

International Chemical Ecology Conference 2013

19 – 23 August 2013

Melbourne Convention & Exhibition Centre Victoria Australia **www.icec2013.com.au**



International Society of Chemical Ecology, Inc.



Asia-Pacific Association of Chemical Ecologists

Conference Program and Abstracts Handbook

Editors: A. L. IL'ichev, R. T. Cardé, D. G. Williams, M. P. Zalucki

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Local Organising Committee Alex IL'ichev Chair

David Williams German Spangenberg

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Conference Office

WALDRONSMITH Management

119 Buckhurst Street South Melbourne VIC 3205 Australia T +61 3 9645 6311 F +61 3 9645 6322 E icec2013@wsm.com.au www.icec2013.com.au

Welcome from the Chair

Our ICEC 2013 academic program showcases the diversity of Chemical Ecology research including plants, microorganisms, invertebrates, vertebrates, soil and aquatic organisms, as well as examples of chemical interactions between all trophic levels. On behalf of the Organising Committee, it is our great pleasure to extend a warm welcome to all Chemical Ecologists participating in the International Chemical Ecology Conference (ICEC2013) on 19-23 August 2013 at the Melbourne Convention & Exhibition Centre (MCEC), Victoria, Australia and hosted by the Department of Environment and Primary Industries (DEPI) Victoria, Biosciences Research Division. This first joint meeting of the Asia-Pacific Association of Chemical Ecologists (7-th APACE biannual conference) and the International Society of Chemical Ecology (29-th ISCE annual conference), extended invitations to all Chemical Ecologists around the globe, and achieved a long-term aspiration of APACE and ISCE Founders and Executives.

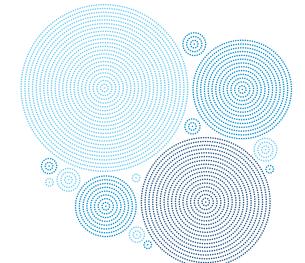
Our ICEC 2013 academic program showcases the diversity of Chemical Ecology research including plants, microorganisms, invertebrates, vertebrates, soil and aquatic organisms, as well as examples of chemical interactions between all trophic levels. More than 460 abstract submissions for oral and poster presentation were received via the on-line ICEC 2013 system. The symposium organisers selected 240 submissions for oral presentations in 2 full day and 15 half-day symposiums, and the remaining submissions were accepted as poster presentations.

Our conference venue MCEC, the world's first "Six Green Star" environmentally rated centre, is integrated with Hilton South Wharf Hotel nestled on the Yarra River close to many hotels, cafes, shops and the Art Centre. There is no shortage of things to do in Melbourne's city centre. You can wander through art galleries, tour historic sites along the 'Golden Mile Heritage Trail', experience the living Australian Forest and indigenous display at the Melbourne Museum or maybe take a leisurely cruise along the Yarra River past Southgate, the Docklands and the MCEC. Melbourne is recognised as the "World's Most Liveable City" and considered the Food and Shopping Capital of Australia.

Organisers of ICEC 2013 are ready to welcome more than 400 delegates from 42 countries attending our ICEC 2013 in Melbourne and believe that this first joint APACE and ISCE conference will be a great success and establish a tradition of such joint conferences every 4 years.



Alex IL'ICHEV Chair of the ICEC2013 Organising Committee



WELCOME FROM THE ISCE PRESIDENT

Dear Chemical Ecologists,

Welcome to Melbourne at the first joint meeting of the Asia-Pacific Association of Chemical Ecologists (APACE) and the International Society of Chemical Ecology (ISCE). The meetings of each society have always offered unparalleled opportunities to interact with colleagues from around the globe and have provided forums to learn of the latest discoveries in chemical ecology. This first joint conference is ideal for discussing the direction of future work and fostering new collaborations. This gathering also will be especially valuable to graduate students and postdocs, the future of our two societies. because the size of our conference ensures that everyone can network.

We have a stimulating scientific program and Melbourne and its environs provides an exciting venue. For those of you who have not yet had an opportunity to visit and explore Australia, it is a most hospitable and rewarding destination. We hope our meeting in Melbourne will be an unforgettable experience for you.

Sincerely,



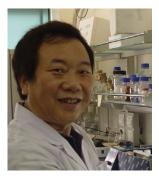
Ring Cardé President ISCE

WELCOME FROM THE APACE PRESIDENT

Dear APACE Friends and Members

It gives me great pleasure to welcome you to our 7th Asia-Pacific Association of Chemical Ecologists (APACE) Conference which is being held jointly with International Society of Chemical Ecology (ISCE) in Melbourne, Australia. This conference makes the dream of many members from both societies to have a joint meeting become true. This joint conference (ICEC 2013) is an ideal opportunity to network with our international colleagues, graduate and postgraduate students. Our local organisers, Dr. Alex ll'ichev and his colleagues will be doing their best to welcome all of you. We are glad that you were able to arrange your schedule to join us in Melbourne.

Thank you.



Yongping Huang President APACE

CONFERENCE SUPPORTERS

The ICEC2013 Local Organising Committee would like to thank the following Conference Supporters:

Conference Host:

Department of Environment and Primary Industries



Conference Co-Hosts:





Supporters:





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Symposia Sponsor:



Exhibitors:







Conference Host City

There is no shortage of things to do in Melbourne's city centre. You can wander through art galleries, tour historic sites along the 'Golden Mile Heritage Trail', experience the living Australian Forest and indigenous display at the Melbourne Museum or maybe take a leisurely cruise along the Yarra River past Southgate, the Docklands and the MCEC. Visitors to Melbourne are delighted and amazed by the sheer breadth of unique sightseeing and entertainment experiences that are available within a short stroll, tram, train or taxi ride of the Melbourne Convention & Exhibition Centre (MCEC) and the city's 23,000 hotel rooms. Whether you're taking a short break between sessions or after a hard day's work, or have arranged a few days of personal time, you are just minutes away from sandy beaches or any one of the beautiful parks and gardens sprinkled throughout the city; and just hours away from wine country, old gold mining towns, snowfields and the world-famous surf coast.

There is no shortage of things to do in Melbourne's city centre. You can wander through art galleries, tour historic sites along the 'Golden Mile Heritage Trail', experience the living Australian Forest and indigenous display at the Melbourne Museum or maybe take a leisurely cruise along the Yarra River past Southgate, the Docklands and the MCEC. Recognised as the 'food capital' of Australia, Melbourne is also renowned for its fabulous shopping. Melbourne attractions include designer stores in the city; the exclusive boutiques of Chapel Street; and bargain-hunting in the buzzing atmosphere of the Queen Victoria Market. And when wandering in the city, peer down almost any laneway and catch a glimpse of the 'secret Melbourne' – a place of edgy art, hidden bars and cutting-edge design.





Conference Venue

Melbourne Convention & Exhibition Centre

1 Convention Centre Place South Wharf VIC 3006 Australia T +61 3 9235 8000 www.mcec.com.au

REGISTRATION DESK AND INFORMATION

The Registration and Information Desk is located at the Melbourne Convention & Exhibition Centre and will be operational during the following hours:

Monday 19 August 2013

0800–1800 hrs Main Foyer on Ground Floor outside plenary 3

Tuesday 20 August 2013

0800–1730 hrs Foyer on Level 2 outside current rooms

Wednesday 21 August 2013 0800–1730 hrs Foyer on Level 2 outside current rooms

Thursday 22 August 2013 0800–1730 hrs Foyer on Level 2 outside current rooms



SPEAKER PREPARATION ROOM

The Speaker Preparation Room is in Meeting Room 214 of the Melbourne Convention & Exhibition Centre from Monday – Thursday.

