

In April 2019, the Pest Control Association of Malaysia (PCAM) celebrated their 25th anniversary, it gives us a sense of joy to celebrate and an opportunity to look back at how we have journeyed this far. This is an achievement that we can be very proud of and a great celebration. This is one great association that has surpassed the quarter century mark - a milestone that shows leadership for the common good of the Pest management industry in our country. One cannot deny that in large measure what makes an associationto be able to sustain 25 years in meeting the needs of its members lies in the great leadership that have served the association over the years.

To commemorate the 25th anniversary, the PCAM organised the National Conference on Urban Pest or better known as NCUP 2.0. the event was held at the Sunway Putra Hotel, Kuala Lumpur on 9 \& 10 April 2019. Some of the issues related to the incidental and seasonal pests such as wild primate, spiders, bats and others were addressed during the 2nd edition of NCUP. These pests are quite common in Malaysia and local pest managers must deal with it occasionally using the most practical and logical techniques.


The NCUP was organized by the Pest Control Association of Malaysia (PCAM) and the chosen theme" Current Challenges \& Strategies in Urban Pest Management in Malaysia" is timely in view of the current economic and social outlook in Malaysia. The event was officiated by the Secretary of Urban Wellbeing, Ministry of Housing \& Local Government, the Honourable Dato' Muhamad Musa.

Keynotes addressed by the PCAM President, Mr. Nor Hisham Badri and Professor Dr. Lee Chow Yang highlighted issues on managing the millennial, technologies as well challenges in managing pests in urban environment. The NCUP 2.0 Technical Advisor, Associate Professor Dr. Abdul Hafiz Ab Majid has brought together 16 academic papers from the Universiti Sains Malaysia, Universiti Kebangsaan Malaysia (UKM), Universiti Malaysia Universiti Sains Malaysia, Universiti Kebangsaan Malaysia (UKM), Universiti Malaysia Sarawak, Universiti Malaysia Terengganu

The event was sponsored by the Platinum sponsor, Make Safe Australia and Bayer Environmental Science (Gold). A total of 22 Exhibitors and 268 participants (Gold). A total of 22 Exhibitors and 268 participants from pest management industry, government sector, student and members from Thailand Pest Management Association and Singapore Pest Management Association attended the event.

Students from the local varsities got their opportunities to present their posters during the event. The PCAM also moderated a round table discussion to bridge the pest management industry. Stakeholders that participated in the discussion include the Malaysia Crop Protection Association (MACPA), Public Health Entomologist Association (PEKA), Entomology Society of Malaysia (ENTOMA) and the USM.


In conjunction with the National Conference on Urban Pest 2019, the Pest Control Association of Malaysia (PCAM) celebrates its 25th Silver Jubilee during the NCUP 2.0 Gala Dinner. The PCAM was formed on August 3, 1994 and extend it appreciation to all that has contributed to what it is today.

The event was graced by the Honourable Mr. Mohammad Nazrul Fahmi Abdul Rahim, Secretary Pesticide Board. The theme was Black Tie, and everyone dressed up to the occasion. The dinner event honour the PCAM past presidents: Haji Hussein Kamal Omar, Mr. Stephen Liu, Mr. Richard Ng, Mr. Ang Tang Loong, Mr. A. Mohan, Mr. Johnny Ooi, and Mr. Tajuddin Ab Kadir. The past leadership has demonstrated great vision for the future of the Association and these leaders inspire the members to change and getting them to actively be involved in building and supporting the process of
 bringing PCAM to greater heights.

## 25th Anniversary of the Pest Control Association in Malaysia (PCAM)

The PCAM President, Nor Hisham Badri together with the Deputy President, Ms. Carol Lam exchange memorabilia with Professor Lee Chow Yang in honour of his contribution the Malaysia pest management industry. Prof Lee was a pioneer in the field of Urban Entomology in Malaysia. His research contributed to improving the management and control of urban pests and public health importance while at the same time advocating the minimal use of pesticides in the human environment. Prof Lee used his extensive networks of contacts, to enlist speaker

s from abroad who would be adventurous enough to venture to Malaysia and talk to PCOs about their research. His own students, he encouraged, to seek a career in the Pest Management field. He was instrumental in working with the association to establish the HH Yap Award, and the PCAM Scholarship. In the early years of the PAL licensing, he compiled large sections of the Manual to be used in the Pesticide Applicator License (PAL) scheme.

