

News Items

A Compendium of Pest Management News Items from the Media Relevant to FAOPMA Member Countries

Compiled by Stephen L. Doggett and David Lilly

AUSTRALIA: BECOMING VEGETARIAN FROM A TICK BITE

The bite from several species of tick around the world can lead to a condition known as “Mammalian Meat Allergy”. In the process of the bite, the tick transmits a carbohydrate molecule known as ‘alpha-gal’ and developing antibodies to this compound can mean you can develop a sensitivity to consuming meats of mammal origin. Symptoms occurs several hours after the meal and may include bloating, pain, rashes, hives, and even a life-threatening anaphylaxis. The story below recounts how a patient developed the disease after receiving a bite from the Australian paralysis tick, *Ixodes holocyclus*. For more information on the condition and how best to safely remove attached ticks, go to www.tiara.org.au.

Source: ABC (26/Dec/2020), www.abc.net.au/news/2020-12-26/i-cant-eat-red-meat-tick-bite-not-vegan-or-vegetarian/12827118

NEW ZEALAND: NATIONAL MOSQUITO CENSUS

Te Papa is the leading museum in New Zealand and one aim of theirs is to document the occurrence of wildlife across the country – this even extends to mosquitoes. Entomologist, Dr Julia Kasper is asking people to collect mosquitoes and send them to the museum. This will help to document the presence of both native and introduced species across the country. More

details can be found on the Te Papa museum web site: www.tepapa.govt.nz/discover-collections/read-watch-play/science/new-zealand-mosquito-census.

Source: 1News (26/Dec/2020), <https://www.tvnz.co.nz/one-news/new-zealand/te-papa-calling-kiwis-collect-mosquitoes-national-census>

ASIA: AMAZING VIDEO OF PARALLEL ANT AND TERMITE TRAIL

An extraordinary video has been captured that shows an ant and termite trail running in parallel, with a column of soldier termites lined up between the two trails protecting the termites. This is well worth a watch.

Source: Twitter (22/Dec/2020), <https://twitter.com/SteveStuWill/status/1341189299878854656>

CHINA: CUSTOMS SEIZE ANTS FOR THE PET TRADE

Chinese customs have seized a number of ants destined for the pet trade that originated from Australia. According to the report, the ants were poisonous (‘venomous’ is the correct term). The shipment contained *Myrmecia* ants that can inflict a painful sting and may cause death from anaphylaxis. Other ants included carpenter ants from the genus *Camponotus*, which is a stingless variety. Both are large species and popular with ant collectors. The ants were destroyed as authorities are worried about the importation of

possible diseases.

Source: *XinhuaNet* (21/Dec/2020), http://www.xinhuanet.com/english/2020-12/21/c_139607448.htm

SINGAPORE: LOWEST WEEKLY DENGUE TOTAL FOR THE YEAR

In Singapore, the year of 2020 will not only be remembered for the COVID-19 pandemic for it was also biggest year for dengue activity in the history of the island nation. As of mid-December there had been some 34,844 dengue cases. For the week ending 12/Dec case numbers have dropped to 228, the lowest for the year. In spite of this low figure, the National Environmental Agency is urging residents to remain vigilant in eradicating mosquito breeding sites.

Source: *CAN* (18/Dec/2020), www.channelnewsasia.com/news/singapore/dengue-cases-singapore-lowest-weekly-count-2020-nea-13799726



MALAYSIA: WHO WANTS COCKROACHES IN YOUR CAKE? HOW ABOUT ON IT!

Arguably the perfect cake for a young and upcoming pest manager would be one that features one of their favourite pests...but cockroaches??? The Slice Ipoh Homebaker in Perak, Malaysia, has produced a delicious

cake covered in what appears to be American cockroaches. One of the roaches even appears to be burrowing out of the top of the cake. Delicious!

Source: *Mothership* (15/Dec/2020), <https://mothership.sg/2020/12/lizard-cockroach-cakes/>

INDIA: RODENTS CAUSE ROAD COLLAPSE

In Ludhiana, in northern India, rodents had dug under a road in a garbage dump, causing the road to collapse. The problem was that the garbage dump was located directly under an elevated road. The rodents had dug into the soil under the road, leading to its collapse. Unfortunately such garbage dumps are common and there is rarely any rodent control undertaken, threatening the stability of other roads in the region.

Source: *The Times of India* (13/Dec/2020), <https://timesofindia.indiatimes.com/city/ludhiana/road-near-garbage-dump-caves-in-after-rodents-eat-into-base/articleshow/79699269.cms>