The Speaker Preparation Room will be operational during the following hours:

Monday 19 August 2013 0800–1630 hrs

Tuesday 20 August 2013 0800–1730 hrs

Wednesday 21 August 2013 0800-1730 hrs

Thursday 22 August 2013 0800–1630 hrs

ACCOMMODATION

Hilton South Wharf 2 Convention Centre Place South Wharf VIC 3006

Crown Metropol 8 Whiteman Street Southbank VIC 3006

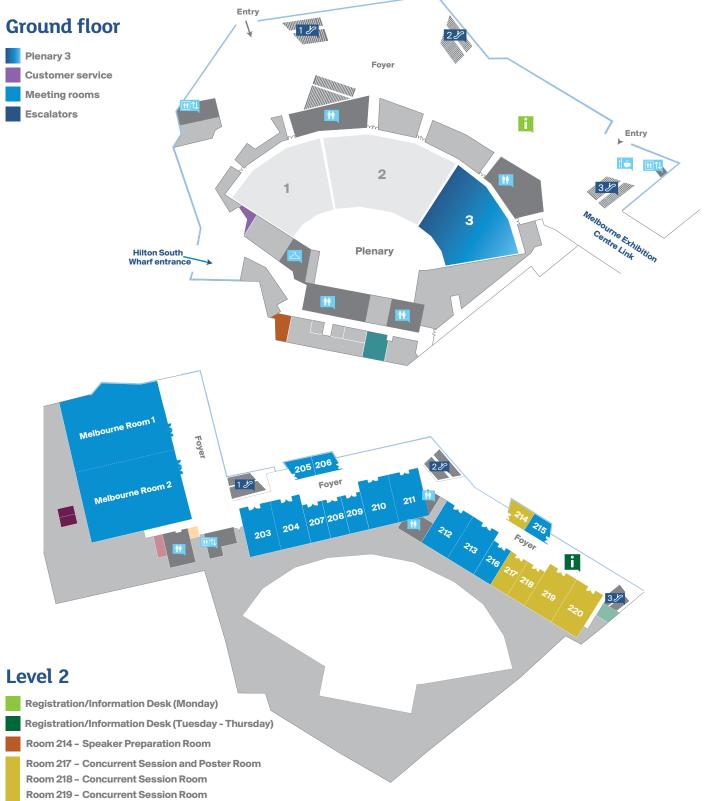
Crown Promenade 8 Whiteman Street Southbank VIC 3006

Crowne Plaza 1–5 Spencer Street Melbourne VIC 3000

Pensione Hotel Melbourne 16 Spencer Street Melbourne VIC 3000

Melbourne Short Stay Apartments 187 City Road Southbank VIC 3006

Travelodge Southbank 9 Riverside Quay Southbank VIC 3006



Room 220 - Concurrent Session Room

Social Program

WELCOME RECEPTION

Monday 19 August 2013

1730-1930 hrs

Melbourne Convention & Exhibition Centre

Main Foyer 3

Begin the Conference with a wonderful evening of networking amongst colleagues. Renew old friendships and make new acquaintances as we welcome you to Melbourne.

Cost: Inclusive for all registration types

Dress: Business Casual

GALA DINNER

Wednesday 21 August 2013

1930-2330 hrs

Showtime

61 South Wharf Promenade South Wharf

Enjoy a fabulous Gala Dinner at Melbourne's perfect riverside venue. The unique location of Showtime Events Centre affords its guests stunning views of the Yarra River, the associated docks and the City Skyline.

Cost: Tickets to the Gala Dinner were to be pre-purchased throughout the registration process. There will be no ticket sales onsite.

Dress: After Five

TOURS

Friday 23 August 2013

Field Day Tour to Yarra Valley Agriculture Area 0900-1600 hrs

Melbourne Convention & Exhibition Centre, pick up at Convention Centre Place, outside the MCEC main entrance

This full day tour will depart and return to the Melbourne Convention & Exhibition Centre. You'll travel to the Healesville Sanctuary which is a zoo specialising in native Australian animals. It is located at Healesville in Yarra Valley Agricultural area of rural Victoria, Australia, and has a history of breeding native animals.

You'll attend the guided tour at zoo and after tour will have the time to get yourself some tasty lunch at one of the three cafes available at the zoo.

Cost: The cost of the transport for this tour is complimentary for delegates that pre booked the tour as part of the registration process. Participants will need to pay for their own entrance tickets (at discounted for ICEC2013 rate) and cover their own cost for lunch and souvenirs.

Dress: Smart Casual with warm jacket and good walking shoes. A light rain coat or umbrella would be advisable.

Note: Tour bookings cannot be made once you are onsite at the Conference. All confirmation of tour attendance needed to be done prior to the Conference.



Friday 23 August 2013

AgriBiosciences Centre at DEPI Bundoora 0900-1230 hrs

Melbourne Convention & Exhibition Centre, pick up at Convention Centre Place, outside the MCEC main entrance

This half day tour will depart and return to the Melbourne Convention & Exhibition Centre. You'll travel to the AgriBiosciences Centre.

AgriBiosciences centre is a \$288 million world-class state-of-art facility for agriculture biosciences research and development. A joint initiative of the Victorian Government, through the Department of Environment and Primary Industries (DEPI) and La Trobe University, brings together world-leading scientists in plant and animal biosciences, biosecurity, bioprotection and soil sciences enabling the following technology platforms: genomics, transcriptomics, proteomics, metabolomics, phenomics, biocontainment, bioinformatics and advance scientific computing.

Cost: The tour is complimentary for delegates that pre booked the tour as part of the registration process.

Dress: Smart Casual

Note: Tour bookings cannot be made once you are onsite at the Conference. All confirmation of tour attendance needed to be done prior to the Conference.



General Information

Banking Facilities - ATMs

ATMs are located adjacent to the Convention Centre entry and on the <u>Exhibition Centre concourse</u>.

Business Centre

A business centre with reception, secretarial support and business equipment for sale and photocopying services is located off the Clarendon Street entrance to the Exhibition Centre. P+613 9235 8448

Car Parking

There are three car parks available at the Melbourne Convention & Exhibition Centre, all open 24 hours, seven days a week.

- Melbourne Convention Centre Entrance off Siddeley Street. Fees start at \$8 per hour. Early-bird and weekend rates are available.
- Melbourne Exhibition Centre.
 Entrance off Normanby Road. Fees start at \$10 per hour up to a maximum of \$40 per day. Early-bird, evening and weekend rates are available.
- South Wharf Retail Car Park Entrance off Normanby Road. Fees start at \$6 per hour. Evening rates are available.

Childcare

Please note no official arrangements have been made for childcare during the Conference. Please check with your hotel as they should be able to assist you with child minding services.

Climate and Dress Code

August is the end of winter and beginning of spring in Melbourne, with daily temperatures ranging from 6-15 degrees Celsius.

Conference: Business Casual Welcome Reception: Business Casual Gala Dinner: After Five

Cloak Room/Luggage Storage

Located off the main Convention Centre foyer, providing storage for delegate's belongings.

Daily Catering

Monday catering will be served in the Main Foyer outside Plenary 3. Tuesday to Thursday catering will be in the foyer space outside of Meeting Rooms 217, 218, 219 and 220.

Disclaimer

ICEC2013 including the Conference Organisers will not accept liability for the damages of any nature sustained by participants or their accompanying persons for loss or damage to their personal property as a result of ICEC 2013 and exhibition or related events.

Emergency Response

In the event of an evacuation, Melbourne Convention & Exhibition Centre staff will act as fire wardens to assist in the movement of patrons to the designated assembly point. The closest evacuation meeting point is located outside the World Trade Centre accessed via the pedestrian bridge outside the Convention Centre exit next to Polly Woodside.

Insurance

Delegates are strongly advised to secure appropriate travel and health insurance. Delegate registration fees do not provide any such insurance coverage. The Organising Committee and the Conference Office accept no responsibility for any loss in this regard.

Internet

The Melbourne Convention & Exhibition Centre offers free Wi-Fi throughout the Centre.