A special presentation on FAOPMA Pest Summit 2019 to be held in Korea was delivered by the KPCA representative, Mr. Sang Hyun Park. Dinner guest were having so much especially winners of luck draws. The highlight of the dinner was cake cutting ceremony and all the delegates offering toast to the PCAM's more success in the future.

In 25 years, PCAM has become a notable industry Organization on the International stage, our local pest experts and scientists have gained International recognition, and
 PCAM enjoyed mutual respect from ASEAN regional Associations and our executive committee member have been elected to serve in international Board of FAOPMA.This has been possible because of the contributions of its distinguished past Presidents, predecessors Committee Members who labored tirelessly and focused much of its attention on the welfare, development and growth of the pest management industry itself-together with its local suppliers and business partners whose commitments to the Association have been most notable.


This article is written and contributed by Jason Jee \& Carol Lam (Executive Committee of PCAM).

## VP-Communication Message

## Dear fellow members of PCAM,

The marketing paradigm has transformed with the rise of digital technologies. Companies today face a constant proliferation of social media channels, the growing power of connected customers, and an explosion of new digital tools. To succeed, marketers must be able to plan, implement, and measure the impact of digital strategies that are suited to today's customers and integrated with their traditional marketing and business goals. In today's world, digital marketing has become like language. It is a medium of communication. Though digital marketing may look like just one more subject and one more career option, it forms the backbone of today's economy. The need to express ourselves and communicate information to others has been there with us since we started carving figures on cave walls. Today all of us spread information through digital channels. We publish text, photos, and videos. It could be for personal, business, or non-profit initiatives. Digital marketing skills have become as necessary as knowing the English language to communicate. People who have started learning digital marketing have realised that digital marketing skills can be applied to any type of job.
Why does small business need digital marketing is a question we regularly get asked? Small business -with limited marketing budgets - are competing with national and international brands when it comes to marketing. In this ever-growing digital era, small businesses have no other options but to compete with corporations that have much larger marketing budgets. The online attribute required of companies demands that small business compete on a larger scale. Everywhere you look today people are increasingly preoccupied with technology. Every business needs an online strategy to thrive today. But, unfortunately, most small business owners don't have one. Customer expectations have changed and almost everyone has access to and regularly uses the Internet. Most of us, when we hear of a business for the first time immediately look for a website or social media profile where we can find out more information. We don't call into the store, or phone the company, instead we look it up and if you cannot find any evidence of the company online, chances are you will try somewhere that has a social presence.

## Gain Exposure through Quality Content

Creating great content is the best way to create a viral effect. You can do this by posting great images, funny videos, memes or writing interesting, compelling blog posts. This is how you differentiate yourself from competitors - have your personality shine through. The more content you produce, the more exposure you will get. And for small businesses, creating content is an extremely inexpensive way of marketing.

## Direction

Companies without a digital strategy generally don't have clear strategy goals for what they want to achieve online in terms of gaining new customers or building relationships with existing customers. And without a clear objective, you likely won't put enough resources into reaching the goals and won't be evaluating analytics. All of which can have massive impacts on your digital marketing efforts.

## Cost Effective

Digital marketing is more cost-effective than traditional marketing. This is especially important for small businesses as they don't have many resources or capital. New media can provide you with a cheaper and more effective advertising channel.

## Higher ROI

By increasing your digital outreach, you can potentially increase your revenue. The more exposure you can gain for your brand, the more leads you will generate. The more data you can extract from your outreach campaigns, the higher your ROI will be.

## Get Ahead of Your Competition

Most businesses have already traded traditional advertising methods and are focusing on Google Adwords, SEO, Social Media or SMS. With so many competitors out there, it is very difficult to market your small business and get ahead of the pack. Monitor what is working for you, what your current and potential customers are engaging with. Once you know what's working for you, repeat. We hope the above tips are helpful when you are thinking about your marketing strategy over the coming weeks and months. Thank you for taking the time to read our message.
Last but not least, I would like to take this opportunity to wish all our Muslim members "Selamat Hari Raya Aidilfitri. Maaf Zahir dan Batin".
Thank you.
Jason Jee
VP Communication (2017/2019)
The Pest Control Association of Malaysia

[^0]Advertisement Rates in Our Newsiltter Publication: Quaterly issue
Paper Size: A4 $(21 \mathrm{~cm} \times 29.7 \mathrm{~cm})$ Color: 4 color
Copies to be printed: 500 pcs only
Halfpage :RM600
Full page :RM 1,000
Frontinside : RM 1,500
Back inside :RM 1,300
Back cover :RM1,800
Front page ( 5 cm ) : RM 1,200
Insertion :RM500 (500 Copies)