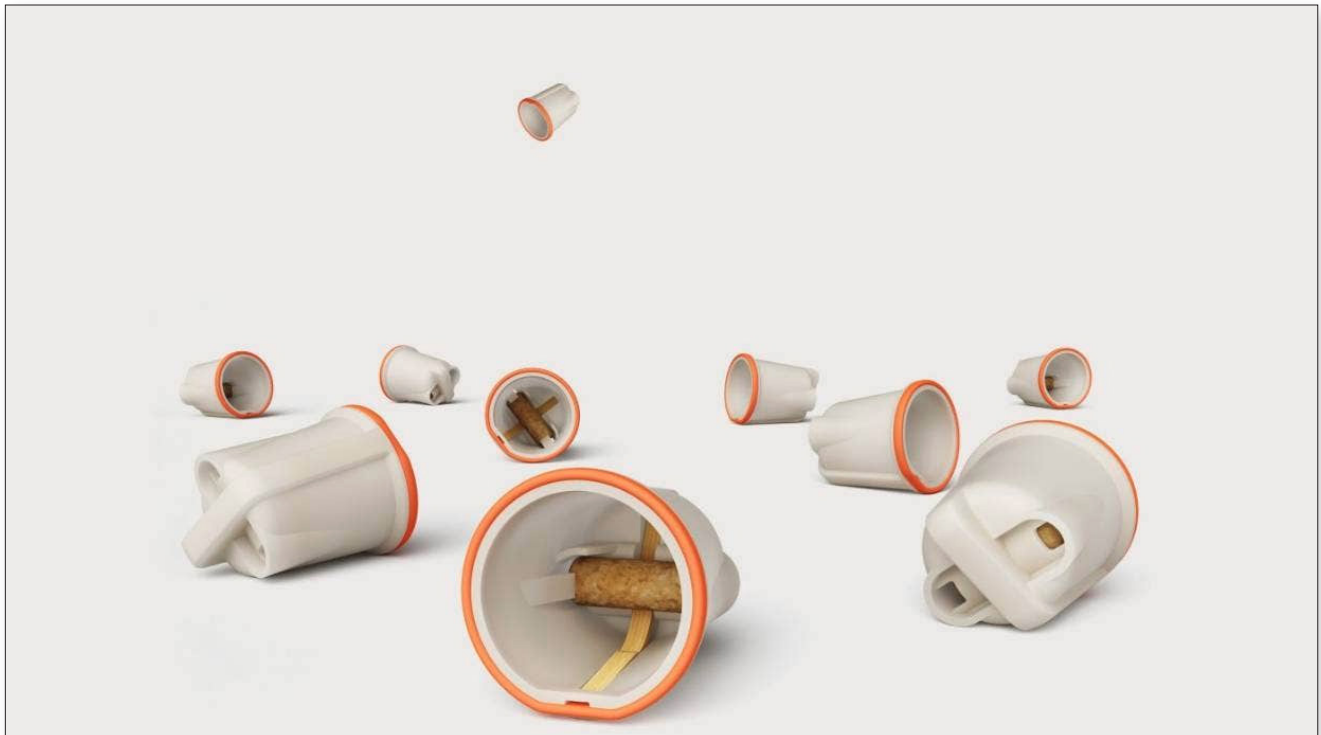
NEW ZEALAND: BIODEGRADABLE RAT TRAPS

With the aim of New Zealand trying to eliminate feral animals by 2050, the company Goodnature has come up with a novel method of rodent control. They are developing small biodegradable rodent traps that can be dropped via drones to remove locations (see image next page). Each trap is roughly the size of a coffee capsule and contains a bait. When the rodent chews on the bait, an elastic band snaps around its neck, quickly strangling the creature. The trap is single use and all components are biodegradable and there are no toxins involved. Being able to be delivered by drones means that they can be dropped into remote inaccessible locations. At this stage, the product is in development and the company has received NZD\$1.3million (USD\$0.92million) to make the concept into a reality.

Source: *Stuff* (10/Dec/2020), www.stuff.co.nz/environment/123631385/tiny-biodegradable-rat-traps-can-be-dropped-by-drone-and-leave-no-trace

USA: FURTHER BANS ON RODENTICIDES

With so many reports of secondary poisoning in wildlife, the California Governor signed a law that prohibits the use of second-generation anticoagulant rodenticides (SAGRs). Only licenced pest managers will be permitted to use these



The Goodnature biodegradable rat traps that can be dropped into remote areas via drone. See story previous page.

products. Recent surveys have found more than 75 percent of wildlife being positive to the SAGRs, with mountain lions being 90% positive.

Source: UCANR (10/Dec/2020), <https://ucanr.edu/blogs/blogcore/postdetail.cfm?postnum=44338>

SINGAPORE: FLOUR MILL FINED \$3,000 OVER PESTS

A flour mill in Singapore was fined SGD\$3,000 (USD\$2,200) after failing to keep its premise free of cockroaches and rodents. Dawood Flour Mill premises were also noted to have poor housekeeping according to the Singapore Food Agency. The licence of the mill was suspended for 15 days, in addition to the fine.

Source: CNA (9/De/2020), www.channelnewsasia.com/news/singapore/dawood-flour-mill-fined-cockroach-rats-infestation-rodent-13734686

INDIA: MYSTERY DISEASE POSSIBLY DUE TO MOSQUITO FOGGING

In Eluru town of Andhra Pradesh in India, one person has died while 450 have reported symptoms of unconsciousness and fainting. Other symptoms include epilepsy, forgetfulness,

anxiety, vomiting, headache and back pain.

There is a suggestion that the cause is chemical poisoning, but questions remain as to how many people could be exposed to such a chemical over a moderately wide area. It has been suggested that the chemical could be an organochloride insecticide used in foggers for adult mosquito control. Laboratory tests are still pending and until the final tests are completed, the local health department is refusing to speculate on the cause, which has resulted in more than 250 people being hospitalized with the condition.

Source: *The Tribune* (8/Dec/2020), www.tribuneindia.com/news/nation/eluru-mystery-disease-may-be-caused-by-anti-mosquito-fogging-181564

PESTWEST WINS PRESTIGIOUS AWARD FOR FLYDETECT®

Flydetect® from PestWest was announced as one of the joint winners of the New Product Award at The Society of Food Hygiene and Technology Virtual Awards Ceremony which took place on Friday 4th December 2020. These awards recognises innovations and excellence in the

food industry. Flydetect® is a remote monitoring fly solution that incorporates a camera within the unit that sends real time alerts to the user. This can then provide the prompt for when fly management is required within a facility. Clearly these devices are the way of the future and congratulations to PestWest! For more information on Flydetect®, see www.flydetect.com.

Source: *PestWest Media Release* (8/Dec/2020).

INDIA: MOSQUITOES ON THE INCREASE IN TRICHY CITY

In Tiruchirappalli, India, which is commonly known as 'Trichy City', mosquitoes are on the rise following moderate rainfall. Water has stagnated across the city, leading to mosquito breeding. A lack of stormwater drains is exacerbating the problem as water is draining to vacant blocks, creating perfect mosquito larval habitat. Normally mosquito fogging is undertaken around this time of the year, however COVID-19 is hampering mosquito control efforts.

