

**The 46<sup>th</sup> AGM & Scientific Conference of the Australian Entomological Society  
Sunday 27 – Wednesday 30 September 2015 PROGRAM**

*Information Disclaimer: The speakers, topics and times are correct at the time of publishing. In the event of unforeseen circumstances, the organisers reserve the right to alter or delete items from the Conference Program*

**NB \* indicates a student presentation**

<b>Time</b>	<b>Sunday 27 September</b>
From 12:00	<b>Registration</b>
<b>17:00-19:00</b>	<b>Welcome reception</b> (included in registration) (Daintrees Pooldeck)

<b>Time</b>	<b>Monday 28 September</b>	
from 08:00	<b>Registration</b>	
09:00-09:15	<i>Welcome and Housekeeping -</i>	
09:15-10:00	<b>Keynote:</b> Kevin Johnson: <i>The Hemipteroid Tree of Life</i> Chair: Stephen Cameron	Kuranda Ballroom
<b>10:00 - 10:30</b>	<b>Morning Tea</b>	
	<b>Session 1A Symposium Systematics of Hemipteroids(bugs, lice, thrips, psocids)</b> Chair: Lynn Cook Kuranda Ballroom	<b>Session 1B Agroentomology</b> Chair: Theodore Evans Tully 2
10:30-10:45	Desley Tree: Diversity of thrips (Thysanoptera) galls and thrips diversity	Catherine Gitau-Clarke: Rewards and risks in timing of herbicide application date and dose in maximising <i>Sirex noctilio</i> (Siricidae) biocontrol
10:45-11:00	Penny Mills: Cousin ltt and dumpy: two new species of gall-inducing scale insect from Western Australia	Piotr Trebicki: Virus infected plants will improve host suitability for the aphid vector under future increased CO <sub>2</sub> concentration.
11:00-11:15	Gary Taylor: Australian jumping plant lice and lerp insects (Hemiptera: Psylloidea): species richness, phylogenetics, host specificity and invasives	Karel Lindsay: Spatial and temporal dynamics of <i>Amblypelta lutescens lutescens</i> Distant (Heteroptera: Coreidae) in avocado crops.
11:15-11:30	Murray Fletcher: The leafhopper genus <i>Amrasca</i> Ghauri (Cicadellidae: Typhlocybinæ: Empoascini) with particular emphasis on the Indian cotton leafhopper.	Franciso Infante: Chemical control of <i>Frankliniella</i> spp [Thysanoptera] in Ataulfo mango orchards does not increase yields

