FEDERATION OF ASIAN & OCEANIA PEST MANAGERS ASSOCIATIONS

PPM News

JUNE ISSUE 2013

Website: **http://www.faopma.com**
President: **David Gay - (davidg@pest-control.com.au)**
Administrator: **Catherine Yan - (info@faopma.com)**
Editor: **Doug Howick - (doug@tpaa.com.au)**

PRESIDENT'S MESSAGE

In Australia the Pest Management Industry is still busy with the Autumn season continuing into Winter, with strong demands for domestic pest management services across most regions of Australia.

Whilst the economy is still very strong in Australia, combined with recent interest rate cuts, we don't anticipate any major shifts in consumer spending or the industrial economy.

A national election scheduled for September in Australia should also see a new conservative government in power that has a strong past history of sound financial management and government. This will, and is, currently giving Australians a great deal of confidence for the future.

At AEPMA, things are also running smoothly and positively across all of our business activities, allowing us to focus on a couple of key initiatives that continue to drive our industry. Those are Codes of Practice; a new website and industry 'hub' similar to the NPMA's website/online presence; and the ongoing liaison with the various government departments in Australia that are responsible for regulating our industry and/or the products we use.

This area of our Association activities is potentially the most important as current government policy is to reduce or eliminate unnecessary or low value government bureaucracy and regulation to industry and consumers. This results in a number of opportunities for AEPMA to assist in drafting new regulations that better represent the needs and skills of our industry and our members.

This is also the area where our FAOPMA member countries can share experiences and potentially the methodology or process on how one member country Association can assist another by sharing this information and any experiences we may have gained. I have spoken about this on several occasions in the past and believe that as an organisation we can really benefit each other by cooperating in this area.

The 25th FAOPMA Convention in Korea on 28 & 29 November this year (see page 8) is progressing nicely and on schedule with various speakers confirming their attendance. The website is now functioning and open for online registration.

I would urge all of our members who are intending to visit Korea in November to get online and book your registration now to take advantage of the discounts on offer including airfares and accommodation etc.

Back in Australia, our national pest management industry event this year will be run by Rapid Solutions – our premium insurance and training provider. This event is once again back at Jupiters Casino on the Queensland Gold Coast. All international guests are welcome. Registration along with further details are available at www.rapidsolutions.com.au.

Until next edition,

David Gay, President

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Why Some Cockroaches Check Out of Roach Motels

by Rachel Nuwer on 23 May 2013,

Credit: Ayako Wada-Katsumata and Andrew Ernst

Roach motels sit at the back of many a kitchen cupboard, bedroom closet, or bathroom cabinet. Yet, to the bane of human residents, only a few years after the traps were introduced in the 1980s, they lost their allure for an increasing number of German cockroaches.

Researchers soon realized that some roaches had developed an aversion to glucose—the sugary bait disguising the poison—and that the insects were passing that trait on to their young. Now, scientists have figured out how this behavior evolved.

Roaches, like other insects, detect taste through special receptors that line hairlike appendages on their mouthparts. The receptors differentiate between sweet and bitter flavors, which signal to the roach whether to eat or avoid the food, respectively. The researchers performed experiments on more than 1000 German cockroaches from the field and about 250 raised in the lab. The normal roaches happily lapped up both glucose and fructose, but the glucose-averse roaches ate only the fructose and spat out the glucose, the team reports online today in *Science*.

Electrophysiological recordings indicated that glucose triggered sweet receptors in the normal roaches but bitter receptors in the other roaches. The change in behavior may save the insects' lives, but it does have its disadvantages: Glucose-averse roaches grow and reproduce more slowly than those with less finicky tastes.

Science NOW UP TO THE MINUTE NEWS FROM SCIENCE

Insect Wing Kills Bacteria

The nanoscale structure of a clanger cicada's wings destroys threatening microbes on contact.

