

# pest

The independent UK pest management magazine

## The battle continues...



**Issue 16**  
**July & August 2011**

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be a good wasp year



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active introduced



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**pest**

**Pest** is published six times a year



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## Aims

As the industry's only independent magazine, **Pest** aims to deliver a mix of unbiased news, impartial advice and topical technical features. We are committed to being as inclusive as possible covering every sector of the pest management industry.

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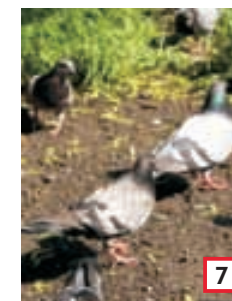
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product information before use

# Contents

Industry news	4
No bird brains here!	7
The shape of things to come	8
Get set for London 2012	11
BPCA holds AGM and makes awards	15
Bedbug special 2011	17
New European code launched	17
Bedbug detection taken to a new 'remote' level	18
Battling bedbugs – the latest weaponry	20
Bedbugs in the USA	23
New bedbug resources	25
Hot stuff in the bedroom – beating bedbugs with heat	26
Using hot and cold controls	29
Small is beautiful for Hockley International	30
All geared up for a demanding wasp season	32
Products – what's new?	34
A cracking event in Krakow	37
Diary dates	39



## Telling it like it is

When we first decided to set up **Pest** magazine, one of our key aims was to be independent. And that's not changed. We are pleased therefore, as part of our 13 page bedbug special, which starts on page 17, to bring you an independent round-up of the latest bedbug developments.

In particular, we have an article from bedbug expert Stephen Doggett, who has a well earned reputation for 'telling it like it is'. First published in the Australian pest manager's magazine, Stephen provides a 'warts and all' review of the products and techniques developed to monitor and control these much talked about pests. Features cover heat and cold treatments and an exciting new service that allows bedbug detection dogs to sniff-out their quarry, even when they are hundreds, if not thousands of miles apart.

Never afraid to say what he thinks is Jonathan Peck, who spoke on behalf of NPAP at the Europest event in Krakow in May. His topic, the future for the pest management industry, makes interesting reading. We also investigate what's been going on behind the scenes with pest control planning for the 2012 London Olympics and highlight what the legacy of the games may be for pest controllers. Read on...

*James Hall*

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## Russell IPM celebrates Queen's Award success

Russell IPM's achievement in earning a Queen's Award for Enterprise in International Trade was officially recognised at a champagne reception and buffet lunch on 1 July.

The sun shone as around 100 employees and guests gathered at Soughton Hall, Northop in Flintshire to hear Her Majesty's Lord-Lieutenant of Clwyd, Mr Trefor Jones, read the citation and present Russell IPM owner, Dr Shakir Al-Zaidi and his wife and co-director, Diana, with an engraved crystal bowl to mark the company's impressive achievement. Speaking at the presentation ceremony, Shakir said: "I would not be here today without the support of my wife and co-director Diana, our families and all the friends, consultants and our fantastic staff in all parts of the world."



Lord-Lieutenant of Clwyd, Mr Trefor Jones presents the award to Diana and Shakir

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## Congratulations go to.....

Ironman Dr Peter Cottee puts all us couch potatoes to shame by training for, and then competing in, an Ironman Triathlon which he undertook in hot and steamy Houston, Texas, USA on 21 May. For those unfamiliar with Ironman it consists of a 2.4 mile swim, a 112-mile bike ride and a marathon 26.2 mile run without a break.



Peter finished around half way down the field saying: "Given my advanced age and the heat and humidity it wasn't a bad result. A fantastic day, albeit a very hot one with over 2,300 competitors starting the race." Thanks to several within the industry, Peter raised just under £5,000 for chosen charity Tushinde, which provides food, shelter and education to children in the slums of Nairobi, Kenya.

### 25 year old Command Pest Control

Founder and managing director, Mark Ward, was spotted on the Command exhibition stand at the Cereals 2011 event with several members of his staff.

Command now employs 55 people and operate throughout East Anglia, the Midlands, northern England, the south west and Ireland. Mark and his team can justifiably be proud of their achievements over 25 years.



L to R: Jeremy Barraclough, Stuart Homer, Mark Ward and Simon Wills

## New additions to the world of consultancy



**Mark Braithwaite**, former managing director of Ipswich-based servicing company Igrox, has launched his own management consultancy business called Braithwaite Business Partnering. Mark plans to put his 20 years of experience to good use by offering a range of services including mentoring and coaching, business process review, risk assessment and financial management as well as project, performance, change and risk management.

**David Loughlin**, formerly with AgriSense, has left to start-up his own consultancy service called Sentomol. Based in Monmouth, Wales, David's company will provide independent consultancy services in the areas of pheromones and other attractants in the animal health, horticulture, amenity, public health and stored product protection markets.

## Tesco enters the home services market

Albeit only in a limited trial area, so far, Tesco Home Services has rolled-out a new service to help customers find local trades people they can trust. Pest control is one such service.

Following initial trials in the Swindon and Gloucester area, Tesco Home Services has just introduced this scheme to customers from certain stores in Berkshire. The range of services offered includes building and plumbing, IT, locksmiths, glazing, garden landscaping and pest control amongst them.

Before being added to the list of Tesco contractors (known as a 'trade partner'), each has to undertake training regarding Tesco values and what is expected of them. They also have to abide by the Tesco guarantee system. The selected contractors are mainly those who are already registered with their local Buy With Confidence Scheme.



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## RAMPS ready to roll-out

All those involved with the introduction of the Register of Accredited Metallic Phosphide Schemes UK (RAMPS UK) have been working away, such that the first courses for operators to enable them to go forward for certification will be ready for off in September. A practical workbook entitled *The Application of Aluminium Phosphide for Vertebrate Control* commissioned by City & Guilds is now complete. Designed to be a practical manual for both trainers and trainees, it covers the full requirements of aluminium phosphide activity. The completed course syllabus was reviewed by the Chemical Regulation Directorate (CRD) before submission to the Office of Qualifications and Examinations Regulation (Ofqual) for its approval. The Level 2 Award in the Safe Use in Aluminium Phosphides has now been approved.



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## Certis effectively pulls-out of pest control

Over the last couple of years the interest shown by Certis in the professional pest control market has noticeably waned. So the official announcement released on 5 July came as no surprise. It read: "Following a review of the Certis sales strategy, and changes to the Certis product portfolio, we will be going forward with greater emphasis and resources now being placed on both the agricultural and horticultural sectors.

"Certis has issued a letter to distributor customers to inform them that we will no longer have a full-time professional pest control products account manager. Certis will continue to market Talunex and Dimilin to the professional pest control sector; products will in the future be handled directly by the sales department. Helen Ainsworth will therefore be leaving the company during the summer months. We wish her well for the future."

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## The changing face of local authority pest control in the UK

Pest control within local authorities is changing radically due to the financial cuts. But how and where?

**Pest** has pulled together the currently available information within the office and aims to keep a log of further changes. To review the list please go to the **Pest** website and look in the News section.

But your help is needed. Our aim is to keep this log as up-to-date as possible. To provide the industry with a central record of what has changed.

But you – our readers – are in the field and know at first-hand what is happening. Please let us know so we can update the record for the benefit of all.

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Nominations for the 2011 **Pest** Best New Product of the Year Award must be made by 31 August. Remember, nominated products must have been launched after 1 September 2010. You can nominate up to five products. From the products nominated we will draw up a shortlist and readers will then have from 1 September until 28 October to vote for their favourite. The winning product will be announced at PestTech in November.

Here are the products readers have nominated already:

- Bedbug Moat from Killgerm
- BirdScare from Bird Deterrent Systems
- Diatomaceous earth aerosol from Barretine EH
- Microbait tamper-resistant mouse bait station from Rat Pak
- Nectar electronic fly killer from Insect-O-Cutor
- Oktabloc II rodenticide from PelGar
- BlitzKits range from Agropharm
- SX pro wasp nest destroyer
- Three-way pheromone trap from SX Environmental
- Vertox Contact gel from PelGar
- WiseTrap and WiseCam from ScanWise

Remember what we are looking for is the product or innovation which you feel has made the greatest difference to your professional life, so get your nominations in now. Go to [www.pestmagazine.co.uk/content/NewsItem.aspx?id=632](http://www.pestmagazine.co.uk/content/NewsItem.aspx?id=632)



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## No bird brains here!

### Gulls spot the dummy eggs

Replacing seagull eggs with plastic dummy eggs has become one of the accepted means of seagull population control. Unfortunately the gulls in Worcester seem to have cottoned-on to this technique, as noted by Andrew Staples of Red Kite Pest Control.

Andrew Staples has been battling the gulls in Worcester since 2006. For two seasons he practised the traditional method of oiling the eggs in the nest. This was only partially successful, as once the eggs were added the gulls sensed all was not well and promptly re-laid more eggs.

So since 2008 he has been replacing seagull eggs with plastic dummy eggs. These are filled with sand and made to resemble the real thing. However, in 2009 Andrew became aware that one seagull pair had

tumbled the exchange of real for dummy eggs and so they laid three more real eggs in the same nest to accompany the dummies. This pair did the same in 2010. Not totally to his surprise, this year Andrew has noted this same behaviour with another ten pairs.

"Gulls are long-lived birds and always return with the same partner to the same nest site each year, so monitoring their behaviour and breeding success is relatively easy," explains Andrew. "My feeling is that gulls have such a strong urge to feed and raise their chicks such that the moment they sense all is not well, their inbuilt reaction is to lay more eggs and start again."

A further variation of behaviour has also been spotted by Andrew this year. Once the eggs were exchanged for the dummies, he has noted that eight pairs promptly abandoned their



The dummies won't hatch, but the second clutch faired better

original nest and built a completely new nest alongside the old, re-laying more eggs.

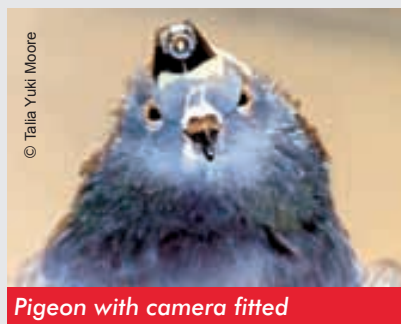
Another worrying factor recorded by Andrew is that these 'intelligent' gulls are not all close together – the nests are spread throughout Worcester – meaning this is not learnt behaviour from one gull to the next – each pair is working it out for themselves!



New eggs laid alongside the dummies



How long before this gull works it out too?



Pigeon with camera fitted

Research by scientists at Harvard University, USA has revealed how pigeons can fly so quickly and accurately through dense forest. Pigeons were trained to fly through an artificial forest with a tiny camera attached to their heads, literally giving a birds-eye view. "Attaching the camera as well as filming them from either side means

## No flies on these pigeons either

we can reconstruct both what the bird sees and how it moves," explains Dr Huai-Ti Lin, a lead researcher for this work.

The methods' pigeons use could be used as a model for auto-pilot technology. Pigeons have >300 degree panoramic vision which allows them to assess obstacles on either side. They can also stabilise their vision and switch rapidly between views using what is called a 'head saccade', a small rapid movement of the head.

Meanwhile researchers from the University of Paris Ouest Nanterre La Défense have discovered that feral pigeons can recognise individual's faces and are not fooled by a change of clothes.

Two female researchers of similar build and skin colour, but wearing different-coloured lab coats, fed a group of pigeons in a Paris city park. One ignored the pigeons after feeding, while the other was hostile and chased them. This was followed by a second session when neither researcher chased the pigeons.

The experiment was repeated several times, and the pigeons continuously distinguished between the individuals. They avoided the researcher who had first chased them. Swapping lab coats during the experiments did not confuse the pigeons and they continued to stay away from the researcher who had been initially hostile.



# The shape of things to come

What does the future hold for the pest management industry? Will we still have a range of effective insecticides and rodenticides to choose from? What will be the next major pest threat? Where will pest controllers of the future turn for products and advice? Jonathan Peck managing director of the Killgerm Group spoke on this topic at the Europepest event in Poland in May. He provided plenty of food for thought.



