# Ant Management Guide

# EFFECTIVE CONTROL AND PREVENTATIVE STRATEGIES

Ants are one of the most successful and adaptable insects on the planet. They thrive in many ecosystems and under a large variety of environmental conditions. Ants are one of the most frequent and persistent pests found in and around homes and buildings. They can also be one of the more difficult pests to control.

Ant management is a significant revenue stream for most PMPs but can become frustrating, time-consuming and expensive due to callbacks, unclear customer expectations, and the improper choice of products to eliminate the infestation. Ant infestations often share similarities, but successful ant management requires an integrated approach including inspection, identification, and a variety of effective ant control products. Habitat modification to eliminate conducive conditions can also help prevent reinfestation.

## **KNOW YOUR ENEMY**

Effectively controlling ants requires understanding key aspects of their biology and behavior, including: (1) SOCIAL STRUCTURE (2) FEEDING HABITS (3) SEASONAL FOOD PREFERENCES (4) COLONY STRUCTURE

## ${f 1.}$ SOCIAL STRUCTURE

Ants belong to the insect order Hymenoptera which also includes bees and wasps. Ants pass through egg, larval, pupal, and adult stages. They live in highly organized colonies wherein all ants work for the benefit of the colony. Queens mate and produce eggs for the colony, while sterile, wingless female workers (the ants you typically see) forage for food, build nests, tend the brood, and defend the colony. To establish new colonies, queens will produce winged reproductive ants (males and females) that fly off and mate. After mating, the males die and the new queens remove their wings, establish a nest and begin laying eggs.

## 2. FEEDING HABITS

To control ant colonies, the queen, brood, and workers must be targeted. Most ant species are considered omnivorous and feed on a wide variety of food sources. Adult ants do not generally eat solid food, but instead consume liquids, such as honey dew from aphids, plant nectar or liquid baits. Liquid food sources are transferred from worker to worker and to larvae through trophallaxis (regurgitation). Workers feed larvae solid foods that are digested and then shared with the queen and workers throughout the colony. For this reason, larvae are often called the "stomach" of the colony.

Baits such as the InTice and InVict ranges are ideal for ant colony elimination, since ants naturally share food throughout the colony.

## 3. SEASONAL FOOD PREFERENCES

The nutritional needs of ant colonies may change frequently. In general, ants focus on colony reproduction and growth during the spring. At this time ants forage for sources of proteins and fats to fuel the developing brood. As ant colonies increase in size throughout the summer months, they require carbohydrates to sustain the population. However, the nutritional needs of a colony can shift, even within a short period of time. Rockwell provides a range of baits with multiple premium food attractants to suit all ant preferences.

## 4. COLONY STRUCTURE

Some pest ant species are "monogynous", meaning each colony has one only queen. However, many pest ant species have multiple queens and multiple nests per colony. To eliminate multi-queen colonies, an adequate amount of bait must be placed for workers to collect and distribute to multiple queens and brood in multiple locations. Some multi-queen species can form "mega-colonies" that consists of many nests of related ants covering large areas. Identifying the species and determining if multiple queens may be present is necessary for the most effective results and to prevent callbacks.

# **BAIT OPTIONS: RECIPES FOR SUCCESS**

Rockwell Labs produces a complete range of ant control solutions, including liquid, gel and granular baits, indoor and outdoor bait stations, and a range of contact insecticides. With both natural/green and synthetic products, you are covered for every account type and every protocol requirement. Rockwell is here to help you develop and execute a comprehensive plan to consistently eliminate ant infestations.

InTice Gelanimo Ant Bait is a sweet ant gel that targets a wide range of ants. This unique high moisture bait with patent-pending "rigid gel" technology combined with quality food grade ingredients is available in ready to use stations (pictured below), 35 g syringes, and 4 oz cups to cover any application site or colony size.

For added exterior protection and large colony control, 4 oz cups can be placed in **InTice Border Patrol Stations** around the perimeter of structures. Unlike liquid baits, ants are able to feed on the entire surface of the bait without drowning. This increases the maximum number of workers that can feed at once and the amount of bait reaching the colony.

A majority of ant species will feed on honeydew, sugary plant nectar, and fruits. InTice Thiquid Ant Bait is a thick syrup mimicking these favored sweet foods. InTice Thiquid includes premium food ingredients and components to prevent moisture loss, increasing the longevity of bait placements. InTice Thiquid is available in 4 oz dropper bottles and 1 gallon jugs and can be diluted for high volume baiting, and sprayed on surfaces for added versatility.

