






**Combined Australian Entomological Society / New Zealand Entomological Society Conference
Sunday 27 – Wednesday 30 November 2016 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



Time	Sunday 27 November
09:30 – 15:30	Editorial Board Meeting
12:00 – 16:30	Data auditing and cleaning on the command line for entomological (and other) datasets (Melbourne Museum)
From 16:00	Registration in the Skyline Lounge
17:00-19:00	Welcome reception (Pool deck Level 4) Proudly sponsored by La Trobe University 

Time	Monday 28 November		
from 08:00	Registration		
08:40 – 08:45	<i>Welcome and Housekeeping</i> - Phil Weinstein and Linda Semeraro		Skyline Room
08:45 – 09:00	Opening address: Dr Gabrielle Vivian-Smith Chair: Phil Weinstein		
09:00 – 09:45	Keynote: Prof Mark Elgar: The evolutionary significance of insect antennae: natural selection of design solutions		
09:45 – 10:30	Keynote: Prof Juha-Pekka Salminen: Distribution of polyphenol-based oxidative and protein-active defenses in the plant kingdom Proudly sponsored by the Australian Entomological Society 		
10:30 – 11:00	Morning Tea		
	Session 1A: Role of phytochemistry in insect nutrition Chair: Martin Steinbauer Horizon Room	Session 1B: Taxonomy & Collections Chair: Mali Malipatil Vista Room	Session 1C: Social insects: challenges, economic opportunities & behavioural insights Chair: Ros Gloag Panorama Room
11:00 – 11:15	11:00 – 11:30 Invited Speaker Dr Clare Casteel: The role of insect-associated microbes in altering host plant defences	11:00 – 11:30 Invited Speaker Dr David Yeates: Biological Collections: Critical Research Infrastructure for Biodiversity and Biosecurity	Rebecca Dew (Student): Casteless to eusocial: How ecology has driven social behaviour in the Australian bee genus <i>Exoneurella</i> (Apidae: Xylocopinae)
11:15 – 11:30			Tim Heard: Biological research in support of stingless beekeeping in Australia

11:30 - 11:45	Olivia Reynolds: Characterisation of larval tephritid gut microbiota: towards understanding sterile fly fitness and performance	John Marris: Faulty thoughts: managing entomology collections through the 2010/11 Canterbury earthquakes	Bernie Wittwer (Student): Aggression in <i>Tetragonula carbonaria</i> (Apidae, Meliponini): influences of task allocation, antennal condition and social context
11:45 -12:00	Isabel Valenzuela: <i>Acizzia solanicola</i> (Hemiptera: Psyllidae) probing behaviour on two <i>Solanum</i> spp. and implications for possible pathogen spread	Robert Mesibov: Aggregated insect data: fit for use?	Boris Yagound: Do worker subfamilies specialise in alternative reproductive strategies in the honey bee (<i>Apis mellifera</i>)?
12:00 -12:15	Karen Marsh: Pro-oxidant phenolics do not defend <i>Eucalyptus</i> foliage against <i>Paropsis atomaria</i> larvae	Ken Walker: Is citizen science the new force of specimen data collection?	Guiling Ding (Student): Extreme polyandry aids the establishment of invasive populations of the honey bee, <i>Apis cerana</i>
12:15 - 12:30	Martin Steinbauer: Feeding on <i>Eucalyptus</i> by senescence-inducing <i>Cardiaspina</i> (Hemiptera: Psylloidea) triggers unique physiological cascades with mixed outcomes for nymphs	12:15 – 12:20 Shaun O'Sullivan: Use of citizen science to enhance public perceptions of insect value to ecosystems and to gather biodiversity information (Rapid fire talk)	Nicholas Smith (Student): Genomic analysis of the clonal Cape honey bee
12:30 - 13:15 Lunch (included in registration)			
	Session 2A: Role of phytochemistry in insect nutrition Chair: Martin Steinbauer Horizon Room	Session 2B: Taxonomy & Collections Chair: Mark Blacket Vista Room	Session 2C: Social insects: challenges, economic opportunities & behavioural insights Chair: Emily Remnant Panorama Room
13:15-13:30	Invited Speaker Prof Rosy Isaias: Functional compartments of nutrients and phenolics in <i>Leptocybe invasa</i> galls on <i>Eucalyptus</i> 	Bryan Lessard: The first molecular phylogeny of Australian soldier flies using anchored hybrid enrichment	Rosalyn Gloag: Worker's sons rescue genetic diversity at the sex locus following a founder event in honey bees
13:30-13:45		Xuankun Li (Student): Preliminary attempts to establish the generic phylogeny of the Australian bee fly tribe Bombyliini (Diptera, Bombyliidae, Bombyliinae) based on morphological characters	Ben Oldroyd: Anomalies in embryogenesis in a thelytokous honey bee (<i>Apis mellifera capensis</i>) result in viable, diploid, female mosaic offspring with two fathers
13:45 -14:00	Beryn Otieno (Student): Resistance of subspecies and genotypes of <i>Eucalyptus camaldulensis</i> against the leaf galling wasp <i>Leptocybe invasa</i> (Hymenoptera: Eulophidae)	David Gopurenko: Integrative taxonomic assessment of the Australasian midge species <i>Culicoides bundyensis</i> (Diptera: Ceratopogonidae)	Nadine Chapman: Applications of genetic testing of honeybees