By Jef Akst | March 6, 2013

It's one of the first natural surfaces found to kill bacteria simply by virtue of its physical structure, *Nature* reported: an array of hexagonal "nanopillars" on the wings of a clanger cicada (*Psaltoda claripennis*) can put enough strain on bacterial cells to rupture them. The findings, published last month (February 19) in *Biophysical Journal*, detail how this nanoscale structure can be so deadly.

Elena Ivanova of Australia's Swinburne University of Technology and colleagues found that the nanopillars do not puncture the bacteria. The structures look more like blunted spikes when viewed on the scale of bacteria, which stick to the tips of the nanopillars, then stretch into the hexagonal spaces between them, putting extreme strain on the cell.

"[It's like] the stretching of an elastic sheet of some kind, such as a latex glove," Ivanova told *Nature*. "If you take hold of a piece of latex in both hands and slowly stretch it, it will become thinner at the center, [and] will begin to tear."

The nanoscale defense only appears to work on bacteria with relatively soft membranes, however; those with greater membrane rigidity could survive the stretch of the pillars.

A redeye cicada (Psaltoda moerens)

The study does hint at a new strategy for antibacterials, chemical engineer Anne-Marie Kietzig of McGill University in Montreal, Canada, who was not involved in the study, told *Nature*. Commonly contaminated materials, such as public railings, she said, could be made to mimic the structure. "This would provide a passive bacteria-killing surface. . . . [It] does not require active agents like detergents, which are often environmentally harmful."

(See the *Nature* story for an animation of how the nanopillars can burst bacterial cells.)

TheScientist EXPLORING LIFE, INSPIRING INNOVATION

200 million wasps to fight coconut pest

Published: 22 May 2013

A total of 211 million parasitoid wasps will be released nationwide to fight an insect pest that has destroyed large areas of coconut plantations throughout the country, the Agricultural Extension Department announced.

Department director-general Panpimon Chunyanuwat said the black-headed caterpillar, known scientifically as *Opisina arenosella* Walker, is a persistent pest in Thailand, damaging coconut crops and creating problems for farmers.

The department plans to breed and release the parasitoid wasp known as B*racon hebetor*, following tests by Kasetsart University in controlled areas.

A total of 60 community pest control units have been set up in 15 provinces to produce the wasps.

About 8.8 million of the minute parasitic wasps will be released in coconut plantation areas each week from Oct 6, 2013 to April 9, 2014. Within the 24-week period, a total of 211.2 million wasps will be released into the environment.

Prachuap Khiri Khan province, a major coconut plantation area in Thailand, has been hardest hit by the black-headed caterpillar.

The department's survey for April 2013 concluded that a total of 88,877 rai of coconut plantations are infested by the caterpillar, and around 93% of this total is in Prachuap Khiri Khan.

Besides black-headed caterpillar, hispine beetle is another major pest to coconut with the survey indicated that a total of 102,697 rai of the plantations are infested by the beetle. The most affected area for this pest is mainly in the South. The department has also instructed farmers to use bio-pest control to manage their plantation.

The Agriculture and Cooperatives Ministry earlier estimated drought and pests have devastated more than 400,000 rai of coconut plantings nationwide, reducing productive plantation areas by 3.36% to 1.44 million rai in 2012 with an output of 1.3 million tonnes, down by 6% from 2011.

The damage to coconut farms has forced Thai food processors to import Indonesian or Vietnamese coconuts.

Coconut is not the only crop that the government has targeted for natural pest control. Farmers in mid-2012 began using *Anagyrus lopezi* wasps from Benin in Africa to control pink cassava mealybugs.

Bangkok Post

PMPs Save Baby Girl's Life

May 22, 2013

Employees with Isotech Pest Management rescued an 11-month-old child from drowning while on a job in Los Angeles, KTLA reports.

According to Los Angeles police, the girl somehow fell into a bucket filled with water outside her home on May 21. Isotech employees Clint Czarnota, Gus James and Mike Mora, who were in a nearby building for a cockroach control call, heard a scream and ran to assist, according to the TV station.

Gus was able to perform CPR on the girl, after the girl's father had pulled her from the bucket. "The dad was karate chopping her back while she was upside down, trying to get water out of her," James told KTLA. "I could tell he did not know CPR or anything."

