UNIVERSITY OF MARYLAND EXTENSION
HOME & GARDEN INFORMATION CENTER

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Ants and Their Control

There are many species of ants in Maryland but only a few are pests in the home. Two species of ants may require special attention because of their behavior. Carpenter ants can cause structural damage. They are covered in the Entomology leaflet #115 on Carpenter Ants and will not be discussed here. Another species of ant that requires more specialized control methods is the tiny Pharaoh ant. Most other ants just wander in the house in search of food and become a nuisance.

Description

Ants have three body regions: head, thorax, and abdomen. The abdomen is divided into the petiole and the gaster (see illustration). They have elbowed antennae, and the gaster is attached to the thorax by a narrow waist that consists of one or two small segments. Termites on the other hand, have straight antennae, and do not have a pinched waist.

There are three distinct castes of ants: queen, male and worker. There may also be different forms of each caste. Ants always live in societies known as colonies. Workers are wingless, but at mating time swarms of males and females are produced, usually winged.

Life History

Adult winged males and females emerge from their cocoons and eventually leave the nests. Emergence of large numbers of ants (swarming) usually occurs at certain times, and often this is the only time we notice the ants at all. Males seek out females in the swarm; mating usually occurs in the air. Males die soon after the mating flight, while the female seeks out a crevice or similar hiding place. She then removes her wings, forms a small cell, and lays a few eggs. The eggs hatch into tiny, white, legless grubs. The queen feeds these grubs, or larvae, with a nutritious fluid that forms in her digestive system. When the grubs are fully-grown, they change into a nonfeeding pupal stage from which emerge the common "worker" ants. These workers begin to forage for food, some of which is fed to the queen and some to the new larvae from the next lot of eggs. Adult workers may live for weeks, or up to two years or more. Queens have been known to live for as long as 20 years. After the colony is well established, some of the larvae will now develop into males and females, which will take off in the mating flight.

Odorous House Ant (EPA)

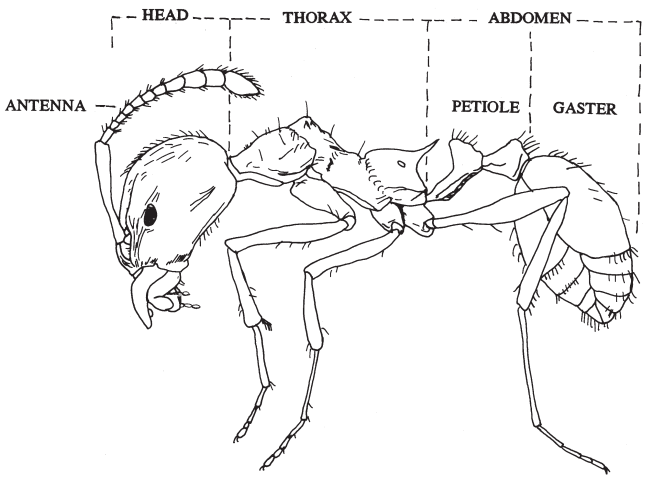
Management in the Home

Ants are frequently attracted from outdoor colonies by food odors. Store food in tight containers or refrigerate it. Rinse all food containers thoroughly before tossing them into the trash or recycling bin. Ants often search for sweets or grease as food. They do, however, feed on other foods including meats, dairy products, pastries, fruits, animal fats, and vegetable oils, as well as on dead or live insects. If ants are found indoors, thoroughly clean areas where ants occur or gather. Search for the routes of entry and seal off with caulking compound. Ants will enter the

Pavement ant mounds (EPA)

house in search of food; if none is present, they will leave.

Traps containing poison baits will control many ants effectively. Traps attract the ants to the poison without the need to apply insecticides in the home. Make sure you have enough traps to control the ants. Larger ants will require more traps than smaller ants. Carpenter ants may require twice the number of traps as small house ants. Traps will take from 24 to 48 hours to work, so be patient. If used correctly, most ants will be controlled without having to apply any insecticides in the home.
If however, after baiting, the ants continue to be a problem, try to locate the ants' nests. Ants have trails that they follow to and from the nest. Watch the ants as they come and go from food. This will help determine if the ants are inside, or coming in from outdoors, and is often helpful in locating the nest. It is not always possible to determine the exact location of a nest, especially if they are between floors, in walls, behind baseboards, beneath cracked basement floors, in decaying or rotting wood (often near leaky pipes), or even in piles of papers. Spot treatment of nests and/or foraging trails with an insecticide may be needed in some cases. Follow the manufacturers' directions carefully when using any pesticide. NEVER USE INSECTICIDES ON FOOD PREPARATION SURFACES OR IN AREAS WHERE CHILDREN OR PETS FREQUENT.
Some of the ants which may be found in homes in Maryland include: Carpenter ants (see Entomology Leaflet #115), Pharaoh ants, Odorous house ants, Acrobat ants, Field ants, and Pavement ants.



If you have persistent problems with tiny brown ants, they may be Pharaoh ants. Have them identified to be sure so that proper control measures can be taken.

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Klass, C. 1991. Ants in Houses. Cornell Coop. Ext. Serv. Cornell University, Suffolk County, Riverhead, NY.

References:

Olkowski, W., S. Daar, and H. Olkowski. 1991. Common-Sense Pest Control. Newtown, CT: The Taunton Press. 715pp.

Mallis, A. 1990. Handbook of Pest Control. Cleveland, OH: Franzak & Foster Co. 1152pp.

Illustration of ant redrawn from: Mallis, A. 1990. Handbook of Pest Control. Cleveland, OH: Franzak & Foster Co. 1152pp.
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