ask ? us

About Pests

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Q What's the best way to control ants?

A Ants can be quite a problem in the ornamental industry. Ants treat some of the homopterous insects (aphids, mealybugs, psyllids, soft scales, etc.) like cattle are treated at a dairy. They move them and milk them and, unfortunately, they also protect them from harm. I have seen ants tending aphids and mealybugs in many different ornamental situations. I've also seen local fire ants (not the red imported) in the University of California Riverside's (UCR) greenhouses colonize in pots infested with mealybugs.

There are a number of ways to rid the ants so you can more easily rid the homopteran insect. A common method that is effective but not very efficient is to lay down barrier treatments of pesticide, typically a pyrethroid. The application is made to the border of the affected area so the foraging ants do not invade. The barrier will need reapplication every 2-4 weeks to keep the ants repelled.

In greenhouses where plants are on benches, a simple method of exclusion is to put Tanglefoot sticky trap material around bench legs. It's effective but requires some maintenance. The Tanglefoot needs to be reapplied when it becomes covered with dirt and dust. Another unfortunate consequence is it can be messy. I've gotten my pants coated a few times; it's not fun.

Ants are amazing in their ability to find an alternate route onto benches. At UCR, we have a film of ants moving from a tree branch onto the roof of a building. As the branch sways in the breeze, it touches the roof, allowing the ants to move back and forth from the roof to the branch and vice versa.

Most of the methods I've mentioned so far only handle foraging ants, which will have a minimal effect on the colony. The most effective method of handling ants is to bait for the colony and queen(s). There are a number of good baits on the market right now. The goal is to bait the ants for a period of time with a sub-lethal dose of insecticide, and the ants will not be hindered from taking and feeding it to the entire colony, hatchlings to queen. In time, the entire colony including the queen will have acquired a lethal dose. Once the queen is gone, the colony dies.

The first thing to note is what ant species is infesting your facility. Different ant species require different types of food, carbohydrates, fats and protein, and they may require them at different times of the year. For example, Argentine ants are attracted to sweet baits year round, but protein baits can be attractive primarily in the spring because they are brought back to the colony to feed the developing brood. Fire ants usually prefer baits containing oils.

Baits are available in several different forms. They can be solids or liquids placed in stakes or small plastic bait station containers. Reusable bait stations can be opened, checked and refilled as needed. Gel formulations are also available and are packaged in small tubes. Ant baits contain carbohydrates, proteins, oils or some combination of these as attractants along with an insecticide. Optimally, offering several types of bait at the same time will cover all bases.

The following Web site has information about the most common ant pests and what they like to eat so you can select appropriate bait. In addition, the site lists common pesticides in bait form and their compositions: www.ipm.ucdavis.edu/PMG/PESTNOTES/pn7411.html .

Q How can I control grasshoppers?

A Since I have been asked this question twice recently by two widely different audiences, I thought I'd answer it. Grasshoppers are usually susceptible to pesticides, especially the broad-spectrum pesticides like malathion. However, both audiences requested an alternative.

Some organic products like Pyrellin (pyrethrins + rotenone) may be repellant and toxic. Another commercially available alternative is called NoLo Bait. It is Nosema locustae, a naturally occurring protozoan that causes disease and death in crickets and grasshoppers. Spores of the protozoan are impregnated into wheat bran flakes and control more than 90 species of grasshoppers, locusts and mormon crickets.

Do you have a question for our panel of experts? Send your disease, pest or growth-control questions to the appropriate person, and look for the answer in an upcoming issue of GPN.

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