Gus' rescue effort was successful, and the girl was taken to a local hospital by paramedics.

"I am so proud of my employees," Isotech's Mike Masterson said in an email to PCT. "Knowing they were willing to be leaders and take command of a bad situation. The result, a little girl's life was saved and her parents will be able to kiss and hug her every day of their lives."

PCT
PEST CONTROL TECHNOLOGY
MARKET LEADERSHIP

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Venezuelan Poodle Moth

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Chilly weather brings rodent risk

Rosemary Ryan - 22 May, 2013

With the first real cold snap of the season upon us hospitality business owners are being urged to be alert to the threat that comes hand in hand with the colder weather - rodents.

Pest control experts say business owners need to vigilant of rodent infestations or risk the reputation backlash and physical damage to their business that they can cause.

Simon Lean, Australian technical manager at pest control leaders Rentokil, said rodents, including rats and mice are most prevalent in the colder months as they seek refuge indoors, looking for both shelter and food.

"A rodent infestation can quickly get out of control, within a period of a year a single pair of mating rodents can result in a rodent population of 400 to 700," Lean said.

"Female rodents are capable of giving birth to between five to 10 offspring more than four times a year and that offspring is ready to reproduce just three months after birth."

"We've already seen an increase in commercial rodent job call outs, from summer 2012/13 to autumn 2013 there was a spike of 18 per cent. We are expecting to see a further increases so businesses should definitely start preparing for potential rodent infestations in winter and have adequate rodent control programs in place."

Lean said the most common pest rodent species in Australia are the black rat, brown rat (Norway rat), and house mouse, all of which are widespread throughout Australia's highest populated areas.

Rodents are nocturnal and build their nests in wall cavities, under floors, roof voids and close to areas where they can scavenge for food and water. They can all carry diseases by leaving infected urine or faeces in places where people can come in contact such as kitchen benches, food preparation and storage areas and rubbish tips.

The effect of rodents can consequently be more serious for businesses serving or selling food and businesses with large storage areas, where rodents can find areas with food, shelter and nesting sites during winter.

Danger signs

- Droppings – rodents leave small, dark droppings particularly along walls or in enclosed areas such as cupboards or under sinks. Rat droppings are sausage shaped, approximately 1 -2 cm long and mouse droppings are thin, spindle shaped and approximately 5mm long.
- Distinctive smell – if you detect an ammonia-like smell that is particularly strong in more enclosed areas, the chances are it may be due to rodents
- Damaged stock and damage to fabric of premises
- Nesting material — rodents build nests with shredded material such as newspaper, cardboard and fabrics
- Damage – rodents have teeth that grow continuously and will gnaw on wood, plastic, cables and other hard materials which can be a fire hazard
- Smears – grease marks from the rodents body as they repeatedly brush up against objects

Potential harm

- Rodents are known to spread infections such as Salmonella, Weil's disease, E.coli, Tuberculosis and Hantavirus
- Damage to stock and buildings
- Contamination of foodstuffs and goods

Business consequences

- Alarm — immediate loss of customer and employee trust which will affect the bottom line
- Damage — to goods, foodstuffs and your health and hygiene reputation
- Cost — can be considerable, temporary closure may be necessary which means loss of business and the costs of replacing damaged stock
- Legal — failure to comply with legislation

Preventative measures

- Hygiene and housekeeping should be a key focus with thorough, regular cleaning taking place frequently to avoiding infestation
- Crates and boxes should be stacked 70cm away from the wall to ensure you can check what's behind them
- Set up a contractual relationship with your pest controller, rather than hiring them on a reactive basis to ensure there is no risk of recurring infestations
- Staff need to be educated on the risks of infestation and act responsibly
- If you do spot a rodent on your premises it is essential to seek professional advice immediately
- If you own a property that is standing empty for any period of time, make sure you inspect it regularly to look for any signs of rodent activity
- Seal up holes in the building to keep rodents out
- Ensure all pipe-work is in good working order
- Look after your drains, clean them regularly to avoid infestations and unblock gutters