Source: *The Times of India* (8/Dec/2020), <https://timesofindia.indiatimes.com/city/trichy/mosquito-menace-on-the-rise-in-trichy-city/articleshow/79614756.cms>

FIJI: CALLS FOR TERMITE TASK FORCE

Following the introduction of the Asian Subterranean Termite, calls have gone out to establish a taskforce to address this termite species. The Minister for Agriculture, Mr Mahendra Reddy is claiming that little has been done to protect the agricultural sector from this termite and has suggested that better cooperation between government and university is needed. He has called for a task force to be formed between the Ministry of Agriculture and the Fiji National University.

Source: *The Fiji Times* (6/Dec/2020), www.fijitimes.com/call-to-establish-joint-taskforce-to-address-termite-problems/

BORNEO: EXPLODING ANTS!

An ant that lives in the tree tops of Borneo literally explodes in defence of the colony. The species, *Colobopsis explodens*, commonly called the 'exploding ant', exhibits a behaviour called 'autothysis', which literally means 'self-sacrifice'. The ant's abdomen is full of a sticky yellow poison

and when threatened, they squeeze their internal organs to the point where the abdomen ruptures, spraying the predator.

Source: *SBNation* (3/Dec/2020), www.sbnation.com/secret-base/22083664/exploding-ants-colobopsis-explodens-nature-is-cool

SINGAPORE: DRINK SHOP SUSPENDED OVER COCKROACHES

The drink outlet Tuk Tuk Cha in NEX shopping centre has been suspended for two weeks by the Singapore Food Agency for accumulating demerit points over failing to keep their premise free of cockroaches. All food handlers in the premise are required to successfully complete a basic food hygiene course before they return to work.

Source: *Mothership* (2/Dec/2020), <https://mothership.sg/2020/12/tuk-tuk-cha-nex-suspended/>

INDIA: RAINS FLUSH AWAY MOSQUITO LARVAE

A cyclone in the Chennai region has not only flushed out garbage and sewage from the local river systems, it has also washed away mosquito larvae. Now the local government is stating that the risk of dengue virus has substantially been reduced as traditionally dengue case drop with the start of the monsoons. It now appears that Chennai will have one of the lowest dengue cases for some time.

Source: *The Times of India* (1/Dec/2020), <https://timesofindia.indiatimes.com/city/chennai/rain-flushed-out-dengue-mosquito-larvae-says-gcc/articleshow/79499467.cms>

MALARIA CASES DOWN BY 43% IN WESTERN PACIFIC

According to the World Health Organization, there has been a dramatic decline in malaria cases across the Western Pacific, including the Philippines since the year 2000. It is estimated that cases are down 43% to 1.7 million in 2019, and deaths are down from five to two cases per 1,000 population. Papua New Guinea still accounts for the majority of malaria in the region, with around 80% of all cases.

Source: *BusinessWorld* (30/Nov/2020), www.bworldonline.com/malaria-cases-in-west-pacific-down-by-43-since-2000-who-says/

INDIA: DANGERS FROM ILLEGALLY PRODUCED MOSQUITO REPELLENT STICKS

In India, incense sticks are being produced that are claimed to repel mosquitoes. Currently, many are being produced without the required government approval. Unfortunately these are often laced with pesticides and other chemicals and pose a health risk when burnt, especially to children and the elderly. Sadly people look for cheap solutions to prevent mosquitoes and often buy these products not knowing the risk. Authorities are urging people to only buy government sanctioned repellents.

Source: *Yahoo News* (28/Nov/2020), <https://in.news.yahoo.com/illegal-mosquito-repellent-incense-sticks-165532854.html>

SINGAPORE: COCKROACHES IN MULTIPLE ROOMS OF FIVE STAR HOTEL

A Korean woman upon recently arriving in Singapore was assigned to spend her two week COVID-19 quarantine period in the five star Grand Copthorne Waterfront hotel, located on the banks of the Singapore River. Unfortunately the first room assigned to her had cockroaches. Upon complaining, she was moved to another room that was infested with cockroaches. So was the third room, also the fourth, and finally the fifth room she was moved to had cockroaches, albeit dead. It was explained to her that due to the sudden lock down, the hotel did not have enough time to carry out a pest service. To add insult to injury, the woman had to pay SGD\$2,000.

Source: *MotherShip* (28/Nov/2020), <https://mothership.sg/2020/11/cockroaches-grand-cophthorne-waterfront-hotel/>

AUSTRALIA: EXPERTS WARN THAT THE RISK OF MOSQUITO-BORNE DISEASES HIGHEST FOR 10 YEARS

Eastern Australia is in the start of a La Niña year. This is a meteorological condition that occurs across the Pacific Ocean; when one side is dry, the other side is wet, and vice-a-versa. A La Niña is associated with increased rainfall in eastern Australia, and the last time such an episode occurred (2011) there was widespread mosquito-borne disease activity from Ross River virus. You can hear the Chief Editor of this

magazine discussing this on a recent TV segment (<https://7news.com.au/the-morning-show/australians-warned-to-brace-for-potentially-deadly-horror-mosquitoes-season-c-1566211>).

Already Ross River virus has been detected in parts of eastern Australia (<https://7news.com.au/lifestyle/health-wellbeing/ross-river-virus-detected-in-mosquitoes-in-the-gippsland-area-in-vic-c-1659729>). The public is being warned to ensure that they undertake mosquito bite avoidance behaviours.

Source: *ABC News* (27/Nov/2020), www.abc.net.au/news/2020-11-27/mosquito-borne-disease-transmission-threat-worst-in-a-decade/12925312

AUSTRALIA: INVASIVE KEYHOLE WASP THREATENS AIR SAFETY

A small wasp, *Pachodynerus nasidens*, has recently invaded Australia from its native lands of Central/South America. Normally it nests in plants and the ground, but will nest in artificial nooks and crannies as well. Unfortunately one of these turns out to be an important part of aircraft called the pitot probe. These are involved in calculating air speed and when they are blocked by nesting wasps, faults with the aircraft are alerted to the pilot. In Brisbane Airport in Queensland, a number of planes were forced to return to the airport of take of abandoned due to faults being reported to the cockpit as a result of the wasps blocking the pitot probe. Most of the planes affected have been A330s. The solution has been to put up fake nesting sites around the airport and once a nest is blocked, it is taken away, destroyed and replaced with a fresh nest. This has helped to reduce wasp populations around the airport.

