North Central Consumer Horticulture Integrated Pest Management (IPM)

The North Central Consumer Horticulture IPM Working Group harnessed the power of the internet to reach gardeners, including Extension Master Gardeners and garden center employees, in the United States and Canada with several webinars which were then enhanced into learning modules promoting IPM.

One online module, Process of Diagnosing Plant Problems, teaches the participant how to determine what is wrong with a plant through a series of questions and Extension resources. This step-by-step process is often a roadblock for Extension Master Gardeners as they help homeowners to diagnose what is wrong with their plants. Focusing on the process itself was a new approach to teaching.

The goal of the Working Group was to give Extension Master Gardeners training to equip them to answer questions about pests and pest control using IPM. Webinars, followed by online self-paced learning modules, included the best growing practices for the most popular topics for home gardeners such as small fruits (raspberries and blackberries), shade trees, cucurbits (squash and pumpkins) and tomatoes. According to the post webinar evaluations, most participants had little knowledge of IPM prior to participation and gained significant IPM information from the webinars.

The training modules uses quizzes to confirm the trainee has retained the concepts.

One of the training modules is Growing Apples with IPM.
In all, nine webinars were conducted over either Adobe Connect or the eXtension webinar platform. The learning modules were created using Moodle software which interfaces with eXtension and allows developers to collect data and aids with analytics. Each learning module is interactive, self-paced and includes videos and quizzes. Originally participants paid $10 for the learning modules, but this fee was removed and now anyone who signs up with a login to eXtension can take any of the nine modules.

Another important outcome of the working group has been presenting the impacts of the webinar trainings at national conferences and promoting the online learning modules which facilitates networking among stakeholders across the USDA regions.

The Consumer Hort Working Group had approximately 20 members from throughout the North Central region. They held face-to-face meetings as well as conference calls. “The working group collaborated across states lines and worked well as a team,” said Mary Meyer, professor and Extension horticulturist at University of Minnesota, who was the lead. The working group also shared their programmatic ideas with working groups in the North Central region as well as other IPM regions.

Professor Meyer noted that as Extension operates with fewer people, Extension Master Gardeners appreciate advanced training so they can give accurate advice and information to gardeners with problems and questions. Additionally, these webinars and online modules helped avoid duplication of work within states in the North Central region. With the working group collaboration, Extension staff could devote their time to more pressing local needs and take advantage of these IPM webinars and learning modules.

The foundation for the working group was a survey of Master Gardeners to gauge their level of IPM knowledge and what tools would be most beneficial. A total of 3,842 Master Gardeners completed the survey. This work was published in a peer-reviewed publication and used to develop curriculum materials. To further provide IPM resources, the working group reviewed consumer horticulture and IPM websites and other resources and listed them on the eXtension website under Gardens, Lawns and Landscapes.

Extension Master Gardeners can take advantage of the training and resources to improve their skill set at identifying diseases and insect pressures and be poised to recommend IPM practices.