Penn State Extension

PA IPM FACT SHEET SERIES

Got Ants? Eliminate Ants with IPM

What Is IPM?

Integrated pest management (IPM) uses information about the pest in order to choose methods of control that are safest and most effective. IPM methods include pest prevention, exclusion, and nonchemical tools first. If chemical pesticides are needed, products are chosen that pose the least risk to human health. With IPM, you start by asking, "Why is this pest here?" and try to remove the conditions allowing the pest to enter and live. This approach solves pest problems rather than just treating the symptoms. It also reduces the need to use pesticides repeatedly.

Why Use IPM for Ants?

- Less hazardous to human health
- More likely to give long-term control
- Easier to carry out safely and effectively
- More cost effective
- Less toxic to nontarget organisms

Steps to Managing Ants

Step 1: Pest Identification

Detecting and positively identifying the ants will help you decide on a plan of action. It can also help determine how severe the problem is. Ants, like bees, are social insects with a queen and workers. Their nests are usually outdoors in the ground. Nuisance ants enter the home by following a chemical trail to the food found there by a nestmate.



The **carpenter ant** is $\frac{4}{2}$ inch long, shiny, dark brown to black, can be destructive to homes, and requires different tactics from household nuisance ants. The **pavement ant** is $\frac{1}{10-\frac{1}{6}}$ inch long, light to dark brown, and one of many species of small nuisance ants that occasionally invade homes.



Step 2: Prevention

The first step in preventing problems with ants is eliminating what is attracting them, usually food and water. By eliminating these attractants you can get long-term control and avoid the need to repeatedly use pesticides, which generally provide only short-term results.

- Prevent ants from entering your home by sealing off all cracks and crevices around windows, doors, and pipes with caulking.
- Eliminate sources of food and water—repair water leaks, clean up all spills and crumbs, and don't let snacks or pet food sit out.

Step 3: Controlling Ants Safely

Try using nonchemical methods first.

Indoors

- Follow ants' trails to see where they are getting in and what they are attracted to in your home.
- Seal the holes they are using to get in.
- Remove the food or drink the ants are after.
- Wipe up ants' chemical trails with soapy water or a vinegar and water solution.
- Ants trapped in the house can be vacuumed up. Be sure to discard the bag.

Outdoors

- Keep vegetation and mulch at least 6 inches away from the base of the house. Ants like to nest there.
- Keep tree branches and shrubbery from touching the house. Ants use these as runways.
- Keep gutters clear and free of decaying leaves. Ants like to nest there.

Using Pesticides on Ants

Most times preventative actions take care of nuisance ant problems. Pesticides are chemicals designed to kill pests. They come in many forms such as "bug sprays," concentrates, dusts, baits, and "bombs" or foggers. Since pesticides are poisons, they should be used sparingly and carefully. If you decide to use chemicals on ants, please read the label and follow these tips:

The Pennsylvania IPM Program is a collaboration between The Pennsylvania State University and the Pennsylvania Department of Agriculture.





The pyramid explains some of the different tactics used in an IPM approach. Think of each level as a labeled drawer full of different types of tools. For example, tools used against pests in "design/maintenance" focus on prevention of pests. They are also low in risk of human chemical exposures. Try to use tactics on the lowest levels if possible.

Indoors

- Use enclosed, tamper-resistant bait traps that have a premixed food with the pesticide. Worker ants carry the pesticide/food mixture back to the nest and feed the queen, thus killing the colony. Choose baits containing hydramethylnon, boric acid, fipronil, sulfluramid, or abamectin.
- Avoid sprays, bombs/foggers, and liquid concentrates. These products are especially risky because they can irritate lungs, leave chemical residues on indoor surfaces, or be touched or ingested accidentally by children. Pesticides in dust form should be used with caution because they can irritate lungs. Such pesticides used on ants inside the home may kill some ants, but the nest will just send in more, especially if food is still available and access is allowed.

Outdoors

- Ant nests can be destroyed or discouraged by digging them up or soaking them with hot, soapy water.
- Avoid using perimeter sprays and granules around the home for ants. Sprays leave residues and may kill many other small creatures besides ants. Birds may also eat pesticide granules and can be killed.

If Using Pesticides, Always:

- Read the label (front and back) and all warnings before use!
- Follow the label directions exactly.
- Keep pesticides up high, in a locked cabinet, and out of the reach of children and pets.
- Dispose of unused or unwanted pesticides and empty containers at household hazardous waste events scheduled in your area. Call your city or county for more information.
- Remember, using the wrong product for the type of pest you have may result in risks to your health without any benefit of ant management.

Need More Help?

- Identifying Common Household Insects in Pennsylvania: pubs.cas.psu.edu/FreePubs/pdfs/UF021.pdf
- Maine IPM Council: www.maine.gov/agriculture/ pesticides/gotpests/bugs/all-ants.htm
- New York State IPM Program: www.nysipm.cornell.edu/ publications/carpenter_ant/files/carpenter_ant.pdf
- PA IPM Program Problem Solver: extension.psu.edu/ipm/ resources/pestproblemsolver

If you suspect that a child has been accidentally exposed to chemicals, immediately call the Poison Control Center at 1-800-222-1222.

For More Information

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An OUTREACH program of the College of Agricultural Sciences

Extension is implied.

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Penn State College of Agricultural Sciences research and extension programs are funded in part by Pennsylvania counties, the Commonwealth of Pennsylvania, and the U.S. Department of Agriculture. Where trade names appear, no discrimination is intended, and no endorsement by Penn State