Source: *ABC News* (27/Nov/2020), www.abc.net.au/news/science/2020-11-26/keyhole-wasp-nest-pitot-probes-brisbane-airport-aviation-safety/12919668

AUSTRALIA: CORRECT ADVICE ON TICK REMOVAL URGED

The Australian paralysis tick, *Ixodes holocyclus*, is arguably the most deadly tick in the world. While it rarely transmits pathogens, its bite can induce a lethal paralysis in both humans and pets, and allergic reactions can be very severe, with even death ensuing. The bite from the tick can also result in a sensitivity developing such

that an allergy to eating mammalian derived meats can occur. Recent research has shown that killing the tick while still attached using either permethrin cream or by freezing with an ether based spray, used for wart treatment, can reduce the risk of allergic reactions occurring. Now there is an active attempt to reduce misinformation on this tick and to encourage people to better manage tick bite. Hear the Chief Editor of this magazine, Stephen Doggett, talking about ticks on a recent TV interview with colleague, A/Prof. Sheryl van Nunen who was the first to describe the condition known as 'Mammalian Meat Allergy' (<https://7news.com.au/the-morning-show/story-info/experts-explain-what-a-tick-is-and-how-to-safely-remove-them-from-your-body-c-1616793>). Note you may need a VPN to view this outside of Australia.

Source: AAP (25/Nov/2020), www.aap.com.au/soap-and-cotton-ball-tick-removal-advice-gets-a-big-cross/

JAPAN: NEW COCKROACH SPECIES DISCOVERED

A team of Japanese scientists from Hosei University have discovered two new cockroach species from southern Japan. The cockroaches belong to the genus *Eucorydia* and were found in forests of the Nansei island chain. Both cockroaches are reported to have "an incredibly beautiful blue metallic lustre, with vibrant orange markings that create a band across their abdomen." They are not known to invade homes. See pictures of these new species in the link below.

Source: SoraNews24 (25/Nov/2020), <https://soranews24.com/2020/11/26/first-new-japanese-cockroach-species-in-35-years-discovered-by-scientists%E3%80%90photos%E3%80%91/>

INDIA: WOMEN DIES WHILE TRYING TO KILL ANTS

An Indian woman from Chennai attempted to eliminate an ant with the use of kerosene. She placed a paper soaked in the accelerant onto the nest, and when her mother lit the paper, then ants started running over the first woman's legs. Unfortunately she was still holding the can of kerosene, which spilled all over her and all of sudden was engulfed in flames. Employing a pest

manager would have been safer!

Source: *The New Indian Express* (23/Nov/2020), www.newindianexpress.com/cities/chennai/2020/nov/23/attempt-to-kill-ants-turns-fatal-for-this-chennai-woman-2226788.html

PHILIPPINES: REWARDS INCREASED FOR RAT CATCHERS

In the Philippines, rats cause millions of damage to crops every year. Thus the government introduced a "Cash for Rats" program whereby people are paid P5 (USD0.10) for each rat tail delivered to the authorities. So far almost 156,000 rat tails have been paid out equating to payments of close to P780,000 (USD\$16,000). A total of P1 million has been allocated as rewards for the rat control program.

Source: *SunStar* (23/Nov/2020), www.sunstar.com.ph/article/1877801/Pampanga/Local-News/Reward-for-rat-tails-nears-P800000-mark

SINGAPORE: ANTI-MOSQUITO KITS GIVEN OUT BY NEA

With dengue cases remaining high in Singapore following this year's all time record number of cases, the National Environmental Agency (NEA) is giving out anti-mosquito kits to all residential homes. The kits contain a booklet on mosquitoes, one tablet of Bti, and various stickers and fridge magnets. Residents are also encouraged to visit the NEA web site, which contains information on the current incidence of dengue and the location of dengue hot spots, and information on mosquitoes and their control (www.nea.gov.sg/dengue-zika). So far Singapore has had 33,956 cases of dengue in 2020 and had more deaths from dengue than COVID-19.

Source: *AsiaOne* (23/Nov/2020), www.asiaone.com/singapore/landed-homes-get-anti-mosquito-kits-due-more-mosquito-breeding-nea

INDIA: MOSQUITO COMPLAINS IN CHENNAI DOWN 17%

Mosquito complaints to the local government in Chennai have dropped by 17% upon last year. This has been the result of the local council's campaign to remove rubbish in waterways. This rubbish is a major source of mosquito breeding.

Source: *The Times of India* (22/Nov/2020), <https://timesofindia.indiatimes.com/city/chennai/>

[mosquito-menace-in-chennai-17-drop-in-complaints-seen/articleshow/79347985.cms](https://www.theguardian.com/world/2020/nov/17/mosquito-menace-in-chennai-17-drop-in-complaints-seen/articleshow/79347985.cms)

HONG KONG: PASTA SOLD CONTAMINATED WITH RAT HAIR AND INSECTS

Dried pasta that was being sold in Hong Kong was found contaminated with rat hair, insect fragments and toxins from mould. The pasta was also found contaminated with pesticide residue. The mould toxins could cause vomiting and diarrhoea if consumed in large amounts. The company producing the pasta, Nissin, denies the insect fragments and believes the testing laboratory mistook wheat bran as insect particles.

Source: *South China Morning Post* (16/Nov/2020), <https://sg.news.yahoo.com/pasta-sold-hong-kong-contains-093224465.html>

NEW ZEALAND: NEW TECHNIQUES TO ELIMINATE FERAL VERTEBRATES

The project 'Predator Free New Zealand' is aiming to eliminate feral vertebrate by the year 2050 in order to protect sensitive flora and fauna. One particular damaging pest are stoats. In the Perth Valley, within the South Island, all possums have been eliminated, but low numbers of rats and stoats remain. It was recently found that a dead rat poisoned with 1080 is especially attractive to stoats, which then die through secondary poisoning by consuming the dead rats. These are placed directly in front of surveillance cameras so that the activity of the stoats can be monitored. Now bird life in the valley is growing, which is a testament to the success of the program.