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# FAOPMA-PestSummit 2019 Daejeon, Korea <br> 24(Tue) - 27(Fri) September, 2019 Daejeon Convention Center (DCC), Daejeon, Korea 

## INVITATION

The FAOPMA-Pest Summit 2019 will be held in Daejeon, Korea, 24-27 September, 2019 with the theme 'ONE HEALTH(Human, Animal and Environment)'.
Since the inception of FAOPMA, the annual international convention is held for the fourth time in Korea, incorporating both local and regional issues specific to the pest management industry.
With many international speakers and presenters at the FAOPMA convention, we have built a reputation as one of the pest management industry's global events.
This FAOPMA-Pest Summit 2019 convention will be focusing on the latest research findings on pest management and disease control presented by speakers who are experts in their field.
Delegates will be having ample opportunity to visit exhibition booths, showcasing today's leading-edge technologies and services of the pest management industry from around the world.
Participate in social events for promoting and achieving the advancement of related industries will be demonstrated.
Every attendee will receive a FAOPMA participation certificate, plus a 1-day AIB Certification Program (subject to terms \& conditions - any attendee who passes the test will receive an AIB certificate).

Your attention and participation to the FAOPMA-Pest Summit 2019, Daejenn, Korea would he warmly welcomed and appreriated more than ever.

President of KPCA Won Soo Hong

## Program at a Glance

|  | 24(Tue) S | ptember | 25(Wed) September |  | 26(Thu) September |  | 27(Fri) September |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Morning | Regis | ation | Upening Ceremony Keynote Speech Lecture | Exhibition |  |  |  |
| Afternoon | EXCO \& AGM | Exhibition |  |  |  |  | or |
|  |  |  |  |  | Closing Ceremony |  |  |
| Fvening | Welrnme Rereption |  | Gala Dinner |  |  |  | - |

## Registration

FAOPMA 2019

Early-bird Registration
(By May 31, 2019)

Pre-registration
(June $1^{\text {st }}$-August 31, 2019)

| Regular Registration | $\$ 350.00$ | $\$ 400.00$ | $\$ 500.00$ |
| :---: | :--- | :--- | :--- |
| Group Registration $(10-29)$ | $\$ 320.00$ | $\$ 350.00$ | $\$ 450.00$ |
| Group Registration(over 30) | $\$ 300.00$ | $\$ 330.00$ | $\$ 400.00$ |


| Regular Registration | $\$ 350.00$ | $\$ 400.00$ | $\$ 500.00$ |
| :---: | :--- | :--- | :--- |
| Group Registration $(10-29)$ | $\$ 320.00$ | $\$ 350.00$ | $\$ 450.00$ |
| Group Registration(over 30) | $\$ 300.00$ | $\$ 330.00$ | $\$ 400.00$ |

On-site Registration
※If you want to apply for AIB Lraining, please contact the secretariat of FAOPMA 2019 Registration.

## By Bank Transfer

| Bank Name | Industrial Bank of Korea. Seoul, Korea. |  |  |
| :--- | :--- | :--- | :--- |
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| Account Holder | KOREA PEST CONTROL ASSOCIATION | Bank Address | 79, EULJI-RO, JUNG-GU, SEOUL, SOUTH KOREA |

## Secretariat of FAOPMA-Pest Summit 2019 Registration

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Web. www.faopma2019korea.org You can register online at FAOPMA 2019 website


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Malaysia and most of South East Asia are heavily dependent on soil termiticides in urban environments to combat subterranean termites. However, the extensive use of pesticides would lead to environmental pollution. Large-scale use of pesticides does not fully meet its application objectives due to several drawbacks such as degradation, volatilization, and leaching. Currently, many Asian countries, in particular, prefer a method or chemical termiticides that are safe for the environment. Therefore, the fate of termiticides such as persistence, leaching and storage procedures should be predetermined (Fig. 1).

## Fig. 1 -

Our understanding on termiticides application in Malaysia.

These statements were typically used in termite control advertising, "Kill and Eliminate termite in the fastest way, Protect your home from termite now! Comes with the warranty for all Termite Treatment". This advertisement offering of 10 years guarantees of termite protection from termite reinfestation. But how certain is the guarantee given based on the warranty?

