Many fields are over the economic threshold of 250 aphids per plant (& 80% of plants infested) and spraying has been going strong. Some have seen aphid numbers decline recently in fields that haven't reached the threshold, so fields need to be scouted to determine whether an insecticide treatment is justified. The hot weather may be doing some good. Some studies have shown that soybean aphid's rate of reproduction slows with temperatures above 86°F and stops at 95°F. Heavy rains may reduce aphid numbers somewhat, but it is not likely that rains will solve the problem.

Many are seeing the small white aphids again this August. These are soybean aphids and are also causing damage, so should not be ignored. Don't confuse the shed white skins with the living aphids. And look closely to see if the majority of aphids are winged or have broad shoulders, which means they have wing pads and are going to form wings. If the majority are winged or are forming wings, they will leave the plant, and perhaps the field, and an insecticide application may not be necessary. Also, brown colored aphids are either dead or will soon die, so do not count them.

August is a critical month for soybeans so it’s important to protect those good potential yields out there, especially with the price of beans today. Brian Lang found substantial yield increases by spraying soybeans that were over the aphid threshold in 2005 even though the soybeans didn't show stress and were growing under good conditions. The average yield increase on 8 soybean varieties at the NE Iowa Research farm in 2005 was about 9 bu/A with an economic return of about $31/A.
How long will we need to scout and manage soybean aphids? In SP-247 “Soybean Aphids in Iowa” http://www.extension.iastate.edu/Publications/SP247X2007.pdf, page 9, it states that benefits from an insecticide application are reduced after growth stage R5.5. Because of the unusual rainfall this late summer, soybeans are continuing to flower later into the season than normal, so ISU is suggesting that you manage soybean aphids until growth stage R 6.0. To determine if your field has reached growth stage R6.0, examine several plants. One each, find the main stem and then find the uppermost node that has a fully expanded trifoliolate leaf. Examine the pods at that node and at the next three nodes down the stem. If any of the pods contain a green seed that fills the pod cavity, it has reached R6.0.

It is best to count all aphids on a few plants to get a feel for what 100 and 250 look like and then estimate from that point on. Another method of scouting developed at the University of Minnesota that can help to speed up the process can be found at http://www.soybeans.umn.edu/crop/insects/aphid/aphid_sampling.htm. Some insecticide trial results on aphids can be found at http://www.ipm.iastate.edu/ipm/icm/2006/1-23/insecticide.html. See the latest Iowa aphid information at http://www.ipm.iastate.edu/ipm/icm/2007/7-16/soybeanaphid.html.

Asian Soybean Rust

X.B. Yang now predicts that there is a greater than 50% chance that Iowa will see its first Asian soybean rust this year, but the good news is that if it arrives it will be late enough in the season that the impact will be minimal. Visit the USDA Soybean Rust website for more updates. http://www.sbrusa.net/

Soybean Sudden Death Syndrome

Soybean Sudden Death Syndrome (SDS) began to show up in some fields over three weeks ago and is becoming more evident as the season progresses. Fields that were flooded earlier in the season and fields south of Highway 92 seem to be most severely effected. While nothing can be done at this point for the 2007 crop, be sure that future soybean plantings are done with a variety that has as low a susceptibility to SDS as possible. Also, where there is SDS there is usually also soybean cyst nematode (SCN), so if the field has never been scouted / tested for SCN, it definitely should be. For more information on SDS, see pages 70 – 72 of the March 26, 2007 Integrated Crop Management (ICM) Newsletter or
For information on examining soybean roots for SCN see page 192 of the June 25, 2007 ICM Newsletter or [http://www.ipm.iastate.edu/ipm/icm/2007/6-25/scn.html](http://www.ipm.iastate.edu/ipm/icm/2007/6-25/scn.html), and for soil sampling for SCN, see page 246 of the October 9, 2006 ICM Newsletter or [http://www.ipm.iastate.edu/ipm/icm/2006/10-9/scn.html](http://www.ipm.iastate.edu/ipm/icm/2006/10-9/scn.html).

White Mold

White mold is also showing up in some soybean fields, especially those with a heavy white mold incidence in 2004 (corn-corn-soybean rotation). Nothing can be done for the 2007 crop, but the next time soybeans are planted in the field, plan to use good white mold management techniques. Information is available from the North Central Soybean Research Program at [http://www.planthealth.info/whitemold_basics.htm](http://www.planthealth.info/whitemold_basics.htm); be sure to use the links on the left side of the screen.

FOR YOUR CALENDAR

**Muscatine Island Research and Demonstration Farm Summer Field Day – August 14**

6:30 p.m.

Fruitland

Drip irrigation will be the emphasis of this field day. For more information see [http://www.extension.iastate.edu/Pages/eccrops/meetmusc.html](http://www.extension.iastate.edu/Pages/eccrops/meetmusc.html).

**Asian Soybean Rust First Detector Training – August 22**

9:30 a.m. – 3:30 p.m.

Fruitland

Individuals who have not gone through the Asian Soybean Rust First Detector training or First Detectors who would like a refresher should plan to attend one of the trainings during the week of August 20. The closest trainings are the ones in Muscatine on August 22 at the Muscatine Island Research and Demonstration Farm at Fruitland [http://www.extension.iastate.edu/Pages/eccrops/meetmusc.html](http://www.extension.iastate.edu/Pages/eccrops/meetmusc.html). Details are at [http://www.aep.iastate.edu/feel/rust.html](http://www.aep.iastate.edu/feel/rust.html).

**Fall Field Day SE Iowa Research Farm - Crawfordsville**

September 6, 2007 - 1:30 p.m.
Topics will include grain storage issues, grain marketing, low linolenic soybeans and other alternative crop opportunities, and managing extended diapause northern corn rootworms. Watch
http://www.extension.iastate.edu/Pages/eccrops/meetserc.html.

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