Source: *RNZ* (16/Nov/2020), www.rnz.co.nz/news/national/430723/dead-rats-and-cameras-lure-last-wily-stoats-in-perth-valley

PHILIPPINES: SURFING RAT SURVIVES FLOODWATERS

Recent a rat was seen floating down a flooded Manila street following typhoon Vamco. The typhoon caused major damage and widespread flooding, leading to native animals and pesky rodents to climb on board any floating object to escape the deluge. A rat was videoed on floating piece of wood and almost appears to be surfing with the water flow; the video can be seen in the link below.

Source: *Daily Mail* (16/Nov/2020), www.dailymail.com.

[co.uk/news/article-8953337/Surfing-RAT-survives-Philippine-floods-hopping-piece-wood-riding-waters-safety.html](http://www.bbc.com/news/health-5533337/Surfing-RAT-survives-Philippine-floods-hopping-piece-wood-riding-waters-safety.html)

AUSTRALIA: RAT BURGER FOR LUNCH ANYONE?

A health worker in Toowoomba, Queensland, was unpleasantly surprised when he was served a cook rat inside his burger from the Wellbean Co café. He bit into the burger and thought that something was wrong...very wrong. You can imagine his surprise, and disgust, when he opened up the burger. A subsequent investigation found that the café was complying with all health laws and was allowed to continue to operate.

Source: *7 News* (12/Nov/2020), <https://7news.com.au/lifestyle/health-wellbeing/toowoomba-hospital-cafe-wellbean-co-forced-to-apologise-after-worker-served-dead-rat-c-1568132>

SINGAPORE: HOME INVADED BY HUNDREDS OF COCKROACHES

Following the treatment of a rubbish chute, hundreds of cockroaches invaded a flat in Bukit Batok. Questions were then raised on the frequency of treating the rubbish chutes as the cockroach infestation was so severe. Residents are advised to tape up and seal their rubbish chute prior to treatments.

Source: *The Independent* (12/Nov/2020), <https://theindependent.sg/hundreds-of-cockroaches-allegedly-invade-bukit-batok-residents-flat-after-rubbish-chute-fumigated/>



Cockroaches invade Singapore home

AN INTERVIEW WITH DINI MILLER ON APM

Prof. Dini Miller from Virginia Tech in the US, who has spoken at a number of past FAOPMA-Pest Summits is a guest speaker on Talking Pest Management (TPM). TPM was recently featured in the July 2020 issue of the FAOPMA Magazine (https://faopma.com/Resources/FMFiles/Magazines/202007/FAOPMA_Magazine_2020_July_Page46-47_Talking_Pest_Management.pdf) and features a series of interviews with notable figures in the pest management industry. Dini Miller is internationally renowned for her work on cockroaches and bed bugs, and was a co-editor on *Advances in the Biology and Management of Modern Bed Bugs*, the first comprehensive text on bed bugs for 50 years. She is in great demand on the speaking circuit globally both for her extraordinary knowledge and incredible insights, and her entertaining presentation style. In this video, Dini discusses the history of Integrated Pest Management and suggests the term should be changed to 'Assessment Pest Management'. Listen to the video for Dini's explanation for the reasons behind the new term.

Source: Talking Pest Management (10/Nov/2020), <https://youtu.be/bjk5GgrGueA>

INDIA: MOSQUITO COIL CAUSES FIRE AND INJURES POLICEMEN

In Odisha, eastern India, a fire initiated by a mosquito coil led to severe burns in three policemen. A coil was lit within a barracks prior to the policemen retiring for the night, which led to their mosquito net catching alight.

Source: *Hindustan Times* (9/Nov/2020), www.hindustantimes.com/india-news/three-odisha-policemen-injured-in-fire-sparked-by-mosquito-repellent-coil/story-uTFR6QawxxW2GwihPliFJO.html

NEW ZEALAND: CHEAP REPELLENTS OUTPERFORM MORE EXPENSIVE OPTIONS

A study undertaken by Consumer NZ involved the testing of 17 different repellent products containing various actives. The products were applied to the arms of people, which was then placed into a cage of mosquitoes for three minutes over a period of six hours. The most effective repellents included 'Bug Grr Off' and 'Bushman Plus', which retail for much cheaper than other products that performed more poorly. The less effective compounds were those that



Prof. Dini Miller speaking on 'Talking Pest Management'.

contained essential oils.

Source: *Stuff* (7/Nov/2020), www.stuff.co.nz/business/123318350/cheaper-mosquito-repellents-outperform-the-pricey-options

AUSTRALIA: INTERNATIONAL AWARD GIVE FOR MOSQUITO MAPPING PROJECT

Redlands Council in southeast Queensland recently won the prestigious 'GO SMART' award. This was given to a project aimed at developing a better mosquito monitoring system, which will lead to more targeted application of insecticide to control mosquito larvae in the region. The area has large mangrove environments that produce the saltmarsh mosquito, *Aedes vigilax*, which is a major vector of several local mosquito-borne viruses. The technology, will lead to more accurately targeted insecticide treatments and better mosquito management.

Source: *Redlands City Council News* (6/Nov/2020), <https://rcc.news/2020/11/council-wins-international-award-with-mosquito-mapping-project/>

USA: TERMINIX PAYOUTS \$60MILLION IN LEGAL SETTLEMENT

It was alleged that the US giant pest management company, Terminix, was conducting illegal business practices in the state of Alabama. The claim is that consumers were being defrauded as the company stated that households were being treated but in fact were not. The result is that some premises suffered damage. It is then claimed that the company that charged exorbitant fees to treat the homes that subsequently had termite damage. Over 12,000 residents will have their homes retreated under the huge legal settlement. This legal settlement was the largest ever for Alabama.

