



Pesticide safety education in the Treasure Valley

The Situation

In Idaho, users of restricted use pesticides (RUP) are required by law to obtain a private or professional pesticide applicators license before they can apply these materials. A RUP is a pesticide that is available for purchase and use only by certified pesticide applicators or persons under their direct supervision. The RUP designation is assigned to a pesticide product because of its relatively high degree of potential human and/or environmental hazard if used incorrectly. Pesticide applicator licenses are administered by the Idaho State Department of Agriculture (ISDA).

To obtain a private or professional applicators license, applicants must pass examinations to show they have adequate knowledge and prove a core competency level for the type of pesticide application that he or she intends to perform. University of Idaho Extension and ISDA work collaboratively to develop and implement educational programs to prepare applicants for taking these examinations. Once a license is obtained, we are assured the person applying restricted use pesticides is knowledgeable and qualified to apply these materials in a safe manner.

Our Response

Every other year in early spring, University of Idaho Extension and ISDA personnel host a three day pre-license pesticide safety education class in Caldwell. Participants in the class include farmers and farmworkers, agricultural and landscape industry workers and government workers.

Topics in the curriculum for the training include:

- Pesticide Formulations
- Pesticide Labels and Safety
- Pesticide Fate in the Environment

- Weeds and their Control
- Pesticide Use Recordkeeping
- Insect Pests and their Control
- Pesticide Storage and Spill Management
- Groundwater Quality Issues
- Plant Diseases and their Control
- Spray Equipment Calibration

The curriculum is delivered the first two days of the class. The third day of the class consists of a half day review period followed by the examinations. The greatest benefit for those who attend this class is that they are generally more successful at passing the examinations versus those who do not attend a pre-license pesticide safety education class. A survey conducted at the University of Missouri in 2002 indicated that the overall success rate of examination takers was higher for those attending a class, especially when the class attendees also studied outside of class time.

Program Outcomes

A TurningPoint audience response system was used along with several of the PowerPoint presentations as part of the March 2009 pesticide safety class. TurningPoint systems utilize remote audience cards that allows for immediate audience feedback. The presenters can determine in real-time, whether the audience understood the material they were teaching. If the audience did not understand a certain subject, the presenter can review that material immediately to be sure class participants understand the subject matter, subsequently helping them to be more knowledgeable of the core pesticide safety materials. The response cards are used again during the review ses-

sion to deliver practice quizzes. The authors believe the use of TurningPoint contributed to the higher percentage of participants that passed the examinations this year.

The March 2009 pesticide safety education class was attended by 39 people from all over southwest Idaho. Examinations were given in the following nine categories: Law and Safety, Agricultural Herbicide, Agricultural Insecticide, Ornamental Herbicide, Right of Way, Aquatic Pest, Chemigation, Restricted Use and Statewide Consultant. Fifty-eight examinations were given with an overall pass rate of 78 percent. The overall pass rates in 2003 and 2007 respectively, when TurningPoint was not used, were 68 and 53 percent. The pass rate for people that do not attend a pesticide safety class before taking the examinations averages 55 percent. Every examination category, except one showed above average pass rates.

References

Fishel, Fred. 2008. Does the University of Missouri Extension Educational Program for Aspiring Certified Pesticide Applicators Assist Them in Passing the General Standards Exam? *Journal of Extension*. May 13, 2009 from: <http://www.joe.org/joe/2008august/tt7.shtml>.

TurningPoint homepage. <http://www.turningtechnologies.com>, May 13, 2009.

Cooperators and Co-Sponsors

Jerry Neufeld, UI Extension, Canyon County
Ronda Hirnyck, UI Extension, Pesticide Program Coordinator
Steve Reddy, UI Extension, Washington County
Sherman Takatori, Idaho State Department of Agriculture

FOR MORE INFORMATION

Jerry Neufeld, Extension Educator
University of Idaho Extension, Canyon County
501 Main Street
PO Box 1058
Caldwell, ID 83605
Phone: 208.459.6003
Fax: 208.454.6349
E-mail: jerryn@uidaho.edu

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