One of the biggest influencers on the future of the pest management sector across the whole of Europe will be the European Commission. What's more, if the pest management industry is to make sure its voice is properly heard in the European legislative process, everyone in it needs to play a much more active lobbying role. So said Killgerm Group MD Jonathan Peck who was speaking at the Confederation of European Pest Control Associations' (CEPA) Europepest event held during the ConExPest exhibition in Kraków, Poland on 19 and 20 May. Jonathan is well placed to comment. As well as running one of Europe's biggest pest control distributor businesses, he plays a leading role on the Chartered Institute of Environmental Health's National Pest Management Panel (NPAP) and is a member of the CEFIC (European Chemical Industry Council) General Assembly and its Sustainable Use Working Group.

The impact of the European Biocidal Products Directive is already being felt. In 1998 there were 1,000 active substances on the market. Of these, just 200 have been supported through the new regulatory system, so that's 80% of actives lost already. In terms of insecticides, 107 were notified but just 50 have been supported. For rodenticides the numbers are 17 notified and 14 supported.

Whilst the Biocidal Products Directive governs what can be sold, the

next big piece of EU legislation, the Sustainable Use Directive (SUD), will cover who may sell and use biocidal products and how they can be used. The SUD for crop protection is already coming into force. Proposals to extend the Directive to biocidal products have not yet been brought forward by the Commission, but they are expected.

## Industry must raise its game

"Unless we start to play the game as well as our opponents, the SUD will become the next nightmare for the industry," he warned. Those who oppose the use of pesticides on principle are extremely good at lobbying and they understand the system and get in early to make their point. Organisations like the Pesticide Action Network (PAN) and the Health and Environment Alliance (HEAL) are extremely influential. "The industry needs to lobby and that costs money and, even more importantly, takes time. Everyone must be prepared to support this effort and to do something," he added. The system in the European Union works very differently to the Westminster process. The European Commission is not like the British Civil Service. It takes the initiative and proposes legislation in its own right. This draft legislation goes through the relevant Committees of the European Parliament and then to a full session of Parliament. After this it is reviewed by the Council of Ministers – one Minister for every Member State (the actual Minister varies with the topic being put forward) – before once again going before the full Parliament. By this stage everything will have been agreed and it will be a two minute rubber-stamping job before the Directive is adopted. It is no use waiting therefore until a bill comes before Parliament. Even on its first reading it is already well on the way to becoming law so lobbying needs to take place with the relevant Directorates of the European Commission and the Parliamentary Committees, as well as with MEPs themselves.

## Time to seize the initiative

The recent example where anti-coagulant rodenticides were almost banned across Europe came about because of proposed amendments to the Commission's wording from members of the ENVI Committee (the European Parliament's Committee on Environment, Public Health and Food Safety – see **Pest** issue 10). "Both the revision of the Biocidal Products Regulations currently underway and the likely introduction of Sustainable Use of Biocides Regulations will give the anti-pesticide groups significant opportunity to ask for many new unreasonable restrictions," he warned. "Everyone in the industry must respond to this and join in the lobbying effort to make sure the industry is at least as effective

as its opponents. The best way to do this is to seize the initiative and show just how competent the industry is." One way of doing this will be to embrace training at all levels – salesmen, advisers and technicians. He felt strongly that the only way to achieve this would be through legislation and that the current moves to introduce a voluntary CEN standard for training across Europe (see box), whilst full of good intentions, would not have the desired result. "Whilst it is good to have a standard, I personally feel that CEN will not deliver what pest controllers want. They want obligatory, statutory certification. If it's not obligatory then it will be just like ISO9000 – the bigger companies will do it, but the small businesses and the sole traders won't bother."

## More distributors likely to be a backward step

Mr Peck also suggested that one of the outcomes from mutual recognition in the Biocidal Products Directive is that there will be more distributors coming into the European market place. He felt that this was likely to lead to a second division of companies selling generic products largely on price, but with little or no service for customers and that this would be a very backwards step.

He did not see many, if any, new active ingredients coming into the market but he did predict there would be better formulations available – more gels, microencapsulation and so on. As for the pests of the future, he acknowledged that bedbugs are back, but he also pointed out that, because of the enormous liability associated with getting bedbug control wrong, bedbug work in the future is likely to become the sole preserve of specialist companies.

He predicted too that mosquitoes will become an increasing problem across Europe and that in his opinion it was a question of when dengue fever came to Europe and not if. He also thought that



"The European Standard (CEN) will not deliver what pest controllers want," said Jonathan Peck

sooner or later we will get fire ants in Europe and that they will become a major source of income for the pest control industry. Turning to the environment he stressed the concerns being caused by secondary rodenticide poisoning and suggested that the days of 'turn-up and top-up' the bait box with rodenticides were probably numbered. Auditors will need to be educated that correctly sited bait boxes are where the rats are likely to be and not simply out in the open where the auditors can see them.

## What is the CEN Standard?

It was in 2009 that the General Assembly of the European Confederation of Pest Management Associations (CEPA) adopted the proposal to develop a common standard for Pest Management Service across Europe and to do this by working with the European Committee for Standardisation (CEN).

The CEN standard will specify the requirements, recommendations and basic competences to reach a professional operation level of the services provided by pest management servicing companies, to meet the needs of private companies, public authorities and consumers.

A CEN technical committee has been set up to develop the standard. There are currently work streams examining 'terminology', 'competences and requirements' and 'recommendations'. The work is progressing well with CEN's timetable requiring delivery of the agreed standards by December 2013.

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FEATURE  
 Gearing up for 2012



# Get set for London 2012

## Planning for a pest-free Olympics

Next year the eyes of the world will be firmly focused on the UK when the Olympics comes to town. To ensure the London Games will not be remembered for its pests, organisers have had to think about pest control from the outset, as Stuart Spear discovered for *Pest* readers.

The number of people who will be watching the London 2012 Olympics and Paralympics is staggering. Four billion people worldwide will be tuning in to catch the opening ceremony, 455,000 sports fans will daily visit the Olympic park in East London, while 5,600 international journalists will be hunting for stories for their news desks.

Bad news stories stick. In Athens it was construction delays, Beijing it was smog while the 2010 Delhi Commonwealth Games will be remembered mostly for food poisoning. From the very beginning, everyone involved in organising the London Olympics has been keen to make sure London is remembered for something other than pests.

As far as the potential pest problems go, it is impossible to excavate enough soil to fill the Albert Hall ten times over, from an East

London wasteland site, without expecting a rat exodus. Then there is the building of the Olympic park over one of London's main Victorian sewers, increased bedbug rates as migrant workers come to work on the site and rising mosquito populations. Not to mention emergency planning against insect-borne infectious diseases and pests being attracted to food waste as hundreds of thousands of spectators daily visit Olympic sites around the country.



On parade! The official London 2012 mascots, Wenlock and Mandeville

The first rule when organising an Olympic event is to see how it has been done before. In 2008 the Chartered Institute of Environmental Health (CIEH) organised a delegation of pest experts to visit Beijing to see how the Chinese kept their Olympics pest free. Similar to London, the Chinese were concerned with mosquitoes, flies, cockroaches, rats and mice. Modernisation had meant bulldozing Beijing's old hotels, taking the city's bedbug problem with them.

To achieve their stated aim of zero pest problems the Chinese authorities launched a three year monitoring and treatment programme with two kilometre pest exclusion zones drawn around each of Beijing's 93 Olympic sites. The programme culminated in constant monitoring during the games with treatment being triggered if a single fly was caught in cage traps laid throughout the Olympic stadium. Similar programmes were initiated in each of the six Chinese host cities. Although no firm financial figure has ever been

A good place to start. CIEH pest experts visited Beijing to see how the Chinese kept their Olympics pest free





Professor Qiyong Liu presents a commemorative Beijing Olympics brochure to Jonathan Peck, representing CIEH National Pest Advisory Panel during a visit to London when he spoke to the group about the Chinese Olympic pest control work

given, an estimate for a similar work programme is in excess of £5 million.

Overseen by Professor Qiyong Liu and his team from the Chinese Centre for Disease Control Prevention, the Chinese response to pest control is testament to a Games run under tight state control. London 2012, on the other hand, is being put on by private and publicly funded organising bodies who are contracting private companies that are mostly regulated by local government. The result is that a head spinning tapestry of organisations are now involved in delivering next year's Olympics.

#### Four key organisations

When it comes to pest control for the London Games, there are four key bodies: the Olympic Development Agency (ODA), the London Organising Committee of the

Olympic and Paralympic Games (LOCOG), the Joint Local Authority Regulatory Service (JLARS) and the CIEH which has drawn up a number of good practice documents specifically for the Olympics on pest control.

The publicly funded ODA is responsible for building the venues and so includes pest control during the construction phase. Once completed, the venues are handed over to the privately funded LOCOG which is responsible for delivering a pest free games while JLARS, a joint regulating body made up of the four local authorities surrounding the Olympic park, is responsible for regulating issues such as contaminated land, noise nuisance, food safety and pest control.

"A lot of our work is around recommendations and education to get it into the psyche of the organisers that they have to take pest control on board with everything that they do," explains Stewart Monk, the JLARS environmental health practitioner responsible for pest control. "One of the good things about the site is that people do take pest control seriously and act responsibly."

#### Rat sightings increased

When Britain won the bid to host the 2012 Olympics back in 2005 a two square kilometre piece of industrial wasteland in East London's Stratford had been earmarked for the main Olympic park. For generations, the site had been used as an industrial dumping ground with the spot where the main stadium now stands used as a Victorian landfill. It meant that before building could even start, thousands of tonnes of contaminated soil had to be removed from the site along with the drains.

It was of no great surprise to Ray Page who is responsible for Newham Council's pest control service that rat sightings started to go up in surrounding housing estates. What was more surprising was that the problem proved short term. "With all that amount of work the rats just had to fan out, but once all the site clearance was completed we returned to what we would normally expect in that area," explained Ray. "Where we did have a big upsurge of rats was around Stratford station development, however that again died a death as the redevelopment took out all the low maintenance foliage, like flower beds, which had become infested."

#### Designs with pest control in mind

Next came the building phase. It was at this point that the ODA and the CIEH Olympic Working Group got together to produce what has now become an industry resource for best practice for minimising pest problems during demolition and construction. The guidance document entitled *Pest minimisation. Best practice for the construction industry*, feeds into one of the key themes of the London Olympics – that the games should leave a lasting legacy.

"As with everything that we are doing around the Olympics, we are looking beyond the games and want to leave a legacy of improved guidance that promotes public health," explains Sharon Smith, strategic projects director for the CIEH. "While the guidance documents have been created for the Olympics we have also made sure that they also have a wider remit. This is why this has been picked up by the construction industry generally."

The CIEH and the ODA presented this document to the Olympic building contractors, outlining what they expected on the site. It covers designing pest control into new builds by using pest-proofed drainage systems, minimising entry points for pests and avoiding unnecessary pest harbourages. Doors need to be designed to close onto a level threshold to deny rodents a gnawing edge while access to birds and squirrels through the eaves needs to be blocked.

This document also covers good practice when it comes to working with pest management contractors, including the planning, documenting and recording of pest monitoring and ensuring that all contractors inform pest controllers of any site changes so that, if necessary, bait points can be removed.

Another key objective of the London



An artist's impression of the impressive Olympic stadium 'in action'. The new stadium was completed ahead of schedule in March

Olympics is around sustainability. According to Stewart Monk it is an objective that is helping to minimise pest problems by ensuring a zero waste strategy on site and using a just-in-time system for the delivery of building materials. In this way, potential pest harbourages are reduced.

"This is a remarkably tidy site. There is nothing lying about in the way of rubbish and there is not a great deal of building materials hanging about either, as these come from elsewhere, when needed," explains Mr Monk. Now that the venues have been completed, or are nearing completion, the transfer process is underway between the ODA and LOCOG.

