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Will You Need to Treat for Soybean Aphid This Year?

Erin W. Hodgson  
*Iowa State University, ewh@iastate.edu*

Matthew E. O'Neal  
*Iowa State University, oneal@iastate.edu*

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Abstract
As soybean fields enter seed set, growers are getting concerned about late-season soybean aphid infestations. So far, much of the state has experienced very low aphid populations. Some fields in northern Iowa exceeded the economic threshold and were treated last week. But in general, most fields have only patchy aphid colonies well below the threshold.

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Will You Need to Treat for Soybean Aphid This Year?

By Erin Hodgson and Matt O’Neal, Department of Entomology

As soybean fields enter seed set, growers are getting concerned about late-season soybean aphid infestations. So far, much of the state has experienced very low aphid populations. Some fields in northern Iowa exceeded the economic threshold and were treated last week. But in general, most fields have only patchy aphid colonies well below the threshold.

There is much evidence to show treating aphids when they exceed the economic threshold (250 aphids per plant with increasing populations on 80 percent of the plants) up to R5.5 will protect yield. But what happens if aphid populations are still increasing past seed set? This was the trend in 2008 when aphid populations were still increasing into September. So do late season insecticides financially make sense for managing soybean aphid? This is a difficult topic for us to discuss because of the lack of replicated data throughout the North Central Region.

A previous article in ICM News showed results from one small plot study at Nashua, Iowa. These data show a R6 treatment may not be worth it. Plants at R6 and beyond may be able to tolerate more aphids without experiencing yield loss. Unfortunately, we do not have a robust data set to help us make recommendations at R6 like we do for aphid outbreaks that occur during R1-R5. So as fields enter seed fill and begin to mature, consider the following factors before treating for soybean aphid regardless of plant stage. Are numbers going up and how fast? Careful field monitoring throughout the summer should give you an indication of the aphid trajectory. Is the value of the insecticide application worth its cost? Depending on the delivery method (ground or aerial) and product choice, control costs can exceed $15 per acre. Keep in mind treating with ground equipment after the canopy closes can reduce yield by one to two bushels per acre.

If you decide to treat for aphids, remember to use sufficient volume and pressure to make contact with aphids on the undersides of leaves and in the lower canopy. This is especially true for beans late in the season when canopies have closed. Whenever possible, leave a check strip so that you can evaluate the value and performance of your insecticide application at harvest.

Erin Hodgson is an assistant professor of entomology with extension and research responsibilities. She can be contacted by email at ewh@iastate.edu or phone 515-294-2847. Matt O’Neal is an assistant professor of entomology with teaching and research responsibilities. He can be reached at oneal@iastate.edu or 515-294-8622.