

Hands-on Pesticide Handler Training for the Tree Fruit Industry in the Mid-Columbia Region of Oregon and Washington

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Rationale/Need

Tree fruit production requires intensive pest management programs which may include multiple pesticide applications each growing season. Producers often employ non-licensed Hispanic workers to assist with pesticide applications or other pesticide handler activities. These workers have been identified as the most vulnerable to pesticide exposure. For producers, providing adequate training to pesticide handlers is often challenging due to language barriers and differences in learning styles.

Training Program Description

A one-day training program was conducted in January, 2006 at the OSU-MCAREC in Hood River for Spanish-speaking pesticide handlers working in the Mid-Columbia tree fruit industry. Four training modules (PPE, Respiratory Protection, Mixing/loading, Clean Up) were conducted in small groups by the WSDA Farmworker Education Program training staff. Interactive, hands-on learning activities were used to facilitate effective learning. Because of the intensive nature of the training with a high trainer to trainee ratio, the program was limited to forty participants. Twenty-one producer-employers from Hood River and Wasco Counties, OR and Klickitat and Skamania Counties, WA each sponsored one to five trainees, paying the registration fee (\$35) and allowing them to attend during a work day.



PPE module



Mixing/loading module



Clean up module

Evaluation/Impact

A pre/post self-assessment of trainee level of knowledge conducted at the beginning/end of the training indicated increased knowledge in all five topics covered during the training (Figure 1). An identical assessment conducted seven months post-training showed that knowledge levels were still higher than pre-training levels, although they had dipped from post-training levels.

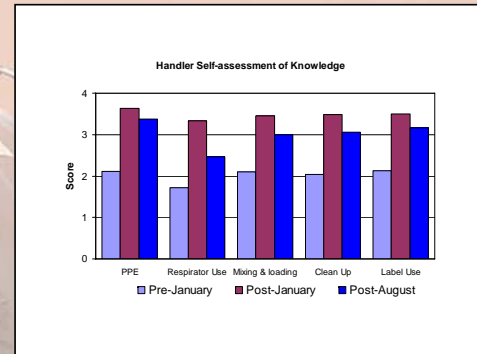


Figure 1. Results of trainee self-assessment of knowledge before the training (Pre-January), immediately after the training (Post-January), and seven months after the training (Post-August).



Follow-up evaluation with trainees

To assess changes in handler knowledge and behavior from their employer's perspective, a telephone survey of the producer-employers was conducted seven months post-training. Among survey respondents, 100% replied affirmatively* when asked if following the training, the trainee(s) they sponsored:

- had increased knowledge of practices for safe and effective handling of pesticides
- demonstrated improved skills for safe and effective handling of pesticides

When producers were asked if the training provided an opportunity to improve the skills of their employee(s), 100% responded affirmatively.

*Using a four-point Likert scale (0=strongly disagree, 1=disagree, 2=agree, 3=strongly agree), affirmative responses included agree and strongly agree.

Discussion/Conclusions

This program provided a valued and effective training opportunity for Hispanic pesticide handlers and their producer-employers in the Mid-Columbia area. Conducting this training was only possible with the participation of the WSDA training team and is currently limited in Oregon to the Mid-Columbia area. We intend to repeat this training program in the Mid-Columbia area and develop the capacity to conduct hands-on training at other locations within Oregon.

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'I hear and I forget. I see and I remember. I do and I understand.'

Confucius