Steps to take

- Arrange immediate removal with rodenticides handled by qualified technicians
- Get rodent proofing and design advice
- Schedule regular rodent control visits to prevent further outbreaks

Tips and information courtesy of Rentokil

hospitality magazine

Pvt Co to keep Kanpur zoo rodent-free

Abhinav Malhotra, TNN -| May 20, 2013

The Kanpur zoo administration has roped in Pest Control of India to put an end to rat menace at the zoo. Though the rodents are not a problem for most wild animals, they gobble up and contaminate the feed given to birds housed in the aviary. The rodents also attack the food stocked in the store house for herbivores.

Talking to TOI, the zoo veterinarian Dr RK Singh said Pest Control of India employees are making efforts to ensure that areas like aviary, indoor wards in veterinary hospital, canteen, and store house remain free from rats as they cause damage to the food stock.

He said rats also pose a major health hazard as they are carriers of various diseases. "These diseases can cause kidney failure in animals leading to their death. Rats also carry a number of pathogenic bacterial diseases especially leptospira which are harmful for the birds. Apart from this, they are also responsible for endoparasitic and actoparasitic diseases like ticks and lice," informed Dr Singh.

Dr Singh further said a rat killer cake of around two kg is being spread in different areas in the zoo by the pest control experts. Dr Singh said this exercise will be repeated every two months to keep the zoo rodent-free.

He said an MoU will be signed with Pest Control of India in this regard after which the company will provide regular services to the zoo.

THE TIMES OF INDIA

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ICUP 2014

8th International Conference on Urban Pests in Zurich, Switzerland, 20 - 23 July, 2014

Colleagues:

The International Conference on Urban Pests will welcome academic and industry researchers, regulatory officials, government agency leaders, manufacturer representatives, and students to Zurich in 2014.
I look forward to your participation and contribution to this Conference.

This will be the 8th gathering of professionals working on a broad range of urban pests—from mites to mice. For many in the discipline it is the unique opportunity to meet and exchange information with individuals, companies, and organizations from around the world. For those returning, it is time again to renew relationships and for first-time participants it is an opportunity to join a Conference that has served the discipline since the first meeting in Cambridge, England in 1993.

The goals of the ICUP have not changed since that first meeting. It is designed around a format that mixes formal presentations and posters with informal gatherings where research results and new ideas can be discussed. The opportunity to share information and learn from those in other areas of this discipline and other parts of the world is invaluable.

Now is the time to consider your participation in ICUP Zurich, the call for papers and posters will go out early in 2013. The Conference participants will be looking forward to hearing about research you are doing now, the program results you will have by the end of this year, or the new chemistry or products you will market next year. Whether presenter or participator, student or senior scientist, the ICUP offers the best venue to present and publish your work.

On behalf of Gabi Müller and the ICUP Organising Committee, I invite you to join your old friends and new colleagues in Zurich in July 2014. This will be the next in a series of successful Conferences for those working on pests in the urban environment.

Sincerely,

William H Robinson
Chair, Executive Committee
International Conference on Urban Pests
www.icup.org.uk
Cambridge, Edinburgh, Charleston, Prague, Singapore, Budapest, Ouro Preto, Zurich

www.icup2014.ch

Termites munch £119,000 in bank

By Alice Stewart - May 1 2013

Termites have managed to munch their way through £119,000 of cash. The insects were discovered by police at a bank in Barabanki, northern India. They somehow managed to get to the 10 million rupees (£119,000) despite it being kept in a steel chest.

Police officer Navneet Rana said: "It's a matter of investigation how termites attacked bundles of currency notes stacked in a steel chest."

It is not the first time that the insects have caused this kind of nuisance, having damaged equipment and documents at various banks across India. Authorities are investigating the matter, after registering a negligence case against bank chiefs.

digital spy

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Bugs are food of the future

ROME, ITALY: Beetles, caterpillars and wasps could supplement diets around the world as an environmentally friendly food source if only Western consumers could get over their "disgust", the UN's Food and Agriculture Organisation (FAO) said on Monday, 13 May 2013.

