

LivingWithBugs Guide

identification, life cycles and management

Using Baits

updated: 4/06

Pest insects that live in colonies (for example carpenter ants, nuisance ants, yellowjackets, subterranean termites, and cockroaches) can often be managed with baits. Baiting works because of the way colonies work. Colonies send out certain individuals, usually called workers, to forage for food outside the colony. Collected food is brought back and fed to the rest of the colony.

Successful baiting involves presenting foraging workers with an acceptable food that has been laced with an insecticide that will disrupt the target colony. Baiting is generally slower to work than conventional insecticides and it tends to be more expensive. On the positive side baiting is generally far safer and less potentially damaging to the environment.

Proper bait selection is critical to the success of this method. You must find a bait that is accepted by your target pest. Baits that work great in one area may not work well in another even for the same target pest. Here are some suggestions for the target pests listed below. For specific bait suggestions see our Guide article for target pest.

carpenter ants

There is still some debate about how effective baits alone are for carpenter ant control. Because of this and because carpenter ants can cause so much damage if left untreated we do not suggest baits alone for carpenter ant control. However, baits can be used effectively as a supplement to

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wall void treatments (see our carpenter ant article). If baits are used do not use those intended only for non-carpenter

ant species (nuisance ants). General ant baits are not effective for carpenter ants. Select only those intended, and labeled, for carpenter ants.

nuisance ants

Baiting is the most effective control method for nuisance ants (Fig. 1). However, it is absolutely critical that you find a bait that your ant will accept. Try different bait products until you find one that attracts your ants. "Recruitment to the bait" is a concept that entomologists use. If, over time, the number of ants visiting a bait placement increases then it is generally assumed that the ants find the bait acceptable. If visitation rates drop, or even go to zero, and ants are still present, the bait should be considered not acceptable. Also, baits should be replaced when they become dry or otherwise are unacceptable.

yellowjackets

Until recently, poison baiting was the best method of controlling ground nesting yellowjackets



Figure 1. Nuisance ants feeding at a waxed paper bait station. These workers, returning to the colony, recruit additional workers to the food source.

(see our yellowjacket article). Ground nests generally cause the most trouble. A few years ago, however, the only product that could be legally used to prepare poison bait (KnoxOut 2 FM) was withdrawn from the market. Since then efforts have been underway to develop a new insecticide bait product and get it labeled for this use. Stay tuned. In a few years, or less, I expect there to be a bait available for nuisance yellowjackets.

subterranean termites

Baiting for subterranean termites is rapidly replacing older methods of termite control. It involves placing a cellulose-based bait below ground, in a special container, that has been impregnated with either an insecticide or growth regulator designed to gradually disrupt the colony. Foraging termites find and feed on the bait and carry the poison back to the colony.

cockroaches

Like baiting for nuisance ants, baiting is the best method for controlling cockroaches. Since cockroaches are more difficult to observe than foraging ants, however, it is difficult to judge bait acceptance in cockroaches. In this case you'll need to rely on tracking the actual reduction in cockroach numbers, or perhaps tenant complaints, in order to judge a particular bait acceptance level.

See www.LivingWithBugs.com for additional information.