Language

The official language of the Conference is English.

Name Badges and Security

All delegates will receive a name badge upon registration. This badge is the official pass and must be worn to obtain entry to all Conference sessions, including social events and associated activities.

Medical Services

The Melbourne Convention & Exhibition Centre's main first aid room is located off the Convention Centre foyer. A smaller first aid room is located off the Exhibition Centre foyer. Please phone +61 3 9235 8333 for any enquires.

Smoking Policy

Melbourne Convention & Exhibition Centre is a non smoking venue.

Special Requirements

Every effort has been made to cater for all delegates who have specified special dietary requests at the time of registering. Please make yourself known to a venue staff member at catering times and functions in order to obtain your meal. If you did not provide this information at the time of registering, please advise the staff at the Registration and Information Desk immediately. No guarantee can be made to cater for delegates that have not advised dietary requirements in advance.

Time Zone

Melbourne's time zone is UTC/GMT +10 hours.

Useful Telephone Numbers

Melbourne Convention & Exhibition Centre +61 3 9235 8000

Accommodation

Crown Metropol: +613 9292 6211 Hilton South Wharf: +613 9027 2000 Crown Promenade: +613 9292 6688 Crowne Plaza: +613 9648 2777 Travelodge Southbank: +613 8696 9600 Melbourne Short Stay Apartments: +613 8256 7500 Pensione Hotel Melbourne: +613 96213333

Transport Taxis: 133 300

Car Hire

Avis: 13 63 33 Budget: 13 27 27 Europcar: 13 13 90 Hertz: 13 30 39 Thrifty: 1300 367 227

Airlines

Qantas: 13 13 13 Jetstar: 13 15 38 Virgin Blue: 13 67 89 Tiger Airways: +61 3 9335 3033

Speakers

The ISCE Silver Medal is awarded annually to recognise career achievement of scientists who have made outstanding contributions to the discipline of chemical ecology. ISCE Silver Medal Award 2013 Lecture supported by Suterra Co. will be presented by Professor Walter S. Leal (USA) with the title: "Chemical Ecology with a cast of Thousands and Recognition of One".

The APACE Life-Time Achievement Award recognises long-term career achievement and significant contribution to Chemical Ecology research in Asia-Pacific Region. APACE Life-Time Achievement Award 2013 will be presented to APACE co-founders Professor Kyung Saeng Boo (Korea) and Professor Kenji Mori (Japan). APACE Life-Time Achievement Award 2013 Lecture supported by Sumitomo Co. will be presented by Professor Kenji Mori (Japan) with the title: "Semiochemicals-Their Stereochemical Diversity as Revealed by Organic Synthesis".

The ISCE Silverstein-Simeone lecture award is made in honour of the enormous contribution made to the field of Chemical Ecology by Drs. Robert M. (Milt) Silverstein and John B. Simeone, the founding editors of the Journal of Chemical Ecology. ISCE Silverstein-Simeone Award 2013 Lecture supported by Springer Publishing Co. will be presented by Professor Consuelo De Moraes (USA) with the title: "Chemically mediated Interactions Among Plants, Insects, and Pathogens".

AWARD SPEAKERS



Professor Consuelo De Moraes United States of America



Professor Walter S. Leal United States of America



Professor Kenji Mori Japan

PLENARY SPEAKERS



Professor lan Baldwin Germany



Professor William Foley Australia



Professor Roberto Kolter United States of America



Professor Jeremy N. McNeil Canada



Professor Rod Peakall Australia



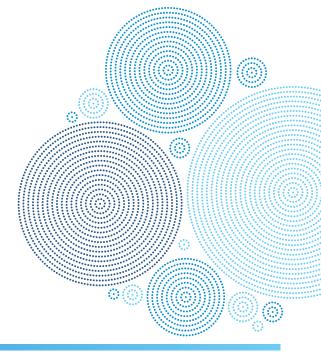
Professor Monika Hilker Germany

Monday 19 August 2013

08.00-18.00	Registration
09.00-10.30	Conference Opening Room: Plenary 3
	Welcome Talk
10.30-11.00	Morning Tea Room: Main Foyer 3
11.00-11.40	ISCE Silver Medal Award 2013 Chemical Ecology with a Cast of Thousands and Recognition of One Professor Walter Leal
11.40-12.20	APACE Life-time Recognition Sumitomo Award Semiochemicals - Their Stereochemical Diversity as Revealed by Organic Synthesis Professor Kenji Mori
12.20-13.00	ISCE Silverstein-Simeone Award Chemically Mediated Interactions Among Plants, Insects, and Pathogens Professor Consuelo De Moraes
13.00-14.00	Lunch Room: Main Foyer 3
14.00-14.30	Plenary1 Room: Plenary3 Koalas and Eucalyptus: The Chemical Ecology of a Specialised Mammal Plant Interaction Professor William Foley
14.30-15.00	Plenary 2 Room: Plenary 3 How a Native Plant Solves Life's Challenges with a Sophisticated Use of Chemistry Professor Ian Baldwin
15.00-15.30	Plenary 3 Room: Plenary 3 Start of Insect Life: Insect Eggs and Their Interactions with Plants Professor Monika Hilker
15.30-16.00	Afternoon Tea Room: Main Foyer 3
16.00-16.30	Plenary 4 Room: Plenary 3 The Chemistry and Evolution of Pollination by Sexual Deception in Australian Orchids Professor Rod Peakall
16.30-17.00	Plenary 5 Room: Plenary 3 The Evolution of Chemical Ecology and Chemical Ecologists Over the Decades Professor Jeremy McNeil
17.00-17.30	Plenary 6 Room: Plenary 3 The Chemical Ecology of Bacterial Development Professor Roberto Kolter
17.30-19.30	Welcome Reception Room: Main Foyer 3

08.00-17.30	Registration					
08.00-17.30	Exhibition	Exhibition				
09.00-10.30			Symposium 3 Topic 5: Chemical Ecology of Pollination	Symposium 4 Topic 15: Applied Chemical Ecology: Newest Research and Development		
Room	218	219	220	217		
Session Chairs	Stefan Schulz (Technische Universitat Braunschweig, Germany) and Ales Svatos (Institute for Chemical Ecology, Germany)	Coral Warr (Monash University, Australia) and Bill Hansson (Max Planck Institute for Chemical Ecology, Germany)	Rod Peakall (Australian National University, Australia), Bjorn Bohman (Australian National University, Australia) and Anna-Karin Borg-Karlson (Royal Institute of Technology, Sweden)	Alex II'ichev (Department of Environment and Primary Industries, Australia) and Jerry Zhu (USDA, USA)		
09.00-09.15	Keynote: Synthetic Approach and Structural Identification of Sigillin, a Complex Polychlorinated Natural Product of Ecological	Keynote: Good and Bad Odors - Correlates of Valence in the Drosophila Olfactory System Bill Hansson	Keynote: Advances in the Electroantennogram Technique for Use in Chemical Ecology Research	Towards Sustainable Pheromone-Based IPM in Horticulture: Future Challenges Alex II'Ichev		
09.15-09.30	Importance from the Snow Flea Stefan Schulz		Thomas Baker	Improving the Efficacy and Economics of Aerosol Emitters for Control of Codling Moth (CM), Cydia Pomonella L. Larry Gut		
09.30-09.45	Identification, Total Synthesis and Biosynthesis of Stylopsal, the Female Sex Pheromone of Stylops Muelleri Ullrich Jahn	Naturally Occurring Olfactory Receptor Variants in Drosophila Coral Warr	The Key to Flower Opening: Jasmonate Signaling and Flower Development in Nicotiana Attenuata Michael Stitz	Active Space and Optimal Trapping Density of Terpinyl Acetate Baited Traps for Monitoring Grapholita Molesta (Busck) (Lepidoptera: Tortricidae) David Williams		
09.45-10.00	Enantioselective Syntheses of Insect Pheromones with Methyl-Branched Skeletons Verified by Chiral HPLC Analyses Tetsu Ando	The Impact of Endosymbiotic Wolbachia on Drosophila Olfaction, Sexual Behavior and Speciation Wolfgang Miller	Carrion Mimicry of the World's Largest Flower, Rafflesia Cantleyi (Rafflesiaceae) Suk-Ling Wee	Pheromone Trap Monitoring for Efficient Integrated Management of Tortricid Moths in Apple Orchards Ylva Hillbur		
10.00-10.15	Euglossa Bees: Identification and Synthesis of Compound Found in Hind-Leg Pouches Erika Wallin	Neuronal Mechanisms of Odor Learning in Drosophila: A Thermogenetically Induced Memory Engram on Kenyon Cells Drives Learned Behaviour André Fiala	Do Pieris Napi Hostplant Flowers Mimic Antiaphrodisiaca to Avoid Egglaying Females? Anna-Karin Borg-Karlson	Mating Disruption of the Carpenter Moth, Cossus Insularis (Staudinger) (Cossid: Lepidoptera) with Synthetic Sex Pheromone in Apple Orchards Kiyoshi Nakamuta		
10.15-10.30	Evolution of Syntheses of the Irregular Terpenoid Pheromones of Mealybugs Jocelyn Millar	Taste Receptors and Food Preferences in Drosophila Anupama Dahanukar	Sex Smells: Flower-Mimicking Fungi Exploiting the Same Host Species are Characterised by Different Odour Blends Michael Rostas	Pheromone Concentration in Orchards Treated with Aerosol Dispensers Satoshi Nojima		
10.30-11.00	Morning Tea Room: Level 2 Foyer		·			