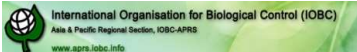
14:00 -14:15	Casey Hall: The effect of interspecific differences in host plant chemistry on a galling insect and its parasitoids	Mark Blacket: Nuclear mitochondrial pseudogenes (numts) & molecular identification of fruit flies (Diptera: Tephritidae)	Emily Remnant: Discovering new RNA viruses in honey bees
14:15 -14:30	Fiona Clissold: Plant quality for herbivores is more than just chemistry: locusts can harness the sun to alter nutritional outcomes	Yen-Po (Paul) Lin : Cryptic diversity in <i>Cryptes</i>	Madeleine Beekman: <i>Varroa</i> , Deformed Wing Virus and virulence – using a naïve host to study the evolution of virulence of RNA viruses
14:30 -14:45	Syed Rizvi (Student) Life-history performance and development of <i>Epiphyas postvittana</i> (Lepidoptera: Tortricidae) on different varieties of <i>Vitis vinifera</i> (Vitales: Vitaceae)	Muhammad Naseem (Student): Genetic diversity of aphids in Pakistan with global comparison as virus-vector	Nathan Lo: Evolution of mound building in Australian termites
14:45 – 15:00	Jerry Nboyine (Student): Detecting ingested plant DNA in faeces of a generalist insect pest: implications for management	Francesco Martoni (Student): The first phylogenetic study of the New Zealand psyllids (Hemiptera: Psylloidea) reveals some interesting host evolutionary relationships	14:45 – 14:50 John Fasi: Ant- hemiptera interactions: <i>Wasmmania auropunctata</i> and <i>Aphis gossypii</i> on taro in Solomon Islands (Rapid Fire presentation) 14:50 – 14:55 Simon Robson: Microclimate regulation in arboreal ants: nest conditions in <i>Oecophylla smaragdina</i> (Formicidae) reflect both ants and nest attributes (Rapid Fire presentation)
15:00 - 15:30 Afternoon Tea			
	Session 3A: Ecosystem Services Chair: Geoff Gurr Horizon Room	Session 3B: Taxonomy & Collections Chair: Ken Walker Vista Room	Session 3C: Social insects: challenges, economic opportunities & behavioural insights Chair: Nathan Lo Panorama Room
15:30-15:45	15:30 – 16:00 Invited Speaker: Dr Jacqueline Beggs: Impact of farm management on native solitary bees	Perry Beasley-Hall (Student): A relic within a relic: phylogenetics and biogeography of Australian cave crickets	Chris Reid: Social structures; new insights into the self-assembled architectures built by (and of) ants
15:45-16:00		Emily Koot (Student): Phylogenomics of New Zealand's Alpine Grasshoppers	James Buxton (Student): The function of pilosity and sculpturing in ants: an experimental and cross-species approach to understanding trait-environment interactions

