WHAT'S BUZZING? News from the World of Pest Management

Understanding the consequences of our nsecticide applications Ant Feeding Behaviour and Balting Techniques

Understanding

Carpet Beetles

The importance of always using registered products





October 2023 Volume 16 No. 5



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FROM THE EDITOR





PMANZ PO Box 133215 Eastridge, Auckland 1146 New Zealand Free phone: 0800 476 269 (0800 4 PMANZ) Email: info@pmanz.nz Website: www.pmanz.nz

ning of some summer fun!

And with it comes a myriad amount of spring bugs including the carpet beetle that can And on the subject of products, Sygenta cauwreak havoc on carpets and other fabric. tions against purchase of insecticides on-line, Dr Paul Craddock looks at this pest.

As Continuing Professional Development will now be part of ongoing Master Technician status, we formally introduce Dr Paul Craddock, Steve Broadbent from Ensystex has some good who will undertaking this development train- advice about ant management with baits. ing of members in the future. Welcome to the PMANZ technical team Paul.

Whether you are a Hand-Tanker or Mister person, do read the article from Jeff Einam of EN-VU about "Understanding the consequences of our insecticide applications".

Spring has sprung as we embrace the begin- This is a timely reminder and refresher about best practice when treating inside residential homes.

> no matter the price. You could be doing so illegally. Read more about this, and your legal standing under the law from EPA.

Once again, thanks to our advertisers, we do appreciate your support.

Happy spring reading.

Warm regards

Peter



President's Pen Maihi Cooper

Kia ora PMANZ members, suppliers, family, friends and other interested readers to the fifth edition of the PMANZ What's Buzzing newsletter for 2023.

Welcome to the start of the spring season and the latest edition of the PMANZ newsletter. I trust our members, suppliers, family, friends and pets are adjusting to our new ways of living but more importantly I hope you're all well. There's lots of interesting topics and I encourage you to read on and speak to the suppliers and or reach out to other members if you need some advice.

Whist spring is supposed to have knocked on our door by October, we still seem to be in the remnants of winter. But don't let that deter you from enjoying the Rugby World Cup and other great sporting events around. Pity the 'Wahs' could not make the final, maybe next year. In the meantime, "Go the All Blacks!"

On a more serious note, we understand from our weather people that our summer is potentially going to be a hot one and we all need to take care of ourselves and staff in the warmer weather. Read about some great hot weather safety advice and what's expected under the Technicians forum.

Recent events have focused on the need for us all to be more safety conscious with the use of Vertebrate Toxic Agents in public areas, AKA rodent baits. Current legislation was highlighted recently with a new rodent bait approval that stated that signage requirements for 12 months when this substance is used in outdoor areas, under **regulation 13.19(5) of the Health and Safety at Work (Hazardous Substances) Regulations 2017**, due to its persistence in the environment.

WorkSafe stated "The signage warns of the presence of VTAs and is intended to raise awareness of pest control operations in the area, so children and small animals are supervised to ensure they are less likely to accidentally ingest VTAs."

Please heed this regulation when laying baits outside in public areas, such as shopping malls, supermarkets, drive-thru takeaway outlets and so on.

Another topic I would like to mention in this edition is waste management and recycling. As a pest controller we end up with old bait and empty pesticide containers.

It is important that you follow instructions provided by the manufacturers and suppliers to ensure these are handled in a safe and appropriate manner. Most pest control operators do not dispose of this type of waste at customer sites, and I agree it is best to take away securely and dispose of in a controlled manner. Please read the article covering how you can manage old fluorescent tubes...

Finally, thank you to the members who attended our Annual General Meeting in August, I appreciate you spending some of your valuable time and I would especially like to thank all of those who participated in the Membership revision, that was successfully approved.

To support our vision of establishing a Continuing Professional Development system for members, I would like to welcome Dr Paul Craddock to the PMANZ team as our lead in this role. Paul has gained a vast amount of experience through his career, and I've always found his approach very applicable and relatable to the pest management task or challenge.

I look forward to him sharing his skill, knowledge and experiences with the membership and association.

There are great articles in this spring edition on ant baiting and summer spraying from both Ensystex and Envu, while Sygenta has reminded us of buying unregulated pest control products from the web that have not been approved by EPA New Zealand. Onto memberships, we are continuing to see the growth in the past 2 months, that is great to have more pest management professionals joining the association.

It gives us a greater presence as an industry in New Zealand and the globe, something to be proud of. We have had 20 members join the association that brings us to a current total of 569 in our membership. Please join me in welcoming the following members:

New Qualified Technicians		
Megan	Sampson	Rentokil
Vibha	Thakur	Rentokil
Kelsey	Rhodes	Rentokil
Donny	Ngawhare	Rentokil
Chanpreet	Singh	Rentokil
Terence	Murphy	Rentokil
Rupert	Garlan	Rentokil
Michael	Peterson	Rentokil
Andrew	Wolland	Rentokil
1	Cattin	JAE Christchurch
Jordan	Comin	North & West
Karl	Streeter	Rentokil
Jianhong	Liao	Rentokil
Nathan	Schwenke	Rentokil
Grant	Powell	Rentokil
Nathan	Wickens	Combat Kiwi Pest
Nathan		Control
Andrew	Wolland	Rentokil
Michael	Zhang	MZ & QW NZ Ltd

New Trainees		
Janice	Black	P & J Black
Vishal	Vishal	Genus
Tamzin	Cowie	RNZAF

That's all from me for now, Ngā mihi nui,

Kind regards

Ant Feeding Behaviour and Baiting Techniques

by Steve Broadbent Regional Director – Australia, SE Asia, S Africa & Gulf Region Ensystex

The complex food cycle within ant colonies varies with the species of ant. Foraging ants bring food or water back to the colony and distribute it to the queen, other workers, and larvae by trophallaxis. A filtering mechanism, the infrabuccal plate, present in adult ants, prevents solid food particles from entering their digestive tract. Consequently, adult ants have typically been considered as 'liquid feeders' only. The solid prey/ food seen being carried by workers back to the colony was thought to be intended as food for the larvae only.

The feeding of larvae commonly occurs when workers apply their mouth parts to those of the larvae and regurgitate liquid food from the worker's crop. This process, stomodeal trophallaxis has been observed in nearly all major ant families.

The larvae can also externally digest solid food to a second chamber, the infrabuccal pocket, brought back by adult ants. The larvae produce that is a collection site for solid food particles. soluble proteins which are in turn sought from

them by the adult ants. The larvae regurgitate the digested solid food back to the workers in a liquid form. This has led to the concept that ant larvae might also serve as a specialised digestive caste.

Recent studies to determine whether bait digestion by larvae is a key factor in the consumption and distribution of the toxicants from baits to worker ants, have shown interesting results. Understanding the mechanism that allows a bait toxicant to enter the colony is fundamental for effective control and enables us to develop baits that better target colony elimination.

What has been discovered is that more important than the provision of solid-phase or liquid-phase food to the larvae, is the fact that toxic baits are most effective by their action through the mouth parts, where food enters the cibarium, the space anterior of (in front of) the true mouth cavity. This chamber opens into a second chamber, the infrabuccal pocket, that is a collection site for solid food particles.

Article continues after advert

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Whereas liquid food is directly imbibed by ants from the surface of their labium (tongue), and carried into the pharynx, through the oesophagus, and into the crop; particles of solid food, obtained by licking with the labium, or rasped off by the maxillae, are carried into the infrabuccal pocket where they are moulded into a nutritious pellet.

Ants also use their labium to cleanse one another and their brood, by which means many food particles may be carried more directly into the infrabuccal pocket. The solid portions, when no longer of any nutritive value, are cast out as a small pellet of refuse. This use of the labium for cleaning, can also spread the toxicant through the ants exoskeleton.

Ducts from the propharyngeal, postpharyngeal, maxillary, labial, and mandibular glands enter into the cibarium and infrabuccal pocket. It appears that baits stored in the infrabuccal pocket come into contact with these various glandular secretions and, if formulated to target this process, release their toxicant into a liquid form. Through trophallaxis among workers, the toxicant then spreads rapidly through the colony, without the need for digestion by larvae. Thus, the larvae are not critically important for the transmission of the toxicant in the colony.