Understanding how long the termiticide lasts in soil and environment after the application is therefore very important, particularly in a tropical climate country such as Malaysia. Moreover, it is difficult to assess the influence of termiticides on soil types because of their complexity as soil mixtures containing minerals and organic particles. When the soil condition is outside of an optimum range, termiticides can be altered to an inactive form, immobilized or absorbed by soils. Effects of organic carbon content and clay on the bioavailability of termites are also different within termiticides.

## Termiticides half-life and degradation rate in Malaysia soil

In this study three commercially available termiticides, bifenthrin, fipronil, and imidacloprid were assessed for their degradation rates and half-life under field conditions. Fipronil had the highest half-life and the lowest degradation rate under field conditions compared to bifenthrin and imidacloprid, while bifenthrin higher half-life and lowest degradation rate in the laboratory study compared to fipronil and imidacloprid. Thus, fipronil and bifenthrin were persistent compared to imidacloprid. The bioavailability of termiticides in the field showed that bifenthrin had the lowest lethal time ( LT50 and LT95) values among termiticide tested for Coptotermes gestroi Fipronil and bifenthrin termiticide tested for Coptotermes gestroi Fipronil and bifenthrin provided good barrier protection as both termiticides had higher half-life values and lower degradation rates.

## Leaching of termiticides

Meanwhile, leaching of termiticides using a soil column method revealed that bifenthrin had a good adsorption characteristic as it showed a higher concentration at the top of the column for sandy loam or loamy sand compared to fipronil and imidacloprid. The result also showed that there was a significant difference in termiticides tested. There was no significant difference for soil tested (sandy loam and loamy sand) towards termiticide concentration. Thus, the soil type used in this study does not affect the leaching process in the soil column. Thus, bifenthrin is recommended during a rainy season for soil treatment or watery areas such as building structure on a sandy beach and peat soil area.

## Stability of termiticide storage after mixing

Two major problems with pesticide storage management are the preparation of the suitable conditions for the storage of termiticides before mixing and the fate of unused termiticides after mixing. Therefore, understanding the best storage condition to keep unused termiticides is important to avoid degradation of termiticides.

At present, pest control technicians in Malaysia often mix and apply termiticides in a container of polyethylene. The polyethylene container is mostly selected because it is sturdy and hard to break, in contrast to a glass container. The containers used to mix termiticide vary in size and color but normally made of polyethylene. Excess mixed termiticides are normally placed in the vehicle or shop. Uncovered containers placed in the vehicle may result in the vulnerability of termiticides to sunlight, while containers placed in the store may be protected against sunlight. Poor storage condition of termiticides could lead to termiticide degradation (Fig 2). In this study, imidacloprid residual remained high compared to bifenthrin and fipronil in aqueous solution. However, all the termiticide tested dissipated higher, of which imidacloprid lost $88.80 \%$, followed by bifenthrin ( $94.80 \%$ ) and fipronil ( $99.53 \%$ ) from their initial concentration. It showed that termiticides tested were unstable in aqueous solution after 30 days.

The half-life values for bifenthrin, fipronil, and imidacloprid were $7.45,3.98$ and 9.42 days, respectively. The black and white bottles had no significant effect on termiticide concentration. This study also showed that the termiticides stored in the shop and in the car did not differ substantially. Fipronil was less effective in termiticide testing since residues were reduced to half after three days of mixing. Termiticide should be used immediately after mixing to prevent photodegradation and hydrolysis.

## Conclusion

Using termiticide without knowing their fate would lead to environmental contamination. Based on this study, fipronil and bifenthrin are recommended termiticides for sustainable termite management due to higher half life, lower degradation rate, and good bonding capability with soil particles. Based on this study, fipronil and bifenthrin are recommended in soil termiticide treatment due to their high half-life values and low degradtion rate.
"How long can this insecticides / chemical last in the environment!!"


Fig. $2 \Delta$
Example of termiticide application and storage in the field


Fig. 3 A
Conclusion

Due to its high capability of adsorbing soil particles, bifenthrin is the best termiticide to be used in the rainy season. The use of bifenthrin protects the building against termite infestation and also it is environme tally safe. Termiticides should also be used immediately after mixing since all termiticide shows a high degrad tion rate within fourteen days. In addition, a degradation study should also be carried out on other comme cially available termiticides, in particular on new termiticides to be registered for application in Malaysia. Ther fore, manufacturing company and PCO's need to be very careful when claiming any warranty or guarantee on any termiticide product before including the above factor discussed in this article (Fig. 3).

Phosphine Courses on 11th \& 12th of April 2019



PAL/APAL-23rd \& 24th April 2019





[^0]:    Disclaimer

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