16:00-16:15	Joshua Grubb (Student): Tolerance and its limits: How physiology and microclimate affect post-fire detritivore distributions	Syakkani Syaukani: A record of <i>Longipeditermes kistneri</i> Ahmad and Akhtar (1985) (Isoptera, Termitidae, Nasutitermitinae) from Sumatra, Indonesia	Megha Majoe (Student): Beating the heat: How do Australian meat ant (<i>Iridomyrmex purpureus</i>) workers performing different tasks deal with temperature and food availability?
16:15-16:30	Chinnappan Gunasekaran: Effect of climate change on terrestrial insects of Western Ghats , Tamil Nadu, India	Stephen Goldson: Keeping pests on a short leash: Changing biological control in New Zealand's grassland ecosystems	Grace Beena Paul: <i>Myrmica rubra</i> as 'ecosystem engineers' and predators, anthills as hotspots of nutrients
16:30-16:45	John Early: Seaweed, kelp flies, parasitic wasps and global warming		Eliza Middleton: Temporal and spatial dynamics of trail clearing in the Australian meat ant (<i>Iridomyrmex purpureus</i>)
16:45 – 17:00	Trace Akankunda (Student): Genetic adaptations that maintain polylectic behaviour in <i>Lasioglossum (Chilalictus)</i> - furrow bees		Anna Probert (Student): Predicting risk and measuring impact of exotic ants in native New Zealand ecosystems
17:00 - 18:00	Poster presentations in the Skyline Lounge (nibbles & drinks will be served)		
	<i>Student Dinner and Trivia evening to be held at Queens College commencing at 18:30</i>		
	<i>Free evening – own arrangements</i>		



Time	Tuesday 29 November		
08:30	Registration desk open		
08:40-08:45	Housekeeping		Skyline Room
08:45 - 09:15	Invited Speaker: Dr Don Sands: Issues facing insect conservation in Australia – now and into the future Chair: Tim New		
09:15- 09:30	Maarten van Helden: Help the Russians are here!		
09:30 -09:45	James Haw: Wasp in disguise: arrival of the European Paper Wasp, <i>Polistes dominula</i> , in New Zealand		
09:45 -10:00	Linda Semeraro: First record of the Giant Pine Scale, <i>Marchalina hellenica</i> (Gennadius) (Marchalinidae: Coccoidea) in Australia.		
10:00 - 10:15	Scott Charlton (presented by Bernie Dominiak): When near enough is good enough - using statistical analysis to determine 'eradication'.		
10:15 -10:30	Robert Hoare: Claws Out: a small New Zealand tragedy, starring the Comma-mark Cutworm Moth (Lepidoptera: Noctuidae: <i>Proteuxoa comma</i>)		
10:30-11:00	Morning Tea – proudly sponsored by The University of Melbourne		

	Session 5A: Taxonomy, systematics & reference collections Chair: John Marris Horizon Room	Session 5B: Invertebrate conservation & invasive species Chair: Gary Taylor Vista Room	Session 5C: General contributed papers Chair: Ary Hoffmann Panorama Room
11:00-11:15	Andrew Austin: Synopsis of the Australian parasitic hymenopteran fauna – a window into the evolution of a megadiverse insect group	Alan Flynn: Beetle <i>Harmonia axyridis</i> in New Zealand	Geoff Gurr: Developing improved crop protection options in support of intensification of sweet potato production in Papua New Guinea
11:15-11:30	Juanita Rodriguez: Around the world in ten million years: historical biogeography of the widespread genus <i>Ceropales</i> (Hymenoptera: Pompilidae)	Chantel Pietila (Student): Using species distribution models to predict potential overwintering sites and the annual distribution of the Queensland fruit fly, <i>Bactrocera tryoni</i>	Trevor Volp: Interactions between the ant-plant <i>Myrmecodia beccarii</i> and its native and invasive ant inhabitants