Hymenopthor Ultra Granular Ant Bait was carefully formulated to target this feeding biology and provide the most effective means of colony control. Fipronil was chosen as the active, since it is nonrepellent, readily transferred from one ant to the next and, due to Ensystex's Liquid Oil Phase Release Technology[™], it is released into the above glandular secretions and spread through the colony by direct worker to worker trophallaxis.

Traditionally, a difficulty with baiting for ants has been the wide range of feeding preferences of the different species (See Table 1). This is further complicated by the fact that the colony's feeding preferences change during different seasons.

Hymenopthor Ultra was specifically developed to overcome this by employing a complex blend of sugars, animal proteins, and oils to ensure optimal palatability for all species of ants (and cockroaches). It works as both a liquid and a granular bait to optimally exploit the ants social/ feeding structure as discussed above.

Uniquely, Hymenopthor Ultra uses an edible cereal base as the carrier. Most granular baits use inedible grits as the base. This is why Hymenopthor Ultra works more effectively, as the actual cereal base is consumed and distributed through the colony through the infrabuccal pocket.

Hymenopthor Ultra effectively provides a better control solution than liquid or gel baits. It can be used indoors or outside, and it can be placed deep into cracks and harbourages, along ant trails, or if required, inside reusable Hymenopthor Ant Bait Stations. These Stations are cleverly designed to provide access to insects of different sizes and prevent bait spillage.

	Relative Feeding Preference		
Species	Sugar	Protein	Oil
Pharaoh's ant	Moderate	High	Low
Argentine ant	High	Low	Low
Coastal brown ant	-	Moderate	High
White-footed house ant	High	Moderate	-
Black house ant	High	Low	Low
Meat ants	Moderate	High	-
Red imported fire ant	-	-	High
Singapore ant	Moderate	High	High
Green-headed ant	Low	High	Moderate
Funnel ant	Low	Moderate	-
Odorous ant	Moderate	High	Low

Arandee was founded in 1972 by Ron Greer. It proudly remains New Zealand owned and operated.

Today, **Arandee** continues to develop innovative chemi-tools with a dual focus on product efficacy and compliance.

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We are committed to environmental responsibility and ensure that every step of our value chain, from laboratory to customer, adheres to strict internal and internationally recognised guidelines of best practice.

OVU Understanding the consequences of our insecticide applications

A study into internal spraying for Fly Control in New Zealand By Jeffrey Einam, Marketing Development Manager ANZ, ENVU

This two part discussion was first published in our newsletter in 2015. I thought it still highly relevant for the treatment of flies today - Ed

Back in 2005 we conducted some research which I subsequently presented at the PMANZ conference that same year.

It involved looking at some, but by no means all the issues associated with Synthetic Pyrethroid (SP) applications for fly control in New Zealand. This was the first time that someone had done an in-depth look at how these products were being applied under New Zealand conditions. Like the original study and the update in 2015, it seems appropriate given the number of new technicians coming into the industry each year that in 2023, the 18th anniversary of the PMANZ presentation that we look again at what we found.

PART 1:

A DISCUSSION AROUND THE KEY ISSUES

Synthetic pyrethroids have been the most applied product chemistry for fly control in New Zealand for well over 30 years. At our last review of this data back in 2015 enquiries about the perceived lack of efficacy of this chemistry had been more frequent up to that point (historical records within AgrEvo, Aventis and Bayer) than would have been commonly expected (especially given the continued success of these products for similar pest uses in Australia).

Throughout my 25 years with Envu (and its subsidiary companies) there have been:

- Unsubstantiated rumours of SP resistance
- Queries about whether products were up to specification (or not)
- Significant differences in the application technique between Australia and New Zealand
- Different expectations and standards from the same products between Australia and New Zealand, particularly where they're applied, and how long they're expected to perform.
- A higher proportion of enquiries from NZ than from Australia.

Similarly – there are also a few enquiries during the summer from people that have had allegedly a reaction after entering an area where SP's have been applied.

SPACE SPRAYING

LV Misting Diluent: Water Equipment: Misting Machine

Thermal Fogging Diluent: Oil, Diesel, Kerosene Equipment: Thermal Fogger

ULV Misting Diluent: Water Equipment: ULV Machine

Mist Blowing Diluent: Water Equipment: Mist Blower

Common Types of Space Spraying Equipment

After investigating these situations (not just limited to New Zealand) we commonly find a link between these cases and incidence of product found on non-target living surfaces such as benches, lounge chairs and the like. In some cases, we've discovered that equipment designed primarily for space spraying (such as handheld misters) has been used to apply residual products (and known, but non-label, dilution rates employed).

Is it possible therefore that the increase in incidence of such reports is from the greater off -target movement of product applied through this kind of 'misting-type' equipment?

We looked closer at all the issues reported and categorised them into 3 main groups.

- 1. Staining/marking and physical damage
- 2. Irritation
- 3. Performance

Staining (permanent damage to surfaces) and Marking (surface deposits that are temporary)

It's well understood that heavy-handed applications can lead to surface staining and marking. However, what is not, is that the most common culprit is the water not the insecticide formulation that leads to the complaint.

Formulations classed as emulsifiable concentrates (EC) however also pose an increased risk of having the potential to stain (damage) surfaces. Damage caused to surfaces by water and EC's is often permanent and costly.

Formulations such as suspension concentrates (SC) and wettable powders (WP) can leave behind powdery deposits (marking) but rarely cause permanent damage. These deposits are more visible on dark surfaces and glass when they occur, but the good news is they can be mostly cleaned off with a damp cloth.

Recommendations – Staining and Marking

My number one bit of advice is, if in doubt do test patches. Think about where the product is going to be applied and make sure that you have considered all these areas. I've seen too many times where large claims could have been prevented by a quick test.

Be careful of dark paints, and unusual paint finishes (suede effects and old-style paint recipes such as lime washes) as these seem to be more susceptible to staining (damage) by residual insecticide applications.

A reminder that water is the biggest culprit for most claims that we investigate here at Envu. In other words, the staining that has occurred can be replicated by water plus insecticide or just water alone.

The biggest claim I have ever investigated was in a furniture manufacturing factory in Perth, Australia. A PCO was called into treat some metal storage racking for spiders. The racking happened to contain their raw timber supplies. He went straight to work and started hand spraying the racks and spray solution began to drip off the racks onto the timber. He probably should have been concerned at this point but carried on and treated all the racking and the rest of the warehouse. When he came back the product had soaked in and dried and no evidence that the run-off had occurred could be found.

The PCO got a call a week later from the factory for him to come down for a site visit. What confronted him was timber furniture that had been stained (colour that is!) with dark blotches (marks) all over it where the timber stain had behaved differently in some places to others. After an involved investigation it was proven that the water stained the timber and disfigured it such that it only became visible once colour stain was applied. So, the claim was not just raw furniture timber, but in this case was completed furniture that should have been ready for sale. As you can appreciate what seemed like a small thing turned into an awfully expensive claim!

Irritancy

Many products we apply have the possibility of causing us harm. With SP's most of this risk is associated with dermal (skin) irritancy known as Cutaneous Paresthesia. For those who have experienced it, symptoms generally are a 'prickly heat' sensation of the affected areas (most commonly around the face and eyes) that whilst temporary can last up to 12 hours or more. With some products and with some individuals this response can vary significantly such that one person can react to Product A but not Product B, some react to Product B and not Product A and some people will not react to either.

So, what does this mean for us in New Zealand and fly control?

Whenever we apply products, we must think about the fate of the application. As much as we can protect ourselves with appropriate PPE, we must also concern ourselves when treating for flies about where is the product being applied (placement) and when can the area be re-entered.

Product Placement

If product is applied to target areas eg walls and not onto living surfaces such as furniture and benchtops, the likelihood of homeowners coming into direct and frequent contact with the treatment will be minimised. When product ends up on non-target areas the risk of exposure and irritation grows rapidly.

Re-Entry

What is well documented is that contact with product that is dry on surfaces poses a much lower risk of irritation than if the product is still wet. That is why we always say once a product is dry it is safe to re-enter however when applying indoors especially, the other mode of contact that can occur is via airborne residues following an application. Ventilation of internal treatments removes airborne residues faster so we can give the premises the 'all clear'.

