

Providing Leadership in Environmental Entomology

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Field Ants

Field ants are in a large group of similar species. Typically, they are found in yards and fields, and are known by many names such as thatching, red or wood ants. The names reflect either the materials they use for their nests or their color. While they are usually considered beneficial, at times larger populations may become a nuisance.

Identification. Field ants have polymorphic (multiple-sized) workers ranging in size from $\frac{1}{8}$ - $\frac{3}{8}$ inches. Their colors are often brown, black, tan, red, or some are bi-colored. Because of their size, field ants are often confused with carpenter ants, but can be distinguished easily by their uneven thorax (Fig. 1.a). They also have a single node (Fig. 1.b) and three simple eyes (ocelli) on the front of their heads (Fig. 2). Field ants do not have a stinger, but instead they possess a circlet of hairs around an opening at the tip of their abdomen where formic acid is expelled as a defense mechanism (Fig. 1.c). When they are disturbed they may pinch skin with their mouthparts, and then squirt formic acid into the wound giving the feeling of being stung.



Figure 1. A Field Ant, *Formica integra*. Side view. a. Uneven thorax. b. Single node. c. Ring of hair at base of abdomen.



Figure 2. A Field Ant, *Formica integra*. Frontal view showing three ocelli between the compound eyes.

Biology and Habitat. Field ants are the largest group of ants, and as such, they are very diverse. Therefore, few generalizations can be made. They are found around structures, but do not often invade homes. They nest in soil, constructing mounds that usually do not exceed the height of the grass.

Nests also may be found under lawn and wood debris such as firewood piles, bricks, lawn ornaments, and other protected places. These types of locations should be inspected carefully for colonies when conducting control efforts. The primary food source of many field ants is honeydew from plant-sucking insects such as aphids, mealy-bugs, and plant scales (Fig.3). However, some species are scavengers and predators.



Figure 3. Field ants feeding on honeydew excreted from plant sucking insects.

Control. Successful control of field ants depends on a thorough inspection and making a correct identification. Low-level populations do not need to be treated. If ants are a nuisance in the yard, follow them back to their nest site. Once the nest is located, drench the mound completely with an appropriately labeled insecticide.

Complete saturation of the 8-12-inch diameter mound is essential. It may be necessary to increase the amount of water used in the application to get the insecticide to penetrate well. It may take a few days for the ants to completely disappear due to wandering ants taking several days to return to their nests. Some granular insecticides worked into the upper surface of the mound may also provide good control, but many are only available to professional pest control operators.

If ants are entering structures, a thorough perimeter treatment up and along the foundation wall with a non-repellent insecticide may be necessary. Treat around doorways and windows, and underneath siding. Make sure all potential entry points are sealed especially where electrical and utility lines come into buildings.

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