

PROFESSIONAL PEST CONTROL

TECHNICAL UPDATE

BASF
The Chemical Company

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Stratagem® controls even the best-fed rodents



Peter Arnold of Termite Doctors & Pest Management Services is delighted with the success of BASF Stratagem rodenticide.

A Queensland PCO has shown that some of Australia's best-fed rats will readily change their diet and select BASF Stratagem ahead of other food supplies or rodenticides, securing their rapid and effective control with high levels of customer satisfaction. Peter Arnold of 'Termite Doctors & Pest Management Services' is based in Buderim and was called in by the 'somewhat desperate' proprietors of a Sunshine Coast bakery, to rid them of persistent and highly unwelcome visitors. Arriving on the scene, the sad story of past failures soon unfolded - and these covered a range of treatments with well known brands of wax block rodenticides with none delivering satisfactory results. The visitors were still there! With airborne

flour and other ingredients inevitably settling into the bake house and storage area environment, it seemed the rats were seldom short of a feed, preferred the diet 'on offer' and lacked any appetite for the blocks that had been provided. As Peter Arnold explains, "One of the hardest things in rat control in this type of environment is to break them from their diet and normal food source ... these well-fed Norway Rats were eating away the walls to get into the dry store. "We were referred to the bakery by another customer and as soon as we arrived on the scene it was clear that the proprietors of the bakery were desperate for effective control. In the store rooms and other locations there was what I would describe as a general scattering of wax blocks that were being ignored by the rats. There was widespread evidence of a significant, long term problem with damage to wiring, walls and other infrastructure."

A fresh strategy

Challenged to create success, Peter decided to equip tamperproof baiting boxes co-stocked with BASF Stratagem and another well-known bait. Evidence that the bait station was being visited was apparent within 3 days and it was immediately clear that it

was the Stratagem that was being (very) selectively taken! Peter Arnold puts it succinctly: "We had broken the rats' dietary habits and had converted them to Stratagem. This was the vital first step to control. Within three days we had to renew the Stratagem in the box and then a body of conclusive evidence, several actually, started to build up. The rat bodies and the absence of fresh eating after a further three days proved beyond further doubt that Stratagem would be taken by even the best-fed rats, with rapid and conclusive effects."



Tamper proof baiting box just hours after installation shows that the bake house rats have started switching diet to BASF Stratagem - the vital first step to control!

Simple strategy for results

Success having been achieved in just six days from first treatment, Peter Arnold, as one might expect, is also delighted with the results. "When I laid out this simple comparative treatment in the bait station, I had little idea that the results would provide such a graphic demonstration of selective eating by the rats. Even after the first 24 hours, the difference was so clear; I just had to take some photos." According to Peter, the bakery success is now being repeated in other locations, to the point where repetition is proving nothing new. Stratagem is taken rapidly and "works a treat," he says. "Whether there are well-fed or hungry rats at any site we visit, the effect after Stratagem is just the same. Stratagem is rapidly taken and the effect on the rats is swift. We're just delighted to recommend and use Stratagem and candidly we don't mind saying so. For us, Stratagem is now the first choice rodenticide, with the very significant advantage of attraction and rapid effect compared to other products."



Part of the body of evidence that Stratagem has been highly effective. After just six days from first application in the Sunshine Coast bakery, eating has stopped and the rats are all dead.

PCO Profile

| | |
|-----------------------------------|--|
| Company: | Termite Doctors & Pest Management Services |
| Base: | Buderim, SE Queensland |
| Proprietors: | Peter and Elaine Arnold |
| Contact: | 07 5444 1118 |
| Area of operations: | Sunshine Coast from Caloundra to Noosa including the Hinterland |
| Speciality: | Termites, rodents and general pest control in domestic residences and commercial buildings |
| Personnel: | A wonderful team of 6 fully trained licensed professionals. |
| Customer base and work: | 90% of our work is termite related. 10% is commercial and domestic pests. Currently 45% of new business is directly from customer referrals. We advertise in Yellow Pages, PDC Directory, Trade Section of local free newspapers, and local radio. |
| Areas we are expanding in: | Mosquitos and midges, bed bugs and new areas of Termite Detection. |
| Awards: | Recently awarded Winners in Excellence in Business Awards 2004 - Category: Service, Area: Sunshine Coast |

Stratagem's formula for success

BASF Product Specialist for Pest Control, Scott Kleinschmidt says that once you understand the key attributes of Stratagem it is easy to see that it has a built-in formula for success in rat control.



BASF Product Specialist, Scott Kleinschmidt.

The keys to effective control of rats and mice are to effect a change in their eating habits, especially in environments where they are otherwise well fed such as food stores, or warehouses and get them to ingest sufficient of the active ingredient for rapid death. Bait must be sufficiently attractive to be taken in preference to the rats' accustomed diet, there must be a low bait intake required for rapid kill without risk of bait shyness being developed in the interim. An active ingredient that is almost undetectable by rats and mice is essential. Peter Arnold and many other PCOs are discovering that all these attributes are combined very effectively in Stratagem. "The professional way to take out rodents" gives a complete profile of Stratagem and in this newsletter I just want to highlight a few important points.