Performance

The final group of issues we classified were around product performance. Resistance is always raised as a question especially given our reliance on one mode of action for so long, but the low selection pressure and mobility of house flies in our urban environment does not appear to be a significant contributor to this developing. To date, there is no tangible evidence of this being responsible for treatments not working. The two areas I feel need to be looked at closely are:

1. Expectations and Claims

Consistently this is a point of debate given that what our market wants us to achieve (warranty period vs cost of treatment) is beyond the real capabilities of the chemistry. For internal use, SP's last up to about 12 weeks and even this varies between products and climatic conditions. Outside applications degrade more rapidly due to UV degradation and weathering eg rainfall events.

However, our market expects us to control flies for long periods of time, a highly mobile insect that does not have intimate surface contact like cockroaches do (good surface contact = enhanced product uptake) that assists products to work for longer. What we know is that a program based around careful timing (not too early in the season), comprehensive selection of products (SP + Fly baits and Traps) combined with favourable seasonal conditions will get us through until the population in the greater urban environment decreases naturally.

2. Product placement

Without doubt and with the best conditions above, poor product application can undo all our efforts. If we fail to treat all the resting surfaces in a home or structure, then we cannot rely on our treatment to last. Where I've seen treatments fail is that despite trying to target resting surfaces the application method inherently results in most of the product end-

ing up on the floor.

Article continues after advert

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PART 2: PUTTING SCIENCE AROUND THE ISSUES

In Part 1 we looked at the main issues around the application of Synthetic Pyrethroids (SP's) for urban fly control.

There was a number of key discussion points that we felt could be more closely investigated so we could substantiate some of the recommendations that were given. In other words put some facts around the messages.

No matter how we looked at the topic, we kept coming back to the fact that there was very little applied research looking at the fate of our treatments. Whether we choose a hand sprayer or a hand held mister, we are applying the same products to the same target areas but could not be absolutely confident where our treatment was going.

This raised a few key questions:

Is there a difference between hand spraying and misting?

- 1. How much product is hitting target resting surfaces?
- 2. How much product is hitting non-target resting surfaces?

We assumed that if product was not where we intended it to be, that might explain why some treatments didn't work as well as others and if products wasn't on target resting surfaces, it could be ending up on non-target (living) surfaces and this could be the reason for cases of homeowners experiencing skin irritation events. To answer this we designed a simple comparison experiment of four scenarios:

- 1. Hand Spraying + Ventilation
- 2. Hand Spraying + No Ventilation
- 3. Misting + Ventilation
- 4. Misting + No Ventilation

Swabs of target and non-target surfaces were taken and analysed at an independent laboratory.

We decided to not just look at surface residues but also the fate of the airborne residues, as this affects safe re-entry times

- How much product is in the air?
- How long do the airborne residues take to disappear?
- How much of an effect does ventilation have on the time to remove airborne residues?
- When can we safely recommend re-entry into a room?

We did this by taking air samples at various times after application to measure how much product remained airborne.

Results

Surface Residues

- Residues on target resting surfaces were similar whether rooms were ventilated or nonventilated
- Residues on non-target resting surfaces were greater when the room was not ventilated.
- Misting equipment created more non-target resting surface residues than hand spraying.
- Residues on target resting surfaces were greater from hand spraying than from misting.
- The concentration of the spray mix in handheld misters needed to be increased to deliver the desired target resting surface rates. This increased concentration also resulted in an increase in the residues on non-target resting surfaces which could lead to an increase in cases of skin irritancy.

Article continues on next page

Air Residues

- Air residues dissipated quickly from treatments that were vented
- Misting created far more air residues than hand spraying.
- Air residues were negligible after 4 hours irrespective of product, application type or ventilation practice.

What has the research answered?

- 1. Can we apply the correct amount of product to surfaces using a mister at label rates?
 - A. Using label rates, misting equipment under-doses target resting surfaces based on the research
- 2. Is the use of misting type equipment going to lead to a greater chance of off-target drift than use of a conventional hand sprayer?
 - A. Misting creates much finer droplets than hand spraying. This creates both more air and non-target residues.

3. Can a 'standard' hand sprayer achieve target deposition rates and result in less off target drift

A. Interestingly, in this study surface residues from hand spraying were not at target levels according to the label. This is an area of research that needs further investigation. This was despite products being applied at an application volume just prior to the point of runoff. However, what was noticeably clear was that there was significantly more active ingredient applied to target (fly resting) surfaces as well as significantly less offtarget drift by using a hand sprayer rather than a mister.

4. What is a safe re-entry period after a house has been treated and well ventilated.

A. Air residues decreased rapidly after the first 30mins and were negligible after 4 hours irrespective of product, application type or ventilation practice.

Take Home Messages

Whether you choose to use a mister or a hand spray, aim to maintain a re-entry period of 4 hours if possible. This will ensure you will not have homeowners exposed to airborne residues.

Ventilation certainly assists with both removing airborne residues and drying surfaces faster than not ventilating although the time to do so is not reliable. Airborne residues end up on non -target resting surfaces <u>especially</u> if a room is not ventilated, so ventilation of rooms is always the preferred option.

Recognise the consequences of misting.

We have shown in this research that whilst both hand spraying didn't quite deliver enough product to target surfaces when applied just prior to the point of runoff, misting applications in the trial delivered quite a lot less active ingredient to target resting surfaces which must be impacting performance (particularly residual control) AND misting will result in more product being applied to non-target resting surfaces. This means that if misting, we must be vigilant in covering up these areas to ensure this is managed appropriately.

Residual spraying should always be an important part of your program but should never be the only part. Think about what is drawing the flies to the site and try to address this first. Supplement the program with the strategic use of fly traps outdoors and fly baits to attract and kill flies. I always like the use of fly baits under rubbish bin lids for instance as it is an area of concentrated fly activity and breeding around the home.

Finally remember the basics, if sufficient chemical is there on a <u>target resting surface</u> it will work. Anywhere else it will not and is a waste of your time and money.

The importance of always using registered products

By Jaelle Bajada, Head of Corporate Affairs, Syngenta ANZ

What are the chances?

That is often the question we ask ourselves when considering an option that involves a level of risk. Should I swim in the ocean late this is one of the risks of purchasing prodat night and on my own?

Should I drive the long distance without a break to get to a location on time or leave the night before?

Hazards and the risk level we are willing to live with is something we are having to consider a lot more often. We all take risks some are more dangerous than others. The risky use of any chemicals including pest control products, falls into a high-risk category that requires careful consideration from the very first question – where do I buy my products from?

In New Zealand, the government regulatory body, the Environmental Protection Authority (EPA), assesses the hazards and the risks before determining the measures required to protect users, and allows for the approval of the pest control products on the New Zealand market according to the Hazardous Substances and New Organisms Act (HSNO Act).

This approval process ensures that if the product label is followed, there is no harm to humans, animals, and the environment.

Unfortunately, not every professional pest product sold in New Zealand is assessed and approved for use in New Zealand and ucts online.

Syngenta's Head of Professional Solutions, David Van Ryswyk, said that the risk of purchasing an unapproved pest control product online or from overseas is high.

"While it may be tempting to find products online that are either quite cheap or available in different pack sizes, you just don't know what you're going to get."

"We are aware of many situations where the products sold online or from overseas are shown not to contain the required amount of active ingredient to make the product effective, or they contain contaminants that make it unsafe for humans, pets, or the environment. Too many operators have received call backs to do the job again because the products purchased online just didn't work," said David.

There are a few issues that people don't consider when purchasing products from overseas without correct EPA approval. They often don't display the correct poisons contact information relevant to the country – a potential risk to the user. If you have imported these products, you are deemed the manufacturer and are liable for them in New Zealand.

Another thing to consider is that many bait products use plant and animal products as attractants. In overseas formulations, some of these may not be permitted in-country according to New Zealand's biosecurity laws. Many manufacturers will have different formulations for different countries to comply with local standards.