Source: *Al.com* (5/Nov/2020), www.al.com/news/mobile/2020/11/alabama-reaches-historic-consumer-settlement-with-terminix.html, and *Fox10 News* (5/Nov/2020), www.fox10tv.com/news/60-million-settlement-with-terminix-over-illegal-business-practices-targeting-alabamians/article_28edeb40-1f93-11eb-bf43-f34da5ee6a1f.html

BANGLADESH: MOSQUITO CONTROL PROGRAM LAUNCHED IN CHITTAGONG

The Chittagong City Corporation has launched a mosquito control campaign in early November. Much of the mosquito problem stems from city canals that are blocked with garbage, leading to water stagnating and creating perfect mosquito breeding conditions. Unfortunately many residents throw rubbish into local water bodies and the council is encouraging the populace to change their behaviour.

Source: *DhakaTribune* (4/Nov2020), <https://www.dhakatribune.com/bangladesh/nation/2020/11/04/ccc-launches-mosquito-eradication-programme>

PALMYRA ATOLL: AN UNFORESEEN CONSEQUENCE OF RAT ERADICATION

Palmyra Atoll, sometimes referred to as Palmyra Island, is located due south of Hawaii, close to the equator. It has no permanent inhabitants but was used as a military base through the Second World War. Black rats were introduced to the inland during this time causing enormous environmental damage to both wildlife and plants. A program was begun in 2011 to eradicate the rodents, which proved successful and also led to the demise of the Asian Tiger mosquito, *Aedes albopictus*. Another unwanted pest on the island are coconuts and the rodents were eating the nuts and thereby controlling these plants. Coconuts impact seabird nesting sites and change the structure of the soil. Since the removal of the rats, coconut seedlings have shot up blanketing the island in a dense stance of plants, inhibiting the growth of native species. Now a second wave of eradication has had to take place – the aggressive removal of coconut plants. It is astonishing what the flow on effects can be in pest management!

Source: *Science Daily* (4/Nov2020), www.sciencedaily.com/releases/2020/11/201104194703.htm

SINGAPORE: DENGUE CONTINUES TO THREATEN

This year has seen a record number of dengue cases and cases remain high. Around 5-600 are being reported every week and the National Environmental Agency (NEA) is stating that populations of the mosquito vector, *Aedes aegypti*, are increasing in number. The concern is that dengue cases may again rise. Already too late

October, there has been almost 33,000 cases, with 28 deaths. Interestingly, this is the same number of deaths due to COVID-19.

Source: *The Straits Times* (30/Oct/2020), www.straitstimes.com/singapore/number-of-weekly-dengue-cases-remains-high-increase-in-aedes-mosquito-population

INDIA: RISE IN DENGUE IN MOHALI PROMPTS FOGGING

In Mohali, northern India, a rise in dengue cases has led to a call from health officials to begin fogging operations and door to door surveys to control adult mosquitoes. Some 33 cases of dengue have been reported from Mohali city alone.

Source: *Hindustan Times* (28/Oct/2020), www.hindustantimes.com/cities/actively-take-up-fogging-to-curb-mosquito-menace-mohali-dc/story-GMPY8TMmaSG6bTHFvnNg5O.html

USA: FIRST ASIAN GIANT HORNET NEST ERADICATED

In the most recent issue of the FAOPMA Magazine, it was reported that the Asian Giant Hornet was recently discovered in the US. This is a very large (length 45mm) and aggressive wasp originating from East and South East Asia and is known to decimate honey bee colonies. They can be so aggressive the media often calls them 'Murder Hornets'. The first ever nest was discovered in the US in the state of Washington, in a hollowed out tree. All individuals were removed via a vacuum and the site then sealed up. It is worth watching the video in the link below to see the process being undertaken.

Source: *SBS News* (28/Oct/2020), www.sbs.com.au/news/first-murder-hornet-nest-destroyed-in-us

GEELONG, AUSTRALIA: MOSQUITO TREATMENT PROGRAM TO BEGIN

In recent years there has been a mysterious outbreak of ulcers in patients from the regions south of Melbourne. In spite of a lack of strong evidence, some health officials believe that the bacteria (*Mycobacteria ulcerans*) could be transmitted by mosquitoes. Thus a comprehensive spraying program has begun against larval mosquitoes in the area. The first treatment is planned for late October to coincide with

high tides that can initiate the hatching of the larvae of the southern saltmarsh mosquito *Aedes camptorhynchus*. Treatments will occur approximately monthly until autumn of next year.

Source: *Bay 93.9* (25/Oct/2020), www.bay939.com.au/news/local-news/122048-mosquito-treatment-program-starts-across-geelong

TEN BEST RODENT BASED HORROR MOVIES

Everyone loves a good horror film, right? But ever wondered which are the best horror films that featured rats? The team at Film School Rejects listed their all-time favourite top ten. I will leave it up to you to check out the web site to see which film was considered no. 1, but I am glad that they featured two of my favourites; *Willard* and *Ben*. As you may know, the latter movie was the inspiration for Michael Jackson's song *Ben*.

Source: *Film School Rejects* (24/Oct/2020), <https://filmschoolrejects.com/rodent-horror-movies/>

SINGAPORE: MEAT PROCESSING COMPANY FINED OVER COCKROACHES

Fuyen foods in Singapore, a meat processing company, was fined SGD\$15,000 (USD\$11,000) over poor hygiene standards. Not only were cockroaches found to be widespread, food was improperly stored. Previously the same company had their operating licence suspended for 13 days in 2019.

Source: *The Straits Times* (21/Oct/2020), <https://www.straitstimes.com/singapore/environment/meat-processing-firm-fuyen-food-fined-for-lapses-in-hygiene-cockroach>

INDIA: GAMBUSIA FISH RELEASED TO CONTROL MOSQUITOES

In New Delhi, India, *Gambusia* fish have been released into a reservoir within the grounds of an institute to control mosquito larvae. *Gambusia* are voracious feeders of mosquitoes, although have proved to be environmentally damaged when released into some countries such as Australia. The release of the fish is part of the strategy implemented to reduce mosquito-borne disease in the region.