Cooked locusts (Image: Wiki Images)

"The main message is really: 'Eat insects'", Eva Mueller, director of forest economics at the FAO, told a press conference in Rome. "Insects are abundant and they are a valuable source of protein and minerals," she said.

"Two billion people, a third of the world's population, are already eating insects because they are delicious and nutritious," she said.

Also speaking at the press conference was Gabon Forestry Minister Gabriel Tchango who said: "Insect consumption is part of our daily life." He said some insects, like beetle larvae and grilled termites, were delicacies. "Insects contribute about 10% of animal protein consumed by the population," he said.

The report said insect farming was "one of the many ways to address food and feed insecurity". "Insects are everywhere and they reproduce quickly, and they have high growth and feed conversion rates and a low environmental footprint," said the report, co-authored by the FAO and Wageningen University in the Netherlands.

But the authors admitted that "consumer disgust remains one of the largest barriers to the adoption of insects as viable sources of protein in many Western countries".

It suggested that the food industry could help in "raising the status of insects" by including them in recipes and putting them on restaurant menus.

The report also called for wider use of insects as feed for livestock, saying that poor regulation and under-investment currently meant it "cannot compete" with traditional sources of feed.

"The use of insects on a large scale as a feed ingredient is technically feasible, and established companies in various parts of the world are already leading the way," it added, highlighting in particular producers in China, South Africa, Spain and the United States.

"Insects can supplement traditional feed sources such as soy, maize, grains and fishmeal," it said, adding that the ones with most potential were larvae of the black soldier fly, the common housefly and the yellow mealworm.

The report also said the insects most commonly consumed by humans are beetles (31%), caterpillars (18%) and bees, wasps and ants (14%), followed by grasshoppers, locusts and crickets (13%).

It said trade in insects was thriving in cities such as Bangkok and Kinshasa and that a similar culture of insect consumption, entomophagy, should be established elsewhere, stressing that it was often cheaper to farm insects.

The report concluded: "History has shown that dietary patterns can change quickly, particularly in a globalised world. The rapid acceptance of raw fish in the form of sushi is a good example."

BIZCOMMUNITY.com Daily industry news

Titan Beetle

Found in the jungles of South America, the titan beetle is second only to the Hercules beetle and can grow up to 6.5 inches

Welcome to FAOPMA 2013 Korea

Dear Distinguished guests,

On behalf of Korea Pest Control Association, it is my pleasure to extend my invitation to the 25th FAOPMA Convention and Exhibition in the city of Seoul, Korea from November 26~28, 2013.

As the president of KPCA as well as president-elect of FAOPMA, I will do my utmost to present you the best FAOPMA event where you will meet cutting edge knowledge, information, techniques and professionals in the pest management industry from all over the world.

At the same time, you will enjoy Seoul city and Korean Culture with Korean people's warmest hospitality!

I look forward to having you in Seoul, Korea.

Thank you very much.

With best wishes,
President Park Myeon Ha

Program at a glance

	26 (Tue)			27 (Wed)			28 (Thu)			29 (Fri)
09:00~10:00	Exhibition Opening	Exhibition	Registration		Exhibition	Registration		Exhibition	Registration	DMZ Eco-Tour (Full-day)
10:00~10:50				Opening Ceremony & Keynote Lecture			Session 7/8			
11:00~11:50							Session 9/10			
12:00~13:00				Lunch / Exhibition Grand Open & Tape Cutting			Lunch			
13:00~13:50				Session 1/2			Session 11/12			
14:00~14:30				Session 3/4			Session 13/14			
14:30~14:50	Executive Committee Meeting & Annual General Meetting									
14:50~15:10				Coffee Break			Closing Ceremony			
15:10~16:30				Pest Managers'Day						
16:40~17:30				Session 5/6						
19:00~21:00	AGM Dinner			Gala Dinner						

※ Program schedule and contents are tentative so subject to change