Training Activities – Hands-On Demonstrations to Go along with IPM Presentation

1. Cool IPM Tools for Pest Management

Objective:

*Become familiar with various tools to help manage common pests around the home and garden.*

Materials:

- Box of tools
- Pest Notes
- Quick Tips
- Photos
- Other publications

What to do:

Before the session, gather together many tools that can be used to manage common home and garden pests. Refer to the Cool Tools worksheet (see file CoolTools.xls) for various suggested tools used to control 5 common pest groups: honeydew producers, ants, snails and slugs, weeds, and gophers and ground squirrels. Bring along Pest Notes, Quick tips, photos printed off from Pest Notes on UC IPM website, and other publications that provide information on pest biology, damage, and management. Divide the tools and associated printed material into “toolboxes.”

During the session, divide the participants into groups and give each a pest or pest group and a “toolbox” containing items associated with management of that pest. Each group should review the materials in their toolbox and work together to come up with a short skit or presentation on how to use the tools.

Hand out copies of the Cool Tools Worksheet to participants at the end of the session.
2. Natural enemies

Objectives:

1. Identify common natural enemies of various pest groups.
2. Understand the difference between predators, parasites, and pathogens.
3. Understand the difference between generalized and specialized predators.
4. Recognize parasitized aphids, scales, whiteflies.
5. Understand ways to encourage natural enemy activity.

Materials:

- Hand lens or microscopes
- Samples of live or dead natural enemy species or good color photos. Good places to look for natural enemies include plants, such as roses, with lots of aphids. Live natural enemies can also be ordered from beneficial suppliers such as www.rinconvitova.com. Find good printable photos in the online natural enemy gallery at http://www.ipm.ucdavis.edu/PMG/NE/index.html.
- Copy of Natural Enemies Handbook

What to do:

Before the session, collect various natural enemy species, including general predators as well as specialized predators of various pest groups such as honeydew producers, caterpillars, or spider mites. Also bring parasites of the various pest groups and samples of parasitized caterpillars, scales, whiteflies, and aphids. Show the group the samples of natural enemies and have them identify the species and note if they are predators or parasites, generalized or specialized. If specialized, ask what pest group they attack. Have the group look at samples of parasitized insects.

If you have a microscope, put aphids and a natural enemy in a Petri dish and let participants watch them feed.

Collect aphid mummies several days before hand. Put them in a jar and wait for wasps to emerge. On the day of the presentation, put them in a covered Petri dish with aphids to see if they “sting” or lay eggs in them.

Ask the group how to encourage natural enemy activity. Be sure to emphasize managing ants, choosing plants that provide nectar, and shelter, and eliminating insecticide applications or choosing pesticides that don’t harm natural enemies.