11:30-11:45	Linda Semararo: A systematic revision of the Macropsinae (Hemiptera: Cicadellidae) leafhoppers of Australia	Vasanthaverni Sivasubramaniam: Selectivity of new generation insecticides on silverleaf whitefly parasitoid <i>Eretmocerus hayati</i> (Hymenoptera: Aphelinidae).
11:45-12:00	Li Xin Eow *: The Phylogeny of the Fungal Spore-feeding Thrips Subfamily Idolothripinae (Thysanoptera; Phlaeothripidae).	Frezzel Tadle *: Development of an artificial diet for the large cabbage moth, <i>Crociodolomia pavonana</i> F.
12:00-12:15	Elison Lima *: Thrips of tropical areas – how much do we not know?	LI-Hsin Wu *: <i>Trichogramma</i> parasitoids for control of Lepidopteran borers in Taiwan: species distribution, life history traits, and <i>Wolbachia</i> infections
12:15-12:30		Cate Paull: <i>Helicoverpa</i> spp. moth behaviour: Just what does emerge?
<b>12:30 - 13:15 Lunch</b> (included in registration)		
	<b>Session 2A Hemipteroid Taxonomy</b> Chair: Stephen Cameron Kuranda Ballroom	<b>Session 2B Molecular Biology &amp; Genetics</b> Chair: Margaret Hardy Tully 2
13:15-13:30	Yen-Po Lin: The cryptic diversity and possible origin of Linnaeus' glasshouse scale insect, <i>Coccus hesperidum</i>	Akane Uesugi: Modification of plant-induced responses by a galling insect affects the field distribution pattern of a subsequent herbivore
13:30-13:45	Martin Steinbauer: Host and range expansion by a native psyllid [ <i>Ctenarytaina bipartita</i> (Hemiptera: Aphalaridae)] as a consequence of revegetation: mechanisms and implications	Caitlyn Perry *: Paradoxes in Ecdysteroid-Related Gene Conservation and Loss
13:45-14:00	Francesco Martoni *: Morphology, Phylogeny and Microflora of the New Zealand psyllids (Hemiptera: Psylloidea)	Amol Ghodke *: Development of a strategy to control <i>Myzus persicae</i> using <i>RNAi</i> technology
14:00-14:15	David Emery: Investigating diversity in the <i>Yovetta</i> genus of Australian cicadas.	Derek Russell: Prospects for slug control using pathogenic protozoa and RNA interference
14:15-14:30	Laurence Mound: Quarantine significance of the disharmonic thrips fauna of Norfolk Island	Kate Marshall: The need for a field based method to detect resistance in green mirid <i>Creontiades dilutes</i> (Stål) (Miridae: Hemiptera) from Australian cotton
14:30-14:45	Ahmad Shahbaz: Screening of sugarcane cultivars to assess the incidence against <i>Chilo infuscatellus</i> (Pyralidae, Lepidoptera)	David Lilly *: Novel Insecticide Resistant Mechanisms in the Common Bed Bug, <i>Cimex lectularius</i>

<b>14:45 - 15:15 Afternoon Tea</b>			
	<b>Session 3A Organismal Ecology &amp; Arthropod Faunas</b> Chair: James Cook Kuranda Ballroom	<b>Session 3C</b> Workshop on Science Communication Tully 3	<b>Session 3C Taxonomy &amp; Systematics 1</b> Chair: Bryan Lessard Tully 2
15:15-15:30	Mostafa Sharaf: Ant Fauna (Hymenoptera: Formicidae) of Socotra Island (Yemen) with description of three new species	Guest Speaker Dr Louise Kuchel	Dennis Black: Australian millipede diversity: an update
15:30-15:45	Don Sands: Invasive flammable exotic grasses: increasing detrimental impacts on Australia's invertebrate biodiversity		Bryan Lessard: Completing the alpha-level taxonomy of the Australian horse flies
15:45-16:00	Renae Forbes *: How effective are Greenfleet CO <sub>2</sub> offset forests at supporting moth and beetle diversity?		Rolf Oberprieler: Looking for a weevil in a haystack — the hunt for the name and status of a potential pest weevil in Australasia (Coleoptera: Curculionidae)
16:00-16:15	James Cook: How isolated is the fig pollination system on Lord Howe Island?		Natalie Gasz *: Medical Maggots: Misunderstood superheroes?
16:15-16:30	Jane DeGabriel: Effects of local environmental conditions on the spatial and temporal structure of fig-wasp communities		Andrew Mitchell: Systematics of Australian Hadeninae (Lepidoptera: Noctuidae)
16:30-16:45	Casey Hall * : The effect of temperature on plant chemistry and how it mediates plant-plant interactions		Torbin Northfield: Increased pollinator habitat enhances fruit set and predator conservation in Australian cocoa
16:45- 17:00	Elizabeth Lowe *: Spider communities in cities: have we underestimated the biodiversity value of private gardens?		
17:00 – 17:15 <b>Book Launch:</b> <i>Tropical Queensland Wildlife, from Dusk to Dawn</i> by Buck Richardson.			
17:15 - 18:15 <b>Poster presentations</b>			
<i>Free evening – own arrangements</i>			

