

2006 Impact Evaluation Report to the Western IPM Center iSNAP Climate and Weather in Pest Management Workshops

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Executive Summary

Grower workshops that focused on using weather and climate information in pest management decision making were held in LaGrande and Toppenish in February 2006. Approximately five months after the workshops were completed a follow-up evaluation was conducted. The purpose of this evaluation was to determine how durable the workshops were in impacting participant behavior. Overall, the findings showed that the workshops were successful in supporting changes in participant actions. The outcome-based education design and committed team members enable the iSNAP Project to create meaningful and locally-adapted educational opportunities.

Methods

The follow-up evaluation was conducted by mail using the Tailored Design Method (Dillman, 2000) five months after the two grower workshops. Twenty-nine workshop participants with complete mailing addresses were sent a pre-letter announcing the survey was coming. A week later the survey was sent along with a letter, a 10 dollar cash incentive, and a stamped return envelope. Three weeks after the pre-letter was sent a thank you/reminder card was sent. Five weeks after the pre-letter went out a second survey was sent to those that had not yet responded. Twenty-three completed surveys were returned, resulting in a 79 percent response rate.

Findings

Pre-season planning activities

Seventy-three percent of those surveyed said they have sought or intend to seek more information on options to reduce off-target pesticide losses as a result of attending the workshop (Table 1). Almost three-quarters (n = 17) considered sensitive sites before applying pesticides. One-third of the respondents have installed buffers, one-third is considering it and one-third do not intend to install vegetative buffers on their farms.

During the cropping season activities

Over half (61 percent) of the respondents indicated that since the workshop they have used or intend to use online weather forecasts to make a pesticide application decision for the week ahead. Another encouraging finding is since the workshops 87 percent of the participants have adjusted their spray equipment to reduce drift. Ten of the 23 respondents are considering the purchase of drift reducing nozzles as well as equipment to measure wind speed, wind direction and humidity. Almost two-thirds (65 percent) of the respondents intend to or are considering contacting NRCS about cost-share or other support programs.



Increasing the likelihood of IPM activities

For this group of growers educational programs were most often (47 times) and consistently cited as a means of increasing the likelihood that they would implement more IPM practices on their farms (Table 2). The second most useful method for overcoming barriers to implementing IPM practices is access to “How-to” publications (cited 22 times). Reducing expenses (cited 16 times) was third most common way to increase adoption, followed closely by online information (cited 13 times).

Table 1. Participant behaviors five months after iSNAP workshops (n = 23).

Planning Activities	Have done	Intend to	Considering it	Don't intend to
<u>Before the cropping season:</u>				
a. Seek more information on options to reduce off-target pesticide losses	7	9	4	2
b. Consider sensitive sites on your farm before you apply pesticides	17	3	1	2
c. Install vegetative buffers to reduce off-site pesticide losses	7	0	7	7
d. Develop a pesticide drift management plan	14	2	4	3
<u>During the cropping season:</u>				
e. Use online weather forecasts to make a pesticide application timing decision for the week ahead	11	3	5	4
f. Buy equipment to measure wind speed, wind direction and humidity on your farm	9	0	10	4
g. Adjust your spray equipment to reduce drift potential	11	9	0	3
h. Purchase drift reducing nozzles	5	1	10	6
i. Contact NRCS about cost-share or others support programs	0	3	10	7

Other participant intentions:

Use websites mentioned at workshop for record keeping.

Spray when calm wind.

Don't spray pesticides that would hurt nearby crops.

Table 2. Participant preferences for increasing the likelihood of adopting IPM practices (n = 17).

Planning Activities	Reduced expense	Technical assistance	Educational programs	Online information	“How-to” publications
<u>Before the cropping season:</u>					
a. Seek more information on options to reduce off-target pesticide losses	3	0	7	3	6
b. Consider sensitive sites on your farm before you apply pesticides	0	0	7	2	2
c. Install vegetative buffers to reduce off-site pesticide losses	0	2	5	1	1
d. Develop a pesticide drift management plan	1	0	7	2	3
<u>During the cropping season:</u>					
e. Use online weather forecasts to make a pesticide application timing decision for the week ahead	0	0	5	4	2
f. Buy equipment to measure wind speed, wind direction and humidity on your farm	7	2	5	1	2
g. Adjust your spray equipment to reduce drift potential	0	0	5	0	3
h. Purchase drift reducing nozzles	5	0	6	0	3

Participant suggestions and feedback:

Session was great and professionally done but we aren't big time producers. What I got out of the class was where to find internet sites for weather, etc.

Your workshop was very informative. As commercial applicators, we are always looking for ways to do a better job of what we do. With new studies and technology always coming along, we hope you keep up the good work of informing people. It was a well put together program.

I am a crop consultant and I also do field research. I use the on-line weather data that I learned about, at this meeting, a lot to help me apply my experiments when the weather is right. As I consult with growers I use many things I learned in this meeting with the growers I work for. This was a very professional and informative meeting. The people giving the presentations were very knowledgeable. I liked getting to meet them and so I can use them as a resource in the future if I have more questions.

The workshop showed me some new ways to help in my spray program and some future considerations.

Common sense and reacting to conditions is still the best drift management plan. If conditions aren't right, don't spray, you must react to the situation as it changes.

Your presentation was very helpful. I already know most of what was taught, but hearing it presented by experts helped me to know I was on the right track.

I think your work/study is great. I hope there is a follow up and/or continuation. Thanks for the opportunity.

References

Dillman, D.A. 2000. Mail and Internet Surveys: The Tailored Design Method. 2nd ed. John Wiley and Sons, New York.

Evaluation Dates

At-event evaluation conducted in mid-February 2006

Pre-letter sent July 7, 2006

Letter, incentive and questionnaire sent July 12, 2006

Thank you/reminder sent July 26, 2006

Second questionnaire sent August 9, 2006