Full details of Stratagem's technical profile are available in this brochure from your BASF Sales Managers or Product Specialist Scott Kleinschmidt.

Flocoumafen is highly potent

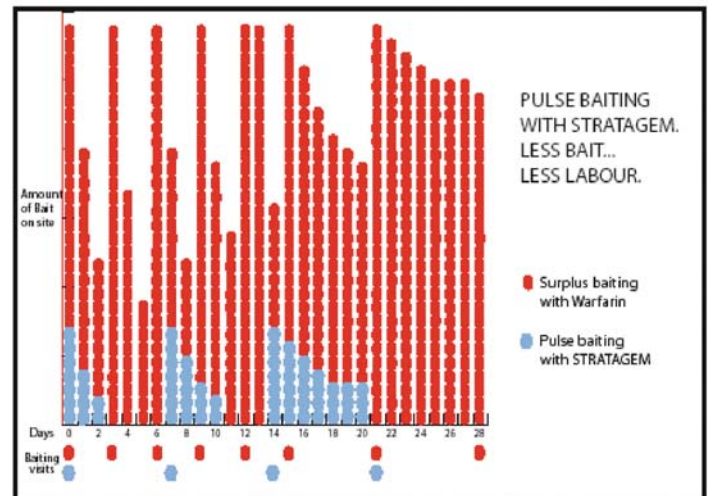
The active ingredient in Stratagem baits is a unique, second generation anticoagulant - flocoumafen - with an industry leading LD₅₀ of 0.25g for a 250g rat. Flocoumafen is the most effective rodenticide on the market today. With the concentration of flocoumafen in Stratagem baits, this translates to an intake of just 1.25 g for the LD₅₀ dose to be acquired. Stratagem bait attractiveness is ensured through several features, including the unique hexagonal shape that allows social concurrent feeding by a number of rats. Stratagem baits are so attractive to rats that even the presence of the human taste deterrent, a synthetic pyrethroid to protect against insect attack and fungicide to prevent mould are no deterrent to rapid intake! Even in the bakery, the rats preferred the Stratagem's crushed grain with Flocoumafen to their regular diet of spilt flour and other ingredients.

| COMPARATIVE POTENCY OF RODENTICIDES | | | |
|---|--------------------|-----------------|--|
| Brand of Rodenticide | LD ₅₀ * | Bait Conc. g/kg | Amount of bait calculated to deliver an LD ₅₀ dose to a 250g rat. |
| First generation anticoagulants | | | |
| Warfarin (Ratsak [®]) | 186 | 0.25 | 186g |
| Coumatetralyl (Racumin [®]) | 16.5 | 0.37 | 11g |
| Second generation anticoagulants | | | |
| Bromadiolone (Bromakil) | 1.125 | 0.05 | 5.6g |
| Brodifacoum (Talon) | 0.4 | 0.05 | 2g |
| Flocoumafen (Stratagem) | 0.25 | 0.05 | 1.25g |

*Source: The Pesticide Manual, British Crop Protection Council, Twelfth Edition, 2000

Pulse program is best

Peter Arnold's use of Stratagem is almost 'text book' in that he identified and noted the various aspects of the environment and the rats' habits, placing tamperproof baiting boxes at selected locations. His timing of inspection and re-baiting demonstrated very clearly the typical and recommended 3-4 day period for each 'pulse' within which the feeding rats would die to be replaced at the next baiting by the next eating group.



Fast acting and complete control

Eradication of the entire population at a location within 7 days, as Peter Arnold found at the bakery, is not uncommon with Stratagem although some widely dispersed populations may take up to three weeks. Rapid reduction in rat populations at any location where Stratagem is used correctly in a pulse program is due to the high potency of the bait and because there is no development of bait shyness through use of slow acting compounds.

| COMPARATIVE TRIALS - STRATAGEM VERSUS OTHER RODENTICIDES | | | | | |
|--|----------------|--------|--------|-------------|--------------------|
| Active ingredient component | Bait eaten (g) | | | Mortality % | Mean days to death |
| | Week 1 | Week 2 | Week 3 | | |
| Bromadiolone (Bromakil [®]) | 376.8 | 64.9 | 27.0 | 94.6 | 8.1 |
| Brodifacoum (Talon [®]) | 315.3 | 28.0 | 21.4 | 98.4 | 7.3 |
| Flocoumafen (Stratagem [®]) | 304.7 | 0.7 | - | 100 | 5.1 |

Source: Rowe F.P. et al. J Hyg., Camb. 1985, 95, 623-627. Great Britain.

Only very small amounts of Stratagem need to be eaten but more often it's taken greedily because it is so attractive.

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Always consult the product label before use.

www.agro.basf.com.au

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