The velodrome, handball and basketball

arenas, as well as the main stadium, are all now LOCOG's responsibility.

A spokesperson on behalf of LOCOG explained: "We will be working closely with all contractors and suppliers across all sites to ensure best practice is followed and on a venue by venue basis. We are also working closely with the ODA during the handover phases of all new venues to identify what work has been done as part of the site clearing and building, so as to ensure the approach taken is all encompassing and continues in the future."

#### Bedbug rise expected

But pest control is not just limited to the Olympic site. According to Ray Page rising bedbug rates are likely to have been

accelerated by an influx of Olympic site workers. There are also concerns that athletes and spectators may bring bedbugs in their luggage.

Again the CIEH is using the Olympics as an opportunity to spread good practice and has published *Pest minimisation. Best practice for the hospitality industry*. The CIEH is planning to use a bed and breakfast programme being run by the London Food Co-ordinating Group, a pan London group of environment health practitioners, to improve pest control standards among the capital's low budget hotels.

This hospitality targeted document covers mice, flies, rats, bedbugs, fleas and cockroaches with an emphasis on early detection. Advice on bedbugs includes training staff to recognise them, reducing harbourages and how to prevent their spread. There is also advice on bedbugs on the JLARS website.

The CIEH will also be working on food waste with food vendors and has already been

## A legacy of best practice guides



These guides are available at [www.cieh-npap.org](http://www.cieh-npap.org)



## Health and Safety ALERT

An article recently published in the *Cardiology Journal*\* suggests that the number of people killed in the UK each year by wasp stings could number in excess of 1000.

It now appears that wasp stings can trigger heart attacks in a number of susceptible people several days after being stung. This is known as

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liaising with the Nationwide Caterers Association (NCASS) to ensure good practice. CIEH has produced guidance for this group as well, *Pest control procedures in the food industry*.

"NCASS is a membership organisation and so we are using it to make sure their members have all the up-to-date information and use best practice. We can then focus on those who are not members and so are less likely to have relevant information," says Mrs Smith.

### Disease reporting strengthened

Given that the Games will be one of the largest international mass gatherings with people coming from all over the world, the Health Protection Agency (HPA) is playing a significant role in disease outbreak emergency planning. One potential risk will be from the arrival of people with mosquito borne pathogens along with the arrival of the more dangerous species of mosquito.

Current systems for the reporting of disease incidents are being strengthened along with an increased list of reportable diseases. The HPA also plans to pick up data from hospital A&E departments and laboratories, along with information from its regional Health Protection Units on a daily basis to ensure potential outbreaks are quickly detected.

The HPA travel and migrant health unit at Colindale has developed a toolkit assessing prevalent diseases country-by-country along with their symptoms to ensure clinicians will be able to recognise them should they present in their surgeries. There will also be daily analysis of the international situation during the Games.

The USA provided a recent salutary lesson to health experts when West Nile Virus spread across North America in just four years after a New York outbreak in 1999. Several thousand people infected with mosquito borne pathogens already enter the UK each year.

"The whole objective for this is to plan for, and expect, the worst, but looking back at other games they have not had anything of a significant public health impact, so we are actually expecting the best," says Deborah Turbitt North East and North Central London director of the HPA.

Mosquitoes not only pose a public health risk but can also pose a biting nuisance and prompt allergic responses. An independent report commissioned by the CIEH into the public health risk posed by mosquitoes has called on Olympic organisers to survey breeding sites in the vicinity of the Olympics and to risk assess final plans in relation to known mosquito populations.

As the Olympics approach there is still uncertainty about what challenges will present themselves. But for the pest world, London 2012 is set to leave a legacy of good practice which will live on well after the Olympic Games have gone.

## BPCA holds AGM

Despite concerns that difficult questions might be asked, the British Pest Control Association's (BPCA) Annual General Meeting on 8 June passed without major incident.

The meeting was at BPCA's new offices on Pide Park in Derby. There were no changes to BPCA office holders, with Martina Flynn (BASF) staying on as president for a third year. Henry Mott (Conquer Pest Control) remains as deputy president and Jenny Humphrey (DRE Pest Control) as honorary treasurer.

An election for the Executive Board saw new faces Philip Bowman (PPC Environmental) and John Forrest (Forrest Environmental Services) elected, with Richard Strand (Pest Information Consultancy) and Lewis Jenkins (Check Services) both being re-elected to the Board. There were no changes to any of the chairs of any of the BPCA committees.

If there was to have been controversy it would have been centred on an exceptional item of expenditure for £70,000 recorded in the 2010 accounts. The president read out a statement detailing the background, which went back to 2007 when a bespoke piece of

computer software was commissioned by BPCA from Borough IT based in London. As others have discovered, the Government with its NHS system for example, there is plenty that can go amiss with such contracts. After protracted negotiations, legal advice was sought and an out-of-court final settlement was recommended. A question from the floor asked if this included BPCA's own legal costs. Unfortunately it did not and these amounted to a further £30,000. On behalf of the whole Executive Board, the president expressed her regret for this loss and stressed that while BPCA felt the IT company was at fault, lessons had been learnt and improvements to systems and governance had been put in place.

### Future plans

BPCA's chief executive, Simon Forrester, presented a review of activities and



BPCA deputy president Henry Mott with president Martina Flynn

highlighted the direction for the Association over the next three years. He explained how a recent survey showed, amongst other things, that members wanted their Association to help them attract business. The introduction of the new BPCA magazine, *alexo*, targeting members' customers will help deliver this.

### PROMPT on the up

Invited speaker Rob Simpson, managing director of BASIS, outlined the PROMPT scheme and the significance of collecting CPD (Continuing Professional Development) points. He was pleased to report a surge in PROMPT membership during 2010 – rising from 354 in January 2011 to over 900 by the end of May.

read more  
on the web  
WWW

## Awards made



Dave Olbury received his life membership award from Martina Flynn at the BPCA AGM in June. The honour is only bestowed on individuals who have worked on behalf of the industry and the Association, voluntarily, over many years. Dave, who retired on 22 May from his post as group manager of pest control services for Manchester City Council, has certainly done that. He is continuing to take an active role in professional pest control as an independent consultant.

Two further awards were made. The first was to Steve Bell of Cannon Pest Control who, as the candidate who achieved the best result in the BPCA Accredited Technician in Pest Control exam, won the Charles Keeble award. The second went to Joe Brook of Yorkshire-based Fuminox. He received the John Bull award for the candidate who achieves the highest mark in the Fumigation Diploma.

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**BEDBUGS**  
New code of practice

## Our bedbug special 2011

Thirteen pages on bedbug monitoring and control



© Richard Naylor, University of Sheffield



Launching the new European bedbug code of practice in Poland are Dr Daniel Bajomi, left, holding the consultation draft (pink cover) and Frederic Verwilghen with the final published code (orange cover)

### New European bedbug code

The new European code of practice for bedbug management was launched during the Europest event held in Krakow, Poland in May (see page 37). Its production has been co-ordinated by the Bed Bug Foundation. The document is based on the pioneering Australian code already in its third edition (see page 25) and involved leading bedbug experts, as well as a formal consultation process across the European pest management industry.

Unfortunately the chairman of the Bed Bug Foundation, Oliver Madge, who was expected to present the Code, did not make an appearance. Consequently, Dr Daniel Bajomi from Babolna Bio, Hungary and Frederic Verwilghen from Edialux in France stepped in and gave an excellent double act on the content. Dr Bajomi was one of the instigators of the Bed Bug Foundation, whilst Frederic is also a vice president of the European confederation of pest control associations, CEPA.

Both presenters, it turned out, have first-hand experience of bedbugs, Frederic's encounter was on an aeroplane and Daniel's in a hotel bedroom – the airline and hotel chain concerned must remain nameless! Bedbugs are a pest which potentially threatens everyone. "It's an exposure pest not a dirty pest, explained Frederic. "And, one thing's for sure. If you haven't got bedbugs in your country yet the chances are you will have them soon."

Bedbugs are a global pest, requiring a global solution, so this pan-European code is to be welcomed as a step in the right direction.

The code provides a wealth of information on bedbugs and their detection and control. It advocates the need for pest controllers to switch from thinking solely about controlling the pest to ways in which they can manage it through monitoring and periodic assessments.

Pest professionals are a key audience, but so too is the accommodation industry; hoteliers, bed & breakfast owners and those involved in social housing all need to have a better understanding of the problem.

In simple terms the three step approach to the control of bedbugs advocated in the code is:

- 1 Prevention – whilst it is impossible to design rooms with zero harbourage points for bedbugs a lot more could be done to improve the design of the structure and the furniture used.
- 2 Detection – proactive monitoring and frequent inspection by competent staff is essential.
- 3 Eradication – employing a combination of non-chemical and chemical treatments.



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The pest controller arrives, carrying no more than an unobtrusive suitcase

The use of specially trained dogs to detect bedbugs has become a familiar concept. It's a technique that has certainly caught-on in the USA and, to a lesser extent, in the UK. Somewhat of a sceptic, **Pest** editor, Frances McKim spent a day out in London last year with Adam Juson and two of his detection dogs and came away convinced. See **Pest** issue 8 March & April 2010.

Dogs are unsurpassed in their ability to detect any scent. But what happens when you can't get the dog to the venue in question? To solve this, Merlin Environmental ([www.bedbugcontrol.co.uk](http://www.bedbugcontrol.co.uk)) has come up with a remote screening test, claimed to be the first in the world. So, rather than take the dog to the bedbug scent, the bedbug scent is brought to the dog. Dog and bedbug can even be in different countries.

Based on the well established Remote Air Sampling for Canine Olfaction (RASCO) system for detecting explosives, Merlin has developed its own bedbug detection procedure.



Once collected, the samples are packed individually in a protective atmosphere

# Bedbug detection taken to a new 'remote' level

A remarkable new, insect remote, bedbug detection service has been developed by Merlin Environmental and is now being operated for the benefit of clients.

Known by Merlin as Remote Insect Scent Tracing or RIST, samples of air and air-borne dust from the suspected location are collected using a specialist portable sampling machine. The machine sucks air and dust through an odour-neutral filter designed to trap the particles of dust and any target odours contained in the air.

The machine is systematically worked through the target area. Each filter is marked with a reference number to ensure that the source of the filter can be identified and linked to the host location. Upon completion of the sampling, the filters are sent to the Merlin detection facility for analysis by the company's specially trained sniffer dog – Carlos.

The sample filters are laid-out in carefully controlled environmental conditions for



Air samples are taken using the specialist portable sampling machine

Carlos to inspect. The dog has been trained to sniff the filters and indicate which filters contain traces of bedbug odour. If Carlos indicates to a filter contaminated with target odour, he will sit and stare, until called off and rewarded by his handler.

RIST is intended to give a positive or negative result for a given environment. The data generated differs greatly to active dog searches. An active dog will tell the handler that a single bug is located within the area being screened. A RIST dog will identify that



At base, the samples are unpacked and opened



The filter is removed from the protected atmosphere



The filters are loaded into the scent wall

the filter has been exposed to bedbug scent and so the environment from where it came warrants closer scrutiny – be that by human or canine screening. Adam Juson, a partner in Merlin Environmental, has been instrumental in developing this remote bedbug technique. He explains: "Several clients came to us to develop a detection system where rapid results can be gained from remote locations, for example to verify customer complaints on cruise ships. Imagine the



Star of the show, Carlos systematically checks the samples

logistics of trying to get a dog team onto a ship that spends no more than one night in any given port. We realised it was much easier and cheaper to get a sample sent to the UK for analysis."

To date this new RIST system has been successfully used to analyse a range of infestations in overseas hotels and on cruise ships by Merlin themselves. However the technique is available for use by other pest control companies – the kits are sent out for the company to capture their own samples. These are then sent to Merlin for screening.

RIST may have its limitations, but it has proven to be yet another useful tool in the war on bedbugs.