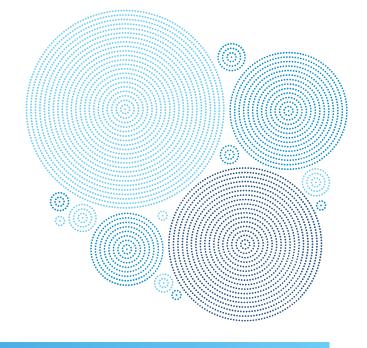
11.00-12.45	Symposium 5 Topic 7: The Chemical Stimulus – Its Analysis and Synthesis	Symposium 6 Topic 11: Insect (Drosophila) Neuroethology	Symposium 7 Topic 5: Chemical Ecology of Pollination	Symposium 8 Topic 15: Applied Chemical Ecology: Newest Research and Development
Room	218	219	220	217
Session Chairs	Stefan Schulz (Technische Universitat Braunschweig, Germany) and Ales Svatos (Institute for Chemical Ecology, Germany)	Coral Warr (Monash University, Australia) and Bill Hansson (Max Planck Institute for Chemical Ecology, Germany)	Rod Peakall (Australian National University, Australia), Bjorn Bohman (Australian National University, Australia) and Anna-Karin Borg-Karlson (Royal Institute of Technology, Sweden)	Alex Il'ichev (Department of Environment and Primary Industries, Australia) and Jerry Zhu (USDA, USA)
11.00-11.15	Laser Assisted Mass Spectrometric Imaging of Plants, Insects, and Bacteria Semiochemicals Ales Svatos	Sugar Aversion: A Newly-Acquired Adaptive Change in Gustatory Receptor Neurons in Multiple Field Populations of the German Cockroach Coby Schal	The Effect of Diesel Exhaust Pollution on the Ability of Honey Bees to Detect and Respond to Floral Volatiles Inka Lusebrink	Patterns of Behavioural Responses in a Generalist and a Specialist: Lessons for Attract-and-Kill Peter Gregg
11.15-11.30	The Use of GC / FTIR as an Important Tool to Identify Semiochemicals Paulo Zarbin	Olfactory Modulation via Blend Detection: Intrasensillar Interactions of Gypsy Moth Pheromone N.Kirk Hillier	Effects of a Plant-Accumulated Pollutant on Pollinator-Plant Interactions John Trumble	Attract-and-Kill Using a Moth Attractant: Potential Role in Resistance Management in Transgenic Cotton Alice Del Socorro
11.30-11.45	Identification of the Sex Pheromone of the Chilean Fruit Leafroller Proeulia Auraria (Lepidoptera: Tortricidae) Jan Bergmann	Olfactory Receptor Neurons for Pheromone and Plant Volatile Compounds in the Clover Root Weevil, Sitona Lepidus Kye Chung Park	Floral Scent and Flower Visitors in a Hybridization System: A Test of the Hybrid Bridge Hypothesis Cristian Villagra	Nature Controlling Itself: Using Live Females as Bait for the Mass Trapping of Bagworm Moths (Lepidoptera: Psychidae) in Oil Palm, Malaysia Norman Kamarudin
11.45-12.00	A New Class of Mealybug Pheromones: A Hemiterpene Ester in the Sex Pheromone of Crisicoccus Matsumotoi Jun Tabata	Whose Cues? Mixed-Species Aggregation in Ladybirds: Physiology, Behaviour and Chemistry Helen Nahrung	Synomonal Fragrance of Fruit Fly Orchids, Bulbophyllum Macranthum and Bu. Praetervisum, to Attract Fruit Flies as Pollinators Ritsuo Nishida	The Optimisation and Development of a Pheromone Trap for the Banana Spotting Bug Ambleypelta Lutescens Ian Newton
12.00-12.15	Discovery of Smoke-Derived Butenolides and Cyanohydrins that Promote Seed Germination Gavin Flematti	Secrets in the Dark: Sexual Communication Variation in the Two Spodoptera Frugiperda Strains Melanie Unbehend	Is Sexual Deception Operating as the Pollination System in the New Zealand Greenhood Orchids (Pterostylis Spp.)? Liezl Thalwitzer	Field Testing and Efficacy of an Aggregation Pheromone Lure and Trap for the Banana-Spotting Bug Amblypelta Lutescens in Avocados, Papaya and Custard Apple Donna MacLeod
12.15-12.30	Metabolomics Reveals Herbivore and Pathogen-Induced Metabolites of Resistance and Susceptibility in Maize Gaetan Glauser	Manipulating Odor Coding and Behavior in Drosophila melanogaster Anandasankar Ray	Sexually Deceptive Orchids: Who Needs a Pheromone to Seduce a Wasp? Bjorn Bohman	Optimising Traps and Lures to Prove Area Freedom from Mediterranean Fruit Flies Shirani Poogoda
12.30-12.45	Cannibalism and NMR Metabolomics in Helicoverpa Armigera Fredd Vergara		The Sharing of Pollinators by Sympatric Genera of Sexually Deceptive Orchids - The Importance of Chemistry for Pollinator Behaviour Rod Peakall	Development of a Female Lure for Queensland Fruit Fly, Bactrocera Tryoni and Jarvis's Fruit Fly, Bactrocera Jarvisi (Tephritidae) Stefano De Faveri
12.45-13.45	Lunch Room: Level 2 Foyer	1	l 	1