InTice Rover Ant Bait is a syrup bait with an additional attractant matrix rover ants can't resist.

Long-lasting **InTice 10 Perimeter Bait** with 10% boric acid is the perfect quarterly perimeter defense to prevent ant problems before they ever start. The mold and moisture resistant granules contain a highly palatable blend of protein, fats, and carbohydrates for maximum ant acceptance. A 3 ft band around structures at the low use rate of 1 lb/1000 sq ft (1/2-1 lb per typical home) will provide up to 90 days of economical protection.

For increased bait placement options, the **BaitPlate** is a small, economical station to hold liquids, gels or granules. Ants, roaches and silverfish can access the **BaitPlate**.

Powerful **InVict AB Insect Paste** contains 0.05% Abamectin, in a matrix of protein, sugars/carbohydrates and fats. It's the perfect choice for spring ant baiting for most common pest ants, and for Pharaoh, pavement and other protein/oil feeding ants year round.

When a large number of ants needs to be controlled quickly, **InVict Xpress Granular Bait** with 0.5% Imidacloprid provides lightning fast results. A rich blend of six different foods forms a highly palatable bait matrix ants can't resist, quickly wiping out colonies.

# REACTIVE vs. PROACTIVE STRATEGY

Whether facing an existing infestation or putting a proactive defense in place to prevent ant problems from developing, Rockwell has the products and strategies needed to give you an Unfair Advantage!

### **ACTIVE ANT INFESTATIONS**

#### **Ants Nesting Indoors**

Ants are found in structures for three primary reasons; food, shelter, and moisture. Ant infestations begin outside of the structure, but may quickly transition to interior nesting if conditions are conducive. For ant nests located in wall voids or other locations within the structure, bait trails with InTice Gelanimo, InTice Thiquid or InVict AB to draw out workers and kill the colony. To increase success, apply a band of InVict Xpress Granular Bait around the outside of the structure to combat ants entering the structure and to offer an additional food source. A non-repellent spray can also be applied around the perimeter. Spray first, then apply InVict Xpress on top of the sprayed area. This tactic will increase the number of foraging ants walking through the non-repellent pesticide and introduce bait into the colony along with the spray, leading to complete control.

A second strategy is to apply **EcoVia WD** as a dust into the voids where ant nests are located. The botanical oils in **EcoVia WD** provide quick knockdown and immediate repellency.

## **Ants Nesting Outdoors**

For active ant nests located outside of the structure, apply **InVict Xpress Granular Bait** where ants nest, trail, and harbor around the structure. As noted above, a non-repellent spray may also be used. Apply the spray first and then bait on top of the sprayed area. If trails are seen on the structure, bait them with **InVict AB** or **InTice Gelanimo**. For large ant colonies or areas with continued ant pressure install **InTice Border Patrol Stations** with **InTice Gelanimo** in cups or **InTice Thiquid**, in close proximity to normal nesting sites. Apply **InVict Xpress** in areas such as mulch beds, heavy ground cover, under decks, and other areas conducive to ant nesting.

#### PREVENTING ANT INFESTATIONS

Pesticide applications must be made around structures in locations ants find most attractive. Integrated Pest Management (IPM) strategies should focus on controlling moisture, removing excessive debris and objects ants may choose as nest sites, as well as preventing access into structures by sealing holes and gaps, and removing branches or foliage touching the home. For a comprehensive perimeter pest treatment that will greatly reduce the likelihood of ant problems, use a two-pronged approach. Apply micro-encapsulated **LambdaStar UltraCap 9.7%**, or for a green option **EcoVia EC Emulsifiable Concentrate**, along the exterior foundation/ground junction, expansion joints, eaves and overhangs, window and door frames, and along structural guidelines and areas where different materials connect; wood /siding, siding/foundation, siding/trim, etc. Apply long-lasting **InTice 10 Perimeter Bait** around the perimeter, outside of the repellent barrier.

InTice 10 provides up to 90 days of control as ants forage on the periphery, taking the bait back to the nest, and avoiding the repellent barrier and the structure. For a service offering using only 25(b) exempt botanical products, EcoVia EC and EcoVia G Granular Insecticide may be used.