Syngenta produces professional pest solutions for the New Zealand and Australian market including ADVION[®] Ant Gel Insecticide and AD-VION[®] Cockroach Gel Insecticide. Syngenta products sold through Garrards, a reputable distributor, have all been through the EPA's approval process.

"Registered chemicals used in pest control have passed a rigorous testing program that ensures the products are fit for their intended use," said David. "All our products go through many tests to ensure safety and importantly, efficacy testing, to provide confidence that our products do what they claim to do."

"Because of the amount of scientific evidence and data we put into the approval process, we provide a warranty for all our products. Customers that purchase through Garrards know that if the product label is followed, they are covered by the product warranty should they need it," said David.

Article continues on next page

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DEMAND® CS is a cost effective, long lasting general pest spray that can be used indoors and outdoors. It controls a wide range of pests including Flies, German and American Cockroaches, Fleas, Spiders, Ants, Silverfish and Mosquitoes.

The capsule suspension (CS) protects the active ingredient so DEMAND[®] CS offers long residual control while also providing quick knockdown when directly contacting the pest.

FOR LIFE UNINTERRUPTED[™]

syngenta.

For more information contact Syngenta on 0800 333 336 or your local Garrards Distributor. Always read the label. DEMAND[®] CS is approved pursuant to the HSNO Act 1996, Approval Code HSR000337. Syngenta Crop Protection Limited, Tower 2, Level 7, 110 Symonds St, Auckland. "Registered trademark of a Syngenta Group Company. "Trademark of a Syngenta Group Company. ©2022 Syngenta. AD 22-117. Unfortunately, pest control products sold online often look like genuine, registered products and it can be difficult to tell whether you are making a high-risk choice. Luckily, there are things you can look for to help you make the right decision.

Syngenta's Technical Service Lead, Peter Ambrose-Pearce, advised that there are certain label elements operators can look out for when long run and maintains the trust that custompurchasing a professional pest solution product.

"Before buying or using a pesticide or fumigant, the first thing is to always check if it is approved by the EPA and displays the HSNO approval number on the label. If there is not a HSNO approval number on the label, the product is not registered, is illegal for use in New Zealand, and can be dangerous to operators or their customers."

"Beware of buying from unfamiliar suppliers and always check with online and overseas sellers to ensure their products are EPA approved before you buy them. You can search the databases on the EPA website (www.epa.govt.nz) to view all registered products in a particular category. But the best way to ensure you are purchasing registered products to buy from reputable supplier."

Managing risk in life and in business is something we all do, often subconsciously. Something to consider when deciding where to buy your products from and assessing the risk is what that decision could mean for the industry.

"We all want to succeed as individual businesses, there's no doubt about that," said David. "But to ensure our industry succeeds in the ers have in professional pest solution providers, we all need to make decisions that ensure our industry is here for the long-term."

"By purchasing from reputable suppliers and using products registered for use in New Zealand, we all benefit from being part of an industry that our customers trust and value."

If you have any questions or concerns about the products you are using or want to have a chat about what we can all do to contribute to a strong and successful industry, contact Peter Ambrose-Pearce or reach out to your local Garrards branch.

Want to check if a substance is registered?

Environmental ection Authority Te Mana Rauhī Taiao

To check which controls apply to a substance, search for the substance in the Approved Hazardous Substances with Controls database.

Click on the link above to take you to the EPA website:

Type the name of the product in the search bar - if it is registered the name will come up at the bottom of the page, just scroll down and you can then click again on the name to see all the controls. Have fun!

ScienceInvasive species cost global economyNewsmore than \$400b annually — study

The impact invasive species have on biodiversity is costing the world around \$423 billion every year, with costs quadrupling every decade since the 1970s, a new report says.

The <u>Assessment Report on Invasive Alien Species and their Control</u> looks at one of the most important direct drivers of biodiversity loss.

The team of 86 experts from 49 countries released the assessment of the global impacts of some 3500 harmful invasive species, finding that economic costs now total at least US\$423 billion every year, with the alien invaders playing a key role in 60% of recorded plant and animal extinctions.

Angela McGaughran, who is a senior lecturer and principal investigator of the Invasomics Lab at the University of Waikato, said the report focused on biodiversity in the particular context of invasive species.

"It's providing some evidence around trends in invasive species over the last several decades, as well as some insights into different tools and options that we might be able to put forward in the future to better control these threats."

Source Radio NZ — Read Original HERE

The thematic assessment report on INVASIVE ALIEN SPECIES AND THEIR CONTROL

News WorthThe latest New York tourism trend?Sharing'Celebrity' rats feasting on trash

New York City, which prides itself for being able to satisfy the interests of the most curious visitor, is now offering <u>rat tourism</u>.

Months after Eric Adams, the city's mayor, appointed a "rat tsar" to combat <u>an estimated three million rodents</u>, tour operators are taking visitors to see <u>swarms of the creatures</u>.

Kenny Bollwerk, who works at a pizza shop in Queens, built a large online following with 10,000 people logging on to watch him film rats in central New York shopping and business centres.

It was not long before a couple of people asked to accompany him.

"The livestreams have created tons of interest. I didn't even realise how popular the rats of New York would become," Bollwerk, 36, told The Telegraph.

"I started filming bad areas to help get more complaints for small businesses and people started asking if they could come with me."

Read the full article from Stuff by clicking <u>HERE</u>

GARY HERSHORN/GETTY IMAGES

News WorthRat Eradication Helping to PreserveSharingHistoric Tongan Island

LATE ISLAND, Tonga — In a groundbreaking conservation initiative, Late Island in the Kingdom of Tonga stands as potentially the largest island in the Pacific to have been cleared of invasive rats, setting a remarkable benchmark for similar endeavors across the globe.

The Director of Tonga's Environment Department, a key partner in the project, Ms Atelaite Lupe Matoto, welcomes the initiative.

"Removing invasive species like rats is one of the most cost-effective tools the country has for restoring the resilience of its natural ecosystems and its communities," she said.

"The primary problem for Tonga is that invasive species like rats and weeds are weakening the resilience of natural ecosystems and increasing the vulnerability of our communities to the increasing impacts of climate change. Controlling invasive species, like rats and weeds can protect our biodiversity and strengthen the resilience of our forests, catchment areas, and reefs, providing protection from cyclones, increasing food security, and creating opportunities from activities such as eco-tourism."

Late Island is a sanctuary of biodiversity for Tonga. It supports one of Tonga's largest intact tropical broadleaf forest ecosystems, one of the most threatened ecosystem types in the world. This tropical forest provides a stronghold for several globally threatened species including the Friendly Ground-dove and Tongan Whistler.

Read the full article from PCT by clicking <u>HERE</u>

Photos courtesy of Island Conservation

NEW ZEALAND NEWS

AI to help us hit our predator-free targets in the countdown to 2050

Two possums caught on a night vision trail cam during trials of first prototypes by New Zealand-based research and development company Critter Solutions.

August 16th 2023, marks 10,000 days until 31 December 2050 – the deadline of the ambitious goal to rid the country of three of biodiversity monitoring, according to the the worst introduced predators devastating our native wildlife: possums, mustelids (ferrets, stoats, weasels) and rats.

There isn't a day to waste. The very survival of Aotearoa New Zealand's birds, geckoes and other small creatures depends on the elimination of these furry ferals.

Collectively these hunters kill an estimated 25 million of our native birds each year. Some 4000 of New Zealand's native species through the Government's Jobs for Nature are threatened or at risk of extinction – proportionally one of the highest extinction rates in the world.

A new artificial intelligence-enabled tool will soon greatly boost predator control and New Zealand-based research and development company Critter Solutions.

Company field trials are underway on fully automated predator control traps that will only trigger when a target has been identified by AI as a pest species.

Critter Solutions is a collaboration between Boffa Miskell and Red Fern Solutions. Funding from Predator Free 2050 Limited initiative in 2021 helped to speed up the development of this new technology.

The new AI-enabled Critter Solutions Kill Trap will use AI to identify animals before the trap is triggered

Project lead Dr Helen Blackie from Boffa Miskell A successful roll-out will help deal with an onsays the traps effectively 'think for themselves' going challenge of remote pest control: avoidand make a decision whether an interacting ani- ing collateral damage among native birds such mal is a target pest species or not."

other species from entering.

