



# **Effective** Control



## Has your kitchen become a picnic ground for ants? Have these hardworking insects invaded your home or your lawn?

There are about 100 species of ants in Canada, so it is not unusual for them to become a pest around the home. In fact, ants are so abundant and so adaptable, they are impossible to eliminate.

Ants should be tolerated as much as possible as they cause little damage in the garden. Because they like to eat other insects like fleas, bedbugs, young silverfish and clothes moths, they can even be considered beneficial.

Species that are known to invade homes in Canada may include the carpenter ant, the little black ant, the odorous house ant, the thief ant and the pharaoh ant Pavement ants can become a nuisance in



The species of ants commonly found in Canada are not aggressive, although some are capable of stinging.

#### Description

Ants may be black, brown, red or yellow. Adult ants range in size from as small as 1 millimetre (1/ 16 - 1/32 inch, e.g., little black ants and thief ants) to as large as 13 millimetres (3/4 inch, e.g., carpenter ants).

Homeowners may confuse carpenter ants with termites. Termites are present only in specific areas in Canada. It is easy to distinguish between them: the termite has straight antennae and a thick waist, and the carpenter ant has a very narrow waist and 'elbowed' antennae.

Carpenter ants are larger than other species, although the sizes of the workers vary. It is important to identify carpenter ants correctly. They can cause structural damage to homes when they excavate galleries for their nests. Piles of sawdust may indicate their presence. For further information please refer to the Pest Note Effective Control of Carpenter Ants.

#### Social Structure

Ants are social insects that live in large colonies usually located in underground tunnels. There are a few species, i.e., carpenter ants, that nest above ground in rotting stumps, or inside structures in wall voids, especially where

wooden structures are damp. Many species will nest outside buildings, and enter them just to forage for

Depending on the species, a colony is made up of one or more queens, and workers. The queens lay the eggs, while the worker ants defend the nest. care for larvae (hatched eggs) and forage for food. The workers carry food back to the nest to feed the queen, larvae and pupae (developing young

#### Spread of Colonies

Ants create new colonies by a process of swarming, or budding.

The appearance of winged queens and smaller winged males means that swarming is taking place. The ants may come indoors at this time, but it does not necessarily mean that the ants will succeed in colonizing in your home!

The queen will lose her wings after mating, and will establish a new colony alone with her brood of young. This type of ant colony is best controlled by destroying the queen.

Ant colonies that spread by budding will send workers with larvae and pupae to a new site. A poorly planned chemical control treatment will encourage this type of colony to bud, thereby complicating the problem.

### Eating Habits

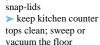
Some ants have food preferences, but generally they are happy to eat whatever you are willing to provide! They are attracted by sugary foods, oils or greasy residues like peanut butter smears, crumbs, or even the honeydew produced by aphidinfested houseplants.

Ant colonies send out scouts to forage for food. A successful scout leaves a scented trail for other workers to follow back to the food source. This accounts for the orderly parade into your pantry!

#### Prevention

Removing access to food and water is the easiest way to avoid all pest problems.

> store ant-attractive foods in glass jars with rubber gaskets or in plastic containers with snap-lids



frequently, especially around pet dishes

- > rinse containers before disposing of them in garbage or recycling bins
- > empty kitchen garbage containers frequently > do not place composters too close to the house
- > ants may enter through cracks around moldings and plumbing, cracks in the foundation or exterior walls - repair and seal as many visible cracks as possible
- indoors, it is helpful to caulk along baseboards, cracks and crevices to block the ants passage through the house - if necessary, use duct tape or petroleum jelly to seal cracks temporarily
- > ants will not cross sticky barriers try placing two-sided tape or a commercial natural gum resin insect barrier paste around the legs of plant stands, or the base of fruit trees, to keep ants away > place pet dishes in a 'moat' (a pan of water
- with a little detergent in it to break the surface tension and prevent ants from floating across)
- > flood ant nests repeatedly with a garden hose to encourage ants to move outdoor nests further from the house
- > pour boiling water and detergent down the nest to temporarily reduce the population of a colony

> diatomaceous earth can be placed in the cracks and crevices as a non-chemical means of control (this powder is composed of microscopic fossils that scratch the outer 'skin' of ants, causing the ants to dehydrate and die)

#### Baits

Foraging ants gather food and bring it back to the nest to feed to colony members by a process known as trophallaxis (the exchange of regurgitated food). A bait system, therefore, does not try to kill foraging ants quickly. It must work slowly enough so that the poison can be fed to all members of the nest.