<b>Time</b>	<b>Tuesday 29 September</b>		
08:00	<b>Registration desk open</b>		
08:35-08:45	Housekeeping		
08:45-09:30	<b>Keynote:</b> Eric Warrant: Seeing at the limits: Vision and visual navigation in nocturnal insects Chair: Simon Tierney		Kuranda Ballroom
	<b>Session 4A Symposium: Genomic Enhancement of Light-Adapted Insect Behaviour</b> Chair: Simon Tierney	Kuranda Ballroom	<b>Session 4B Symposium Edible Insects</b> Chair: Joseph Allotey
08:30-09:30	<b>09:30 - 10:30 Keynote Markus Friedrich:</b> Deep transcriptome insights into cave beetle eyes		Joseph Allotey: Studies on the mopane worm, <i>Imbrasia belina</i> an edible caterpillar
09:45 - 10:00			Alan Yen: Insects as food and feed in Australia: purpose and scale
10:00 - 10:15			Marks Dithogo: Ecology and biology of <i>Imbrasia belina</i> (Westwood) in Southern Africa: with special reference to Botswana.
10:15 - 10:30			Daniel Loeto: The mopane worm as a model to study cryptococcal virulence
10:30-11:00	<b>Morning Tea</b>		
	<b>Session 5A Symposium: Genomic Enhancement of Light-Adapted Insect Behaviour (continued)</b> Chair: Simon Tierney	Kuranda Ballroom	<b>Session 5B Social Insects</b> Chair: Lori Lach
			Tully 2
			<b>Session 5C Pheromones &amp; Insect Olfaction</b> Chair: David Merritt
			Tully 3
11:00-11:15	Bill Humphreys: Darkness down under – diversity and opportunities from subterranean life in Australia	Lori Lach: Decreased pollen carriage and foraging in European honey bees with a common gut parasite	Aead Muhmed *: Role of olfactory cues in host finding in the parasitoid <i>Diachasmimorpha kraussii</i>
11:15-11:30	Simon Tierney: The influence of light on insect behaviour and evolution: tracking transitions in photic niche with photoreceptive opsin genes.	Dilanka Mihindulasooriya *: Ant-plant interaction: re-establishment of myrmecochory in bauxite mining restoration	Umar Lubanga *: The long and the short of mate attraction in a psyllid: do semiochemicals mediate mating in <i>Acanthocnema dobsoni</i> Froggatt (Hemiptera: Trioziidae)?
11:30- 11:45	11:30 -12:00 William Wcislo: Ethology and evolution of dim---light foraging bees	Katya Hogendoorn: Entomovectoring of <i>Trichoderma</i> spores has no noticeable influence on hive health	Jeanneth Perez: Quantitative changes in sex pheromone release of laboratory reared <i>Bactrocera tryoni</i> males

11:45 - 12:00	12:00 - 12:15 Theresa Jones: The dark side of night: the biological implications of artificial light at night	Ryan Leonard *: Making scents of urban pollination: does air pollution alter honeybee memory?	Donna Chambers: Use patterns and damage thresholds of the <i>Amblypelta lutescens lutescens</i> (Banana-spotting bug) pheromone trap
12:00 - 12:15		Laurance Berville: The role of nutrition in determining individual and group patterns of behavior	Syed Rizvi *: Volatiles as an indicator of host-plant quality: response of light brown apple moth to healthy and fungus-infected grapes
12.15 - 12.30		Brian Heterick: <i>Melophorus</i> ants (Hymenoptera: Formicidae): really cool thermophiles	
12:15-13:15 <b>Lunch</b> (included in registration)			
<b>Social Media for Scientists</b> Elizabeth Lowe, Margaret Hardy & Cameron Webb Tully 3			
13:15-14:00	<b>Keynote:</b> James A. Walker: Biosecurity in Northern Australia Chair: Tony Clarke		Kuranda Ballroom
	<b>Session 6A Symposium: Biosecurity in Northern Australia</b> Chair: Tony Clarke Kuranda Ballroom	<b>Session 6B Linnaean Games</b>	Tully 2
14:00-14:15	Nader Sallam: Monitoring sugarcane moth borers in South East Asia – Keeping Australia safe		
14:15-14:30	Luke Halling: Arrival and spread of vegetable leaf miner ( <i>Agromyzidae: Liriomyza sativae</i> ) in Australia.		
14:30-14:45	Mark Stanaway: Pestpoint: Connecting Field Diagnosis to the Lab for Better Biosecurity.		
14:45-15:00	Kyla Finlay: Borne on the wind; Understanding the significance of natural pathways of plant pests into Australia and New Zealand		
15:00-15:30 <b>Afternoon Tea</b>			
	<b>Session 7A Symposium: Biosecurity in Northern Australia</b> (continued) Chair: Tony Clark		Kuranda Ballroom
15:30-15:45	Margaret Hardy: The role of bioinsecticides from spider venoms in biosecurity		
15:45-16:00	Greg Daghish: Recent insights into the ecology of <i>Cryptolestes ferrugineus</i> (Stephens): a new threat to Australia's grain industry		
16:00-16:15	John Nielsen: Asian Gypsy Moth risk on maritime vessel – an overview of the Department of Agriculture's border management strategy		