13.45-15.30	Symposium 9 Topic 6: Evolution of Chemical Communication in the Era of Genomics and Transcriptomics	Symposium 10 Topic 12: Molecular Mechanisms in Perception of Semiochemicals	Symposium 11 Topic 16: Student Travel Awards Symposium (Young Chemical Ecologists)	Symposium 12 Topic 15: Applied Chemical Ecology: Newest Research and Development
Room	218	219	220	217
Session Chairs	Christer Löfstead (Lund University, Sweden) and Astrid Groot (Institute for Chemical Ecology, Germany)	Judith Reinhard (University of Queensland, Australia) and Charles Claudianos (University of Queensland, Australia)	Ring Cardé (University of California, USA), Jocelyn Millar (University of California, USA) and Yongping Huang (Chinese Academy of Science, China)	Alex II'ichev (Department of Environment and Primary Industries, Australia) and Jerry Zhu (USDA, USA)
13.45-14.00	Patterns Emerging in the Genetic Basis of Moth Sexual Communication Astrid Groot	Keynote: Honeybee Olfactory Plasticity: Scent Memories Regulate Olfactory Receptor Expression and Modify Odour Preferences Judith Reinhard	Determination of the Absolute Stereochemistry of Methyl-Branched Hydrocarbons Isolated From Several Orders of Insects Jan Edgar Bello	Bacterial Infection of Trees Induces Release of a Volatile That 'Deceptively' Attracts Insect Vectors; Can We Manipulate the Environment to Prevent Vectors from Homing in on Infected Plants? Lukasz Stelinski
14.00-14.15	Sex Pheromone Evolution in New Zealand Leafroller Moths: A Story of Differential Gene Regulation Richard Newcomb		Possible Origins of a Male Mating Pheromone in the Sea Lamprey Tyler Buchinger	Healthy Plant Protection Kirsten Leiss
14.15-14.30	The Evolution of Multi-Component Sex Pheromones in Moths Matthew Symond	Micro-RNA Regulation of Olfactory Learning and Memory in Honeybees Charles Claudianos	Cross Species Sex Attraction and Reproductive Isolation between Vespula Vulgaris and V. Germanica Robert Brown	Introducing the Lacewing Egg Concentrator for Chrysoperla Spp. Miklos Toth
14.30-14.45	Evolution of Genetic Variance in Cuticular Hydrocarbons Under Selection Mark Blows	Phenotypic Plasticity in Olfactory Related Gene Expression of Leaf Cutting Ants (Atta Vollenweideri) Sarah Koch	Sticky Hydrocarbon Footprints and Stinky Defensive Allomones Function as Aggregation Phermones in Hippodamia Convergens Christopher Wheeler	Attraction of Chrysoperla Sinica, a Natural Enemy by Synthetic Attractants for Controlling Colorado Potato Beetle Jian-Yu Deng
14.45-15.00	Functional Genomics Reveals Molecular Mechanisms Underlying the Evolution of Sex Pheromone Detection by Moths Kevin Wanner	Characterisation of Carboxylesterases Associated with Clearance of Sex Pheromones and Plant Odorants on the Body Surface in Two Spodoptera Species Shuang-Lin Dong	Enantioselective Synthesis and Field Evaluation of Methyl-Branched Secondary Alcohols, a Novel Pheromone Component of a Lichen Moth and Its Structure-Related Compounds Yuta Muraki	Assessing the Impact of Semiochemicals in the Management of Maize Stem Borer (Busseola Fusca, Fuller) in Nigeria Emmanuel O. Ogah
15.00-15.15	Genetic Analysis of Male Preference for Female Sex Pheromones in Ostrinia Nubilalis Fotini Koutroumpa	Deciphering the Molecular Mechanisms of Chemosensation in a Crop Pest Moth, the Noctuid Spodoptera Littoralis Emmanuelle Jacquin-Joly	Host Plant Volatiles and Preference in a Specialist and Generalist Parasitoid: To Learn or Not to Learn? Gurion Ang	The Dependence of Sex Pheromone Production on Larval- And Adult-Acquired Metabolites in Virgin and Mated Female Heliothis Virescens Stephen Foster
15.15-15.30	Sex Pheromone Evolution and Speciation in the New Zealand Endemic Leafroller Moths of the Genera Ctenopseustis and Planotortrix: The Male's Story Bernd Steinwender	Chemosensory Genes from Cotton Bollworm Helicoverpa Armigera Wei Xu	Identification and Variations in Pheromone- binding Proteins among Legume Pod Borer (Maruca vitrata) Populations from Asia and Africa Malini Periasamy	Chemical Ecology of Ambrosia Beetle Megaplatypus Mutatus: From Identification of Pheromones to Formulation in Reservoir and Monolithic Delivery Systems and Monitoring and Mating Disruption Trials Paola Gonzalez Audino
15.30-16.00	Afternoon Tea Room: Level 2 Foyer	·		



16.00-17.30	Symposium 13 Topic 6: Evolution of Chemical Communication in the Era of Genomics and Transcriptomics	Symposium 14 Topic 12: Molecular Mechanisms in Perception of Semiochemicals	Symposium 15 Topic 16: Student Travel Awards Symposium (Young Chemical Ecologists)	Symposium 16 Topic 15: Applied Chemical Ecology: Newest Research and Development
Room	218	219	220	217
Session Chairs	Christer Löfstead (Lund University, Sweden) and Astrid Groot (Institute for Chemical Ecology, Germany)	Judith Reinhard (University of Queensland, Australia) and Charles Claudianos (University of Queensland, Australia)	Ring Cardé (University of California, USA), Jocelyn Millar (University of California, USA) and Yongping Huang (Chinese Academy of Science, China)	Alex II'ichev (Department of Environment and Primary Industries, Australia) and Jerry Zhu (USDA, USA)
16.00-16.15	Identification and Characterisation of Pheromone Receptors from the Light Brown Apple Moth (Epiphyas Postvittana) Jacob Corcoran	Molecular Characterisation, Expression Pattern, and Ligand-Binding Properties of Three Odorant Binding Protein Genes from Dendrolimus Tabulaeformis Zhen Zhang	Propionates and Acetates of Chiral Secondary Alcohols: Novel Sex Pheromone Components Produced by a Lichen Moth Barsine Expressa (Arctiidae: Lithosiinae) Toru Fujii	Essential Oils and Their Compositions as Spatial Repellents for Pestiferous Social Wasps Qing-He Zhang
16.15-16.30	Differential Expression and Functional Characterisation of Candidate Pheromone Receptors in the Hessian Fly, Mayetiola Destructor (Diptera, Cecidomyiidae) Martin Andersson	Identification and Characterisation of Pheromone Receptors and Binding Proteins in the Diamondback Moth, Plutella Xyllostella Guirong Wang	Pheromone Mass Trapping for the Management of Discrete Generations of the Lepidopteron Pest, Opisina Arenosella Walker (Lepidoptera: Oecophoridae) in Coconut Ecosystems Chandrashekharaiah Muniyappa	Control of Carpophilus Spp. (Coleoptera: Nitidulidae) from Basic Science to the Development of a Green Method of Crop Protection Mofakhar Hossain
16.30-16.45	Caste and Social Context Dependent Pheromone-Related Gene Expression in the Mandibular Glands of the Honeybee Abraham Hefetz	Ligand-Binding of Three Pheromone- Binding Proteins in the Beet Armyworm Spodoptera Exigua Naiyong Liu	Behavioural Responses of Coffee White Stem Borer (CWSB), Xylotrechus Quadripes Chevrolat (Coleoptera: Cerambycidae) to Plant Volatiles of Coffee Prashant Mangaigikar	Responses to Host Plants and Pheromone Components of Shoot and Fruit Borer, Conogethes Punctiferalis (Guenee) (Lepidoptera: Crambidae) Infesting Castor and Cardamom Bhanu K.R.M.
16.45-17.00	Immunostimulation Modulate Social Behavior, Chemical Communication and Gene Expression in Honey Bee Workers (Apis Mellifera) Freddie-Jeanne Richard	Investigating the Structural Basis for Odorant Recognition in an Odorant Receptor from the Malarial Vector, Anopheles Gambiae Charles Luetje	Biosynthetic Pathways for C15-Dienal Sex Pheromone in Dolbina Tancrei Takuya Uehara	Investigation of the Behavioral Response of Green Lacewings to Aphid Sex Pheromones and Other Green Lacewing Species: Results from Field Experiments Sándor Koczor
17.00-17.15	The Impact of Symbiotic Bacteria on Chemical Communication in Drosophila Daniela Schneider	A Conserved Aspartic Acid Regulates Activation of the Insect Odorant Co- Receptor (ORCO) Brijesh Kumar	Allelic Specific Expression in Relation to Bombyx mori Resistance to Bt toxin Cry1Ab Yazhou Chen	Developing New Measures for Rice Pest Management via Chemical Elicitor-Based Manipulation of Volatile Signals Yonggen Lou
17.15-17.30	The Butterfly That Smells Like a Moth: Sharing of Ancestral Pathways for Male Courtship Pheromone Biosynthesis Christer Löfstedt	Insect Odorant Receptor Structure and Function With Regard to their Application in Olfactory Biosensors Richard Newcomb	Natural Products as Alternative to Pyrethroids for Malaria Vector Control Emilie Deletre	Generic Pheromone Lures Attract Cerambycid Beetles in an Asian Tropical Montane Rain Forest Jacob Wickham
17.30-19.30	ISCE Executive Committee Meeting	APACE Executive Committee Meeting		