That's the one! Carlos indicates this filter has been exposed to bedbug scent

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# Battling bedbugs

## the latest in weaponry

Bedbugs are a truly international phenomenon and much has been written to promote the various products and techniques developed to monitor and control them. But a critical overview is rare. Well-known for his bedbug research and appearances on conference platforms around the world, Stephen Doggett always 'tells it how it is'.

In this article, which first appeared in the January 2011 edition of *Professional Pest Manager* (the leading pest control magazine in Australia), Stephen and his co-authors David Lilly and Richard Russell cast a critical eye over what's available. Written from an Australian perspective, readers must be aware that not all the products mentioned (particularly the insecticide products) are available in the UK.

The worldwide explosion in bedbug numbers has led to an equally dramatic increase in bedbug related products. The market has been flooded with a variety of monitoring devices for early detection of infestations, numerous non-chemical means of management, as well as several new insecticides. There have also been many groups who have developed bedbug management guidelines in order to combat the rise of this public health pest. The list of new products could fill several text books; however, the following is an overview of what's new and, more importantly, what works.

In terms of bedbug monitors there are two broad types: those that have attractants and those that do not. The latter group provides a

simple harbourage for bedbugs such as corrugated cardboard and may contain gels to capture the bugs. This includes the BDS from Catchmaster ([www.catchmasterpro.com/bds.php](http://www.catchmasterpro.com/bds.php)) and the BB Alert Passive from MidMos ([www.midmos.com](http://www.midmos.com)). The latter has a white border around the edge and it is claimed that bedbugs defecate before entering the monitor and so the spotting (and hence presence of bedbugs) can be quickly detected.

Those monitors that contain attractants can be simple and have one bait such as heat, e.g. BB Alert Active ([www.midmos.com](http://www.midmos.com)) and the Bed Bug Dome from Slivatronic ([www.silvandersson.se](http://www.silvandersson.se)), or carbon dioxide (Bed Bug Beacon from Packtite, [www.packtite.com](http://www.packtite.com)), or they



Australian bedbug expert Stephen Doggett tells it like it is

### Monitoring devices abound



may contain multiple attractants including heat, carbon dioxide and various kairomones (these include various compounds exuded from the human skin that attract biting insects).

Such devices include the Nightwatch ([www.biosensory.com](http://www.biosensory.com)) and the CDC3000 ([www.cimexscience.com](http://www.cimexscience.com)). The most effective of the monitors at attracting bedbugs are those that produce high amounts of carbon dioxide. In fact a home-grown version made by a group of researchers at Rutgers University in the United States, consisted of nothing more than an inverted cat dish, an insulated container and a block of dry ice and cost only a few dollars, yet this was far more effective at collecting than all the commercial devices tested. Unfortunately, all the monitors have use limitations, and it looks like being some time before a perfect detection system is developed.

There is now a sticky tape (called Bed Bug Monitor) from AgriSense ([www.agrisense.co.uk](http://www.agrisense.co.uk)) being marketed for the monitoring of bedbugs. This is a double sided tape with a low and high-tack side; the low tack side is for adhesion to furniture and walls. In trials that we conducted the tape only captured one bedbug out of 40 over a two week period; in fact it seemed that the tape actually repelled the bedbugs. On the other hand, not one of the bugs climbed over the tape and so it worked quite well as a barrier!

#### Simple but effective barriers

Speaking of barriers, this is another area of expanding technology. Barriers aim to prevent bedbugs from climbing onto the bed and biting the sleeping victim. The Climbug interceptor ([www.insect-interceptor.com](http://www.insect-interceptor.com)) has been around for some time and is proven technology, and it also functions as a highly effective bedbug monitor. The Bed Moat ([www.thebedmoat.com](http://www.thebedmoat.com)) is almost an exact copy but seems to be of better construction and should also function as stated. Two recently developed barriers on the market have come out of Australia; the Bed Bug Barrier ([www.bedbugbarrier.com.au](http://www.bedbugbarrier.com.au)) and the BB Secure Ring ([www.bedbugsecure.com](http://www.bedbugsecure.com)). The Bed Bug Barrier comes as two types: one in which the bed leg or caster sits, and another which is placed between the caster and the bedbug. Preliminary investigations from overseas indicate that the Bed Bug Barrier effectively stops bedbugs from climbing onto the bed. The BB Secure Ring is a very simple device: it consists of a flat ring of PTFE (a Teflon-like plastic), which is placed between the caster and the bed base. The ring has an ultra smooth surface that bedbugs cannot grip, and they are unable to climb over it to reach the bed. This device was tested comprehensively in our laboratory and was able to stop around 2,000 bedbugs of all stages. A video of the bugs trying to unsuccessfully clamber over the ring can be seen on the above company's website.

A number of new insecticides are becoming available to the Australian pest manager. In the Aug/Sep 2010 edition of *Professional Pest Manager* it was mentioned that Phantom Insecticide (active: chlorphenapyr) was just released in Australia. This is a very slow acting product but early investigations suggested that it was able to kill 100% of pyrethroid resistant bedbugs. However, more recent research findings by several groups indicate that it is not as effective as first thought, likewise some anecdotal

### Plenty of barrier devices on the market

Right: Simple but very effective, the BB Secure Ring



Left: The Climbug interceptor



Left: The two types of Bed Bug Barrier

field reports are suggesting only moderate efficacy. This has prompted our laboratory to evaluate the product against an Australian bedbug strain and the results will be forthcoming.

Bayer is set to release a number of new insecticidal products for bedbug control: Temprid, Premise Foam and Cislin Aerosol. Both Temprid and Premise Foam contain imidacloprid and there are no resistance issues with this chemical. In fact even extremely dilute doses applied directly to bedbugs are highly effective and achieve a complete kill. Sadly these are no silver bullet as imidacloprid provides a poor level of residual protection. Despite the high level of pyrethroid resistance, Cislin Aerosol (active: deltamethrin) provided a 100% kill against all bedbugs tested in our laboratory when sprayed directly at the bugs. Bayer must be congratulated for being the first to include on their product labels a recommendation that the industry standard A Code of Practice for Bed Bug Control in Australia ([www.bedbug.org.au](http://www.bedbug.org.au)) should be followed. The more pest managers that become aware of the Code, the more likely we will sooner reduce the impact of bedbugs, and so 'well done' Bayer: hopefully, other companies will follow this lead.

Ensysyex will be soon coming out with Maxxthor KDR, which contains synergised bifenthrin and imiprothrin. To date, ▶▶▶

### About the authors

Stephen Doggett and Richard Russell are from the Department of Medical Entomology, ICPMR & University of Sydney, Westmead Hospital, Westmead, NSW, Australia whilst David Lilly is from Ecolab Pest Elimination Division, Castle Hill, NSW, Australia





this is the most effective pyrethroid based product tested by our laboratory although, as per other pyrethroids, a complete kill may not result and reapplication will be required.

Currently, there is an attempt to have Diatomaceous Earth Dust (DED) registered in Australia. DED is a highly effective insecticide, albeit slow acting, is effective against resistant bedbugs and has been long employed overseas. The product has very low mammalian toxicity, very long activity, and resistance is unlikely to develop due to its mode of action (it absorbs lipids out of the insect exoskeleton, which leads to dehydration and death). Hopefully, DED will soon be available.

Now the latest buzzword in insecticides is 'enzymes'. Apparently these chemicals can produce an instant death when applied directly to bedbugs, even those resistant to many products. Exactly what these enzymes are is still a mystery; sadly, however, early indications are that they do not provide good residual activity. There are already companies selling enzymes for bedbug control online in the US, but these products are unlikely to be registered here.

Another area of insecticide use has been in the impregnation of mattresses and mattress covers. The active employed is typically permethrin. In light of the high degree of resistance in bedbugs against this active, the expected efficacy would be low. We have now tested Cimex-Pro, which has been applied to mattresses in Australia, and found it to be ineffective against our modern resistant strain of bedbug, although a complete kill is achieved with old laboratory susceptible strains.

## Mattress & luggage protectors



*Below & left:  
Mattress and pillow protectors, with  
and without, insecticide impregnation*



*Above:  
The BugZip*

Similarly, tests against the ActiveGuard mattress liner (sold in the US, [www.allergytechnologies.com](http://www.allergytechnologies.com)) produced only around 20% control with the resistant strain. Based on these research findings, it would be difficult to recommend these products as part of a bedbug management programme since most field infestations involved insecticide resistant strains of bugs.

Many disparate groups in the USA are now producing management guidelines, too numerous to list here. While some are excellent, 90% of the information is identical between each, indicating a huge waste of human resources and demonstrating the uncoordinated nature of bedbug management in the States. Some of the guidelines attempt to list every innovation in bedbug management, but what is the point if a particular technology just does not work? Practical and useful information is needed for the pest manager (and everyone else impacted by bedbugs). One of the basic fundamental principles of the Australian Code of Practice is that technologies are only included when there is evidence of efficacy and, where there is such evidence, the limitations are described. The reality is that every technology on the market has limitations. How do we know this? Simply because there is still a bedbug problem, which is growing in many parts of the world. If a pest manager ever has a concern about a product, s/he should check the Code, if it is not listed, then it probably does not work.

By no means is this list endless, many more products were unveiled at the recent (September 2010) Bed Bug Summit in Chicago. Some conceptually were quite silly, such as the Rest Assured hand sanitiser for use after handling infested mattresses (anyone who does so should wear disposable gloves). While others demonstrate more promise. However, one aspect became clear; that there are no magical silver bullets on the horizon. This means that an IPM approach to bedbug management as per the Code of Practice must still be followed.



## Bedbugs, SPI, textile, & timber pests?



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## America's most infested cities

Data recently released by Terminix, the largest pest control servicing company in the USA, confirmed that New York maintained its number one spot for bedbug infestations.

In the Terminix ranking of most infested cities, the rest of the locations listed saw some reshuffling of position compared with the company's initial 2010 list. In addition, a couple of locations made an appearance for the first time.

In 2011 the 15 most bedbug-infested cities were, in descending order: New York, Cincinnati, Detroit, Chicago, Philadelphia, Denver, Washington DC, Los Angeles, Boston, San Francisco, Columbus (Ohio), Dayton (Ohio), Baltimore, Louisville (Kentucky) and Dallas.

The list was created by compiling data from

the 350 Terminix branches across the country. The company evaluated complaint calls from customers as well as confirmed cases by service professionals when creating the ranking.

Baltimore, Dallas and San Francisco appear on the list for the first time this year, replacing Indianapolis, Cleveland and Minneapolis. Cities not appearing on the list may still encounter bedbug infestations as most cities and states have reported bedbug activity during the last year.

In the US this is a national epidemic that has plagued homeowners, hotels, apartments and even retail centres over the past year. The bedbug problem is growing in scope and severity according to Terminix, and the movement of pests isn't expected to slow anytime soon.



## EPA's bedbug pesticides database

With cases of bedbug infestations increasing in the USA, the Environmental Protection Agency (EPA) has launched a new database listing all pesticides registered for this purpose. The new search tool will let consumers choose an EPA-registered bedbug product that meets their needs and is safe, if properly used according to label instructions.

There are more than 300 different products registered by EPA for use against bedbugs. When selecting a bedbug pesticide product, it is important to choose one that is appropriate for the situation, such as where the pesticide will be applied, and to always follow the instructions on the pesticide's label.

This new product search will allow consumers to find bedbug products by company, name, EPA registration number, active ingredient and place of application.

[www.epa.gov/bedbugs/productsearch](http://www.epa.gov/bedbugs/productsearch)



## Dogs get certified

The use of dogs to detect bedbugs in the USA is now a nationwide accepted practice. Yet, to date, there has been no central certification system for these four-legged practitioners. To rectify this, the National Pest Management Association (NPMA) organised the first National Canine Conference on 1-3 June in Philadelphia. Over 200 people attended along with more than 50 canine candidates to be put through their paces to receive official certification.