Traditional traps typically require the pest to trap, which can also reduce catch-rates. "By us- critical part of that". ing AI we can do away with manual triggers completely," says Blackie.

Cloud technology which relies on information motely notify a user that it has triggered and relayed from the trap to the Cloud, with the an- can send a picture of the animal it has been imal being held until a decision is made.

presence of a pest.

as kea and kākā.

Using AI to trigger traps means that the trap's "We want to ensure that achieving national design can be more open and appealing for eradication of rats, mustelids and possums, the pests to go into, as it is not also trying to stop Predator Free 2050 goal, is carried out in the best way possible," says Professor Dan Tompkins of Predator Free 2050.

push, pull or stand on a trigger to activate the "Reducing impacts to non-target species is a

The traps are low power, self-resetting, and self luring – meaning they can be left in the field for Most other AI traps currently available use long periods without servicing. The traps retriggered by.

Blackie says a key technical success has been The traps have passed requirements for deliverdeveloping the trap so that it's extremely fast at ing a humane kill for rats, stoats and possums in triggering when an animal is recognised – with- independent trials. As well as controlling pest in a fraction of a second – after detecting the species, the device can also be used in a 'passive' mode to collect monitoring data on native species.

Article continues on the next page

The trap under development are triggered within a fraction of a second when a pest animal is recognised. The collage image of possums was captured live from a smart camera, during Critter Solutions Kill Trap trials

The Critter Solutions Species Specific Kill Trap is expected to be ready for sale by late 2024.

Tompkins leads the products to projects portfolio and says the Predator Free mission was launched knowing that new tools and approaches would be needed to get the job done.

"This is one of many great advances that we are already seeing."

SOURCE: Stuff

Click **<u>HERE</u>** to read original and see video

Want to get involved?

Set in 2016, the Predator Free 2050 target is part of a nation plan to tackle our biodiversity crisis. There have been <u>wins to cel-</u> <u>ebrate</u> along the way.

To be successful, it requires the use of old and new trapping techniques and a collective effort involving everyone from iwi, the public and private sectors, communities groups and <u>individuals setting traps</u> in their own gardens.

Start backyard trapping. If you live in a suburban section, you're probably best to start by targeting mice and rats. However, if you live on a lifestyle block or a section that is near a bush reserve or the coast, rats, stoats, possums and <u>feral cats are</u> <u>likely to be present</u>, and you will need bigger traps.

Join a local predator control group. The more people involved the greater the out-comes that can be achieved.

Selontra, the responsible choice for rodent control.

Discover a cost-saving solution that works three times as fast on rodents.

Discover a cost effective option for large pest control jobs.

Selontra offers superior performance – working three times faster on rodents than standard baits. Plus, it has stop-feeding technology for reduced bait wastage that ensures significant cost savings.

Designed with a non-anticoagulant active, which is neither persistent nor bio-accumulative, Selontra is also four times more appealing than standard baits.

An ideal solution to use around birds, as they are 50 times less sensitive than rodents to the cholecalciferol active. This makes it the responsible choice when there is a risk of secondary poisoning. Selontra also contains safeguards to help prevent accidental human consumption, including a warning dye and the bittering agent Bitrex,[®] which is used in a concentration that is undetectable to rodents but acts as a human taste deterrent. This ensures that Selontra is a responsible and effective choice in controlling rodents.

Selontra can be used in and around domestic homes, industrial, commercial, and agricultural buildings, animal houses, farms, wharves, public service buildings, hospitals, food processing facilities, abattoirs, transport vehicles (including ships), around grain terminals, storage areas and fence lines (including perimeter fence lines).

Try Selontra for a responsible, effective and cost-efficient method of rodent control.

IDENCE

Selontra[®] Soft Bait Rodenticide

Target rodents with the greatest confidence

Selontra[®] Soft Bait targets rodents and nothing else. Limit the likelihood of adverse exposure to pets, livestock and wildlife by choosing the best option for both rapid pest control and minimal risk of secondary poisoning.

- Extremely palatable soft block formulation
- Rapidly metabolised, naturally occurring active ingredient
- Softer non-target toxicity profile when compared to anticoagulant baits

For more information on Selontra Soft Bait, visit pest-control.basf.co.nz

BASF We create chemistry

Revolutionising Bird Deterrence: Flock Off's Ongoing Success in New Zealand

Flock Off, the groundbreaking Electromagnetic bird deterrent system, continues to soar to new heights in the bird deterrent industry, demonstrating remarkable effectiveness in deterring seagulls, pigeons, and a wide range of pest bird species. With numerous successful installations already completed in New Zealand, the system has become a game-changer, particularly in the deterrence of various seagull species in open-roof scenarios and pigeons within diverse commercial settings.

Across the ditch in Australia, Flock Off has gained widespread acclaim for its outstanding ability to deter Silver Gulls (Chroicocephalus novaehollandiae) seagulls. This innovation has proven to be an exceptional alternative to elevated netting and grid wire systems. Notably, the advantages of Flock Off include significantly reduced labour intensity, the elimination of the need for roof penetrations, and the added aesthetic benefit of minimal visibility to the casual observer.

At the recent PestiCon conference in Australia, Peter McCarthy delivered an indepth presentation introducing the Flock Off system, complete with case studies and a glimpse into the future of electromagnetic bird deterrent technology.

Additionally, Flock Off is committed to supporting the education and certification of installers. Installer Training is available by contacting Jason Costello and Peter McCarthy. For access to the Flock Off App please contact our offices in Australia and New Zealand Bird management professionals in New Zealand looking to embrace this cutting-edge technology can reach out to Jason Costello at 027 345 004 or visit our website at www.flockoff.co.nz. For technical inquiries, please contact Peter McCarthy at PestIT / Bird Control NZ via email at <u>peter@pestIT.com</u>.

Flock Off is at the forefront of revolutionising bird deterrent solutions, and our ongoing success in New Zealand and Australia underscores our commitment to innovation and excellence in bird control.

A Revolution in Bird Management

The Flock Off System is a revolutionary, high-tech and humane solution to stop birds from landing on structures immediately and permanently. Flock Off can help eliminate the costs, risks, health hazards and damage caused by birds, ONCE AND FOR ALL!

Flock Off has been successfully installed on 10,000+ structures throughout America, Europe, Australia and now New Zealand. These structures include commercial, residential, agricultural, military, billboards, signal towers, solar panels, sports venues and utilities to name but a few.

Flock Off impacts the bird's navigation by creating an Electromagnetic "force field" around any structure that causes birds to simply find it impossible to land. Flock Off is discrete, easy to install, and very effective!

The system is now available in Australia and New Zealand.

Call to learn more, or visit our website today!

New Zealand Sales – Jason Costello 027 345 0044 Australian Sales – PestIT 03 9457 1700 www.flockoff.co.nz www.pestIT.com.au

As pest control specialists and an industry supplier to a wide variety of small and large businesses, PestIT's focus is to supply non-chemical solutions to achieve the best possible pest control outcomes. We create, distribute and support our clients with pest control products and systems that are 'cleaner, greener and smarter'. In today's climate, our 'green' approach remains sensitive to managing broader implications for global warming. By choosing PestIT, we help reduced waste, remove chemicals and lead the way forward for smarter technology.

Understanding Carpet Beetles: Biology, Behaviour, and Prevention

By Dr Paul Craddock

They vary in colour, with species like the varied carpet beetle showcasing striking calico combinations of brown, white, orange, and black.

Introduction

Carpet beetles, often underestimated due to their diminutive size, can become significant household pests. These insects, belonging to the family Dermestidae, are known for their ability to infest homes and cause damage to a wide range of materials. Understanding the biology and behaviour of carpet beetles is crucial for effective prevention and control. This article explores the biology and behaviour of carpet beetles and provides practical tips on how to prevent their entry into homes.

Biology of Carpet Beetles

Life Cycle: Carpet beetles undergo complete metamorphosis, consisting of four distinct stages: egg, larva, pupa, and adult. The life cycle duration can range from two months to several years depending on factors such as temperature and food availability.