Wednesday 21 August 2013

08.00-17.30	Registration			
08.00-17.30	Exhibition			
09.00-10.30	Symposium 17 Topic 3: Rhizosphere Ecology	Symposium 18 (Combined Symposia) Topic 1: Interactions between Plants and Animals in the Australian Biota and Topic 4: Plasticity of Constitutive Plant Defences: Microbes to Climate	Symposium 19 Topic 8: Microbial-Chemical Ecological Interactions among Micro-organisms and their Environments	Poster Display
Room	218	219	220	217
Session Chairs	Leslie Weston (Charles Sturt University, Australia) and Ulrike Mathesius (Australian National University, Australia)	William Foley (Australian National University, Australia) and Ben Moore (University of Western Sydney, Australia) Daniel Ballhorn (Portland State University, USA) and Ros Gleadow (Monash University, Australia)	Junwei (Jerry) Zhu (USDA, USA) and Anna-Karin Borg-Karlson (Royal Institute of Technology, Sweden)	
09.00-09.15	Keynote: Plant Root Exudates and Their Role as Plant Protectants in the Rhizosphere Leslie Ann Weston	Keynote: Effects of Microbial Plant Symbionts on Insect Herbivores Daniel Ballhorn	Keynote: Dynamic Nature of the Chemical Ecology of Algal- Bacterial Interactions Roberto Kolter	
09.30-09.45	Organic Anions in the Rhizosphere: Transport Mechanisms and Functions Manny Delhaize	Colour Preference in Eucalyptus-Feeding Psyllids and Implications for Insect- Plant Associations Kevin Farnier	Effects of Bacteria on Mosquito Behavior Coby Schal	
09.45-10.00	Detection and Transformation of Secondary Plant Products in Soils Using LC and GC/MS - A Metabolomic Perspective Inge Sindbjerg Fomsgaard	Integrating the Responses of Australian Insects to Eucalypt Terpenoids and Epicuticular Waxes into General Conceptual Frameworks of Host Plant Selection Martin Steinbauer	Microbial Chemo- and Biodiversity Related to the Pine Weevil Hylobius Abietis Behaviour Anna-Karin Borg-Karlson	
10.00-10.15	Role of Flavonoids in Symbiotic and Pathogenic Root-Microbe Interactions Samira Hassan	Exploring the Chemically-Mediated Interactions between a Marsupial Herbivore and its Environment, and How This Contributes to its Adaptability Natasha Wiggins	Microbial Chemoecology of Fly and their Environments Junwei (Jerry) Zhu	
10.15-10.30	The Momilactone-Mediated Allelopathic Interaction Between Rice and Barnyard Grass Hisashi Kato-Noguchi	Deploying the Chemical Defence Cocktail of Eucalypt Secretory Cavities Ian Woodrow	Is Chemical Attraction Causing Yeasts and Flies to Coevolve? Matthew Goddard	
10.30-11.00	Morning Tea Room: Level 2 Foyer			
11.00-12.45	Symposium 20 Topic 3: Rhizosphere Ecology	Symposium 21 (Combined Symposia) Topic 1: Interactions between Plants and Animals in the Australian Biota and Topic 4: Plasticity of Constitutive Plant Defences: Microbes to Climate	Symposium 22 Topic 8: Microbial-Chemical Ecological Interactions among Micro-organisms and their Environments	Poster Display
Room	218	219	220	217
Session Chairs	Leslie Weston (Charles Sturt University, Australia) and Ulrike Mathesius (Australian National University, Australia)	William Foley (Australian National University, Australia) and Ben Moore (University of Western Sydney, Australia) Daniel Ballhorn (Portland State University, USA) and Ros Gleadow (Monash University, Australia)	Junwei (Jerry) Zhu (USDA, USA) and Anna-Karin Borg-Karlson (Royal Institute of Technology, Sweden)	
11.00-11.15	Influence of Root Chemical Ecological Characteristics on Plant Resistance to Heavy Metal Stress Lei Nie	Differential Oviposition on Subspecies and Genotypes of Eucalyptus Camaldulensis by Leptocybe Invasa, an Australian Gall-Forming Wasp Beryn Otieno	Novel Defense Mechanisms of Endophytic Fungi via the Production of Volatile Biocidal Metabolites Ross Mann	
11.15-11.30	Microbial Diversity and Exploration of the Rhizosphere -A New Frontier Andrew Whiteley	Plant Quality is More Than Just Chemistry: Linking Morphology, Physiology and Behaviour to Nutritional Outcomes Fiona Clissold	Allelopathy of Marine Epiphytic Bacteria: Assessment of the Realistic Ecological Role of Bioactive Bacterial Secondary Metabolites Jan Tebben	
11.30-11.45	Interaction Between Glyphosate and Rhizosphere Microbial Diversity Melanie Weckert	Roots to Shoots: Above and Belowground Investment in Cyanogenesis in Crop Species Subject to Environmental Variation Rebecca Miller	Volatile Terpenoid Response from Methyl Jasmonate Treatment of Four Conifer Species Lina Lundborg	
11.45-12.00	Soil-Borne Mycorrhizal Fungi-Mediated Aboveground Plant Defense Rensen Zeng	Changes in Defence Chemistry of Plants Grown at Elevated Co2 May Reduce Their Nutritional Value Ros Gleadow	Does Choice of Food Affect the Repellency of Pine Weevil Feces? Karolin Axelsson	
12.00-12.15	Effects of a Rhizospheric Biocontrol Fungus on Plant Growth and Aboveground Herbivore Defence Michael Rostas	Eucalyptus Secondary Chemistry in a Warmer World Ben Moore	Efficiency of Constituents from Thai Alpinia Galanga (L.) Against Phytopathogenic Fungi and Structure Activity Relationship Rachsawan Mongkol	
12.15-12.30	Melolontha Melolontha: A Root Feeding Pest in Apple Orchards John Abraham	Interactive, Direct and Plant-Mediated Effects of Atmospheric [Co2] and Temperature on Insect Herbivores of Eucalyptus Markus Riegler	Varietal Differences in Rice Metabolites Elicted by Insect Gut Contents Takako Aboshi	
12.30-12.45	Using Chemical Ecology to Improve the Biological Control of Root Pests with Entomopathogenic Nematodes Ted Turlings	Does Methyl Jasmonate Prime Terpene Defenses in Norway Spruce Against Bark Beetles and Fungi? Tao Zhao	Defences Within Plant Tissue, Are Often Not Enough to Prevent Insect Borne Diseases Piotr Trebicki	
12.45-13.45	Lunch Room: Level 2 Foyer			

