• Kills Cockroaches Faster than •
• any other Product on the Market •

Call 13 35 36
www.ensystex.com.au
info@ensystex.com.au

EXTERRA™

Thor's Thunder

News & Views from Ensystex • **ISSUE SIX** •

AEROTHOR – Simply the Best

The launch of Aerothor has proven a real winner. Aerothor offers powerful flushing action and quite simply, kills cockroaches faster than any other product on the market. The professional valve system give premium performance without any leaks or drips, even when using the extension nozzle to probe deep into cracks and crevices. Pest controllers all around Australia are singing the praises of Aerothor.

"Great product, we have a large commercial portfolio and even some of our clients have commented on the pleasant fragrance. Plus it complements Blattathor very, very well. Great work Ensystex!!!" **Peter Ferguson - Exopest (Melbourne)**

"We are extremely happy with the knock down power of Aerothor it has filled a large void in the market." **Ryan Robertson - Complete Pest Control (Adelaide)**

"It works very well against German cockroaches. My technicians are really happy with the results." **Reg Chilby - Advanced Pest Control (Anna Bay, NSW)**

"It flushes the cockroaches out very quickly. Our customers are very impressed. It drives the cockroaches out of their harbourages instantly and they are on their backs in seconds!" **Dave Brown - Central West Pest Management (Parkes, NSW)**

"It's better than any other aerosol we have tried. It works like a true aerosol and doesn't foam up at all." **Kevin Wadebrook - Lindar Pest Control (The Entrance, NSW)**

"Aerothor is the best Aerosol product we have ever used! It's easy to use, good pressure from the can, no odour and it works just great! Absolutely fabulous on German cockroaches!!!" **Craig & Katie Caban - Caban's Pest Control (Goonellabah, NSW)**

"We are extremely happy with Aerothor. We particularly like it's initial flushing action on German cockroaches. The fact that the deposit dries quickly and there is no odour are two extra positives. Aerothor will now be the only aerosol that I use." **Rob Springer - Urban Pest Control (Sydney)**

"Aerothor is going really well in flushing out cockroach problems . I'm heading off with a can this afternoon to treat another job that has been a tough one in the past – and I am sure Aerothor will help me fix it up!" **Shaun Canavan - M & J Pest Control (Bomaderry, NSW)**

"Ensystex have produced yet another winner! It is simply amazing to watch the German cockroaches rush out and keel over dead in seconds. **John Boyham - Budget Pest Control (Perth)**

FACT OR FANCY?

COCKROACH BAITING AND THE TRANSFER EFFECT

An interesting paper was presented at the Sixth International Conference on Urban Pests titled **Factors Affecting Coprophagy and Necrophagy by the German Cockroach (Dictyoptera: Blattellidae)** by AG Appel from the Department of Entomology and Plant Pathology, Auburn University.

Gel cockroach bait formulations have been used to successfully control cockroach infestations since the mid 1980s. It is widely thought that due to the slow-acting insecticides used, unmetabolised insecticide is excreted in the faeces and remains in the body of dead cockroaches to affect other individuals. Consequently coprophagy (consumption of faeces) and necrophagy (the consumption of dead insects) have been marketed as important for providing "secondary kill" of individuals that have not directly eaten the toxic bait.

The purpose of Appel's study was to evaluate the potential importance of coprophagy and necrophagy to "secondary kill". In several experiments, they presented cockroaches with either contaminated faeces or bait-killed cockroaches alone, or in the presence of competitive food, and determined mortality.

Adult male and 1st-3rd instar insecticide-susceptible German cockroaches were used in the trials. The results showed that all the bait formulations were toxic to German cockroaches. There was no control mortality of 1st-3rd instar nymphs in the coprophagy experiments. There was significant mortality of nymphs exposed to the faeces of adult males who had fed on insecticidal baits.

Adult male and nymphal German cockroaches were killed after consumption of bait-killed adults or nymphs. Clearly the dead cockroaches contained sufficient insecticide to cause the death of additional cockroaches. However, when adult male cockroaches were presented with a choice of an additional 24 hours of starvation, or consumption of dead cockroaches, most did not exhibit necrophagy. Nymphal bodies were more readily consumed than adult male bodies. When adult males were given the choice between eating dead cockroaches and food, there was virtually no consumption of the dead cockroaches.

