

ZENITHOR™

GEL ANT BAIT

*ELIMINATES
most species
of pest ants*

*ZENITHOR Viral
Transfer Effect™*

*Highly potent
BIO-ACTIVATION*

ENSYSTEX®
LEADING INNOVATION IN PEST MANAGEMENT

ZENITHOR™ GEL ANT BAIT

ZENITHOR Gel Ant Bait is a premium quality professional gel bait that targets most pest species of ants including all species of sugar (sweet) feeders. ZENITHOR Gel Ant Bait represents the culmination of many years of patient research, detailed formulation development and field trials to provide you with the most palatable and effective ant gel.



Phase 1:
'EXPOSURE'

SUPERIOR GEL PROPERTIES

ZENITHOR Gel Ant Bait has been formulated to provide a stable gel even in hot tropical conditions, whilst providing a moist, viscous presentation at all times to ensure superior consumption by ants for an extended time frame. It is also easily dispensed from the handy-to-use syringe from which, upon application, it forms a homogenous 'bubble' that maintains its shape and does not dissolve into the substrate like many gels, thus ensuring prolonged availability for consumption by ants. This is due to the intricate formulation process that creates a superior gel which locks in the moisture for extended attraction to ants.

ZENITHOR Gel Ant Bait is highly attractive to ants immediately upon application and remains palatable for an extended period. However, the majority of ant feeding activity occurs within the first 24-72 hours after placement.

SUPERIOR ACTIVE

ZENITHOR Gel Ant Bait contains 0.5 g/kg (S)-indoxacarb. Technical grade indoxacarb is a 75:25 blend of (S) and (R) isomers, though it is only the (S)-isomer that is insecticidally active and consequently declared on the product label.

Indoxacarb is an oxadiazine insecticide which our research has shown is most effective against insects when it is consumed; which makes it the ideal product for use in toxic baits. This is because insects rapidly metabolise (breakdown) the (S)-indoxacarb into N-decarbomethoxylated indoxacarb (DCJW) after they ingest it.

This conversion of indoxacarb into the active DCJW form correlates with the appearance of neurotoxic poisoning in the ants.

This process, referred to as *ZENITHOR Enzyme Bio-activation™*, occurs more slowly after topical treatment e.g. if the active is used as a spray treatment or surface residual treatment.

This requirement for the conversion of the indoxacarb provides a safety factor since it is effectively 'activated' by the insect. The (S)-isomer of the N-decarbomethoxylated metabolite (S-DCJW), a powerful sodium channel blocker, provides the toxic mechanism of action. The onset of the neurotoxic symptoms leads to rapid and irreversible impairment of nerve function, feeding cessation, paralysis, and death.

Phase 2:
**'ZENITHOR ENZYME
BIO-ACTIVATION'**

*Following consumption,
ZENITHOR is metabolised
into a deadly insect
neurotoxin, causing
gradual death*

ELIMINATES ANT COLONIES

ZENITHOR Gel Ant Bait contains specialised food attractants to target the widest range of nutritional needs of a broad spectrum of pest ants. Although ZENITHOR Gel Ant Bait is strongly targeted at controlling sugar (sweet) feeding ants, ant species that normally feed on other food sources generally exhibit a feeding preference for honeydew or sweet foods too, meaning they are also controlled with ZENITHOR Gel Ant Bait.

ZENITHOR VIRAL TRANSFER EFFECT™

Ants are social insects living in colonies that work together to gather food, rear young and defend the nest. There are typically three different groups of worker ants. These are permanent foragers, intermittent foragers and nurses. The behaviour of ants changes with age; young ants are nurses at first, then they are intermittent foragers, and finally permanent foragers. Ants less than one month old are considered young and typically 65% of them are nurses. After one month most become members of a pool of ants able to forage and give liquid food to the queen, soldiers or larvae by a process known as trophallaxis.

Phase 3:
**'VIRAL
TRANSFER'**



ZENITHOR Gel Ant Bait exploits this social behaviour through the *ZENITHOR Viral Transfer Effect*. Since it is a liquid gel, it can easily be consumed directly by all worker ants. They can then feed it directly to the larvae, soldiers and queen. This process takes time, in order for the ZENITHOR to be fed to all the members of the colony.

This is where the magic of indoxacarb and *ZENITHOR Enzyme Bio-activation* is important. The indoxacarb has to be converted by the ants' enzyme systems into its highly potent bio-active form (N-decarbomethoxylated indoxacarb). This takes a few hours to occur which means the ants have time to return to the colony and share the toxicant through trophallaxis with the other members of the colony, thus ensuring that ZENITHOR Gel Ant Bait eliminates the entire colony.

In fact research has shown that liquid gel baits can be distributed by trophallaxis as far as 25 to 50 metres from the point of feeding.

ZENITHOR™
GEL ANT BAIT

ZENITHOR GEL ANT BAIT IS PROVEN TO BE PARTICULARLY EFFECTIVE IN THE CONTROL OF:

Coastal brown ant	<i>Pheidole megacephala</i> Fabricius
Red imported fire ant	<i>Solenopsis invicta</i> Buren
Black house ant	<i>Ochetellus glaber</i> Mayr
White-footed house ant	<i>Technomyrmex albipes</i> F. Smith
Ghost ant	<i>Tapinoma melanocephalum</i> Fabricius
Crazy ant	<i>Anoplolepis gracilipes</i> F. Smith
Hairy ant	<i>Paratrechina longicornis</i> Latreille
Argentine ant	<i>Linepithema humile</i> Mayr
Sugar ants	<i>Camponotus</i> spp
Pedicle ants	<i>Tapinoma</i> spp
Pennant ants	<i>Tetramorium</i> spp
Pharaoh's ant	<i>Monomorium pharaonis</i> Linnaeus
Singapore ant	<i>Monomorium destructor</i> Jerdon
Greenhead ants	<i>Rhytidoponera</i> spp

And more...

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