Source: *Outlook* (20/Oct/2020), www.outlookindia.com/newscroll/gambusia-

[fish-released-in-reservoir-to-contain-mosquitobreeding/1959181](#)

AUSTRALIA: TERMITE HOT SPOTS IN SYDNEY

Claims are that termite activity in the largest city in Australia have increased over the last 5 years. According to pest management experts, the five top hotspots for termite activity are Seaforth, Turramurra, Castle Hill, Campbelltown, and Gympie Bay. Unfortunately there is no hard evidence to support any of these claims.

Source: *7 News* (19/Oct/2020), <https://7news.com.au/lifestyle/hidden-infestation-leaves-homeowners-with-250k-repair-bill-and-your-suburb-could-be-at-risk-c-1415499>

MALAYSIA: MAJOR MOSQUITO PROBLEM

In Ipoh, Malaysia, there are major mosquito problems in the area. One retired health inspector claims he uses three cans of insect repellent per month along with vaporisers. It appears the mosquito problem relates to underground breeding in blocked drains.

Source: *The Star* (19/Oct/2020), www.thestar.com.my/metro/metro-news/2020/10/19/up-in-arms-over-mosquito-menace

ISRAEL: THE SPREAD OF THE LITTLE FIRE ANT

The little fire ant (*Wasmannia auropunctata*) was first discovered in Israel in 2005 and probably arrived in the nation towards the end of the last millennium. The ant came from Brazil, although how it arrived in the Middle East is unknown. What is clear however, is that the ant has subsequently spread primarily through the nursery industry with the movement of plants. Now many nurseries are infected with the little fire ant. Now the control of this invasive species has become a priority and a task force has been set up with the aim of eliminating the species. The first task will be to determine the geographic extent of the species, the second will be to get the public involved to map the ant's distribution, and finally methods of extermination will be examined.

Source: *The Jerusalem Post* (18/Oct/2020), www.jpost.com/israel-news/halting-the-spread-of-the-little-fire-ant-646163

UK: A PEST CONTROL WEB SITE WITHOUT ANY PEST CONTROL?

Why would a pest control web site have nothing on Pest Control you may ask? Well when it is from the famous and often controversial street artist known as Banksy, then it becomes no surprise. To him, someone who sells his art is called a 'pest'. For an artist who became famous for painting images of rats, perhaps his use of the words 'pest control' are fitting. Fortunately he allows the use of his image for non-commercial use, hence the reproduction here of some iconic images.

Source: *Pest Control* (18/Oct/2020), <https://pestcontroloffice.com/index.asp>

SCOTLAND: TRAINS CHAOS DUE TO ONE RAT

Train timetables in Scotland recently became chaotic after a pesky rat chewed through a power line triggering a major signal fault. Trains were forced to travel much slower causing delays throughout the network. The culprit of the incident was found dead, frizzled to a crisp after hitting copper.

Source: *Daily Record* (17/Oct/2020), www.dailyrecord.co.uk/news/scottish-news/peckish-rat-causes-rail-chaos-22861270

USA: DISCOVERY MAY LEAD TO NOVEL MEANS OF FIRE ANT CONTROL

A study at the University of Georgia in the US has found a unique 'supergene' in fire ant colonies, which determines if young queens leaves the colony. Queens that do not possess the gene are more likely to be attacked and killed by colony members. Perhaps in the future genetic manipulation may lead to colonies attacking their reproductive stage leading to a reduction in new colonies forming.

Source: *SciTechDaily* (17/Oct/2020), <https://scitechdaily.com/supergene-discovery-leads-to-new-knowledge-of-fire-ants-pest-control-methods/>

USA: CHICAGO AGAIN FOUND TO BE THE MOST RAT INFESTED CITY IN THE US

According to data from the US pest company Orkin, Chicago tops the list for the most rat infested city in the country. This is the sixth year in a row that Chicago has received this dubious honour. Beyond Chicago, the top 10 were Los Angeles, New York, Washington, DC, San Francisco, Detroit, Philadelphia, Baltimore, Denver, and

Minneapolis.

Source: Fox (17/Oct/2020), www.foxcarolina.com/chicago-is-the-rattiest-city-in-america-for-the-sixth-year-in-a-row/article_49cb04c7-1b7b-5ae4-9277-888b3898483a.html

SOUTH KOREA: JAPANESE ENCEPHALITIS CASES IN GYEONGGI PROVINCE

There were a total of three suspected cases of the mosquito-borne disease, Japanese Encephalitis during mid-October from Gyeonggi Province in South Korea. The patients were two women over 60 and one man in his 50's. The disease has a high fatality rate of around 30% and is preventable via vaccination and mosquito avoidance measures.

Source: ProMED-ahead Digest (17/Oct/2020), Vol. 99(39).

AUSTRALIA: CONCERNS OVER YELLOW CRAZY ANT SPREADING TO WET TROPICS

Yellow Crazy Ants have been found in the far north of the country around Townsville. This ant is considered to be one of the most invasive species on the planet and is very difficult to control as they form super colonies. By spitting formic acid onto its prey, it can overwhelm native animals and be very damaging to ecosystems. A new infestation of the ant was found in Alligator Creek, barely 5km from sensitive protected parklands. This is now the fifth infestation found in the areas. Calls have gone out for Federal funding to stop the ant from spreading and to eradicate existing colonies.

Source: The Guardian (14/Oct/2020), www.theguardian.com/australia-news/2020/oct/14/yellow-crazy-ant-infestation-could-spread-to-queenslands-wet-tropics-conservationists-warn

INDIA: PATNA MUNICIPAL CORPORATION TO UNDERTAKE MOSQUITO CONTROL

In order to control the spread of dengue virus, Patna Municipal Corporation in India has launched an intensive mosquito control campaign involving fogging for adults and larvicide spraying. At the same time efforts are being made to control COVID-19 through the use of equipment common to the mosquito control program.