NPMA had three objectives for the conference, explained Jim Fredericks, director of technical services for NPMA. "Our first objective was to provide an educational forum for canine handlers and business owners about the science, legal issues, training methods and business models behind canine scent detection," detailed Jim. "Secondly, NPMA wanted to provide a centralised location where canine teams had the opportunity to become certified by third-party evaluators in accordance with the NPMA Best Management Practices. Our final objective was to provide an environment where handlers, trainers, business owners and academics could informally exchange ideas about the future of canine scent detection and ways that our industry can maintain its high level of professionalism. All in all, I think we succeeded in achieving all three of our objectives and we were very pleased with the outcome of the meeting," he concluded.



In addition to the regular keynote and educational sessions at PestWorld to be held in New Orleans on 19-22 October, there is to be an optional, additional Bed Bug Forum.

## Additional bedbug forum at PestWorld

Featuring renowned experts, the Forum provides the latest research, control techniques as well as information on the legal implications of bedbug treatments. Bedbug sessions will run over the same three days in October. There is no additional cost for registered delegates.

In addition, and of particular interest to overseas delegates, is an international round-up, with speakers from Australia,

South Africa, Canada, Japan, Germany and Spain.

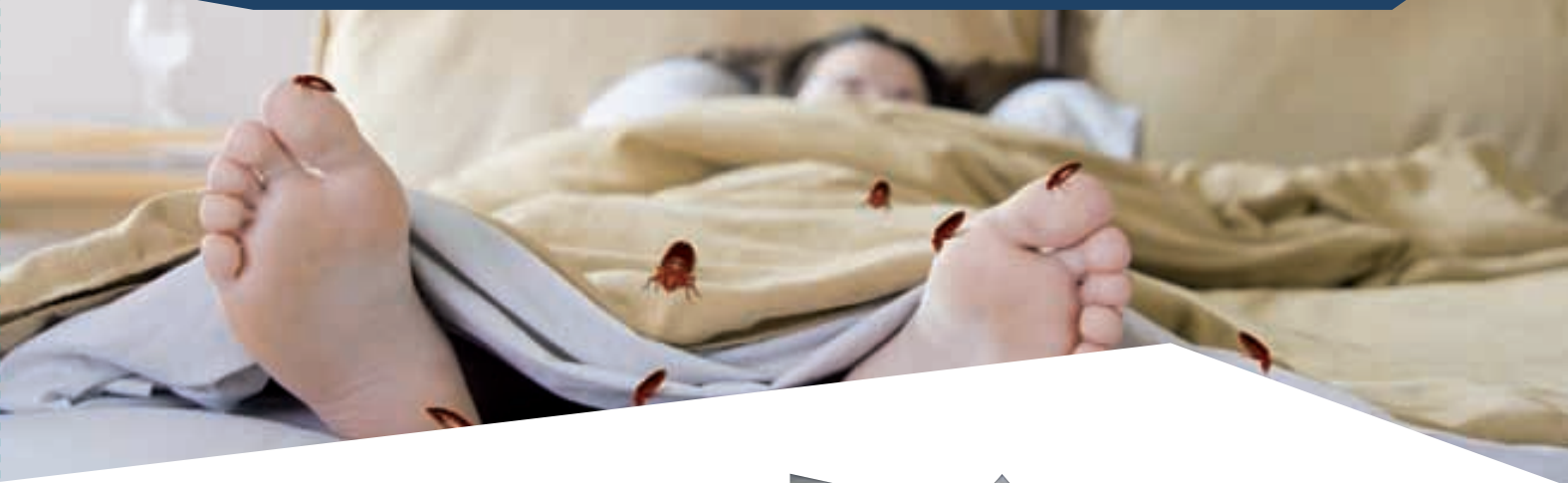
A new addition to PestWorld in 2011 is The House of Learning. As seen at PestEx and Parasitec, this is to be a hands-on demonstration from canine inspections, to treatment methods and monitoring practices.





# Supplying you with the **UK's largest** stock of innovative bedbug products

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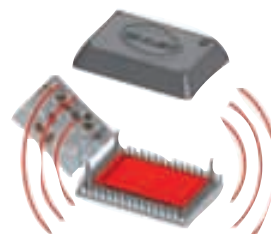
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DETECTOR**



**AGRISENSE BEDBUG  
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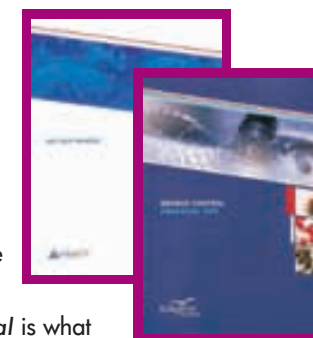
**BEDBUGS**  
New resources

### Practical guides from Killgerm

These two publications from Killgerm provide excellent technical, yet practical information.

The first was released at PestEx 2011 – *Bed Bug Control. Practical Tips*. It is a straightforward eight page brochure doing what it says 'on the tin'. Sections include identification, inspection, monitoring & prevention, insecticides & resistance and physical control.

For a more in-depth reference, the 32 page *Bed Bug Manual* is what you need. Although it has been around a couple of years, it is routinely updated and covers subject areas similar to the practical tips booklet, but in considerably greater depth. Both publications are available from Killgerm and can be downloaded at [www.killgerm.com](http://www.killgerm.com) once you have registered and gained a password.



### Raft of publications from Rollins Inc

Rollins, the owners of the worldwide Orkin pest control servicing empire, certainly know a thing or two about pest control – so their new suite of publications which can be found at [www.bedbugbusinessplan.com](http://www.bedbugbusinessplan.com) is a strong addition to the range of information available.

These range from bedbug 101 tip sheets designed by market sector – property managers, office managers, hospitality, healthcare and the like – and in several languages ranging from English to Chinese and even Hindi.

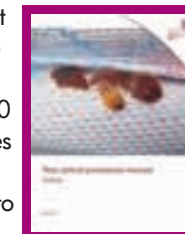
A more substantial brochure – *Bed Bugs. The Issues, Challenges and Facts* – aims to explore bedbug hype versus reality. Produced jointly with the National Apartment Association is a paper discussing all matters relating to bedbugs in the multifamily industry, whilst another produced with the Association for the Healthcare Environment addresses issues in the hospital and long-term care sectors.



### New from NPAP

Joining the National Pest Advisory Panel's (NPAP) stable of first-class publications comes its 20 page bedbug procedures manual. Although much of the content is similar to the Killgerm brochures, treatment processes reflect the more local authority target market.

Chapters discuss treatment processes broken down between domestic properties and block or larger properties. Other sections deal with insecticide storage, disposal and health & safety. Available on request from [npap@cieh.org](mailto:npap@cieh.org) or as a download at [www.cieh-npap.org](http://www.cieh-npap.org) For international readers, this and many in this series, are available in a wide range of languages.



### AllThingsBedBugs.org

This new website site aims to be a one-stop shop for bedbug information for the general public. Produced by the USA's National Pest Management Association (NPMA) the site is designed as a resource for people who are either dealing with a bedbug infestation or educating themselves on ways to prevent bringing this unwanted pest home.

AllThingsBedBugs.org also offers information on the history of bedbugs, their biology, signs of infestations and places where the pests are found. Other features include frequently asked questions, prevention tips, current bedbug news, a blog and bedbug photography & video footage.

To view go to [AllThingsBedBugs.org](http://AllThingsBedBugs.org) or [www.PestWorld.org](http://www.PestWorld.org).

### Codes from around the world



The new European Code of Practice (1), reviewed on page 17 of this issue, joins other codes already available in other parts of the world. The trailblazer was the Australian code (2), initially introduced in July 2006. However, in this fast moving environment, it has now undergone extensive revisions with a third edition released in May 2010. This code aimed at pest professionals has been joined by a code designed for accommodation providers (3).

In the USA, the National Pest Management Association (NPMA) released its own code *Bed bug best management practices for pest professionals* in January 2011 (4).

All four of these codes can be downloaded from the *Pest* website at [www.pestmagazine.co.uk/content/newsitem.aspx?id=636](http://www.pestmagazine.co.uk/content/newsitem.aspx?id=636)

### Get SMART with BASF

This handy eight page SMART Guide from BASF Pest Control Solutions sets out a clear Integrated Pest Management approach to the most effective treatment of this increasingly problematic pest. It has been developed from the company's extensive international bedbug control experience. "Our new guide provides best practice advice on pinpointing the problem, preparing the ground, treating the infestation and making the most of the products available," explains BASF's insect management specialist, James Whittaker. Available free from 0161 485 6222 or [www.pestcontrol.basf.co.uk](http://www.pestcontrol.basf.co.uk)





# Hot stuff in the bed room

## Beating bedbugs with heat

Well known as an insect specialist, Clive Boase of the Pest Management Consultancy reviews the growing trend for using heat as a method of bedbug control.



### The story so far

Heat treatment for bedbug control is sometimes presented as a 21st century innovation. However, it has actually been around a long time, with a publication from 1916 describing a whole-building heat treatment little different from those carried out today. Despite this early start, the potent and easily applied insecticides introduced from the 1940's onwards, dominated bedbug control up until the end of the 20th century. In the last decade however the dynamics have shifted and alternative treatments, such as heat (and cold), are now edging back into the market.

## My nose knows you know!

That's because its been fully trained to sniff out bedbugs, wherever they may be.

### Yes bedbugs are my quarry.

We work in all sorts of locations, but we really come into our own in sensitive areas or where you have a large location to screen quickly such as hotels, public buildings, aircraft, ships and so on....



Find out how I can help your business by contacting my human, that's Adam Juson of Merlin Environmental on 0800 037 7332 or email him at: [info@bedbugcontrol.co.uk](mailto:info@bedbugcontrol.co.uk) [www.bedbugcontrol.co.uk](http://www.bedbugcontrol.co.uk)

A range of professional heating systems are now available for bedbug control, typically either for heating 'bubbles' and wrapped stacks, or for heating whole rooms and their contents. Smaller stacks and 'bubbles' may be powered from a standard domestic electrical socket, but heating larger volumes requires more power. This is typically provided by dedicated diesel-powered heaters, which may produce up to 25kW, or more. The heaters either heat air which is then ducted to the area required, or heat a water/glycol mix which is piped to heat exchangers which then heat the air within the room. Heat generators and the associated pipework need to be carefully sited and routed to reduce disruption to normal activities, both outside and inside the premises.

Although buildings such as hotels may be the obvious targets for heat treatment, the technology may be used to control bedbugs (and other pests such as storage insects) in many other types of buildings, and in more unusual structures such as vehicles or aircraft.

### Just taking care

Unless organisations carrying out heat treatment are fully trained and experienced, property damage has been known to occur. So prior to heating, all sensitive items such as pets, plants, vinyl records, oil paintings, some wooden furniture, aerosols and some electronic equipment, must be carefully identified and removed. In addition, fire safety equipment may also need to be removed or disabled, and an alternative system put in place during treatment.

The way each room heats up can be quite variable, so to monitor progress, temperature probes are installed, particularly in corners, between furniture, and under floor boards. The temperature trend at each probe will highlight areas which are slow to heat up, and may therefore require some adjustment. However even a comprehensive array of probes will not identify all cool spots. Hand-held infra-red thermometers may be used to identify cool areas, but as Ian Townend, European business development manager of DryAir UK suggests: "With experience, simply touching and feeling surfaces within a room is a rapid and effective way of finding areas that are struggling to reach required temperatures."



As temperatures rise, the insects may try to seek out cooler locations, perhaps under floor boards or in stud walls. If possible, such voids will be heated directly, or at least temperature probes inserted to check that internal temperatures are adequate.

To some extent this problem can be overcome by heating adjoining rooms, so even if insect movement does occur, they will only move into another heated location. At borderline temperatures insects may be temporarily paralysed, but will recover if temperatures then subside. However once temperatures move towards 60°C, irreversible and lethal changes will occur, such as denaturing of proteins, melting of lipids, and severe desiccation.

Dave Hammond, managing director of Sussex-based Thermokil, explains: "One of the main benefits of heat treatment is that it not only kills the active stages, but also the eggs, which are notoriously difficult to kill with conventional insecticides." Dave has done much to research and develop the use of heat over the last 14 years and now supplies heat equipment to several UK pest control companies.