Wednesday 21 August 2013

13.45-15.30	Symposium 23 Topic 9: Multimodal Communication: (Integration of Olfaction, Taste, Vision, Acoustics, Mechanoreception)	Symposium 24 Topic 10: New Studies in Chemical Ecology Involving Vertebrates and Opportunities for Solving Practical Problems of Livestock Production and Human Health	Symposium 25 Topic 2: Aquatic Chemical Ecology	Poster Display
Room	218	219	220	217
Session Chairs	Gerhard Gries, (Simon Fraser University, Canada) and John Hildebrand (University of Arizona, USA)	John Pickett (Rothamsted Research, UK) and Mike Birkett (Rothamsted Research, UK)	Tilmann Harder (University of New South Wales, Australia) and Justin Seymour (University of Technology, Sydney, Australia)	
13.45-14.00	Keynote: Seabirds Smell Birds: Multimodal Sensing and Signaling in Procellariiform Seabirds Gabrielle Nevitt	Keynote: Opportunities for Livestock Production, Including Fish Farming, and Human Health from New Concepts in Invertebrate Chemical Ecology John Pickett	Keynote: Chemical Mediation of Interactions Between Seaweeds and Their Diverse Microbial Communities Peter Steinberg	
14.15-14.30	We Can Smell and Hear a Rat Gerhard Gries	Chemically-Mediated Interactions in Rift Valley Fever Virus (RVFV) Vector-Host System Baldwyn Torto	Chemical Defences Influence Microbes in the Habitat-Forming Kelp Ecklonia Radiata Rebecca Neumann	
14.30-14.45	Detection and Learning of Floral Electric Fields by Bumblebees Dominic Clarke	Cows in 'Waterbuck Clothing' for Protection Against Tsetse Flies and Enhanced Productivity Rajinder Saini	Principal Component Analysis of the Antarctic Sponge Dendrilla Membranosa Secondary Metabolome Christopher Witowski	
14.45-15.00	Multiple Communication Modalities by Fire Ants as They 'Eat, Prey, Love' Deby Cassill	Malaria-Induced Changes in Host Odors: Implications for Vector Transmission and Disease Diagnosis Mark Mescher	Discovering the Hidden Secondary Metabolome of Salinispora Arenicola: A Study of Intra-Specific Diversity Utpal Bose	
15.00-15.15	Bimodal Communication in Insects: Neuroethological Aspects of Integration of Acoustic and Odor Stimuli Niels Skals	Acacia Proanthocyanidins as Inhibitors of Ruminal Methane Production: Structure-Function Relationships Ann Hagerman	UTP is a Major Component of Soluble Sex Pheromones in a Marine Shrimp, Lysmata Wurdemanni Dong Zhang	
15.15-15.30	Neural Processing of Behaviorally Significant 'Odor Objects' in the Insect Brain John Hildebrand	Presence of Natural Repellents in the Odor of Beagle Dogs Against the Tick Rhipicephalus Sanguineus (Acari: Ixodidae) Ligia Borges	Decoding Peptide Pheromones that Elicit Attraction, Aggression, Spawning and Paternity Success in Molluscs Scott Cummins	
15.30-16.00	Afternoon Tea Room: Level 2 Foyer			
16.00-17.30	Symposium 26 Topic 9: Multimodal Communication: (Integration of Olfaction, Taste, Vision, Acoustics, Mechanoreception)	Symposium 27 Topic 10: New Studies in Chemical Ecology Involving Vertebrates and Opportunities for Solving Practical Problems of Livestock Production and Human Health	Symposium 28 Topic 2: Aquatic Chemical Ecology	Poster Display
Room	218	219	220	217
Session Chairs	Gerhard Gries, (Simon Fraser University, Canada) and John Hildebrand (University of Arizona, USA)	John Pickett (Rothamsted Research, UK) and Mike Birkett (Rothamsted Research, UK)	Tilmann Harder (University of New South Wales, Australia) and Justin Seymour (University of Technology, Sydney, Australia)	
16.00-16.15	Honeybees Learn Odour Mixtures via a Selection of Key Odorants Judith Reinhard	New Chemical Ecology Based Interventions for the Control of Ectoparasites Affecting Farmed Livestock and Human Health Mike Birkett	Disrupting Pathogenesis: Chemical Interference of Quorum Sensing by Australian Alcyonacea Marnie Freckelton	
16.15-16.30	Integlation of Olfaction and Taste Information for Feeding Preference in the Fly Mamiko Ozaki	Chemical Communication in Frogs Stefan Schulz	A Unique Host Plant Location Strategy of an Aquatic Beetle Gregory Röder	
16.30-16.45	Mechanisms of Upwind Orientation by Short and Intermittent Flight in Potato Moths, Phthorimaea Operculella, Induced by Sex Attractant Pheromone Shin Tejima	The Toxicity of Poison Dart Frog Alkaloids against the Fire Ant (Solenopsis Invicta) Robert Vander Meer	Comparison of the Chemical Communication Allowing Host Selection in Two Marine Symbioses Which Associate Crustaceans with Echinoderms Guillaume Caulier	
16.45-17.00	Temporal and Chemical Partitioning of a Shared Pheromone Among Five Cerambycid Species Robert Mitchell	Love Makes Scents: Olfactory Communication and Mating Behaviour in the Echidna Rachel Harris	Linking DMSP-Metabolism and Antimicrobial Production in Coral-Associated Bacteria Jean-Baptiste Raina	
17.00-17.15	Antagonism between Herbivore-Induced Plant Volatiles and Trichomes Affects Tritrophic Interactions Jianing Wei	Identification of Scent Signals Contributing to Speceis, Sex, Age and Individual Recognition from Anal Sac Secretions and Feces in the Domestic Cat Masao Miyazaki	Dimethylsulfoniopropionate (DMSP) is a Strong Forgaing Cue in the Marine Microbial Food Web Justin Seymour	
17.15-17.30	Interplant Communication of Tomato Plants through Common Mycorrhizal Networks Yuanyuan Song	Why Do Lumholtz' Tree-Kangaroos Apply Inefficient Anti-Predatory Strategies Towards Dogs? Sigrid Heise-Pavlov	Antioxidant Defence Capacity of Acropora Corals in a Changing Climate Cherie Motti	
19.30-23.30	Gala Dinner Venue: Showtime			

