

Revised version March 2013

# **Best Practice for Controlling Rats with Ratabate®**

### Introduction

This covers the most efficient (least amount of effort) and effective (best results) of accomplishing the application of Ratabate® for the control of Rats by using Paste in bait stations or Striker Bait Stations. This is based on reputable procedures that have proven themselves as a result of research outcomes and over time by Connovation field advisors and large numbers of customers.

Ratabate® is a high quality, cost effective form of pest control that does not require a licence. Ratabate contains the first generation anticoagulant, Diphacinone as its active ingredient. Diphacinone has a short half-life of 3 days, meaning it breaks down quicker, with minimal secondary kills. RatAbate® is also environmentally responsible with minimal food chain impact so won't harm the environment. Ratabate® is a sustainable choice for farmers, orchardists, lifestyle block owners and others.

## Why use Ratabate®

- \*Biodegradable with no persistent residues
- \*Environmentally responsible, 98.4% less persistent than brodifacoum, no secondary kills, minimal risk to native birds or non-target species
- \*Highly palatable, made from human food grade ingredients and proven to be significantly more palatable than other rat baits
- \*NZ Food Safety Authority approved Maintenance Compound (non dairy) and Asure Quality for Food/Beverage/Dairy, all Type C
- \*A high quality cost effective toxin that does not require a licence
- \*A sound, trustworthy and more humane alternative to 2nd generation anticoagulant baits without the secondary poisoning risk
- \*Safe to handle and dyed green for bird protection
- \*Made in New Zealand

# **Products**

#### Paste

A stiff paste combining peanut butter, grains and oils that rats prefer to eat rather than other products. Highly suitable for controlling low to high rat populations and the key is to maintain an uninterrupted supply of bait until cessation of rodent feeding occurs. Rats cannot tolerate low doses successively over a number of days. Paste bait ensures that there is no translocation of bait as rats have to feed at the bait placement sites.

## Striker Bait Station

A Striker Bait Station is made from biodegradable potato starch and is a small frame measuring approximately L 60mm W 14mm D 17mm. It is filled with 18 grams of Ferafeed 213 Paste and diphacinone active is added. The Striker is glued to a backing label and dipped in a light wax for weather protection and to maintain bait freshness. They are suitable for use in urban or rural environments where permanent bait stations are not required. The Striker packaging breaks down in a couple of weeks so the user may not need to return to the area as they can be confident that there is no bait left.





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## **Rat Sign**

Fresh droppings, rub marks, gnawing, feeding activity, and sightings.

## **Application**

## Pre-feeding

Unlike acute toxins, with anticoagulants such as Diphacinone (Ratabate Paste and Strikers) there is no need to pre-feed with non-toxic bait as the onset of symptoms takes some time and rodents do not associate feeling sick with the product.

### General

Bait placing for rats should be a minimum of a 50 x 50 metre grid. Place enough bait to ensure that there is an uninterrupted supply of bait for all rats for at least ten days or until rat activity ceases. This means you must have a reliable supply of bait and there are several factors that can influence this and must be taken into consideration; how much bait is placed at each baiting point, the number of baiting points, the time period between each baiting round, the number of mouths - a rat index RTI, the number of other mouths - a possum index. The first thing you should check is the rat index for the block. If rat numbers are high 50% RTI or more then you will need to check regularly that there is bait for the rats. The second thing to do is check the possum index. If you have over 5% RTC you might have possums eating your bait and you would need to plan to place some Feratox.

A rough guide on working out the number of baiting points is a square 100m x 100m is 1 hectare so you would need two bait stations per hectare but might be able to cut down slightly to allow for breaks in bush and open ground. You could fine tune the number and to work out how many baiting points needed cut your block into rectangles. So if your block is 1.2 km by 1.2 km this will be 25 x 25 bait stations for a grid or 625 baiting sites. Add 20% for rolling country and 30% for really steep country.

## Ratabate Paste in Bait Stations

Use Rodent Cafe', Philproof or other bait station designed for holding rat bait. Paste bait placed into bait stations will prevent access and predation by non-target animals; afford protection to bait from the weather and it makes rats feed at the bait site therefore preventing translocation of bait. Site bait stations in areas where there is evidence of rats and so they are not readily accessible by children, domestic pets or stock, not placed in water and if putting inside buildings, placed them along walls where rodents tend to travel.

Spray ready to use Lure-It at and around the entrances and on top of the bait stations as the enticing fragrant lure will help draw rats to the bait. Put gloves on before handling the paste. Using a spatula or similar for the purposes of applying only Ratabate, place 70 to 80 grams of paste into each bait station. Check each bait station at two day intervals in the first instance in cases of high population; you don't want to run out of bait. Perhaps scale back if bait take is reduced. Where part or all of the bait has been eaten, replace with fresh bait. If consistent bait tales occur then the quantity of bait in stations must be increased and or additional stations be placed. Wash spatula and gloves in clean water and store in poison store for future use.





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### Ratabate Striker Bait Stations

Put on gloves and staple Strikers into place by affixing directly onto trees and fence posts or staple inside permanent bait stations through the area where there is evidence of rats. Position Strikers at heights that will not be readily accessed by children, domestic pets or stock and they must not be placed in water.

To help prevent the Striker tags from breaking, carefully select a suitable surface to staple to and use longer staples in the staple gun. If using in managed forests make sure to check with the Forest Manager on any special requirements for attaching to trees.

The number of Strikers to be placed will depend on the rat infestation and how frequently the bait uptake is to be checked and baits renewed. A good guide is to place a minimum of 3 Strikers no less than 75 metres between sites in continuous habitat. Check Strikers at two day intervals in the first instance in cases of high population, you don't want bait to run out. Perhaps scale back if bait take is reduced. Where Strikers have been entirely eaten replace with fresh Strikers. Where Strikers have been partially eaten leave in place and insert the equivalent number of new Strikers. When Strikers are being eaten at a consistent rate, this signifies a high rodent population and the quantity of Strikers at each site must be either increased or additional Strikers put in place.

## **Safety Recommendations**

Adhere strictly to product label directions at all times.

Ratabate must be stored in its original container away from children, pets or food and wash hands.

All remaining bait should be removed and destroyed by burning or burying in at least 60cm of soil.

### Recording

If a large number of bait stations or Striker Bait Stations are placed then record the stations on a GPS or geo map. This will ensure all stations are replenished with bait and once baiting is discontinued that all poison is removed if required.

## **Pre-Operational Monitoring**

Chew cards would be good - even if you placed some around the edges you would at least get an idea of the populations you are dealing with. Once you know what you are dealing with then you can plan your operation. This can be undertaken with Connovation Chew Cards to determine rodent numbers. A Chew Card is a 180mm x 90mm piece of white core flute card that has a pre-feed peanut butter Lucerne paste pressed into the flute channels from the sides. The cards provide a visual surface for attraction and a surface for biting. They indicate presence of species by bite mark identification.







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# **Products**