Source: The Times of India (12/Oct/2020), <https://timesofindia.indiatimes.com/city/patna/pmc-takes-measures-to-control-mosquito-menace/>

articleshow/78608483.cms

INDIA: CAMPAIGN TO STOP DENGUE IN DELHI

An ongoing campaign against the spread of dengue virus has now moved to a stage where authorities are encouraging residents of Delhi to spend 10 minutes every Sunday to inspect their homes. People are asked to look for stagnant water and to drain it to prevent mosquito breeding. Location political figures are using the mantra "we will stop the breeding of dengue mosquitoes and protect our family and all of Delhi from Dengue." The government of Delhi has also launched a Dengue helpline to assist the public with matters pertaining to mosquitoes and the virus.

Source: The Statesman (11/Oct/2020), www.thestatesman.com/cities/we-will-stop-breeding-of-dengue-mosquitoes-protect-all-of-delhi-from-dengue-arvind-kejriwal-1502929071.html

TAIWAN: HIKERS WARNED OF THE DANGERS FROM TICKS

Warnings are going out to people who hike in forested areas of Taiwan. If people develop a circular like rash or flu like symptoms they should seek medical treatment for possible Lyme disease. Ticks are most likely encountered in forest regions or mountainous areas in Taiwan.

Source: Taipei Times (10/Oct/2020), www.taipeitimes.com/News/taiwan/archives/2020/10/10/2003744942

EUROPE: MOSQUITO ALERT APP LAUNCHED TO TRACK INVASIVE SPECIES

A number of exotic mosquitoes have been introduced into Europe with devastating consequences, resulting in outbreaks of mosquito-borne disease never previously seen. In order to better track the spread of the exotics, an app has been launched called 'Mosquito Alert'. The app helps people to recognise the most common invasive species and allows individuals to submit images of the mosquitoes and their habitats, which are then reviewed by a team of 50 scientists. The app has been in use in Spain over the last five years and have help to successfully track the spread of *Aedes albopictus* through the country. More than 18,300 mosquito sightings

were made during these years. Apps like come under the term 'Citizen Science' and by gaining the assistance of the community a more effective mosquito surveillance system has now been established.

Source: *Creaf* (9/Oct/2020), <http://blog.creaf.cat/en/noticies-en/citizen-scientist-mosquito-alert-launched-europe-track-spread-mosquitoes/>

AUSTRALIA: THE BATTLE TO ERADICATE FIRE ANTS

Fire ants were first introduced into Australia more than 20 years ago. Efforts to eradicate the exotic species have so far been unsuccessful, and even controversial at times. A program detailing the battle was recently released and available in the link below.

Source: *ABC Landline* (8/Oct/2020), www.abc.net.au/landline/eradicate-or-bust-the-battle-to-eradicate-fire/12752822

FIRE ANT ART

A graduate student have created art out of dispersing fire ants. Horace Zeng placed various dabs of paint onto plain paper and then dropped fire ants into the paint. As the ants dispersed they created various beautiful patterns in their haste to leave the area. I recommend watching the YouTube link in the video below to watch the process.

Source: *Kottke.org* (8/Oct/2020), <https://kottke.org/20/10/paintings-by-fire-ants>

INDIA: GOVERNMENT AGENCIES FINED IN DELHI OVER MOSQUITOES

In New Delhi, a range of government agencies have received legal notices over mosquito breeding. This has included schools, police stations, a fire station, and several other locations. Officials from the South Delhi Municipal Corporation have stated that chemicals alone will not stop mosquito breeding, the cooperation of all is required.

Source: *The Times of India* (7/Oct/2020), <https://timesofindia.indiatimes.com/city/delhi/mosquito-challans-to-delhi-govt-agencies-metro/articleshow/78530818.cms>

JAPAN: MORE FIRE ANT SPOTTINGS

Reports of fire ants at ports in Japan are becoming increasingly common. The latest is at Aomi and Oi Piers in Tokyo Bay during early October. At both sites, several hundred fire ants were found in container yards. Insecticide applications were undertaken to destroy the ants.

Source: *NHK World-Japan* (7/Oct/2020), https://www3.nhk.or.jp/nhkworld/en/news/20201007_25/

GERMANY: FAT RAT RESCUED AFTER BECOMING STUCK IN DRAIN COVER

In Germany, fire fighters were called out to rescue an obese rat caught in a drain cover. The rescuers were forced to lift the cover and push the rodent out with a wooden wedge. It took 30 minutes to release the furry beast who was then taken to a veterinary clinic for some painkillers and a free feed. [SLD: I wonder how much rodent control goes on in that city!]

Source: *Unilad* (7/Oct/2020), <https://www.unilad.co.uk/animals/chubby-rat-rescued-by-firefighters-after-getting-trapped-in-drain-cover/>

US: 2020 IG NOBEL PRIZE WINNER: WHEN TWO LEGS MATTER

The Ig Nobel Prize is a satirical award given to scientists for what is considered to be trivial research. Its stated aim being to "honour achievements that first make people laugh, and then make them think." In the early days of the award many scientists felt quite embarrassed when they received an Ig Nobel prize as they felt their research was being criticised. However, now most see it as a badge of honour, as the reward is about having fun in science; something that is all too uncommon these days. The 2020 Ig Nobel Prize was awarded in mid-September and one of the most unusual prizes was given the researcher Richard Vetter who showed that many entomologists are scared by spiders – thus the difference of just two legs makes a huge difference in how we perceive the arthropod. His paper was published back in 2013 in *American Entomologist* and can be downloaded in full from: <https://academic.oup.com/ae/article/59/3/168/6813>

Source: *Ig Nobel Prize Winners* (17/Sep/2020), www.improbable.com/ig-about/winners/ ■