Dealing with Threats of Blood-sucking Bed Bugs

As an International travel, transportation and financial hub, Singapore has not been spared from the worldwide scourge of the Bed Bug menace. Bed Bugs' occurrence was previously known as a problem afflicting the developing world and was in decline up until the later part of the 1980. Today, Bed Bugs' infestation has become a problem of major concern among developed societies, making its ugly presence felt in households, hotels, living quarters and dormitories, and even office premises. What has caused the rise re-invasion or the one-day scare? Where did they come from? How is it we cannot feel its bite? Why do they share our living space and, worse of all, share the beds we sleep on, sucking our blood like miniature vampires? Why do they leave a litter of moul, egg case, dried blood, stains and faecal matter which is filthy and disgusting? How do they multiply? What are the health risks and impacts? Are there pesticide resistant strains? What other methods can we take to eliminate pesticide resistant strains? Where and how can we be found? What is the best way to get rid of them? How can we adopt a control strategy to keep them permanently out of our lives?

All the answers to these questions will be revealed at the Bed Bug Summit!

Jointly organised by the National Environment Agency and SPMA, international experts will present their papers on all you need to know about the management of Bed Bugs.

Prof. Lee Chauv Yang is a Professor of Entomology at the Universiti Sains Malaysia. He is internationally known for his research on biology and management of cockroaches, ants, termites and bed bugs in South East Asia. Dr. Lee’s research has contributed to improving management strategies against insect pests of urban and public health importance, while at the same time advocating the minimal use of pesticides in the urban environment. He has authored and co-authored more than 145 peer-reviewed journal papers, 7 books and trained 24 graduate students. Dr. Lee received many awards at international and national levels including the Outstanding Young Malaysians Award 2008 (Honour for Academic Leadership), Kyoto University Visiting Professorship 2007, 2011, HH Yap Award 2003, MSTM Medal 2003, Fulbright Scholarship 2002 and the National Young Scientist Award 2003. He is currently the President of the Pacific Rim Termite Research Group.

Dr. Changle Wang is an assistant professor of Entomology at the Rutgers University (New Jersey, USA). His expertise is in urban pest management including common urban pests such as cockroaches, bed bugs, termites, and ants. His research has provided many practical solutions on bed bug and cockroach management. He is the co-author of an award-winning invention “Insect Interceptor device”. This device is currently the most effective and affordable bed bug monitor used in the U.S. He published 6 books/book chapters, 41 peer-reviewed papers, and 19 non-peer reviewed articles. Besides research, he also conducted state-wide extension on urban insect pests and received an award for his extension work by Rutgers University Cooperative Extension.

Dr. How Yee Fatt graduated with a first class honour degree in Applied Biology from Universiti Sains Malaysia in 2005. Soon thereafter, he continued his graduate studies at the National Institute of Health, Department of Medical Sciences, Ministry of Public Health, Thailand. He is a principal investigator in research for prevention and control of medically important insects, such as mosquitoes, cockroaches, bed bugs, houseflies and head lice in Thailand. He has long experience on research and development of repellents and larvicides of both synthetic and biological pesticides for control of mosquito vectors of dengue and filariasis. He is currently leading two Thailand-funded projects on the control of bed bugs and vectors of dengue and chikungunya in Thailand. Dr. Apiwat has authored and co-authored more than 45 peer-reviewed journal papers and 2 books. He is also a government official/evaluating officer of household products containing repellents or insecticides against medically important insects for the products to be registered for sale in Thailand.

Dr. Stephan Doggett is Australia's Mr. Bed Bug. He is a Senior Hospital Scientist at the Department of Medical Entomology at Westmead Hospital in Sydney and manager of the NSW Health funded Mosquito Monitoring and Arbovirus Surveillance Program. His research background is extremely broad having worked on various arthropods of medical importance notably ticks, mosquitoes and bed bugs.

Since the beginning of the modern bed bug resurgence, Stephen has been at the forefront of documenting the rise and impact of these public health pests within Australia, and has produced over 80 articles for industry and scientific journals, and given over 100 presentations on bed bugs and their control. He is widely consulted both locally and internationally on bed bugs and their control by the past management and accommodation industries, as well as the media. He is also consulted on bed bugs by the medical profession having recently completed a large clinical review on bed bugs, which was published in 2012 in the high impact factor journal, Clinical Microbiological Reviews.

