

EVALUATION OF IPM ONLINE COURSES



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As with most in Extension, the University of California Statewide Integrated Pest Management Program (UC IPM) extends science-based information via in-person meetings. In 2011, UC IPM delved into online courses with the goal of expanding our reach without losing the interactivity that can occur at in-person meetings and field days. Ten years later, UC IPM has 24 online courses. In 2020, online courses were taken 8,505 times and UC IPM reported 8,250 continuing education hours. Evaluations from UC IPM's online course participants show that these courses facilitate the adoption of IPM.

ONLINE COURSE FEEDBACK

Collect immediate feedback from participants who finished your online course. An online survey is a good way to get immediate feedback from participants. In addition to assessing how to make the course better, also ask about knowledge or skills gained and what they anticipate they will do differently now that they've got this knowledge or these skills.

Follow up with your online course participants a few months after they take the course. Use this assessment to see if anticipated actions right after taking the online course turned into reality. What did the participants do differently because of the online course? UC IPM uses a follow up survey. Our response rate is only OK. We are contemplating how to encourage people to respond.

Use the feedback to improve the online course. UC IPM focuses on importance of the content to the participant, what's missing, and the participant's satisfaction, ease of use, understanding of the content, perceptions of course activities, assessment of the course pace, and engagement level.

93% (2484 responses) agreed and strongly agreed that their knowledge of the subject increased

91% (2485 responses) agreed and strongly agreed that the course was important to their work

92% (2482 responses) agreed and strongly agreed that they will be able to apply what they learned

96% (865 responses) agreed and strongly agreed that the course learning objectives were met

ADOPTION OF IPM FROM ONLINE COURSE LEARNING

Take my time when scouting as I now [am] more knowledgeable as to what I'm looking for.

By adding barrier treatments I was able to reduce the frequency of foliar spraying.

Timing based on day degrees

I provide annual pesticide safety training to our ... preserve managers. I revised our course instruction (on this topic)..

I no longer use food containers to store chemical.

altered gopher control program to eliminate use of poisons due to proximity to school & prison

suggest that all equipment be tracked and maintained more efficiently

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Behavior changes after taking a UC IPM online course

IPM TOOLS
n=15

BETTER OR TIMED APPLICATION
n=22

READY TO ACT
n=23

SHARED WITH OTHERS
n=9

BETTER OR TIMED MONITORING
n=17

DIFFERENT PEST MANAGEMENT CHOICES
n=22

PREVENTION
n=4

IPM
n=10

A follow-up survey was sent to participants 3 to 6 months after the online course was completed. For all courses, 66% of the respondents (241 responses) frequently put what they learned into practice or did so all the time. Qualitative feedback was categorized and the amount of feedback (n) within a category most likely depends on the kinds of courses UC IPM provides (i.e., the large focus on IPM tools was because we have several courses focused on personal protective equipment (PPE) and calibration).

The biggest behavior change reported was readiness to act, which included an increased confidence to use IPM practices. Pesticides or other pest management practices such as traps or baits were mentioned to be put out at optimum times or spot applied for successful pest management. Online course participants also said they made different choices with pesticides (using a targeted pesticide versus broad spectrum) or choosing cultural or mechanical control methods instead of pesticides. Another behavior change was more, better, or better-timed monitoring. The IPM tools category contained changes for the maintenance of pest management tools, better PPE choices, and improved PPE care. Behaviors mentioned less frequently included unspecified changes (e.g., "changed pest management"), sharing what was learned with others, and prevention practices like roguing or keeping records of pest management activities.