Female carpet beetles can lay more than 100 eggs at a time, which hatch into larvae within seven to 35 days

The larval stage is the most destructive, as larvae actively feed on organic materials and can survive for several weeks without food. After going through the pupal phase, adult carpet beetles emerge in spring or summer.

Article continues on next page

Appearance: Adult carpet beetles are small, typically measuring between 3-5mm in length. They vary in colour, with species like the varied carpet beetle showcasing striking calico combinations of brown, white, orange, and black. The Black carpet beetle appears as a small, all black oval beetle. Adult carpet beetles are often seen dead on window ledges, as they gravitate towards light.

Diet: Larvae are voracious feeders and can consume a variety of items, including wool, fur, feathers, leather, silk, and even stored food products. They are particularly attracted to keratin, a protein found in animal hair and fibres.

Habitat: Carpet beetles are adaptable and can be found both indoors and outdoors. They are often associated with bird nests, bee hives, and flowering plants, as these locations provide access to their preferred food sources. Adult carpet beetles are capable fliers and can move from room to room, allowing for rapid infestation.

Behaviour of Carpet Beetles

Light Attraction: Adult carpet beetles are attracted to light when they emerge from their pupal stage. This behaviour often leads them to crawl up walls and seek entry points into homes and are found on window ledges.

Feeding Patterns: Larvae are the primary culprits behind damage caused by carpet beetles.

They hide in dark, secluded areas and feed on materials like carpets, upholstery, clothing, and even stored food items. Their bristly hairs and avoidance of light help them remain concealed.

Seasonal Activity: Carpet beetles have life cycles closely tied to the seasons. They are more active in the spring and early summer when plants are flowering, and pollen is readily available. During this time, they are more likely to infiltrate homes.

Signs of a carpet beetle infestation include:

Adult Carpet Beetles: Spotting adult carpet beetles in the house can indicate that larvae have been laid somewhere. Adult carpet beetles are attracted to light, so you may find them around bulbs and windows.

Damage to Fabrics: Look for damage and holes in fabric items such as clothing, blankets, and wool rugs.

Shed Larval Skins: Carpet beetle larvae shed their skins as they grow. You may find these skins along skirting board areas of the house.

Bare Areas on Wool Rugs: Carpet beetle larvae can cause thin or bare areas on wool rugs or tufts of woolen carpet plie to beak free when vacuuming.

Cocoons Under Carpets or Rugs: The presence of cocoons under carpets or rugs can be a sign of a carpet beetle or beetle infestation.

Grubs Crawling Around the Floor: Small grubs crawling around the floor could indicate a carpet beetle infestation.

Holes in Natural Fabrics: Look for holes in natural fabrics such as carpets, rugs, and other materials made from wool or silk.

Article continues on next page

Impact of Carpet Beetle infestations.

The damage carpet beetles can do can be significant. Carpet beetle larvae can destroy sections of carpet that then require expensive replacement. The beetles can also damage clothing and bedding, particularly woolen clothing and blankets, feather down duvets and similar. This damage may only be noticed months or years later once the damage becomes significant.

A lesser known impact of carpet beetle is that of allergic reactions. Carpet beetle infestations are known to cause secondary skin irritation, eczema, asthma and allergic responses in sensitive individuals. This is primarily caused by the shedding of small hairs from the larval bodies, faeces and cast skin fragments. These hairs break off easily and become airborne and are capable of lodging on human skin from where they can pierce the skin and mucus membranes. They may also be inhaled and ingested.

Allergic reactions often become apparent when heavily infested clothing or bedding material (like winter woolen blankets) are removed from storage and then used. The affected individual is then exposed to lots of allergenic insect material falling out of the blanket while in bed.

Article continues on next page

Broad Spectrum Control

- Rapid Knock Down
- Longer Residual

Using the dual active ingredients of Alpha-Cypermethrin, to provide supior knock-down, and Bifenthrin with established strength of residual control, Fury 120 SC is a superior, longer-lasting general pest insecticide.

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Preventing Carpet Beetle Infestations

Preventing carpet beetle infestations begins with understanding their behaviour and implementing effective strategies:

Regular Cleaning: Frequent cleaning of carpets, upholstery, and storage areas can help eliminate potential food sources for larvae.

Sealing Entry Points: Seal cracks, gaps, and crevices in doors, windows, and walls to prevent beetles from entering your home.

Screening Windows: Install screens on windows to prevent adult carpet beetles from entering when they are attracted to light sources.

Proper Storage: Store clothing and textiles in airtight containers to prevent larvae from accessing them.

Reduce Outdoor Attractants: Trim and maintain flowering plants near your home, as carpet beetles are drawn to them. Also, remove bird nests or bee hives in close proximity.

Regular Vacuuming: Vacuum carpets, rugs, and upholstery regularly to remove any potential larvae or eggs.

Carpet Beetle Treatments

Carpets beetle treatments typically require the application of control products (typically sprays) to the infested areas.

Carpet should be treated thoroughly, including under and behind furniture (which may need to be moved). Products are typically synthetic pyrethroid sprays, however the use of an Insect Growth Regulator (IGR) is strongly recommended as well.

The synthetic pyrethroid will kill adults and larvae directly, and the IGR will prevent any surviving or newly introduced larvae from completing their life cycle.

Infested material like clothing and blankets can be effectively treated by freezing for several days. Note freezing of material will not remove the allergic insect material that may be present, so dry-cleaning or washing may be required as well.

Article continues on next page

Some common flowering plants that can attract carpet beetles

Lavender (Lavandula spp.): The fragrant blooms of lavender can be attractive to carpet beetles.

Daisies (Asteraceae family): Various daisy species, such as the New Zealand native daisies, can be potential sources of attraction for carpet beetles.

Rose (Rosa spp.): The beautiful and fragrant flowers of roses may also draw carpet beetles.

Camellia (Camellia spp.): Camellia bushes with their colorful blossoms can be appealing to these beetles.

Flowering Trees: Some species of carpet beetles may be attracted to the blossoms of trees like cherry, plum, and apple trees.

Wildflowers: Various native New Zealand wildflowers, such as the New Zealand flax (Phormium spp.), could serve as attractive food sources for carpet beetles.

It's important to note that carpet beetles have diverse preferences, and their attraction to flowering plants can vary depending on the specific beetle species and the availability of other food sources.

Conclusion

Carpet beetles may be small, but their potential for damage should not be underestimated. Understanding their biology and behaviour is essential for effective prevention. By implementing proactive measures such as regular cleaning, sealing entry points, and reducing outdoor attractants, homeowners can significantly reduce the risk of carpet beetle infestations. Vigilance and proper maintenance are key to keeping these tiny pests at bay and protecting valuable household items from their destructive appetites.

Camellia japonica

Lavender

more than a membership IT'S A PARTNERSHIP

PMANZ CONFERENCE 2024

"EMERGING CHALLENGES IN PEST MANAGEMENT"

This conference will focus on the evolving nature of pest management and the new challenges it presents. Discussions will cover the need for adaptive pest control strategies.

Thursday 29th and Friday 30th August 2024.

Who should attend

Pest Managers, Technicians, Supervisors and Managers and Product Suppliers

The Pest Management Association of New Zealand are bringing together leading pest industry experts to share ideas on improving our future understanding of science-based pest management strategies, what insecticides work best and how to use them, ensuring you are safe, and looking at the role of technology in pest management. Listen to and talk with the experts in a relaxed atmosphere to get answers to your pressing questions.

A walk down Memory Lane

Extracted from PMANZ Newsletter of Jan/Feb 2010

Bed bug genetic mutations caused knockdown resistance to pyrethroids

The bed bug problem is a resurging nuisance aboard with the tourism industry in New Zealand as well as in Australia (TVNZ News 2006), where the epidemic caused a doubling of number each year; in San Diego (Bedbugger, 2009) where the infestations occurred within the university in chairs, dorms, library, student housing, etc. aboard the plate the

NZ Herald (Jan 2010) reported the ten dirtiest hotels in Asia, Canada, Europe, France, Italy, the UK and the US. It seemed that bed bug infestations helped out to put some of these hotels on the list of the world's dirtiest hotels - a not-so-glamorous worldwide title, of course!

