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Abstract
Soybean aphids continue to dominate the insect problems in Iowa's field crops during the last part of July. Five questions were recently posed to the extension field agronomists across the state regarding the current soybean aphid situation. These questions were: (1) When did spraying start for soybean aphids?; (2) Spraying is occurring in what counties?; (3) If spraying has not occurred, what are the population levels at across your area?; (4) Are Harmonia/multicolored Asian lady beetles occurring in the same fields as the aphids?; and (5) Any other observations that you want to provide would be appreciated.

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Extension agronomists update soybean aphid situation

by Marlin E. Rice and Matt O'Neal, Department of Entomology

Soybean aphids continue to dominate the insect problems in Iowa's field crops during the last part of July. Five questions were recently posed to the extension field agronomists across the state regarding the current soybean aphid situation. These questions were: (1) When did spraying start for soybean aphids?; (2) Spraying is occurring in what counties?; (3) If spraying has not occurred, what are the population levels at across your area?; (4) Are Harmonia/multicolored Asian lady beetles occurring in the same fields as the aphids?; and (5) Any other observations that you want to provide would be appreciated.

Their responses are given below. As a summary statement, soybean aphids have reached the economic threshold in some fields, but certainly not all fields, and some fields have been sprayed that probably did not need it. If fields have not been scouted for aphids, this is definitely the week to be walking the fields. For more information on economic thresholds and speed scouting, see the Integrated Crop Management article Soybean aphids exceed the economic threshold in northeast Iowa, July 9, 2007.

By using the 250 per plant threshold, growers can determine if aphid populations are at a level that will significantly reduce yield. Although some may ask why not use an insecticide regardless of the population, this is a prescription for insecticide resistance. Currently, growers have very powerful tools at their disposal to manage the soybean aphid. The judicious use of these products will maintain their usefulness into the future.

Mark Carlton, Albia:


Counties sprayed: I know of Jefferson, Mahaska, and Monroe counties.

Populations: Populations in many fields are now at 100-150 aphids per plant; 75 percent of the aphids on plants are very small. Colonies are primarily on the newest, expanded trifoliolate, and petiole.

Lady beetles: I have yet to see an Asian lady beetle, but I am seeing insidious flower bugs in many fields.

Other observations: Hot spots along field edges. I think many growers will begin spraying...
Monitor soybean aphid populations on PIPE
July 2, 2007
Soybean aphid numbers increase...and decrease
July 2, 2007
Early soybean aphid outbreak--to the east
June 11, 2007
Soybean aphids found in Minnesota and Wisconsin
June 4, 2007
PIPE: Pest Information Platform for Extension and Education
March 26, 2007
Purdue University identifies the #1 predator of soybean aphids
March 26, 2007

the economic threshold in northeast Iowa
July 9, 2007

George Cummins, Charles City:

Spraying started: We had occasional spiking of Roundup® with few aphids the week of July 9. Aphids started showing up that week in all counties (listed below) and numbers have gradually increased. We have had some hot spots reported (black sooty mold with numbers well above threshold) in Floyd, Butler, Black Hawk, and Cerro Gordo in <2 percent of a field. Spraying began the week of July 23 in all 11 counties even though most fields were under threshold. Many farmers are lining up to spray in the next two weeks but continuing to scout. North and west of Mason City it has remained drier and the soybeans are already stressed.

Counties sprayed: Black Hawk, Bremer, Butler, Cerro Gordo, Floyd, Franklin, Grundy, Hancock, Mitchell, Winnebago, Worth.

Lady beetles: Yes, but their numbers have not increased as rapidly as the aphids.

Other observations: Have had a number of calls where there are hot spots in part of the field (<2% of the field) and no aphids to be found in the rest of the field or very low numbers. Historically, there has been another major migration in early August. Where there is little moisture stress and aphid numbers are below threshold yet, I have been advising to continue to scout and delay a week or so if possible. We have an occasional field in Black Hawk, Bremer, and Butler that exceeds threshold for 1st-generation bean leaf beetles. Farmers/dealers use that as additional justification to spray aphids now. Some companies are promoting up to three weeks' residual and will give a free respray later on if needed.

Jim Fawcett, Iowa City:

Spraying started: Started July 25 as far as I know.

Counties sprayed: Jones County; possibly Benton and Linn counties as well.