These results question the significance of coprophagy and necrophagy as an important means of insecticide transmission in typical German cockroach infestations. Although adult faeces are clearly toxic to nymphs, the time to kill is quite lengthy. Adult male faeces may not be as attractive as female or nymphal faeces, but there is little evidence that cockroaches prefer faeces to normal food. In typical infestations, either the cockroach populations are relatively small and there are few faecal deposits, or the infestation is very large and the environment is abundant with faeces (and dead cockroaches). In any event, cockroach debris should be removed as part of a good sanitation program since it is highly allergenic to sensitive individuals.

When adult male cockroaches were presented with dead adult males or 1st-3rd instar nymphs killed by exposure to a variety of toxic baits there was generally less than 25% mortality after 14 days. Mortality declined even further when the cockroaches were provided a choice between dead cockroaches and food. In behavioural assays, cockroaches preferred nearly all alternative foods to dead cockroaches, whether they contained insecticide or not. Although there may be differences in food preferences and aversions among German cockroach strains, this data demonstrates that necrophagy is the last resort of starving cockroaches.

More particularly, these results further emphasise the importance of good sanitation (especially the removal of food sources) for the successful management of German cockroach infestations.

A benefit of Ensystex's Blattathor Gel Cockroach Bait is the high palatability that really attracts cockroach feeding. Also we know with Blattathor that once the cockroaches have taken a lethal dose of the active, Blattathor triggers feeding inhibition. So, once the cockroach has consumed a lethal dose, it stops feeding and you do not waste any bait. This means bait placements last longer with more of the attractive bait left readily available for consumption by other cockroaches. This is more important than relying on the various feed-through effects since cockroaches clearly prefer a quality food when compared to faeces or dead cockroaches.

TERMITES AT SEA?

The Proclaim - constructed in 1939

Rod Trenholme - Ecolab Pest Elimination

The Proclaim was constructed in 1939 and is an important and enduring part of NSW maritime history. The almost 70 year old ferry however, has not been without a long and continuing battle against some very destructive termites. Over a number of years damage has occurred to timbers in several areas throughout the hull of the vessel and to timber framework in the life jacket storage area.

Recently during some timber repairs and replacement, termites were again located in the vessel. The owners commissioned Ecolab Pest Elimination (formerly Eagle Pest Control) to inspect the vessel and make recommendations to eradicate the termite infestation.

It was evident from a detailed inspection that termite activity was in several areas throughout the vessel with the possibility of there being multiple colonies. With careful consideration to the unique aspects of the ferry and the owner's obligation to keep the vessel in constant service, Ecolab recommended the installation of the Exterra System. Exterra was chosen as the preferred solution based on its minimal disturbance and Exterra's proven termite elimination performance. Ecolab was also able to provide the owners with the confidence that they had the appropriate experience to work in a professional and sympathetic manner with this sensitive and important piece of Australian Maritime history.

Within 2 weeks of installation, termites had begun feeding on the Exterra bait located in the Above-ground Stations throughout the hull and middle deck leading to elimination of the colonies and for the first time in many years the Proclaim will be free of termite attack!

Rod Trenholme, Ecolab Service Specialist advises, "I have used all major Termite Management baiting systems and find the Exterra stations are more effective and successful at intercepting termites. They are more technician friendly to use because they are more robust and efficient to monitor and bait."

EXTERRA™

EXTERRA IN KOSCIUSZKO

Another great fan of Exterra is Larry Wadell of High Country Pest Control. When an infestation of Coptotermes acinaciformis was discovered at the Kosciuszko HQ and Educational Centre in the Snowy Mountains it was natural that the NSW National Parks & Wildlife Service would turn to Exterra and High Country Pest Control with their reputation for professional service as the preferred solution.

Given the sensitive environment the use of toxic chemicals was prohibited of course.

Larry baited activity in the wall panelling and a nearby tree stump to resolve all the issues.

Another Exterra Success Story.

Larry Wadell - High Country Pest Control

Larry baiting activity in a nearby tree stump to resolve all the issues.