However a room at 60°C is potentially hazardous for humans too, so whole-room treatments are carried out by two technicians, with one remaining outside the heated rooms at all times. Technicians spend no more than 10 to 15 minutes in a heated room, with access to bottled water for rehydration.

### Belt and braces

Use of heat and insecticide may sound like overkill. Rentokil Pest Control and Revival Environmental jointly developed the Entotherm system, launched in 2010. However, as Steve Sinclair of Revival warns: "It is accepted that heat is not a silver bullet, so insecticide treatments may also be necessary, particularly where a bubble or stack treatment is carried out." Even where a whole-room treatment is carried out, then insecticides may still be required. Ian Townend adds: "An insecticide barrier treatment may be required, to prevent pest migration when treating a mid-terrace house."

Guarantees in bedbug control can be a controversial topic. There are pest control organisations that believe that it is too risky to offer a guarantee, whatever the treatment technique. However the experience of others is that if they completely get rid of the bedbugs, then even busy premises are likely to stay free of bedbugs for an extended period. In this situation, offering a six month guarantee is an acceptable risk, and shows that the organisation has confidence in its work. To date, organisations using heat treatment alone have in general been reluctant to guarantee treatments, but some organisations offering heat in combination with insecticides now feel sufficiently confident to offer a guaranteed bedbug service.

### Opportunities and challenges

As to the future, the use of heat for bedbug control faces both significant opportunities and challenges. The recent movement of bedbugs into up-market hotels and the leafy suburbs, has created a customer base able to afford the more costly heat treatment. The



Hot air generated by the diesel heater unit is ducted into hotel rooms

coming years will show whether the technology remains primarily a high-end service, or whether competition will drive the cost down to the point where it opens opportunities in other market segments.

The mid years of the 20th century saw heat treatment lose ground to the challenge from inexpensive and effective insecticides. In time, effective bedbug insecticides will again be introduced. It is not yet clear whether heat treatment will then still retain a significant presence, or again lose ground.

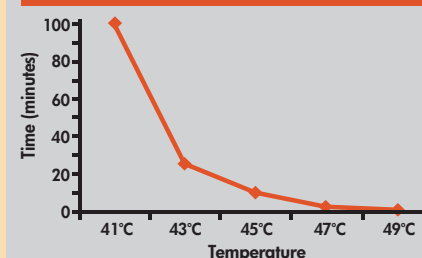
Heat (and cold) will, however, remain one of the few non-chemical means of bedbug control.



Heat has been used successfully to treat aircraft

### How hot is hot?

Time to achieve 100% mortality of adult bedbugs at temperatures shown



In the USA the use of heat treatment for the control of bedbugs is growing fast, with several pest control companies now running dedicated heat treatment teams.

This work has been underpinned by research at the universities in Florida, Minnesota and Kentucky, into the relationship between temperature, duration of exposure, and bedbug mortality.

Results from laboratory tests show that below 40°C, there is little mortality of adult bedbugs, even if the temperature is maintained for long periods. Above 40°C,

then the time required to achieve 100% mortality decreases rapidly, with death occurring within a minute at 50°C.

The impact of heat on eggs is broadly in line with the effects on adults.

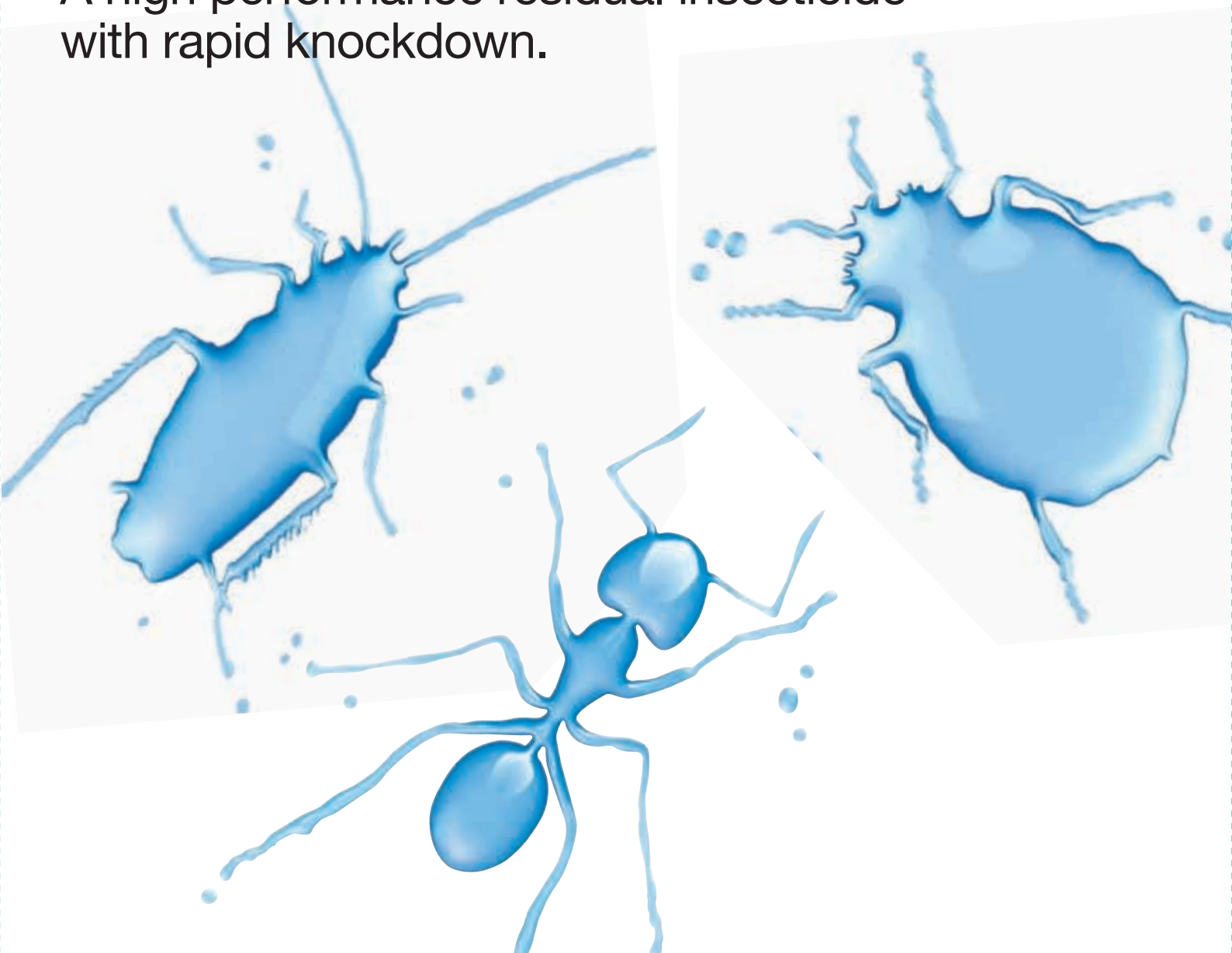
However the target temperatures used in practice are several degrees higher than those found effective in the laboratory in order to accelerate the temperature rise in the more insulated parts of the structure.







The first choice spray treatment.  
A high performance residual insecticide  
with rapid knockdown.



## BASF Pest Control Solutions



- Proven high performance, low dose formulation
- Excellent broad spectrum insect control
- Rapid knockdown and reliable residual action
- Easy, acceptable and safe in use

Enabling the most effective solutions to your pest problems.

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## BPCA turns up the heat

Reflecting the increasing interest in heat as a method of insect control, the British Pest Control Association (BPCA) has recently introduced a new course covering heat treatment into its extensive training portfolio.

Held for the first time at their new offices in Derby, the course lasted three days (24-26 May) and attracted seven delegates, not only from the UK but also from France, Greece and Dubai.

All aspects of insect control by heat were covered – ranging from the physics of how heat kills insects, the equipment required, and the practical techniques of treating furniture right through to whole rooms. The whole range of pests was covered – from bedbugs to woodworm and stored product insects.

As course tutor, Dave Hammond of Thermokil, explained: "This is very much a hands-on experience. Delegates don't just sit and listen. My mantra is 'If you can sheet it, you can heat it'."

Summing up the feelings of the delegates, Cliff Eccles, operations director for Pestokil said: "The course was an essential tool in our further understanding of how thermal dynamics can be effectively used to control insects and in particular bedbug infestations."

Tammy Pratt, BPCA's training officer, concluded by saying: "We were very pleased with how the course ran. One piece of delegate feedback was that attendees would prefer to do the course in a more intense two-day format to minimise time out of the office. We've responded to that, so the next course will only last two days."

It is on 9 and 10 November, again in Derby.



Hands-on activity on the BPCA course. Main picture: Introducing the heat to the sheeted stack. Inset: Sheeting up and inserting temperature probes into the stack

## Cold as well as hot



Not to be forgotten is the use of cold. In the UK the Cryonite system, available from Riwa, has been used for bedbug control for some years.

Insects have various physiological protection mechanisms to survive low temperatures. One is by lowering the freezing point by producing antifreeze agents such as sugar, alcohol, and proteins. Another is to induce formation of ice between the cells, thereby protecting them.

When using cold, the key is how fast you can make the temperature drop. The Cryonite system produces carbon dioxide (CO<sub>2</sub>) 'snow' at -80°C. Bedbugs (all stages) cannot compensate for this rapid cooling, so literally freeze to death.

The aim of treatment is to create a thin layer of CO<sub>2</sub> snow wherever there may be bedbug harbourages. The treatment is only effective when the CO<sub>2</sub> snow comes into contact with the pest, so treatment of an area needs to be thorough and meticulous. The layer of snow should be thin enough so that it disperses within 20-30 seconds. A thicker layer will produce an insulating effect and negate the efficiency of the treatment.







Frank Howard, chemist, enthusiastic entrepreneur and founder of Hockley International



Marketing manager, Peter Rosevere, on the Hockley stand at PestEx 2011 in London for the launch of Lambda and Daleth



The international sales team, left to right, Karin Allen, Mark Murphy and Stephanie Girard liaise with customers in five languages

# Small is beautiful

If you say to someone you work for a chemical company, most people will jump to the conclusion that you mean one of the large multi-national organisations, Bayer, BASF, Dow and the like. But this is not always the case. Within any industry there is always scope for small, flexible and highly customer-orientated organisations – as anyone who comes face-to-face with Manchester-based Hockley International will discover.

Having been in business for over 30 years, the success of Hockley International lies firmly with its enthusiastic founder and owner, Frank Howard. At a time of life when Frank could justifiably be starting to think about retirement, nothing could be further from his mind.

Born and bred in Stockport, Frank has lived and breathed chemicals throughout his entire life. Frank's father, although a builder by profession, literally fired his love of chemistry – as he was an enthusiastic amateur chemist who, amongst other things, was keen on making gunpowder. As Frank says, maybe this explains why his father ended-up hard of hearing! Then, on the way to summer holidays spent in North Wales, the train would pass the Joseph Crossfield works, the Persil factory followed by the Stanlow Oil Refinery. "These were all factories with pipes and steam billowing out – I was fascinated," details Frank. So it was no surprise that Frank went on to read chemistry at the University of Manchester.

Having discovered at university that he was not a practical chemist, Frank turned towards the commercial side of the chemical industry. Living where he does there was plenty of scope, as this part of the North West is renowned as the chemical capital of England.

Frank worked in the production and sales side of various chemical companies, until starting his initial company, Mostyn Chemicals, in July 1979. Originally operating from a small bedroom in Poynton and with a core of five staff (one of whom still works for the company today) business flourished. In 1989 Mostyn merged with MTM Agrochemicals, to be followed in 1991 with a management buy-out and the formation of a new company – Hockley International. In 2009 Frank celebrated 30 years in business. More recently, bringing the company bang up to date, Hockley underwent a total image make-over and then in 2011 moved to a purpose-built and company-owned modern office building, conveniently placed near Manchester airport.