In most reports, it can be surmised that the worldwide rise was a result of the ever changing measures put in place to control the pest such as pesticide formulations e.g., pyrethroids. The influx of travellers to various exotic locations can likewise increase the chances of getting 'bed bug hitchhikers'

Entomologists continue to find ways of controlling this epidemic. They persist in carrying on re-search to study how to combat these blood-suckers and to measure the level of resistance to ex-isting pesticide formulations.

In Kentucky (a copy of the University of Kentucky College of Agriculture news follows), entomolo-gists discovered that the bed bugs in United States previously exposed to pyrethroids, have ge-netically mutated to what is known as knockdown resistance. This knockdown resistance means the pesticide used, cannot anymore kill the bed bugs.

These findings are beneficial to the pest industry for future identification of a more appropriate or effective means of eliminating these bed bugs.

Results of the Second Training Survey conducted in

August 23— 36 Responses

Question: Please tell us in your own words what specific training topics you would like to see over the next 12 months. It could be about pest biology, treatment options, best practice guidelines, health and safety, legislation matters. You tell us what you want to see. It is your association.

#	RESPONSES
1	Training around treatment options including chemical options
2	Pest treatment options
3	
4	pest biology
5	I would like to know the best practice guidelines.
6	Treatment options especially non toxic methods and skills on dealing with difficult customers
	and customers in general.
7	Rodents control Fly spray treatment
8	Always good to see Health and safety and best practice
9	Fogging Treatments / Chemicals vs Mix Ratio's , legislation , Target species, Best Practice guide- lines.
10	Quick visual guides for pests and there activity within the seasons with info around there life cylce with hit on best treatment and chemicals use
11	Treatment options
12	Best practice guidelines Treatment options
13	Pathway to becoming an MPI approved supplier Best practice for installation of 3 Tier rodent control on commercial premises?
14	I think it's important that we're kept up to date with any changes in current legislation
	matters. Pest biology is an important aspect of pest control training - knowing the biology of
	the pests you are treating is beneficial (particularly with difficult to control infestations) and
	treatment options would go hand-in-hand with this. I personally feel saturated with health
	and safety requirements from all directions, so H&S isn't something I feel we need more of
45	(but that's just from my perspective).
15	Cockroach treatments and how to get them out of walls and appliances. Legislation about ro-
	dent control especially in commercial kitchens and food manufacturing promises.
16	Selecting a few pests at a training session to discuss habits and treatments, chemical and nat-
	ural is very helpful. Continued updates on any law changes for treatments and products and
	updates on any new health and safety regulations.
17	treatment options for Ants
18	Pest biology, it is interesting and aids in treating them according. Treatment options always,
	new or improved. Legislation matters/changes and how it will affect/influence our industry.
	Pricing comparisons by area (annually or bi-annually only to keep on top of data and to know
	how many cowboys are out there - on both spectrums, too high and too low). Reputable sup-
	plier recommendations. Don'ts (things to avoid, from experienced pesties).

#	RESPONSES
19	yes best practice , treatments on factories / grain stores,foggings, pestigas before and after treatment.
20	I would like to get training on Mechanism on pesticide action on pests, pesticide classification and resistance management, Health and Safety legislation matters, etc
21	Insects biology and treatments
22	Bed bug treatments
23	Pest biology, treatment applications, chemical knowledge- best uses for different con- centrates etc I want to learn anything they want to teach
24	Pest biology & treatment options
25	Pest control future and NZ laws
26	 Timber pests and how to treat them Insecticide active ingredients and there best use cases Rodent trapping and proofing Systems and operations for running an efficient pest business e.g invoicing, equipment registers, booking systems and re- porting.
27	Treatment options
28	Borer control is a specialized subject and knowledge of the insect is paramount. Treat-
29	Best practices, legislation and health and safety
30	Definitely treatment options and product application along with best practice guide- lines. I find the open forums to be very educational, also. As a side point, my experi- ence with renewing my licence has been tedious to say the least and I would like to see that simplified for those who are experienced approved handlers with 5 or more years in the industry. Having said that, I would expect ongoing refresher courses be mandatory to keep up to date with industry practice. New entry applicants should be required to complete the more comprehensive course including hands-on training and man-hours. For some years up until recently the door opened to applicants who were able to attend a brief theory course or two with little experience and be qualified to enter the industry with even less training. I know because I personally assisted four to become approved han- dlers who had little experience beforehand. Thankfully, they were responsible and went on to perform admirably in the industry. In their cases I personally spent time with them and was confident they were not simply about making fast or easy money. Thank you too for your efforts to promote the industry so professionally. Kind regards
31	Rodent control large contracts best practice seems to be a large variation in the way
32	Pest biology, effective treatment, good practices and guidelines and health and safety
33	I would like to see training on treatments for different pests in the short term and a
34	pretty much what you listed there - more pest biology, the treatment options and H/S is huge now. For us here it would be birds and rodents. Lastly -help/training on find-
35	Treatment options
36	Best practices, treatment options and Pest biology please

Continuing Professional Development

PMANZ is embarking on a project to establish a Continuing Professional Development training system for Members. We've taken your feedback and are currently scoping the delivery of this to be a mix of online training modules, webinars and in person sessions on the topics that interest you.

The idea is for members to be able to select the option that suits them best and then benefit from ongoing and updated information. This will count towards achieving and maintaining Master Qualified Technician membership status. We want to make the training easily accessible to all members and take into account diverse learning needs.

It's an exciting change and is in line with what is happening in many other trade industries at the moment.

Dr Paul Craddock will head up this programme.

Paul Craddock has a PhD in Entomology. He is an Ecologist/ Entomologist and has considerable experience in all aspects of pest control, from the day-to-day work of a domestic pest controller, right up to the large-scale eradication of invasive ants, including the science and research behind it all. Paul frequently consults on a wide variety of large and small scale pest control and biosecurity projects including ants, mosquitoes and midges throughout New Zealand and the Pacific Islands.

Paul has extensive experience in commercial, residential and environmental pest management, having worked with the Auckland Regional Council, Department of Conservation, Flybusters/Antiants and Rentokil Initial over the past 20 years.

He has held operational management roles for over 8 years managing a team of pest control technicians, providing technical support and training and was the scientific specialist for a range of biosecurity and large-scale pest control projects in New Zealand and the Pacific region, including ants, mosquitoes, flies and other pests.

Paul also serves on the board of the Pest Management Association of New Zealand (PMANZ). He is currently the vice president and technical manager for the association and is widely consulted by the press and TV about New Zealand pest issues.

Aside from supporting you with professional development, Paul is able to provide technical support to members on a range of issues.

Paul can be contacted on paul@pmanz.nz

The new PMANZ website has now been up and running since March, when we used it to generate renewal notices. We are now looking to move on to the next stage which is to switch over to the interactive "Finder Facility" from the old-school "Registered Technician by Region" page. We're aiming to do this at the beginning of November, in time for prospective customers to use it to select a

pest control provider for the busy summer pest season.

The "Finder Facility" allows prospective customers to search by pest type, locality and residential/commercial. The search screen they will use looks like this:

Find A Professional Pest Manager

To find properly qualified pest management in your area, just:

- click on "I need help with" to list pests types
- then click for your locality
- and, residential or commercial?
- Finally, click on "*Find services in my region*" to see a list of the businesses in your area who can assist

Click on the suggested results and you'll see all the details you need to help get your pest problem resolved.

If you still have queries, please feel free to call PMANZ on: 0800 476 269

I need help with		
I am located in		
Select Region		-
Find services in	my region	

BUT

Your business will **NOT** show in the results unless **YOU** populate your organisation's account with the necessary information on pest types that you service and areas that you cover. This is all done in the "Finder results" section at the foot of the Edit tab, where you will need to select services for each area that your organisation services.

For anyone who is unsure about this, I will be running online sessions throughout October to assist with getting this important job completed. Just look under the news section on the website for session times, or feel free to call the 0800 number for individual assistance.

It's great how many members have already set up their passwords on the new PMANZ website. For anyone who has not yet done so, this is a simple process:

Every PMANZ member has been set up as a user on our new system. If you go to the homepage: <u>https://pmanz.nz/</u> you will find a button towards the right-hand side to login. Using your email address, you can create a password exclusive to yourself – the system will enable this through a "lost password" process.

