

9-19-2005

## Soybean aphid suction trap network up and running in Iowa

Matt O'Neal

Iowa State University, [oneal@iastate.edu](mailto:oneal@iastate.edu)

Follow this and additional works at: <http://lib.dr.iastate.edu/cropnews>



Part of the [Agriculture Commons](#), and the [Entomology Commons](#)

---

### Recommended Citation

O'Neal, Matt, "Soybean aphid suction trap network up and running in Iowa" (2005). *Integrated Crop Management News*. 2405.  
<http://lib.dr.iastate.edu/cropnews/2405>

**The Iowa State University Digital Repository provides access to Integrated Crop Management News for historical purposes only. Users are hereby notified that the content may be inaccurate, out of date, incomplete and/or may not meet the needs and requirements of the user. Users should make their own assessment of the information and whether it is suitable for their intended purpose. For current information on integrated crop management from Iowa State University Extension and Outreach, please visit <https://crops.extension.iastate.edu/>.**

---

## Soybean aphid suction trap network up and running in Iowa

### **Abstract**

Funding from the North Central Soybean Research Program and the North Central Integrated Pest Management (IPM) Center allowed the soybean entomology lab at Iowa State to establish four soybean aphid suction traps during the 2005 growing season. The traps are designed to capture soybean aphids as they migrate to new soybean fields or back to buckthorn, their overwintering host. The traps are composed of a 20-foot vertical tube with an electric fan at the base. The fan pulls air through the tube and deposits aphids into an alcohol-filled jar. The jar is replaced every week and the contents are sent to David Voegtlin at the Illinois Natural History Survey.

### **Disciplines**

Agriculture | Entomology



## Insects and Mites

# Soybean aphid suction trap network up and running in Iowa

by Matt O'Neal, Department of Entomology

Funding from the North Central Soybean Research Program and the North Central Integrated Pest Management (IPM) Center allowed the soybean entomology lab at Iowa State to establish four soybean aphid suction traps during the 2005 growing season. The traps are designed to capture soybean aphids as they migrate to new soybean fields or back to buckthorn, their overwintering host. The traps are composed of a 20-foot vertical tube with an electric fan at the base. The fan pulls air through the tube and deposits aphids into an alcohol-filled jar. The jar is replaced every week and the contents are sent to David Voegtlin at the Illinois Natural History Survey.

Voegtlin is an aphid taxonomist and the coordinator of this multi-state suction trap network. Each week, from May through October, Voegtlin and his crew sort through the contents of 20+ traps located across the North Central region. Not only does he count the number of soybean aphids per trap and determine their sexual morphology, he also identifies potentially hundreds of aphid species collected within these traps. To draw inferences regarding the potential overwintering success of soybean aphids,

Voegtlin will determine the number of winged males and females collected each week. It is these sexually reproducing males and females that produce eggs that overwinter on buckthorn.

Based on their density, we can make some predictions about the likely overwintering success of soybean aphids from year to year. We will keep you informed of the suction traps' progress as these estimates come in. To see the current results and location of each trap, visit the following Web site at [www.ncipmc.org/traps/](http://www.ncipmc.org/traps/).



**Soybean aphids lay eggs that overwinter on buckthorn.**  
(Marlin E. Rice)



**These soybean aphid suction traps in Boone County are composed of a 20-foot vertical tube with an electric fan at the base. The fan pulls air through the tube and deposits aphids into an alcohol-filled jar.** (Matt O'Neal)

*Matt O'Neal is an assistant professor of entomology with research and extension responsibilities for pest management in soybeans.*