

Better pest management helped producers reduce pesticides and save money on \$184 million Wisconsin soybean crop

Soybean producers and agricultural professionals who participated in University of Wisconsin-Extension Pest Management Education programs bettered their practices for managing the soybean aphid. By improving control of the pest while minimizing use of chemical pesticides, these farmers minimized crop damage, saved time and money and protected the environment.

Situation:

Soybean aphids first appeared in Wisconsin and the U.S. in 2000, posing a serious threat to a crop that is increasingly important to the state's agricultural economy. Between 1985 and 2001, the number of acres in production increased from 300,000 to 1.5 million; bushels produced soared from 9.6 million to 59 million, and cash receipts increased from \$46.5 million to \$184 million. By 2001, Wisconsin ranked 13th out of 50 states in overall production.

Response:

University of Wisconsin researchers have rapidly developed management information on the soybean aphid pest. UW-Extension delivers this field crop pest information through Pest Management Update (PMU) meetings, the Wisconsin Crop Manager newsletter and Extension publications.

In November 2002, more than 650 producers, crop consultants, agricultural cooperative agronomists, agricultural agents, industry representatives and vocational, technical, agricultural education (VTAE) instructors attended pest management update meetings held in eight locations around Wisconsin. Half of those who completed registration forms had attended pest management update meetings for more than nine years. Of those who gave feedback, 83 percent read the Wisconsin Crop Manager in 2002.

Impacts:

As a consequence of UW-Extension educational programs, 44 percent of soybean growers responding to an evaluation survey said they changed a practice related to the soybean aphid based on university information. Many changed the timing of planting to minimize potential damage, increased the intensity of scouting and used thresholds. Thresholds are guidelines of how many or the level of pests a crop can sustain before pesticides are needed or are economical. By counting the number of insects they found on sample plants, farmers were able to avoid spraying when the cost of applying pesticides would be greater than the losses due to insect damage.

Success stories:

People responding to an evaluation of Pest Management Education programs provided strong evidence that these programs made a positive difference in production practices:

“I was better able to identify aphids and assist with decision-making.” VTAE instructor, Sparta

“Pest Management Update made farmers aware of when to scout, what it [aphid] looked like, the method for counting and the threshold level.” VTAE instructor, Wausau

“Scouted more, did more counts for determining threshold.” Crop consultant, Wausau

“I’ll make more of an effort to prevent herbicide resistance.” Producer, Chippewa

“I will be able to help improve farmers’ management techniques because of what I have heard; will look at different chemistries for weed control in 2003.” Crop consultant and coop agronomist, Arlington

“I used better choices for chemical control and scouted more effectively.” Coop agronomist, Janesville

“Confirmed my belief that Asian ladybird beetle is helpful in controlling soybean aphid.” Coop agronomist, Janesville

“Planned to treat in late July this year, but based on scouting and pest management meetings, decided not to and was happy with the decision.” Producer, Janesville

Contact: David W. Fischer, UW-Extension, Dane County Crops/Soils Agent;
Phone: (608) 224-3716; E-mail: david.fischer@ces.uwex.edu

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