Populations: Generally less than 20/plant south of I-80 where I don't think any spraying has been done yet.

Lady beetles: Asian lady beetles seem to be at fairly low levels.

Other observations: Spider mites also have been observed in some fields with aphids.

Kyle Jensen, Lewis:

Spraying started: Spraying very few fields.

Counties sprayed: Harrison and Pottawattamie; maybe more but haven't heard for sure.

Populations: Populations have just started taking off with the moisture and cooler temperatures that we have had, finding anywhere from 0-50 per plant normally. Did find a field that had a couple thousand on the plants for 50 yards on the edge then tapered back to about 100.
Lady beetles: Have not seen any lady beetles yet.

Other observations: Spider mites in areas with lots of white flies.

Paul Kassel, Spencer:

Spraying started: Spraying started in mid-July; some the week of July 9. Not sure how legitimate that early spraying was; I did not see the fields. Some farmers started adding Warrior®/other pyrethroids to their last glyphosate application during the week of July 16. I would say the real aphid spraying started the week of July 23.


Populations: I think the heaviest area for aphids is southern Clay County. Other areas appear to be hit or miss but still legitimate spraying.

Lady beetles: Just saw them this week, so fairly low levels.

Other observations: We had widespread rain on July 26. This did not appear to affect the populations that much in my observations, although some people seem to think that it did help.

John Holmes, Clarion:

Spraying started: July 23 along Highway 30; later that week in my area's north counties.

Counties sprayed: Boone, Hamilton, Hardin, Humboldt, Marshall, Story, Tama (?), Webster, and Wright.

Populations: Populations in northern counties are running 50-150 aphids per plant, but the borders are higher, so fields are getting sprayed.

Lady beetles: Yes, but at low levels.

Other observations: I believe spraying is warranted in some areas but not all. I know that in Wright County I had counts running from 25-235 aphids per plant in the field that I sample for the aphid survey. The average was 125 aphids per plant. I saw hardly any beneficial insects on the soybeans.

Brian Lang, Decorah:

Spraying started: Earliest fields to hit threshold were sprayed the second week of July. Most fields have been sprayed in the last two weeks.

Counties sprayed: All nine counties in my area: Allamakee, Winneshiek, and Clayton first, followed by Howard, Dubuque, followed by Delaware, Fayette, Buchanan, and Chickasaw.

Populations: In general, they are low but rising. In many fields, you have to look hard to find any. In other fields, there will be a plant here and there that has 1,000+ aphids and the rest will have none or 30-40.
Lady beetles: Yes.

Other observations: So far I have not run into any aphids south of Highway 92.

Mark Licht, Carroll:

Spraying started: A few fields were sprayed around July 19 or 20 but relatively few and mostly on the east side of my area.

Counties sprayed: Mostly in Calhoun, Carroll, Greene, and Sac. There have been a small number of acres sprayed in Crawford, Ida, and Monona counties.

Populations: Where spraying has not occurred, populations are rising from past weeks and are about 50-75 aphids per plant. Still below the Iowa State University economic threshold.

Lady beetles: Yes, but in lower numbers compared to bean leaf beetles and aphids.

Other observations: From my scouting and talking with co-op agronomists and crop consultants, there have been low populations and even in fields that have been sprayed, they have not reached the 250/plant threshold. But as producers have wanted to go on a worry-free vacation, they have sprayed prematurely, making for an expensive vacation if populations will not have been high enough for application or if they have to respray.

Virgil Schmitt, Muscatine:

Spraying started: It is still very spotty, but the first I was aware of in my area was about July 22.

Counties sprayed: Cedar, Clinton, Jackson, and Muscatine.

Populations: In general, they are low but rising. In many fields, you have to look hard to find any. In other fields, there will be a plant here and there that has 1,000+ aphids and the rest will have none or 30-40.

Lady beetles: Yes.

Other observations: So far I have not run into any aphids south of Highway 92.

Aaron Saeugling, Winterset:

Spraying started: Last week, we started to find aphid populations over 250 to start treating.

Counties sprayed: Dallas, Jasper, Madison, Marion, Polk, Poweshiek, and Warren counties.

Populations: I am only finding a few fields at threshold levels.

Lady beetles: I am seeing very few multicolored Asian lady beetles.

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