Thursday 22 August 2013

08.00-17.30	Exhibition		
	Symposium 29 Topic 17: Chemical Ecology (General Topics)	Symposium 30 Topic 13: What's Your Bioassay? – New Directions in Chemical Ecology	Symposium 31 Topic 14: Chemical Ecology of Invading Species
Room	220	219	218
	Myron Zalucki (University of Queensland, Australia) and Alex I L'ichev (Department of Environment and Primary Industries, Australia)	Markus Knaden (Institute for Chemical Ecology, Germany) and Ryohei Kanzaki (University of Tokyo, Japan)	Zhang Zhen (Chinese Academy of Forestry, China) and Eric Jang (USDA, USA)
	Gustatory Responses of Antheraea Assamensis Helfer (Lepidoptera: Saturniidae) Larvae Mary Joseph	Keynote: Olfactory Driven Foraging Strategies of the Desert Ant Cataglyphis Fortis Markus Knaden	Keynote: Trapping Little Fire Ant, Wasmannia Auropunctata (Roger) Longevity and Trap Mechanism Matthew Siderhurst
	Abnormal Thickninig of the Peritrophic Membrane of Caterpillars Caused By Chitin-Binding Defense Protein MIx56 from the Latex of Mulberry Trees: A Novel Mode of Action of Defense Kotaro Konno		
	Analysis of Glucose Conjugates in Leaf Beetles and Their Host Plants Gerhard Pauls	Development of a Novel Cell-Based Odorant Sensor Based on Insect Odorant Receptors Hidefumi Mitsuno	Trail Pheromone Disruption in Ants: Communication Disruption Can Reduce Foraging David Suckling
	Beetle Juice Strategy: ABC Transporter Functions as a Pacemaker For Sequestration of Plant Glucosides in Leaf Beetles Anja Strauss	New Strategies for Phytoplasma Vector Control by Semiochemicals Juergen Gross	Attractiveness of Volatiles from Natural Honeybee Hive Products to the Small Hive Beetle Aethina Tumida (Coleoptera: Nitidulidae) R. Andrew Hayes
	Phyllotreta Striolata Flea Beetles Selectively Sequester and Hydrolyze Glucosinolates from Their Host Plants Franziska Beran	Shedding Light on How Plant Chemical Heterogeneity Affects Insect Movement Bronwen Cribb	How Does the Bark Beetle, Dendroctonus Valens, Initiate and Cease the Aggregation Attack? Zhudong Liu
	Elucidation of Elicitors in Sogatella Furcifera(Horváth) Causing the Japonica Rice Plant(Oryza Sativa L.) Varieties to Induce Production of the Ovicidal Substance Against the Egg of S. Furcifera Jeong-Oh Yang	New Tools for an Old Puzzle Ajay Mathuru	The Variance in Relative Contents of Induced Volatile Monoterpenes of Pinus Tabulaeformis by an Invasive Bar Beetle, Dendroctonus Valens Zhen Zhang
	Morning Tea Room: Level 2 Foyer		
	Symposium 32 Topic 17: Chemical Ecology (General Topics)	Symposium 33 Topic 13: What's Your Bioassay? – New Directions in Chemical Ecology	Symposium 34 Topic 14: Chemical Ecology of Invading Species
Room	220	219	218
	Myron Zalucki (University of Queensland, Australia) and Alex IL'ichev (Department of Environment and Primary Industries, Australia)	Markus Knaden (Institute for Chemical Ecology, Germany) and Ryohei Kanzaki (University of Tokyo, Japan)	Zhang Zhen (Chinese Academy of Forestry, China) and Eric Jang (USDA, USA)
	OsHI-WRKY Transcription Factor Regulates Herbivore- Induced Signaling and Defense Responses in Rice Lingfei Hu	A Plant Factory for Moth Pheromone Production - Proof of Principle Bao-Jian Ding	Evidence for Male-Produced Attractants of Ten Species the Cerambycid Beetle Genus Neoclytus Ann Ray
	Potency of 'Frass and Plant Volatile' to Enhance the Bio-Efficacy of Diadegma semiclausum Hellen. against Diamond Back Moth, Plutella xylostella L. Agus Susanto	Tritrophic Interactions in Antheraea Assamensis- Machilus Bombycina / Litsea Monopetala and Exorista Sorbillans Complex Pushpa Pawar	Exploiting the Scent of Fruits to Protect Crops Against Drosophila Suzukii John Abraham
	Herbivore-Induced Leucine-Derived Nitrile in the Evening Primrose Attracts the Predatory Shield Bug Koji Noge	'Bee-Nose' for the Detection of Diseases in Humans and Pests in Agriculture Flore Mas	Formulating Volatiles from Wine and Vinegar to Attract th Invasive Pest Spotted Wing Drosophila, Drosohila Suzuk Amanda Ramsey
	Evidence for Aggregation Control by Cuticular Hydrocarbons in the European Earwig, Forficula auricularia Stephen Quarrell	Wolbachia Alter Individual Perception and Sexual Selection in Terrestrial Isopods Freddie-Jeanne Richard	Honeydew-Based Superlure for the Invasive Social Wasp Vespula Vulgaris, in New Zealand Rikard Unelius
	Revealing the Love Dart Allohormone: The Molecular Basis for Paternity Success in Helicid Snails Michael Stewart	First Impressions Matter: Early Quality Assessment Lessens Pheromone Specificity in a Moth Ring Cardé	Pheromone Mediated Mating in the Western Bean Cutworm, Loxagrotis Albicosta Jeremy McNeil
	Comparisons of Familial and Gender Specific Differences in Cuticular Hydrocarbons in Two Species of Australian Psylloid (Hemiptera: Psylloidea) Falko Drijfhout	Blend Blindness During Pheromone Orientation Caused By Differential Sensory Adaptation in the European Corn Borer Zsolt Kárpáti	Developing an Effective Lure for the White Butterfly, Pieri Brassicae Thomas Sullivan
	Eco-Physiological Consequences of UV-B on Brassicaceae - Impact on the Co-Evolutionary Arms Race Between Plants and their Enemies Inga Mewis	Change in a Self-Maintenance Behavior of a Slug Species (Deroceras reticulatum) as a Response to Predation- Threat Chemical Cues from Ground Beetles is Linked with their Ecological Relevance	Evolution in the Invasive Weed, Pastinaca Sativa, After Reassociation with its Specialist Herbivore, Depressaria Pastinacella Tania Jogesh

Thursday 22 August 2013

13.45-15.30	Symposium 35 Topic 17: Chemical Ecology (General Topics)	Symposium 36 Topic 17: Chemical Ecology (General Topics)	Workshop Topic 18: Insect Semiochemical and Pheromone Registration: Policy and Issues
Room	220	219	218
Session Chairs	Myron Zalucki (University of Queensland, Australia) and Alex IL'ichev (Department of Environment and Primary Industries, Australia)	Myron Zalucki (University of Queensland, Australia) and Alex IL'ichev (Department of Environment and Primary Industries, Australia)	David Williams (Department of Environment and Primary Industries, Australia) and Max Suckling (Institute of Plant and Food Research, New Zealand)
13.45-14.00	Bioactive Fractions Containing Male Sex Pheromone Components in the Pestiferous Fruit Fly, Bactrocera Carambolae and Melon Fly, B. Cucurbitae Alvin Kah-Wei Hee	Sex Pheromone Components and Field Trapping Tests of a Clearwing Moth Glossosphecia Romanovi (Lepidoptera: Sesiidae) Hideshi Naka	Pheromone Registration - Why is it So Hard? David Suckling
14.00-14.15	RNA Interference of P450 CYP6CM1 Gene Has Different Efficacy in Two Biotypes of Bemisia Tabaci Fengming Yan	Ant Trail Pheromone Biosynthesis is Triggered by a Neuropeptide Hormone Robert Vander Meer	Regulation of Low Risk Chemicals - A Conundrum for Regulatory Policy and Practice Jay Kottege
14.15-14.30	Semiochemicals of Three Tomicus Species in Pinus Yunnanensis Franch Zhen Zhang	Identification of Leafhopper-Induced Tea Plant Volatiles and their Attraction to Parasitic Mymarid Wasps Baoyu Han	Registration of Pest Management Products That Manipulate Insect Behavior Agenor Mafra-Neto
14.30-14.45	Chemicals in Rice Plant Relating Host Selection for the Green Rice Leafhopper, Nephotettix Nigropictus Zhihui Zhan	Characterisation of Apis Cerana and Apis Mellifera Epicuticular Hydrocarbons and their Role in Varroa Destructor Orientation Behaviour Maria Celeste Fernandez Ferrari	Registration of a Plant Volatile-Based Attract and Kill Formulation for Helicoverpa Spp. in Australia Peter Gregg
14.45-15.00	Multitrophic Interactions between Aphids, Ladybird Beetles and Their Parasitoids Mediated By Phytochemicals in a Natural and Managed Plant Systems Ghulam Abro	Influence of Plant Extracts on Development and Reproductive Bioactivities of Dysdercus Koenigii Kamal Kumar Gupta	Workshop Discussion
15.00-15.15	Re-Evaluation of Toxic Compounds to the Multicolored Asian Ladybird Beetle, in the Cowpea Aphid Infesting the Black Locust Tsunashi Kamo	Identification of Estrus Indicating Chemo-Signals in Water Buffalo (Bubalus Bubalis): A New Approach in Developing Kit to Ascertain Estrus Govindaraju Archunan	
15.30-16.00	Afternoon Tea Room: Level 2 Foyer		
16.00-17.00	Closing Ceremony Room: 219/220		

Friday 23 August 2013

09.00-12.30	AgriBio at DEPI Bundoora Tour
09.00-16.00	Field Day Tour to Yarra Valley Agriculture Area

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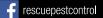
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