the last herbicide application appear to be the fields most commonly over the threshold for Soybean Aphid. The economic threshold is 250 aphids per plant with 80% of the plants being infested and with populations increasing. Once the soybeans reach growth stage R 5.5, an insecticide application is not needed. If there is a seed 1/8 inch in diameter in a pod at one of the top two nodes with a fully expanded trifoliolate leaf on the main stem of the plant, the plant is about right at R 5.5. Aphid numbers usually crash on their own by mid-late August, although that did not happen last year.

An alternative for conventional scouting is to use the “speed scouting” method developed at the University of Minnesota. You only have to be able to count to 40 to use this method, but need to take a spreadsheet to the field to take notes and make a decision. You will most likely hit threshold with “speed scouting” before you actually hit the threshold using the conventional method. The data suggests that if you hit the threshold using the “speed scouting” method, there is an 82 per cent chance you will soon go over the threshold using the conventional scouting method. The following site describes the method and provides a link to download the spreadsheet.

[http://www.soybeans.umn.edu/crop/insects/aphid/aphid\\_sampling.htm](http://www.soybeans.umn.edu/crop/insects/aphid/aphid_sampling.htm)

Scouting techniques and management information can be found in SP 247, *Soybean Aphids in Iowa – 2007*, which can be downloaded from

<http://www.extension.iastate.edu/Pages/eccrops/transfer/07SBA.pdf>.

## White Mold

White mold is showing up in the northern part of the territory I cover. While white mold has first become evident this year during the last two weeks, the infections took place shortly after the beginning of flowering in late June. The infection itself is no longer spreading, but the evidence of the infection gives the appearance of the disease spreading as more plants show the symptoms of the disease.

The availability of fungicides for soybeans has raised many questions about their efficacy against white mold at this stage in the development of the disease. Domark is one fungicide labeled for white mold, but it should to be applied by R3 and before infection has occurred, so likely will have little benefit now.

The most important thing for growers to do at this time is to note the presence of white mold in the field and then select for varieties with lower susceptibility or higher tolerance for white mold the next time soybeans are grown in the field. Wider rows may help with white mold, but wide rows have other drawbacks. If the conditions are good for white mold infection (cold and wet) at the beginning of flowering, the application of an appropriate fungicide at that time may help. An application of Cobra at or just before the first bloom has also been shown to lessen the impact of white mold.

Another possibility is to try the biological control product “Contans WG.” It is composed of natural fungi that colonize the white mold fungus. It is not a quick fix, but in the long term may reduce white mold problems. A good time to apply the product is after harvesting the diseased crop so it has plenty of time to establish before the soybeans are planted again in the field. This University of Wisconsin publication contains some good information on white mold management, including biological control:

[http://www.plantpath.wisc.edu/soyhealth/pdf/whitemold\\_06.pdf](http://www.plantpath.wisc.edu/soyhealth/pdf/whitemold_06.pdf).

## **Soybean Sudden Death Syndrome**

Soybean Sudden Death Syndrome (SDS) is showing up in many fields again this year. It is commonly seen near field edges where there is extra soil compaction and in low areas that were wet this spring when the infection occurred. Brown Stem Rot (BSR) can cause leaf symptoms identical to SDS. See pages 70 – 72 of the March 26, 2007 Integrated Crop Management Newsletter or [http://www.ipm.iastate.edu/ipm/icm/2007/3-26/bsr\\_vs\\_sds.html](http://www.ipm.iastate.edu/ipm/icm/2007/3-26/bsr_vs_sds.html) for identification and management of SDS and BSR.

If the field has not been tested for Soybean Cyst Nematode (SCN), the presence of SDS in the field should prompt a soil test for SCN as SCN is usually present if SDS is present. The sample submission form and instructions for taking the sample are in PD-32 “Plant Nematode Sample Submission Form” which is available at Iowa State University Extension offices or can be downloaded from <http://www.extension.iastate.edu/Publications/PD32.pdf>.

## **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>

## **CORN**

### **Corn Leaf Aphids**

Corn leaf aphids are being found in fairly large numbers in some fields in NW Iowa. There are no known thresholds for corn leaf aphids on corn after pollination, however ISU has suggested the following guidelines or Action Threshold to trigger an insecticide application. “Aphids on or above the ear leaf, increasing in population heavy enough to leave noticeable honey dew on the leaves.” There are other aphids that are also found on corn, but soybean aphid is NOT one of them. For ID of these other aphids go to: <http://www.ianrpubs.unl.edu/epublic/live/g1284/build/g1284.pdf>

## 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, strip-tilling and planting on the contour using RTK guidance. The expo will feature field demonstrations and industry exhibits on the latest technology. More details will be available soon.

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