11:30-11:45	Rowan Emberson: Implications of a revision of the New Zealand Licinini (Coleoptera: Carabidae) for other southwest Pacific faunas (Being presented by John Marris)	Tara Murray: Progress towards conservation management of the nationally endangered robust grasshopper in New Zealand braided river systems	Mike Bowie: Mitigation measures: using invertebrates to evaluate restoration success in two New Zealand habitats
11:45-12:00	Kam Cheng Yeong (Student): The Leaf Beetles (Coleoptera: Chrysomelidae) of Sabah, Borneo	Bernie Dominiak: Climate modelling predicts a potential shift in distribution and abundance of Queensland fruit fly <i>Bactrocera tryoni</i> in Australia	Kevin Powell: Endemic strains of the biosecurity pest grape phylloxera: How can we effectively manage them?
12:00 - 12:15	Mengjie Jin (Student): Australian Cerambycidae barcoding database building based on Illumina Miseq platform	Nicola Sullivan: Mealybug mass trapping in South Australia: Gotta catch 'em all!	Michael Nash: Changes to farm management create a new niche for cabbage centre grub
12:15 - 12:30	Yu-lingzi Zhou: Spiralling endophallus: a novel modification in male rove beetles with a decreased "penis"(Coleoptera: Staphylinidae)	Florian Schwarzmüller: Fighting Queensland Fruit Fly <i>in-silico</i> : Spatial simulation modelling of an insect pest to inform management strategies	Matt Krosch: Evolution of pollution tolerance in Australian <i>Cricotopus</i> midges (Diptera: Chironomidae)
12:30 – 13:15	Lunch (included in registration)	AES Board Meeting	
	Session 6A: Taxonomy, systematics & reference collections Chair: Cor Vink Horizon Room	Session 6B: Invertebrate conservation & invasive species Chair: Bernie Dominiak Vista Room	Session 6C: General contributed papers Chair: David Williams Panorama Room
13:15-13:30	Ethan Briggs (Student): The systematics of tarantulas from the Top End (Northern Territory)	Michael Klochmann: Stress tolerance in early life stages determines vulnerability to climate change	Mubashar Iqbal: Evaluation of resistance level in citrus psylla against synthetic pyrethroids
13:30-13:45	Matthew Shaw: Uncovering convergences in the mite superfamilies Dermanyssoidea and Eviphidoidea	Olivia Vergara (Student): Invertebrates and their response to mammal exclusion. A study at ZEALANDIA, a fenced reserve in New Zealand	Muhammad Asrar: Determination of biophysical and biochemical parameters imparting antixenosis and antibiosis based resistance in some bt and non-bt cotton germplasms against jassid and whitefly

13:45 -14:00	Ahmad Kamran Khan (Student): Biodiversity of soil inhabiting mesostigamata (<i>arachnida: acari</i>) from different agro-ecological zones of Punjab, Pakistan	Xuang Cheng (Student): Host performance of pests depends on plant types encountered in the previous generation: the case of the polyphagous redlegged earth mite pest, <i>Halotydeus destructor</i>	Philip Weinstein: Bioluminescence in the ghost fungus <i>Omphalotus nidiformis</i> does not attract potential spore dispersing insects
14:00-14:15	Cuong Huynh: Is <i>Phryssonotus novaehollandiae</i> (Synxenidae, Polyxenida, Diplopoda) a single species or more than one cryptic species in Australia?	Rifilwe Modiba (Student): The impact of riparian alien plant removal on aquatic invertebrate communities in the upper reaches of Luvuvhu river catchment, Limpopo province	Leilani Walker (Student): The role of exaggerated chelicerae in mate defence in New Zealand sheet-web spiders (<i>Cambridgea foliata</i>)
14:15 - 14:30	John Early: William Colenso's giant weta Hemideina	Sean Moore (Student): The ant community structure of the main habitats at Yookamurra sanctuary in semi-arid South Australia, with a focus on seed-harvester ant species	Umar Lubanga: Convenience polyandry and the functional significance of lone and reciprocal substrate-borne vibrations to Drooping she-oak psyllids (<i>Acanthocnema dobsoni</i>)
14:30 -14:45	14:30 – 14:35 James Lumbers: Towards the systematic revision of the Australian bristle fly genus <i>Rutilia</i> Robineau-Desvoidy, 1830 (Diptera: Tachinidae) (Rapid Fire presentation)	Luis Mata: The Little Things that Run the City – Insect ecology, biodiversity and conservation in the City of Melbourne	Bonnie Humphrey: Determination of the habituation characteristics of New Zealand jumping spiders, <i>Trite planiceps</i>
14:45 -15:00		Siobhan de Little: Understanding resistance in Australian green peach aphid populations, and the potential for invasion of foreign biotypes	Humayra Akter: Effect of raspberry ketone on remating behaviour of Q-fly
15:00-15:30 Afternoon Tea			
	Session 7A: Biological control for agriculture & environment Chair: Bill Palmer Horizon Room 	Session 7B: Invertebrate conservation & invasive species Chair: Isabel Valenzuela Vista Room	Session 7C: General contributed papers Chair: Leilani Walker Panorama Room

