

# A multi-pronged attack on soybean aphids

## Biological control, aphid-resistant varieties and aphid tracking systems

**NCSRP**



**NORTH CENTRAL SOYBEAN RESEARCH PROGRAM**

*The North Central Soybean Research Program (NCSRP) is comprised of state soybean checkoff boards in Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota and Wisconsin. Established in 1992 to coordinate soybean production research efforts on a regional level, NCSRP invests soybean checkoff funds in research programs to better understand and manage soybean pests and diseases.*



[www.planthealth.info](http://www.planthealth.info)

*For more information or to order copies of this soybean aphid research update, contact David Wright at 800-383-1423.*

*Special thank you to our insert print publication sponsor: Warrior with Zeon Technology® insecticide. Are You Ready to Fight Soybean Aphids?*

*Cover photo courtesy of Roy Scott, SDSU.*



© 2008 North Central Soybean Research Program

Every initiative at the North Central Soybean Research Program has the same goal: helping producers improve their profitability.

That's why checkoff-funded researchers spent years tracking down and studying *Binodoxys communis*, an exotic natural parasitoid from Asia that was released throughout the North Central region in 2007. This tiny, stingless wasp effectively controls soybean aphids in China, and we're hoping it'll do the same for U.S. soybean growers.

If *Binodoxys* establishes itself here and helps keep aphid numbers low, it also may lower the number of insecticide applications needed. This is a classic case of natural biocontrol, and if it works, it'll be one of the most successful in history.

In another area, thanks to checkoff support for germplasm screening at public institutions, aphid-resistant soybean varieties are on the way. Several universities are developing resistant lines, using different genetic sources of resistance. The more

resistant sources there are, the tougher it will be for aphids to overcome them.

Checkoff dollars helped build the suction trap network that tracks aphid migrations and populations, as well as the Sentinel Plot Program, an early-warning system for rust and aphids.

NCSRP also funded research on soybean aphids' native natural predators and treatment thresholds so growers know when to spray and when to hold off calling the custom applicator.

From biocontrol and genetic resistance to early warning systems and treatment recommendations, your checkoff dollars cover a lot of ground when it comes to helping you manage aphids. That's your soybean checkoff. Delivering results.



**Jerry Wyse**  
NCSRP President  
Haven, KS

### Table of Contents

Aphid enemies from Asia . . . . .	3
When soybean plants are good aphid hosts . . . . .	5
Increase in native parasitoids . . . . .	6
New guide identifies beneficial insects. . . . .	7
Monitoring aphids via the suction trap network . . . . .	8
Growers can track aphids online through the IPM PIPE. . . . .	9
Aphid-resistant varieties coming soon. . . . .	
Revisiting the 250 treatment threshold. . . . .	10