This method may work more slowly, but it is a highly effective way of eliminating nests. Also, baits containing boric acid or hydramethylnon are generally of low toxicity to other animals.

- > ant trails are commonly found along baseboards, the edge of carpets along walls, or along the edges and corners inside cabinets
- > place bait stations directly in the path of foraging ants, but out of the reach of children and pets - use your creativity!
- > be generous! use plenty of bait stations
- > use of two different baits at the same time may give better results
- > repeated bait applications may be needed keep baits available for at least two weeks
- > do not use chemical sprays to kill visible ants while using a bait system or the bait system will not work!

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#### Homemade Bait Recipe:

5 mL (1 tsp.) boric acid 60 mL (2 oz.) corn syrup

Heat until boric acid is dissolved. Cool. Dilute with 60 mL (2 oz.) water. Place in flat dishes or use an eye dropper to place drops near ant trails. Keep out of reach of children and pets.

Note: boric acid powder may be purchased at a pharmacy.







#### **Chemical Control**

Chemicals in the form of sprays, dusts, etc. can be used effectively as barrier and nest treatments.

Chemical applications made directly to the nest may eliminate colonies. Locate outdoor nests by the presence of anthills, or follow the ant trails back to the nest. Nests located indoors in wall voids can be treated with dusts that can be puffed into the area.

Chemical barrier treatments can be applied to baseboards or door and window frames to prevent outdoor nesting species from foraging for food indoors. Spraying indoors where trails have been observed may cut off food and water sources for an indoor nest. Unfortunately, with some species of ants, chemical-barrier spraying may cause the colony to bud. If the treatment seems to increase the areas ants appear from, have the ant species identified, or try using a bait system of control.

There are numerous domestic class chemical products available. These products may contain chemicals such as pyrethrins, diazinon, fenthion, malathion, methoprene, propoxur, rotenone, carbaryl, and others. Always check the label to make sure the product is intended for indoor use.



#### Remember

#### Before Purchasing a Pesticide Product

- > Identify the pest correctly.
- ➤ Use physical control methods and alternatives to pesticides.
- > Read the label directions and safety precautions before buying the product. The label must include the name of the pest to be controlled and the treatment location (e.g., indoor, outdoor, garden uses, pet treatment).
- > Purchase only the quantity of product needed for the treatment.
- ➤ Alternatively, you may choose to hire a licensed pest control operator.

#### When Using a Pesticide

- ➤ Carefully read all label instructions and precautions before using pesticides.
- ➤ Do not drink, eat or smoke while applying pesticides.
- ➤ Persons and pets should vacate the area during treatment. Cover or remove aquaria.
- ➤ If kitchen area is to be treated, cover or remove food, dishes and utensils.

#### After Handling a Pesticide

- ➤ Always wash your hands thoroughly after handling any pesticide product.
- > Do not permit persons or pets to contact treated surfaces until residue has dried completely.
- > Provide adequate ventilation of treated areas after use.
- > Wipe clean all surfaces that comes in direct contact with food, such as counters, tables and stovetops, including indoor and outdoor surfaces.
- ➤ Always store pesticides out of reach of children and pets and away from food and beverages.

#### In Case of Accidental Poisoning

- ➤ Call a poison control centre immediately and seek medical attention.
- ➤ Take the pesticide container or label with you to the emergency facility or physician.
- > Follow first aid statements on the label.
- ➤ In case of accidental poisoning of pets seek veterinary attention immediately.

#### When Disposing of Pesticides

Do not reuse empty pesticide containers. Wrap and dispose of in household garbage.



Unused or partially used pesticide products should be disposed of at provincially or municipally designated household hazardous waste disposal sites.

#### Use Common Sense

- > These are general recommendations.
- > Consult the label for specific instructions.
- ➤ When in doubt, contact a professional.

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