



ANTS

The ant most frequently found invading schools and homes in the Bay Area is the Argentine ant, *Linepithema humile*. This ant can also be a pest outdoors when it protects plant-feeding insects—such as aphids, scales and mealybugs—from attack by their natural enemies (ladybugs, lacewings and others). Ants guard these insects in order to harvest the nutritious “honeydew” they excrete.

Although ants can be annoying pests, they provide an ecological cleansing and fertilization service of considerable importance. Ants aerate the soil and recycle dead animal and vegetable material. They kill and eat many pest insects such as termites and immature cockroaches, fleas, and flies. Because of these beneficial aspects, it is undesirable (and probably downright impossible) to eliminate ants from their outside habitat. The best approach to ant management is to try to keep them out of the building.

Detection

Look for individual “scouts” wandering around, or long lines of ants marching to and from the food or water source. Distinguish Argentine ants from carpenter ants by size. Argentine ants are small, around 1/8” long, and dark brown. The queens are slightly larger. Carpenter ants are 1/4” or larger and require different management techniques from those listed below.

What You Can Do

Inside Your Home

- **Keep Things Clean.** Ants are attracted to food debris, esp. sweet things.
- **Kill the Scouts.** When you see just one or two ants wandering around, they are actively looking for food (and sometimes water). Kill these scouts when you see them so they can't call in the hordes when they find a tasty tidbit.
- **Use Ant Baits.** Baits are better than insecticide sprays because they use a minimum of insecticide and confine it to a very small area. Ants pick up the bait and take it back to feed to their nest mates. For more information, see Tips for Using Ant Baits on page 2.
- **Use Insecticidal Dusts.** Diatomaceous earth (DE) has little toxicity to humans and pets, but kills ants by absorbing the waxy coating on their bodies, causing dehydration and death. DE is particularly effective when blown into cracks and wall voids before they are sealed. If kept dry, DE will remain effective for years. Use a hand duster to apply DE and wear a dust mask and goggles.

Outside Your Home

- **Use Sticky Barriers.** Ants cannot cross barriers made from sticky materials. Apply a 4-inch wide band of commercial sticky barrier around the trunk of a tree or bush to prevent ants from protecting aphids and other honey-dew-producing insects. Apply the barrier as high on the trunk as possible to prevent people (especially children) from getting stuck. Prune any branches that touch walls, fences, or the ground so ants do not have alternate routes into the plant.
- **Ant Baits.** If you can find the spot where ants are entering the building (can be difficult), place bait stations there; otherwise, use baits only inside.

Quick Fix for an Ant Emergency

When ants invade, here are a few quick steps you can take to get the situation under control until you can implement a more permanent solution.

1. Observe the ants and try to determine what they are after (usually left-over food but sometimes a dead bug) and where they are entering the room (usually through a crack in the wall). Mark the entry point so you can find it again. If you can't find an entry point, see #5.

2. If the ants are in one or more lines leading to food, don't remove the food until after Step 3, because they will scatter. Ants are easier to kill if they remain in a line.

3. Clean up the lines of ants. You can do this very easily with a vacuum cleaner. The ants will suffocate in the dust of the vacuum bag. If you don't want to get out the vacuum, use a spray bottle filled with water and about a teaspoon of dish washing detergent. Spray the solution on the ants and wipe them up with a sponge.

4. Once you have cleaned up the ants, block their point of entry by making a temporary closure with a smear of petroleum jelly or a piece of tape. Later, use silicone caulk to permanently close cracks in the wall, along moldings and baseboards, and gaps around pipes and ducts.

5. If you cannot find an entry point, clean up the ants (#3) to a convenient (preferably out-of-the-way) spot to place a bait station (see right, Tips for Using Ant Baits). Remember to remove the bait station when the line of ants has disappeared so you don't attract more ants into the house!

6. If ants have begun nesting in a potted plant, move the plant outdoors and water it thoroughly. Place the pot into a bucket and fill the bucket with water until it comes up to about an inch below the rim of the pot. Using a stick, make a bridge for the ants to get out of the pot and the bucket without getting in the water. The soil in the pot will be too wet for them, and the ants will soon begin carrying their white-colored young to safety. When no more ants emerge, drain the pot and return the plant to the house.