Once you have done this, you will have full access to the members' area and ALSO...

... you will be able to populate your own organisation's service offering by pest type and locality and to feature when customers come looking!

Don't forget – for any help you need.

Call David on 0800 476 269 or email him on info@pmanz.nz

Find resources and tips for small business owners to help you look after yourself and your team.

If you're suffering financial-related stress and anxiety, talk to your GP. They'll be able to assess where you're at and refer you to a special- call or text 1737 for support from a trained ist if necessary.

You can also access trained counsellors for free by texting or calling 1737. Find out more at 1737.org.nz:

1737.org.nz(external link)

Other mental health and wellbeing support can be found at Depression.org.nz:

Depression.org.nz(external link)

Sorted has free finance tools, guides and resources on its website:

Sorted.org.nz(external link)

If you want to talk to someone for support around debt or personal budget issues, you can ring the free

Money Talks helpline on 0800 345 123:

Money Talks

Call or text for free support

If you have questions about government financial support or business help, call the COVID-**19 Business Helpline:**

North Island 0800 500 362 or

South Island 0800 505 096.

If you feel a bit overwhelmed, anxious or just

Take the stress out of tax

want to talk, free services are available 24 hours a day, 7 days a week: counsellor

Lifeline 0800 543 354 or text 4357 Samaritans 0800 726 666

Helplines(external link) — Mental Health Foundation

Mental health and wellbeing support

Source Information Provided by:

MINISTRY OF BUSINESS, **NOVATION & EMPLOYMENT** IIKINA WHAKATUTUKI

NEED TAX GUIDANCE

Just click on the illustration to take you to the IRD Tax **Toolbox**

PMANZ website Statistics

For the period from 1st July to late September 2023, the new PMANZ website received 1957 visitors that viewed 3906 pages - that is an average of 2 pages per person. The top page views are listed below. This gives us a great indication of what pest activity is of current concern to the public.

Home	251
Find a Professional	73
News (membership restructure)	36
Latest newsletter	31
Ants	29
Urban Pest Management Qualifications	28
About us	27
Join us	27
Members Area	27
Code of practice for the food industry	23
Alphabetical list of registered technicians	22
Rats	18
Mice	17
Flies	14
Wasps	11
Bed Bugs	9

more than a membership IT'S A PARTNERSHIP

NEW ZEALAND TECHNICIANS FORUM

Indicators do point to El Niño.

El Niño conditions have developed in the tropical Pacific for the first time in seven years, setting the stage for a likely surge in global temperatures and disruptive weather and climate patterns.

A new Update from the World Meteorological Organization (WMO) forecasts that there is a 90% probability of the El Niño event continuing during the second half of 2023. It is expected to be at least of moderate strength. The WMO Update combines forecasts and expert guidance from around the world.

El Niño occurs on average every two to seven years, and episodes typically last nine to 12 months.

It is a naturally occurring climate pattern associated with warming of the ocean surface temperatures in the central and eastern tropical Pacific Ocean.

But it takes place in the context of a climate changed by human activities.

In anticipation of the El Niño event, a WMO report released in May predicted that there is a 98% likelihood that at least one of next five years, and the five-year period as a whole, will be warmest on record, beating the record set in 2016 when there was an exceptionally strong El Niño.

So what does this mean for us?

Read more over the page

A hot dry summer will bring an invasion of ants and cockroaches inside, said Dr Paul Craddock, entomologist and vice president of the Pest Management Association.

While the summer heat would initially bring an influx of flies and mosquitos outside, without much rain, they might decrease.

"Initially lots, but in ongoing heat you might see a reduction. Though there will still be the annoying ones around.

Your only protection might be a cork hat and a citronella candle, as pest control companies were getting booked up, he said.

As the weather warms up though service technicians need to take care of themselves as they will be working both indoors and outside.

A good practice is to avoid areas that could show extreme heat, such as roof spaces, servicing ducting etc.. In previous warmer years the temperature in roof spaces can go beyond 50C in some areas of the country.

The hotter and more humid it gets the more the body has to sweat, increasing the risk of dehydration. In extreme heat the body starts to struggle to cool itself down, which can then lead to heat cramps, heat exhaustion or even heatstroke.

Research has shown that when the temperature gets to 35C, accompanied by high humidity, health is put at danger. Once 40C is reached, it can be dangerous even with low humidity levels.

This is going to be compounded with the PPE that service technicians usually wear if going into a roof space to treat a wasp's nest, these jobs should be planned for a cooler time of the day with regular breaks for hydration.

This coming season we cannot forget the common sense measures that we have all become accustomed to in New Zealand during the summer months such as :-

- Making sure you have sun cream in your vehicle, and that it is not expired.
- Wear a hat when outdoors and avoid wearing shorts as lightweight trousers will offer better UV protection.
- Take regular breaks during the day, a lot more than you would normally as the sun will tire you out, and your decision making could suffer putting yourself and others at risk.
- Drink, drink, drink a lot of water, plus carry electrolytes to put into your water to help keep you hydrated. You will lose a lot of water in the heat.

Finally, another measure to consider is the chemicals in your vehicle, most of them do not like high temperatures and they could start to break down. Store them in a suitable chilly bin. Take special care in opening bottles that have been exposed to high temperatures as the heat can cause the pressure to build up inside the bottle.

Now is the time to prepare your vehicle ready for the summer and the onslaught of insect work you are going to get.

Sources:

Stuff Read original HERE

and

Pest Magazine AUG/SEP

BPCA

Technical Hints— Sustainability

How to dispose of all your light bulbs and tubes at the end of their lifespan.

Be sustainable - Don't pollute your environment with mercury – Follow the following instructions.

Order online a prepaid cardboard box from Interwaste. Click <u>HERE</u> to order.

It's a simple and easy way to safely and in an environmentally friendly manner dispose of all your fluorescent lamps. The box will be flat packed and shipped to your address. Simply unpack and unfold and store and fill with all used fluorescent lamps. The box will hold up to 100 fluorescent lamps. Once the box is full contact Interwaste for collection of the box via courier. The one-off payment includes shipping, collection and recycling.

If you believe that it will take you a very long time to fill the box that can contain up to 300 15W tubes then contact PMANZ. We will do our best to put you in contact with PMANZ members in your area who are happy to put your tubes in their Interwaste box.

Some useful links below:

Interwaste: <u>https://interwaste.co.nz/shop/100-tube-fluorescent-tube-recycling-box-ft100</u>

Poisons Centre: <u>https://poisons.co.nz/articles-and-info/common-poisons-around-the-home/</u> view/clean-up-of-energy-saving-compact-fluorescent-light-bulbs/

Technical Hints— Sustainability

How to clean up a broken tube?

- Ventilate the area and have people and pets leave the area for 15 minutes
- Use two pieces of card/paper to scoop together the debris, taking care to minimise spreading the powder
- Use a damp paper towel to pick up powder
- Dab the area with a sticky tape to pick up small amounts of powder remaining or broken glass
- Wrap all debris and cleaning material well and place in a sealed plastic bag and dispose in accordance with your council regulations
- It is now safe to vacuum the area (Ensure you throw the bag away (or wipe out the canister) immediately following the first use of the vacuum).

You should dispose of the residue in accordance with your local council regulations.

more than a membership (IT'S A PARTNERSHIP)

Pest Control Technicians – Greater Wellington Region

Pestproof Limited - Full Time Position

We are looking for a trainee or a fully qualified/experienced Service Technician to join our team.

About the job:

- A fully equipped and serviced work vehicle will be provided
- Full time Tuesday to Saturday
- Hourly pay to be negotiated

Preferred skills for the fully qualified technician:

- Bird management (poisoning, trapping, proofing, repelling and shooting)
- Treatments against Wood Boring Insects
- General Pest Management

How to apply:

Apply through Seek or by emailing Paul Chapman directly - **paul@pestproof.co.nz**

Find out more at:

- https://youtu.be/htsXA0oEidg?si=oL80zQGLqHLghwat
- https://www.seek.co.nz/job/70250970