16:15-17:30

Australian Entomological Society 44th Annual General Meeting - Kuranda Ballroom

18:30-22:30

CONFERENCE DINNER in the Mossman Ballroom

<b>Time</b>	<b>Wednesday 30 September</b>	
08:30	<b>Registration desk open</b>	
08:50-08:55	Housekeeping	
	<b>Session 8A Pests &amp; Natural Enemies</b> Chair: Sarina Macfadyen Kuranda Ballroom	<b>Session 8B: General Biosecurity</b> Chair: Anthony Clarke Tully 2
08:55-09:10	Kris Le Mottee *: Summer and Winter Diapause in <i>Helicoverpa punctigera</i> : adaptations for a changeable climate	Shaun Bennett: A summary of interceptions and additions to the New Zealand fauna, with reference to Australian origins.
09:10-09:25	Justin Cappadonna *: Green mirids: Multiple host-use patterns and population connectivity in native and agricultural habitats.	Alan Flynn: Recent diagnostics response to the detection and eradication of Queensland fruit fly <i>Bactrocera tryoni</i> in Auckland, New Zealand
09:25-09:40	James Hopkinson: Developmental biology of the minute two-spotted ladybird beetle, <i>Diomus notescens</i>	Sarah Corcoran: Australia's battle with Fire Ants we cant afford to lose
09:40-09:55	Colin Tann: Using Stable Isotopes to determine movement and spatial mixing of <i>Helicoverpa spp.</i> populations within Australian cotton producing landscapes of varying complexity	Gary Morton: Electric Ants in Australia is this the end?
09:55-10:30	<b>Morning Tea</b>	
	<b>Session 9A Symposium: Pests in Broadacre crops</b> Chair: Sarina Macfadyen Tully 2	<b>Session 9B Taxonomy &amp; Systematics 2</b> Chair: Matthew Krosch Kuranda Ballroom
10:30 -10:45	Joshua Douglas *: Population analysis of <i>Halotydeus destructor</i> (the red legged earth mite) in crops and pastures	Andrea Lawrence *: The common cat flea: a phylogenetic story of the most ubiquitous ectoparasite and an underrated vector
10:45-11:00	Siobhan de Little: Management of insecticide resistance: using leading-edge technologies in on-farm management	Keith Bayless *: Towards a compelling phylogeny of cyclorrhaphan flies (Diptera) using whole body adult transcriptomes
11:00-11:15	Dustin Severtson *: Binomial sequential sampling plan for the cabbage aphid <i>Brevicoryne brassicae</i> L. (Hemiptera: Aphididae) on canola and implications for remedial action	Matthew Krosch: In the footsteps of Wallace: the biogeography of the Breadfruit fruit fly, <i>Bactrocera umbrosa</i> , across the Malay Archipelago
11:15 -11:30	Kym Perry *: Colonisation of canola by diamondback moth, <i>Plutella xylostella</i> , in southern Australia: where are they coming from?	Sandra Schachat *: Wing pattern evolution in jaw moths (Lepidoptera: Micropterigidae)