Over the last seven years, Stephen has worked with a distinguished team of Australian pest controllers in producing an industry standard on bed bug management: A Code of Practice for the Control of Bed Bugs in Australia, and Stephen is the principal author. The Code is now up to its third edition (and seventh version) and has been adopted by other pest control organisations around the world, notably in Europe in the pest management industry. More recently to assist the Hospitality Industry and other accommodation providers in achieving ‘best practice’ in bed bug eradication, Stephen developed A Bed Bug Management Policy and Procedural Guide for Accommodation Providers. Both the Code of Practice and the Management Policy are available for free from www.bedbug.org.au. Stephen is also an internationally award winning insect photographer with his images appearing in numerous books, journals and other publications. At the FAPMA 2012 conference, Stephen received the inaugural ‘Award for Excellence’ for services to the pest control industry.

Dr. Usavadee Thavara is a Medical Scientist (senior professional level) and is currently in charge of the Biology and Ecology Section, National Institute of Health, Department of Medical Sciences, Ministry of Public Health, Thailand. Dr. Usavadee is a member of the steering committee of the Ministry of Public Health, Thailand for nationwide prevention and control of dengue vectors. She also has been appointed as Innovation Ambassador of the Ministry of Science and Technology, Thailand. She has done research and developed repellent products for prevention and control of medically important insects since 1980. Recently, her research had been granted by the National Research Council of Thailand (NRCT) to develop an integrated management against bed bugs in Thailand. So far, she has produced publications relating to insect vector surveillance and control continuously. She is regularly invited to conduct lectures at Mahidol University, Chulalongkorn University, Kasetsart University, and Past Management Association. Besides, she played another important role as WHO temporary advisor in the field of dengue vector control and development of pesticides for public health in 2002. With an attempt to produce valuable work continuously, she has authored and co-authored about 70 peer-reviewed journal articles and 10 books for training public health officials, municipality staff, students and other interested people. She has received 12 awards for research works and books.
## Programme

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<td>0900 – 0915</td>
<td>Opening</td>
<td>Director-General, National Environment Agency of Singapore.</td>
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<td>0915 – 0930</td>
<td>Welcome</td>
<td>President, Singapore Pest Management Association.</td>
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<td>0930 – 1000</td>
<td>Singapore Bed Bug Survey</td>
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<td>1030 – 1100</td>
<td>Tea/Coffee break</td>
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<td>1100 – 1130</td>
<td>Ecology and Behavior of Bed Bugs</td>
<td>Dr. Yee-Fatt How, Bentz Jaz Singapore Pte Ltd.</td>
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<td>1130 – 1215</td>
<td>Techniques of Bed Bug Inspection</td>
<td>Dr. Changle Weng, Rutgers Univ., USA</td>
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<td>Health Impacts of Bed Bugs</td>
<td>Dr. Stephen Doggett, Westmead Hospital, Australia.</td>
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<td>1400 – 1430</td>
<td>Insecticide Resistance in the Bed Bug in Thailand</td>
<td>Dr. Apiwat Tawetsin, National Institute of Health, Thailand. Co-Speaker: Dr. Usavadee Thavara, National Institute of Health, Thailand</td>
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<td>1430 – 1530</td>
<td>Bed Bug Management Code of Practice, and Management Techniques of Bed Bugs</td>
<td>Dr. Stephen Doggett, Westmead Hospital, Australia.</td>
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<td>1530 – 1650</td>
<td>Now Innovation in Bed Bug Inspection and Management</td>
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### Date: Friday, 14 September 2012

### Time: 0800 – 1730

### Venue: Mapletree Business City, 20 Pasir Panjang Road
Singapore 117439

### Fee: $150.00 (Per Member) $180.00 (Per Non-Member)

## Who should attend:

Public Council Staff, Environmental Health Officers, Pest Management Professionals, Hotel Personnel, Building Management Personnel, Interested Members of the Public.

## Registration Form

To register, simply fill in this form and mail it to SPMA together with your payment before the closing date.

Company: ____________________________

Contact Person: ____________________________

Tel: ____________________________ Fax: ____________________________

Contact E-mail: ____________________________

SPMA Member? Please circle: Yes / No

Attendees: 1) ____________________________

2) ____________________________

3) ____________________________

4) ____________________________

5) ____________________________

6) ____________________________

7) ____________________________

8) ____________________________

I am enclosing $ ____________________________

by cheque no. ____________________________ paid to

Singapore Pest Management Association
Crawford Post Office, P O Box 514, Singapore 911901

Hp: 9437 1099 Fax: 6484 4270

Email: contactus@spma.org.sg
Website: www.spma.org.sg

Closing Date for Registration: Saturday, 01 September 2012  First-come-first-served basis upon payment