15:30-15:45	Mrittunjai Srivastava: Potential classical biological control of Cactus Moth, <i>Cactoblastis cactorum</i> Berg (Lepidoptera: Pyralidae) with koinobiont larval parasitoid <i>Apanteles opuntiarum</i> Martínez & Berta (Hymenoptera: Braconidae) from Argentina	Don Sands: Novel perspectives for conservation of the Australian fritillary butterfly (<i>Argynnis hyperbius inconstans</i> Butler, 1873) (Lepidoptera: Nymphalidae)	Piotr Trebicki: Insect vectors under future climate
15:45-16:00	Greg Lefoe: Progress towards biological control of wandering trad, <i>Tradescantia fluminensis</i> Vell. (Commelinaceae) in Australia using the leaf feeding beetle, <i>Neolema ogloblini</i> (Monrós)	Elisabeth Fung (Student): Did Bumble bees (<i>Bombus terrestris</i>) carry new RNA viruses onto the Australian island of Tasmania? (presented by Katja Hogendoorn)	Perry Bennion: The ecology and distribution of an Australian ant-plant symbiosis and its other associate
16:00-16:15	Raelene Kwong: Biological control of <i>Sagittaria platyphylla</i> – agent selection and risk assessment	Melinda Moir: Concordance in evolutionary history of threatened plant and insect populations warrant unified conservation management approaches	Roger Kitching: Insect herbivory in a Fragmented Landscape: plants, grasshoppers and predators in Bornean rainforests and palm plantations
16:15 -16:30	Greg Lefoe: Biological control of silverleaf nightshade <i>Solanum elaeagnifolium</i> in Australia: a new hope?	Michael Braby: Patterns of butterfly biodiversity in Australia	Anne Wignall: The evolution of flexible predatory strategies in jumping spiders
16:30 - 16:35	John Weiss: Safeguarding Australian horticulture from long distance dispersed plant pests (Rapid Fire Talk)	Stefanie Oberprieler (Student): Conserving the little rulers of our world: incorporating terrestrial invertebrates in biodiversity monitoring (Rapid Fire Talk)	Cindy Bessey: Masses of the marine insect <i>Pontomyia oceana</i> at Ningaloo Reef, Western Australia [Rapid Fire Talk]
16:45 - 17:45	<i>Australian Entomological Society 47th Annual General Meeting in the Vista Room</i>		
18:00 - 22:00	Pre-dinner drinks start at 18:00 – Level 4 – Skyline Lounge CONFERENCE DINNER		