11:30 - 11:45	Cheng Zuan *: The fitness cost of bifenthrin resistance of the redlegged earth mite, <i>Halotydeus destructor</i> .	Bryan Lessard: Soldier fly taxonomy is a battlefield.
11:45- 12:00	David Perovic: Ecological symptoms of broad-acre landscapes and implications for biodiversity and biocontrol.	Stephen Seaton *: Emergence of a native <i>Coptocercus</i> species in the jarrah ( <i>Eucalyptus marginata</i> ) forest of Western Australia subject to drought
12:00- 12:45	<b>Lunch</b> (included in registration)	
12:45 -13:15	<b>Keynote: Ary Hoffman</b> Aedes control: the future is now! Chair: Simon Tierney	Kuranda Ballroom
	<b>Session 10A Symposium Exotic Mosquitoes</b> Chair: Scott Ritchie	
13:15-13:30	Angus Sly: Probing our borders: Exotic mosquito detections at first ports of entry	
13:30–13:45	Cameron Webb: Assessing the threats and strategic responses to exotic mosquitoes	
13:45-14:00	Scott Ritchie: A brief history of traps: How to detect exotic mosquito borne viruses without going mad	
	Nigel Beebe: Establishing a population genetics toolbox and regional spatial database to facilitate indenifying the incursion origin of the dengue mosquito <i>Aedes aegypti</i> and the Asian tiger <i>Ae. albopictus</i> .	
14:15-14:30	Jana Batovska: DNA barcoding identification of mosquitoes using traditional and next-generation sequencing techniques	
14:30-14:50	Panel discussion	
14:50–15:30	<b>Phil Carne Prize presentations</b> Francesca van den Berg *: When hot rocks get hotter: behavior and acclimatization mitigate exposure to extreme temperatures in a spider  Nathan W Burke *: Sticking it to the man: Does sexual conflict maintain facultative parthenogenesis in the spiny leaf stick insect, <i>Extatosoma tiaratum</i> ?  <b>Student Awards / Closing remarks</b>	

## POSTER PRESENTATIONS - AES 2015

1	Effect of raspberry ketone supplements on mating performance of Queensland fruit fly, <i>Bactrocera tryoni</i>	Humayra Akter
2	First occurrence of the <i>Monomorium setuliferum</i> species group (Hymenoptera: Formicidae) from the Arabian Peninsula, with description of a new species	Abdulrahman Aldawood
3	Molecular species identification in biosecurity: a case study of an <i>Aedes aegypti</i> interception in Melbourne, Australia	Jana Batovska
4	Syco-killers: lethal mate competition in fighting fig wasps	James Cook
5	One step ahead: parasitoids disperse farther and form larger populations than their fig wasp hosts	Timothy Sutton * - presented by James Cook
6	Honey bee nutritional requirements and foraging behaviours change when infected with the gut parasite <i>Nosema ceranae</i>	Jade Ferguson *
7	Expecting the Unexpected – the tale of <i>Cryptolestes cornutus</i> (Coleoptera:Laemophloeidae)	Luke Halling
8	Molecular and morphological variation between a commonly widespread and a newly described <i>Plutella</i> species in Australia.	Tharanga Kariyawasam *
9	Susceptibility of the silverleaf whitefly parasitoid <i>eretmocerus hayati</i> to insecticides used in cotton.	Stephanie Kramer
10	Land use influences mosquito communities and disease risk on remote tropical islands: a case study using a novel sampling technique	Dagmar Meyer Steiger *
11	The brown marmorated stink bug, <i>Halyomorpha halys</i> (Heteroptera: Pentatomidae); diagnostic features and similar Australian species.	Graham Teakle
12	An epiphytic ant-plant and the structure of arboreal ant communities	Trevor Volp *