Now with a staff of 18 and an annual turnover fast approaching £20 million, entrepreneur Frank Howard can feel justifiably proud of his endeavours. Outside the company this achievement has been officially recognised, with the awarding of the Queen's Award for Export as well as, in 2009, winning the UKTI award for international trade, presented by Chemicals Northwest.

## Products known – company not

Internationally, sales of pesticides into the agricultural market in third world countries, particularly Africa, accounts for around 80% of Hockley's turnover. Sales into the animal health and veterinary markets make up nearly 5% and the balance of activity is in public health – a sector Hockley is keen to expand on a global basis. Today the company is one of the UK's large exporters of environmental health insecticides and amongst its customers are several of the world's leading Non-Governmental Organisations (NGOs). Supplies to disaster relief projects is one specialty and the company will be exhibiting this year at the inaugural Aid-Ex exhibition to be held in Brussels, Belgium in October.

In the UK several of the Hockley products are now well known, yet their manufacturer is not. Products such as Alphamost Supra-6 (alpha-cypermethrin) and Deltamost SC (deltamethrin) suspension concentrates have carved a loyal following with pest control customers. Both products are broad-spectrum insecticides effective against a range of flying and crawling insects. Permost Uni Fly spray (permethrin with tetramethrin) ready to use insecticide is also a product leader.

Sales into pest control in the UK are handled exclusively by SX Environmental Supplies. As SX managing director, Richard Lunn,

explains: "We have sold the range of Hockley products for over ten years, during which time their quality and reliability has been first class. Hockley approached us as they were seeking an entry point into this sector and they are now one of our significant suppliers."

Their range of insecticide products has proved very popular and, as a company, they are easy and professional to deal with. Significantly in today's ever environmentally aware climate, their products are manufactured in the UK, not half way around the world or elsewhere in Europe."

## New microencapsulated formulations

As to the future, Hockley has recently teamed up with GAT Microencapsulation AG from Austria to launch two new broad spectrum microencapsulated products specifically designed for pest control – Lambda and Daleth. As marketing manager, Peter Rosevere explains: "Both Lambda and Daleth are presented as capsule suspension (CS) formulations.

"CS formulations are manufactured by an emulsification process of oil in water, creating a capsule containing active ingredient similar to the principle of an eggshell. The capsule size and the thickness of the walls can be varied in the manufacturing process to allow slow, medium and fast release. This gives both



The creation and printing of labels in-house for short-run product lines ensures production flexibility

immediate and longer lasting residual efficacy."

With over 30 years in business already under their belt, prospects look rosy for the next 30 too.



## The seven secrets to success at Hockley International

- 1 A personalised service. By listening to, and working with, their partners, both parties achieve a shared goal. Several of Hockley's customers have been with them since the 1980s.
- 2 Manufacturing flexibility. Multiple manufacturing locations offer flexibility on quantity, price, availability and order times.
- 3 Tailor made products. Willingness to manufacture short-run bespoke product lines.
- 4 Prices quoted to overseas customers are always 'product delivered to the customer' so no hidden extras for delivery.
- 5 Extensive knowledge of transporting and shipping hazardous chemicals.
- 6 Long experience of payment procedures, trading in various currencies and variable payment terms.
- 7 Linguistic abilities. Staff able to trade in Spanish, French, German and Dutch.

Combined together, these attributes underpin the company's strap-line: 'making a world of difference.....'



Frank Howard, is proud, yet protective, of his company's products





© Dr Reiner Pospischil

# All geared-up for a demanding wasp season

One of the warmest springs in living memory following a particularly cold winter means pest controllers are reaping the benefits of a demanding (and profitable) wasp control season, advises BASF Pest Control Solutions

But what brings about 'good' or 'bad' years? Over the past six or seven years, annual sales of BASF's Wasp Nest Destroyer aerosol and the independent WaspWatch tracking (see [www.waspwatch.co.uk](http://www.waspwatch.co.uk)) both show a good correlation between wasp problems and spring temperatures.

These data indicate UK wasp challenges were especially high in 2004, 2005 and 2007 – years which also stood out for

average spring temperatures well above the 30 year mean.

"The correlation is far from complete, but our records show seasons of higher than average demand for wasp nest control products almost invariably follow warmer than average springs," reports BASF insect control specialist, Roland Twydel. "And the annual sting indices produced by WaspWatch show exactly the same trend.



Feeding the grubs after they hatch is the focus of the adult's attention early on

## Can you pass the pest test? Take the Pest Test

BASIS has made two PROMPT CPD points available if you can demonstrate that you have improved your knowledge, understanding and technical know-how by passing the **Pest Test** and answering all our questions correctly. So read through our special bedbug section in this issue of **Pest** and answer the questions below.

<b>1</b> When remote sensing for bedbugs, what does RIST stand for?	<b>4</b> Which of these American cities are listed by Terminix in their top 15 bedbug infested cities?
a) Real Insect Sensing Test	a) New Orleans
b) Red Indication Stand Transfer	b) San Francisco
c) Rather Innocent Small Traps	c) Denver
d) Remote Insect Scent Training	d) Boston
<b>2</b> Which of the following bedbug devices are used as bedbug monitors?	<b>5</b> What should be removed prior to treating a room with heat to control bedbugs?
a) BB Secure ring	a) All the furniture
b) Nightwatch	b) Pets
c) Bedbug dome	c) Oil paintings
d) Maxxthor KDR	d) Carpets
<b>3</b> Which geographic areas/countries have developed bedbug Codes of Practice?	<b>6</b> When using heat to kill bedbugs, what temperature is lethal to the bedbugs within one minute?
a) Europe	a) 30°C
b) South America	b) 40°C
c) South Africa	c) 45°C
d) USA	d) 50°C

Name:	Tel:	PROMPT registration number:
	Email:	

This is hardly surprising since we know wasp populations in late summer and autumn depend on the success with which queens emerge from winter hibernation and establish new colonies in the spring.

As well as warm, dry springs favouring colony establishment, we also know that cold winters can reduce queen survival. Ironically, fewer surviving queens means less competition for nest sites in the spring, leaving them in better condition to produce more offspring. So a warm, dry spring following a cold winter provides the most favourable conditions for a large summer wasp population.

"With an average March to May temperature 1.8°C above the 30 year mean at 9.1°C, Met Office figures show this spring has been one of the UK's two warmest since 1910 as well as notably dry across most of the country, giving over-wintering queens the opportunity of a good early start.

We've also experienced one of the coldest winters in the past 30 years," he adds. "So, while the summer weather will undoubtedly have an effect, we could well be facing the most challenging wasp season since 2004, with fewer queens in better condition developing stronger colonies of up to 6,000 workers apiece."

BASF points out that wasp nests are rarely established before mid-June and at this time most will be very small, containing only a queen and up to a dozen workers rearing her initial offspring. The size of colonies means they cause little or no nuisance at this stage and tend to escape notice.

Even as colonies and nests grow rapidly over the summer, wasps aren't generally troublesome because their whole focus is on foraging for insects which they take back to the nest to feed the grubs. The adults feed on both sugary substances and protein 'soup' they extract from chewed insect prey.

Once the queen stops laying and the final grubs have matured in late summer or early autumn, however, things really change. By this time wasp numbers outstrip the availability of insect prey and many thousands of workers focus their attention on whatever sugary liquids they can find, particularly from ripening fruit and summer barbecues, really becoming a pest.

"In most cases, wasps aren't worth treating until July," stresses Roland Twydel. "In fact, colonies can be very valuable over the summer for the extent to which they control insect pests."

So early season control can do more harm than good.

"Small nests and those sited well away from dwellings can probably be left untreated too, as they will die-off with the arrival of colder weather." In all other cases, though, effective colony control is likely to be required.

"This should be focused on the nest, with direct treatment the first priority. Spraying a specialist aerosol insecticide – such as Sorsec Wasp Nest Destroyer – directly into the nest is one of the best ways of ensuring rapid and complete control of the colony. It avoids the risk of failing to effectively treat the core of an infestation and all nest access routes by the indirect alternative of dusting a large void with a residual insecticide. And it is far more desirable environmentally.

"In some cases – like wall cavities – it will be impossible to access the nest directly. But active nests, or obvious nest entrances, can generally be found – typically in roof spaces, in and around garages and sheds, and in trees, walls and holes in the ground. For the most consistent control, it's always worth inspecting premises thoroughly to enable direct treatment wherever possible."

Reports coming in from up and down the country confirm that 2011 promises to be a bumper wasp year. Henry Walton from



One of the more unusual nests Paul Bates of Cleankill Pest Control has dealt with was built in a bird nesting box

PesTech in Darlington has already recorded a three-fold increase in wasp nest call-outs this summer and says he has had to take on another member of staff.

Further south, Paul Bates, managing director of Cleankill Pest Control in Surrey reports that the season began some three weeks earlier than usual, with the nests themselves larger than usual.



Nest entrances can generally be quite obvious and so easy to find

## Not to be left out



Syngenta has published a colourful guide to bees. It is a simple summary of the differences between the three main groups of bee in the UK – bumblebee, honeybee and solitary bee – and their varying requirements.

You can download your own copy from the Syngenta website at [www.syngenta-crop.co.uk/crop-centre/environment](http://www.syngenta-crop.co.uk/crop-centre/environment)

## Don't ring us!

The mobile phone may be a blessing for millions of people worldwide, but it has also become a deadly bane for bees, say experts. Researchers claim that mobile phone signals may explain the sudden drop in the global population of bees.

Daniel Favre, professor at the Swiss Federal Institute of Technology in Lausanne, concealed cell phones in hives under controlled conditions. They found the phone signals bewildered the bees who began to fly in a zigzag manner and then collapsed. The researchers conducted more than 80 experiments in which they recorded the insects' reactions to mobile phones when they were switched off and when making calls.

Bees also produced a 10-fold greater noise whenever such a phone made or received a call. But they behaved normally once the phone was switched off or put on standby.

Dr Favre explained: "The bees' noise drastically increases as soon as the phone rings. Rays from the phone and the noise clearly disturb the bees. This gives the bees the signal to leave the hive. But often they are so confused they fly to their death."



# Get a buzz this summer

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Use biocides safely. Always read the label and product information before use. Products contain Bromadiolone 0.005%. \*On selected lines, offer open until the end of September. See your local distributor for more information or call our freephone number.

## Not a spike or a wire in sight!

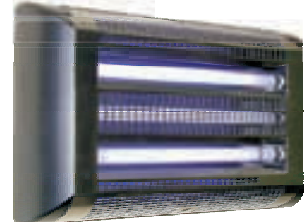


Bird Free is a patented optical gel which, the producers say, keeps all birds, off all structures without harming them. Its active ingredients are recognised by HSE as food-grade material. So how does the gel work? Because birds see the ultraviolet end of the spectrum, Bird Free appears to them as fire.

Supplied in 250g caulking tubes, each tube comes with 15, 1cm-high plastic application dishes. These are generally affixed with silicon adhesive. Magnetic dishes for metal structures and hooks to hang in trees are also supplied. Bird Free is quick and easy to apply and remains effective for up to four years, claims the manufacturer. However, surfaces must be cleaned thoroughly of all bird droppings, nests and other debris before application.

[www.killgerm.com/birdfree](http://www.killgerm.com/birdfree)

## New Vulcan provides season-long fly control



Bower Products new EFK, Vulcan, uses Philips Master Actinic BL lamps to eliminate flying insects over the whole season. The Vulcan also incorporates a large GLU board with monitoring squares and clever front design to ensure maximum UV output, says Bower.

Thanks to the new environment-friendly water-based phosphor technology, the UVA output and lifetime have also been significantly improved. The lamp also contains industry leading low mercury levels and no lead. Competitively priced and very energy efficient, the Vulcan is available with two or three tube options. Servicing, cleaning and tube changing are quick and simple thanks to the annealed stainless steel lift-up front guard. Secura versions with shatterproof sleeves are also available.

