

Iowa State University Extension Information for Southeast Iowa

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CROP UPDATE 8/20/2009

SOYBEAN

Soybean Aphid Numbers Still Increasing

Soybean aphids have surpassed the economic threshold in many fields in the area now. It's always difficult to make a spray decision this time of year, because aphid populations should crash naturally soon, but will it be soon enough? 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 as likely to pay off, although some later applications did pay last year. 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.

One thing I am seeing is that in some fields the little white aphids (white dwarfs) make up 80-90% of the population, especially if the beans are near or at R5.5. This usually indicates that the aphids are nearing the end. Brain Lang reported that aphid numbers have leveled off this week in research plots in NE Iowa near Decorah (at over 2,000 per plant). Every field is different, so we need to continue scouting at least through the R5.5 stage and not go by the calendar date as to when to cut off spraying. Be sure to check harvest intervals on the labels.

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>.

Japanese Beetles

Although not as bad as last year, Japanese beetle populations are large in some soybean fields. The damage that these insects cause is not as bad as it looks. It takes 20% defoliation on the entire plant (not just the upper canopy) to justify treating. Most people tend to overestimate percent defoliation. 20% doesn't sound bad but it looks terrible. Look here for a picture of 20% defoliation <http://www.ipm.iastate.edu/ipm/icm/2002/7-29-2002/soydefoliation.html>.

Soybean Sudden Death Syndrome

Soybean Sudden Death Syndrome (SDS) is much more widespread this year than last. 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. Infection occurs in the spring under cool, wet conditions, so it tends to be more common in early planted beans, especially in a wet spring. It also tends to be found more in no-till (because of cooler soils), but I think where it is most common is in areas where there is soil compaction or poor drainage. Trying to reduce soil compaction and improve drainage are some ways to try to combat the problem in the future. 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 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>

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.

Special Session for CCAs at Precision Ag EXPO

CCAs and other ag professionals can earn CCA credits by attending a special session from 9:00-11:00 a.m. at the Precision Ag EXPO on Sept. 17. Hands-on training in adjusting tillage and planter equipment, and discussion on how auto steer and RTK technology have helped to make strip till a more viable option on eastern Iowa hills. 2 hours of soil and water credit. More details available soon.

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