Time	Wednesday 30 November		
08:00	Registration desk open		
08:30-08:35	Housekeeping	Skyline Room	
08:35 - 08:55	Isobel Ronai (Student): Anarchy in the honey bee colony: the genetic basis of worker sterility (Phil Carne Prize finalist) Chair: Phil Weinstein		
08:55 - 09:15	Michaela Plein (Student): Identify flower-visiting insects at risk of coextinction under imperfect detection: Model evaluation and case study (Phil Carne Prize finalist)		
09:15 - 10:00	Keynote: Dr Barbara Barratt: Improving uptake of biological control globally Chair: Bill Palmer	 International Organisation for Biological Control (IOBC) Asia & Pacific Regional Section, IOBC-APRS www.aprs.iobc.info	
10:00 - 10:30	Invited Speaker: Dr Steve Naranjo: Long-term ecological impacts of a biocontrol program against <i>Bemisia tabaci</i> in the Western USA		
10:30-11:00	Morning Tea proudly sponsored by Landcare Research New Zealand		
	Session 9A: Biological control for agriculture & environment Chair: Sarina Macfadyen Horizon Room  International Organisation for Biological Control (IOBC) Asia & Pacific Regional Section, IOBC-APRS www.aprs.iobc.info	Session 9B: General contributed papers Chair: Linda Semeraro Vista Room	Session 9C: General contributed papers Chair: Piotr Trebicki Panorama Room
11:00 -11:15	Geoff Baker: Sourcing effective biological control agents of conical snails, <i>Cochlicella acuta</i> , in Europe for release in southern Australia	Jessica Henneken: The potential role of web-based putrescine in prey attraction	Paola Magni: Entomotoxicology: development and validation of GC-MS methods for nicotine, methamphetamine, ketamine and endosulfan detection and their effects on blowfly survival and growth rates
11:15 -11:30	Tao Wang (Student): Effects of relative body-size on the host stage choices of parasitoids: Developmental temperature affects interactions between <i>Eretmocerus warrae</i> and its host	Josh Douglas: Millipedes and pillbugs: pests or beneficials?	Sasha Voss: Forensic applications of hyperspectral imaging: aging blowfly pupae
11:30 -11:45	Jian-Feng Liu (Student): Population growth of <i>Amblydromalus limonicus</i> (Acari: Phytoseiidae): effects of habitat complexity and diets	James Woodman: Effects of salinity on oviposition, embryonic development and survival in the Australian plague locust	Ian Dadour: Larval density and cooling: does the Forensic Entomologist need to consider this relationship when determining a post-mortem interval?

11:45 -12:00	Gonzalo Avila (Student): Laboratory odour-specificity testing in the assessment of potential non-target risk for <i>Cotesia urabae</i>	Caitlyn Perry: Shedding light: a comparison of moulting hormone synthesis genes across Arthropoda	Jumnongjit Phasuk: Nocturnal flight activity of phlebotomine sand flies caught by different lights in traps in Satun province, Thailand
12:00 - 12:15	Ravi Parkash Maurya: Evaluation of different diets for the mass rearing of predatory bug, <i>Eocanthecona furcellata</i> under laboratory condition	Christopher Freelance: Illuminating the effects of artificial light at night on antennal investment in the Australian black field cricket	Lucy Mclay: Impacts of ecologically relevant levels of artificial light at night on life history traits in the fruit fly, <i>Drosophila melanogaster</i>
12:15 - 13:15	Lunch (included in registration)		
13:15-13:30	Julio Medal: Invasive stinkbugs in the USA: <i>Halyomorpha halys</i> , <i>Halyomorpha halys</i> , <i>Megacopta cribraria</i> , <i>Bagrada hilaris</i> Chair: Luke Barrett	Skyline Room	
13:30–13:45	Cor Vink: The invasive spider <i>Latrodectus hasseltii</i> - another unwanted Australian in New Zealand		
13:45-14:00	Maryam Yazdani: Mutual interference in <i>Dolichogenidea tasmanica</i> (Cameron) (Hymenoptera: Braconidae) when foraging for patchily distributed light brown apple moth		
14:00 - 14:15	Mofakhar Hossain: <i>Mastrus ridens</i> (Hymenoptera: Ichneumonidae) is a promising biological control agent for codling moth in Australia.		
14:15- 14:45	Mackerras Medal Presentation Chair: Phil Weinstein		
14:45 –15:15	Student Awards / CHAEC prize / Illustration and Photographic competition prizes		
15:15 - 15:20	2017 Conference announcement		
15:20 - 15:30	Closing remarks		
15:30–16:00	Afternoon Tea		