[www.bower.co.uk](http://www.bower.co.uk)

## Jet propelled wasp nest destroyer

A powerful jet aerosol formulation of Sorex's original Wasp Nest Destroyer has been introduced by BASF Pest Control Solutions. It contains 0.25% tetramethrin and 0.10% d-phenothrin with a specialist aerosol valve and extension tube that maximises the freezing action and stupefying qualities of the propellant.

A coarse jet with large particles, optimises the amount of active ingredient delivered and a larger can, with almost double the spray volume, gives better nest penetration. Knockdown of external wasps is within five seconds and complete cessation of all activity 30 minutes after treatment, says BASF.

Sorsec is powerful enough to be used at any time of day, in the most awkward of access situations and under any weather conditions.

[www.pestcontrol.basf.co.uk](http://www.pestcontrol.basf.co.uk)



## First new rodenticide active ingredient for 20 years, say Bayer

Bayer has launched a new single feed, second generation range of rodenticides under the tradename Rodilon. The range contains the first new active ingredient to be introduced to the UK in over 20 years, difethialone, which will control rodents that are resistant to bromadiolone and difenacoum, says Bayer.

The company claims that the four formulations are all extremely palatable. Two of the products, Rodilon Wheat Tech and Rodilon Trio, benefit from unique 'turbo impregnation' manufacturing which infuses the active ingredient to the core of the bait. This, they say, not only offers superior rat and mouse control, but also minimises the risk to operators from dust. Rodilon Trio is specifically for the control of mice. Rodilon Wheat Tech is ideal for rats and uses the highest quality whole wheat grain. Also for rat control are Rodilon Blocks which are moisture and mould resistant with multiple edges to encourage gnawing. The final formulation, Rodilon Soft Blocks are suitable for mice and rats and are an excellent choice where there are other food options available.

The products are available in a range of pack sizes through all major distributors.



[www.pestcontrol-expert.com](http://www.pestcontrol-expert.com)

## Trapping flies from far and wide

Maxifly is a new high capacity fly trap from Russell IPM. Suitable for gardens, resorts and public places, Maxifly uses its chimney effect to disperse the specially formulated attractant bait up to a 20 metre radius, says Russell.



[www.russellipm.com](http://www.russellipm.com)

The trap is designed to allow warm air to rise through the entry hole at the bottom of the trap. This chimney effect also helps moderate the temperature inside the trap so insects continue to enter, even on hot days. When full you simply add the contents of the Maxidry sachet to solidify the contents which can then be used as a soil improver.

## Another new bedbug monitor

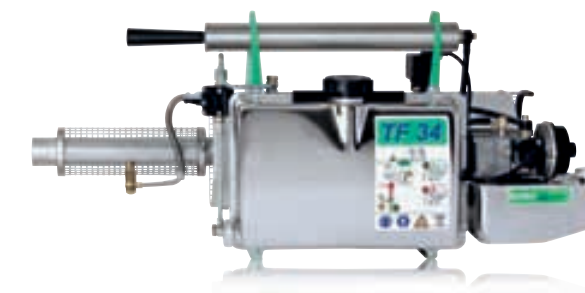
Bed Bug Alert comes from US-based Bird-X but it can be shipped internationally, says the company. It's described as a clear, safe, rigid plastic bedbug monitor – about the size of a business card that slips under the mattress or into other tight spaces where bedbugs are suspected. A special gel inside the device containing human pheromones, attracts and traps bedbugs if they are present.



[www.bird-x.com](http://www.bird-x.com)

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**Features and benefits:**

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- \* Low profile;
- \* Angled entry ramps ensure cockroaches enter first time;
- \* Entry windows on all sides for easy access;
- \* The release paper on the glue board is easily peeled off;
- \* Reusable, it is only necessary to replace the glue board;
- \* Contain no chemical pesticides;
- \* Suitable to use in the food industry.

**Design protected by the OHMI.**

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**“To my customers,  
a cockroach is a cockroach.  
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the same way.”**

*Michael, Pest Management Professional*

**“I don't want to know their names.  
I want them out of my apartments.”**

*Simon, Building Administrator.*

**“I'm begging you-stop these cockroaches  
from invading my kitchen!”**

*Bethany, Writer*

**“No matter their kind, there is no  
place for them in my restaurant”**

*James, Professional Chef*

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the gel bait that controls all cockroach pest species,  
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DuPont™ Advion® Cockroach Gel bait, using chemistry that bioactivates inside cockroaches to its MetaActive™ form, combines a proprietary, high-consumption bait matrix with a unique, nonrepellent active ingredient.

Studies show that this formulation quickly attracts cockroaches, even in situations with existing food sources. DuPont™ Advion® Cockroach Gel bait can be used in a wide variety of application sites.

**Use biocides safely. Always read the label and product information before use.**

Advion® Cockroach Gel bait contains Indoxacarb. This product is approved under the Biocidal Products Regulations (as amended) 2001. For use only as directed. (UK: BPR Product authorisation number: UK-2010-0001).



DuPont Professional Products

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## A cracking event in Krakow

Congratulations to the Polish pest control association who cleverly joined forces with the associations in the Czech Republic, Slovakia and Hungary to organise ConExPest which was held in Krakow, Poland on 19 and 20 May. With nearly 40 exhibitors, there was plenty to see. The Brits were well represented with Russell IPM, AgriSense, Brandenburg UK, P+L Systems, Research Information and ourselves at **Pest** all represented. Whilst the number of exhibition visitors was felt by some of the international exhibitors to be disappointing, all the main Polish distributors were present and all seemed happy with the attendance. It was obvious too from the general buzz and the number of managers from other international companies checking out the event, that East Europe is seen as a growth market for pest control.

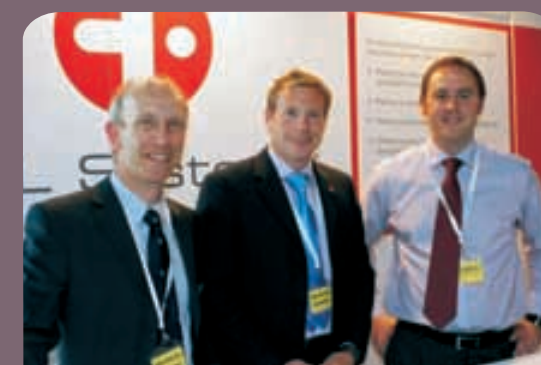
read more  
on the web  
[www.pestmagazine.co.uk](http://www.pestmagazine.co.uk)



Above, the driving force behind the international success of the event 'Mr Pest Poland' - Adam Puscinski



The accompanying CEPA Europe conference was well attended. Presentations were in English with simultaneous translation into Polish



P+L won an award for the best EFk at the event. Pictured left to right: Grahame Turner, Richard Ardron and Steve Jackson

Right, Paul Sidebottom from Russell IPM



Running alongside the exhibition was the CEPA General Assembly and Europe conference which were chaired by CEPA vice-chairmen, Patrick Vernie (centre) and Frederic Verwilghen (right)



From just over the border in Hungary, Babolna Bio were out in force launching their new rat bait station

Left, CEPA treasurer Bertrand Montmoreau and friend!



Above, the Killgerm mouse had clearly got its passport! She/he is seen here with **Pest's** associate editor Helen Riby



Killgerm Polska's managing director Wojtek Zabaglo, right, was kept busy



Italian manufacturer OR.MA. were showcasing their rat bait stations, EFks and aerosol insecticides



ConExPest gave Ana Francisco, left, from Portugal's Plastdiversity, an opportunity to catch up with her Polish distributors



Presented by the National Pest Management Association

# PEST WORLD 2011

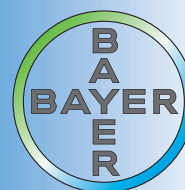
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REFERENCE  
Diary dates

	DAY	EVENT	VENUE	FIND OUT MORE
<b>AUGUST</b>	7-10	7th International Conference on Urban Pests	Ouro Preto, Brazil	<a href="http://www.icup2011.com">www.icup2011.com</a>
<b>SEPTEMBER</b>	7-9	18th Annual Biocidal Products Directive Conference	Hotel Fira Palace, Barcelona Spain	<a href="http://www.informaglobalevents.com">www.informaglobalevents.com</a>
	12-15	6th European Mosquito Control Association Workshop	Budapest, Hungary	<a href="http://www.emca2011.com">www.emca2011.com</a>
	22-24	FAOPMA 2011 Conference & Exhibition	Goa, India	<a href="http://www.ipca.org.in">www.ipca.org.in</a>
	28	Benelux Pest & Pest Control News dinner	Voorthuizen, The Netherlands	<a href="mailto:rinus@pestcontrolnews.com">rinus@pestcontrolnews.com</a>
<b>OCTOBER</b>	12	NPTA Regional Conference	Holiday Inn, Manchester Airport	<a href="http://www.npta.org.uk">www.npta.org.uk</a>
	19-22	PestWorld 2011	New Orleans, USA	<a href="http://www.npmapestworld.org">www.npmapestworld.org</a>
	26-28	A Pest Odyssey 2011	British Museum, London	<a href="http://www.pestodyssey.org">www.pestodyssey.org</a>
<b>NOVEMBER</b>	2	PestTech 2011	National Motorcycle Museum, Birmingham	<a href="http://www.pesttech.org.uk">www.pesttech.org.uk</a>
	2	Pest Control News dinner	Windmill Village Hotel	<a href="mailto:editor@pestcontrolnews.com">editor@pestcontrolnews.com</a>
	16-17	Parasitec Iberica & Tecnoplagas	Hotel Auditorium, Madrid, Spain	<a href="http://www.parasitec.org">www.parasitec.org</a>
	24	SOFHT Annual Lecture & Lunch	Landmark Hotel, London	<a href="http://www.sofht.co.uk">www.sofht.co.uk</a>



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[www.mybayerjob.co.uk](http://www.mybayerjob.co.uk)

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To be successful, you will hold a biological science degree ideally in the fields of entomology, botany or agricultural/horticultural science. You should be able to demonstrate an understanding of the pest and weed control markets in the UK and Ireland. Experience of product development and field trials knowledge would be a distinct advantage. Excellent communication, presentation skills, and IT skills are required. This is predominately an office-based role but will require travel both in the UK and overseas.

Please visit: [www.mybayerjob.co.uk](http://www.mybayerjob.co.uk) to apply

Closing date: 12 August 2011

Bayer's policy in the UK is to treat all applicants fairly and equally regardless of their sex, sexual orientation, marital status, race, colour, nationality, ethnic or national origin, religion, age, disability or union membership status.





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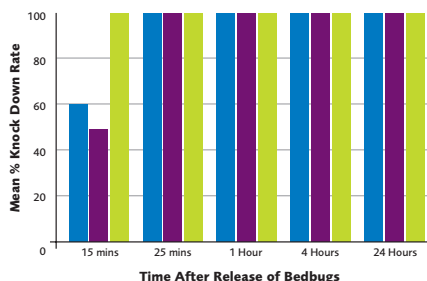
### LABORATORY TESTS

The following test results detail the efficacy of Phobi Dose on three types of surfaces. Phobi Dose was sprayed on each surface and left to dry before bedbugs were released. The first graph details results immediately after treatment – the second shows results 14 days after treatment when bedbugs were re released.

■ Textile (ie carpet) ■ Plywood ■ Ceramic Tiles

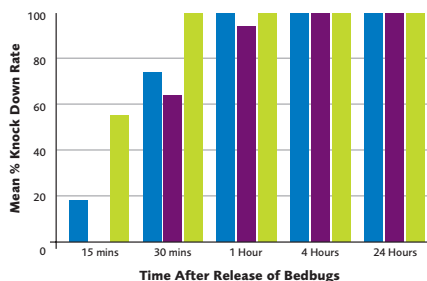
#### Trial at Day 0

Knock down speed of all bedbugs after treatment.



#### Trial at Day 14

Knock down speed of all bedbugs 14 days after treatment.



### FIELD TEST

5 separate apartments were treated independently within a multi storey block of flats. 5 apartments in the same block were untreated to act as a control. Bedbug infestations averaged medium to high in each apartment.

The graph shows the average control in all 5 apartments within 14 days from the initial treatment.