HAACP

HAZARD ANALYSIS CRITICAL CONTROL POINT FOR PEST MANAGERS

At first glance pest management appears to play a minimal role in any HACCP program, indeed the same with Australian Food Hygiene regulations. In essence there is simply a reference to the requirements for an "effective pest control program."

This may be interpreted that professional pest managers do not impact on the food safety program, as long as they are controlling the rodents and insects. This only covers part of the picture though. In fact everything you do in a food premises can have a significant impact on the safety of food. For this reason, it's important that certain procedures, directly related to your work, are followed to ensure the integrity of any food safety program.

Some ideas for you to consider in establishing your professionalism when working around food processing facilities are:

ENTRY: Ensure you are familiar with, sign off on and follow all plant personal hygiene and food safety rules. Many of these rules may seem as though they don't apply to our tasks, as we don't touch food, but we often do come precariously close to food contact surfaces — and it only takes one wrong placement of a dirty hand to compromise the food safety program. This may seem obvious but it is often overlooked.

HAND WASHING: This task should be considered paramount. We often forget that our hands are being placed in areas that many others aren't permitted to touch. Because we are working around finished product, raw materials and food contact surfaces we need to be washing our hands thoroughly — and often.

UNIFORMS: Make sure that your uniforms comply with the facility's uniform policy. This usually includes such things as no buttons, outside pockets, specific colour — and in some cases, to only be worn inside the facility.

HAIR NETS: Make sure that your technicians understand the importance of wearing them. Most food facilities are taking hair and facial hair nets very seriously.

Rodent Stations

Insect Monitoring Stations

RODENT STATIONS: Unless in damp or wash down areas, all rodent traps should contain a glue board. This is required to ensure when a rodent enters a station, it, and any of its potential pathogens are contained. Because the glue board contains the hazard, it also makes emptying a trap less of a HACCP procedural concern. The removal of a dead rodent requires you to remove and clean the rodent trap since it is a potential biohazard. This means the station should be bagged, taken out of the facility, decontaminated and replaced. It is not good enough to simply replace the glue board. It is highly likely the rodent has defecated or urinated in the station, and if there were any pathogens they are now contaminating the station. Failure to do this would constitute a HACCP failure, because a dead rodent can't possibly be safely removed without the potential for cross-contamination occurring.

INSECT LIGHT TRAPS (ILTS): Glue type lights tend to be installed in more sensitive areas, so care must be taken when opening and removing the glue trap for insect identification and disposal. Ensure that there is no open product, uncovered equipment or finished goods in the immediate vicinity. Remove the glue board, identify the insects and then place the glue board into a zip lock bag to be disposed of safely.

Changing bulbs is another area of potential concern. Never work over or above any production line unless a plant foreman has signed off to proceed with the work (and signed again upon completion). One broken bulb can cost hundreds of thousands of dollars if a piece of glass gets into a food line. And even if a the bulb says "shatterproof" don't assume it is! After lengthy exposure to UV light, even the best coatings can become brittle and break when dropped.

PESTICIDES: Application of any pesticide in or around a food processing facility can always pose a degree of risk. Issues can arise from a slight overspray, a piece of your rodent bait block being moved or an employee having a reaction to a product. While the result may not have been directly related to your application, you may become involved. It is imperative that you strictly follow the label requirements in a food plant.

Even if the premises are closed during the application, there are still contamination risks to consider. Ask yourself questions like: Where are you entering the facility? What areas must you pass through to get to the treatment zones? Where are you mixing your products? Will you be working over any exposed equipment? How much do you trust the cleaning staff to ensure that all exposed surfaces have been properly covered before or cleaned after treatment?

Wherever possible use baits and place them in closed stations. Ensystex provides a wide range of suitable baits and stations.

DOCUMENTATION IS CRITICAL! Write down everything you did, what you found and what your client needs to do to improve hygiene and pest management standards. Consider the inclusion of drawings of the treated areas/equipment.

There are many more responsibilities that you have when it comes to food plants. Whilst your primary responsibility is to ensure that the premises are kept safe from pests, you also have a responsibility to ensure that your actions don't create risks. Training programs for you food team are essential. After all, your clients are relying on your expertise to protect their food safety!