Prevention

- **Store Food in Ant-Proof Containers.** The Argentine ant will feed on just about anything, so store food in glass jars with rubber seals, or in plastic containers with tight-fitting snap-on lids. Although refrigerator storage is usually safe, ants sometimes do get into refrigerators and freezers. If this happens, a light, temporary coating of petroleum jelly on the rubber seal around the door should keep them out. You may want to replace the seal if it is faulty.
- **Take Out the Garbage.** If garbage contains food scraps, don't leave it inside overnight. If you compost kitchen waste, store it in an ant-proof container.
- **Keep Things Clean and Dry.** Keep kitchen surfaces clean and dry, and sweep or vacuum the floor frequently to remove all food scraps. During our long, dry summers ants sometimes invade houses looking for water, so fix leaking faucets and pipes promptly. To keep ants out of your pet's water bowl, use a soapy barrier (see below).
- **Caulk Cracks.** Follow that ant trail back to the crack where they are entering the building and use silicone caulk to permanently close the hole. Use weather-stripping around doors and windows. It may not be practical to try to seal every hole in your house; but over time, by following ant trails and sealing those holes, you will significantly reduce the number of places ants can get in. If ants are already nesting in wall voids, puff some diatomaceous earth into the void before sealing it.
- **Use Soapy Barriers.** Set pet food dishes or other open containers of food in a shallow pie pan filled with soapy water. This forms a moat that ants cannot cross. It is important to add soap or detergent to the water to break the surface tension so the ants sink and drown. To protect potted plants, put a plastic saucer under the pot and place both saucer and pot into the pie pan. Fill with soapy water to just below the top of the saucer (you don't want the plant to soak up soapy water).

Tips for Using Ant Baits

Ant baits contain a pesticide mixed with an attractive food substance. Ants take small quantities of bait back to their nest to feed to their nest mates. In this way the entire nest can sometimes be eliminated.

- **Use Baits with Either Boric Acid, Hydramethylnon, Fipronil, or Arsenic** as an active ingredient.
- **Use Baits Inside.** There are several reasons for this: 1) There are too many ants outside to try to eliminate them from around your house (and you wouldn't want to anyway). 2) If you put ant baits around the outside of your house, you run the risk of attracting more ants close to your dwelling and from there it's a short walk to your kitchen or bathroom. 3) Out-side it's harder to keep track of the bait stations and easier for kids and animals to get to them. 4) Rain or sprinklers can wash away the bait. *Note:* An exception to this is large commercial bait stations filled with liquid boric acid bait and installed and serviced by a pest control company. These large bait stations are tamper resistant and can keep ants from coming into a building.

Tips for Using Ant Baits, cont.

- **Have a Variety of Baits.** It can be helpful to have several different baits on hand because Argentine ants change their food preferences frequently depending on environmental conditions and what is going on in the nest. In general liquid baits are attractive all year around, but if one bait is not attracting them, try another. *Note:* wait at least a day to see if they take the bait.
- **Do Not Spray Insecticide** around the bait; this will repel the ants.
- **Remove Baits When Not in Use.** Once the line of ants going to the bait has disappeared, remove the bait so you don't attract more ants. If the bait you are using comes enclosed in a bait station, return it to its original box to save to use again. Put the box inside a plastic bag and seal it with a twist-tie. Some arsenic baits will remain attractive for at least 15 years, but some other baits may deteriorate with time.
- **Baits Don't Work Right Away.** In some cases it may take several weeks to kill the ants. At first you may see more ants coming to the bait, but after a few days to a week you should see a significant reduction.

Products

Insecticidal Dust

Concern® Diatomaceous Earth Crawling Insect Killer, Grow More® Diatomaceous Earth

Hand-Duster

Pest Pistol® (If unavailable locally, call 888-784-1722 to order.)

Sticky Barrier

Tanglefoot® and Stickem® Tree Pest Barrier®

Baits containing Boric acid

Terro® Ant Killer II, Victor® Liquid Ant Killing System

Baits containing Hydramethylnon

Combat® Ant Control System

Baits containing Arsenic

Grants® Kills Ants

Baits containing Fipronil

Combat® Quick Kill Formula Ant Bait

Note: New products are constantly coming to the market. Brand names listed are for example only. No endorsement of specific products is intended nor is criticism implied of similar products that are not mentioned. Always use according to directions on product label.

For More Information

If you have questions about the information in this fact sheet, contact the Marin County Department of Agriculture at 415-499-6700, or the Bio-Integral Resource Center, PO Box 7414, Berkeley, CA 94707; 510-524-2567.