

Scientific Programme*

(Version 20 July 2017)

*currently only presenting authors are displayed



Sunday, 10 September 2017

17:00 Registration at Hotel

19:00 Welcome Reception – Hotel

Monday, 11 September 2017

08:00 Welcome Address: Representative from the Ministry of Agriculture

08:15 Scientific Session 1

Session 1: Accidental introductions of biocontrol agents: positive and negative aspects

Session Organizers: Donald C. WEBER, USDA-ARS, Beltsville, Maryland, U.S.A. and Tim HAYE, CABI, Delémont, Switzerland

08:15	Donald C. Weber	Introduction & Accidental introductions of natural enemies: causes and implications
08:35	Peter Mason	Risks and benefits of accidental introductions of biological control agents in Canada
08:55	Kim Hoelmer	Adventive vs. planned introductions of <i>Trissolcus japonicus</i> against brown marmorated stink bug: an emerging case study in real-time
09:15	Tim Hays	Can native parasitoids benefit from accidental introductions of exotic biological control agents?
09:35	Franck Herard	Accidental introduction into Italy and establishment of <i>Aprostocetus fukutai</i> (Hym.: Eulophidae) in citrus longhorned beetle infestations
09:55	Joe M. Kaser	Inadvertent reconstruction of exotic food webs: biological control harms and benefits

10:15 Coffee/Tea Break

10:45 Scientific Session 2

Session 2: The importance of pre and post release genetics in biological control

Session Organizers: Richard STOUTHAMER, University of California, Riverside, California, U.S.A. and Stephen GOLDSON, AgResearch Limited, Christchurch, New Zealand

10:45	Richard Stouthamer	Introduction & Practical management of the genetics of classical biocontrol introductions
11:05	Tania Zaviezo	Genetic diversity of field and laboratory populations of <i>Mastrus ridens</i> and consequences of inbreeding during laboratory culture
11:25	Thibaut Malausa	Effects of genetic diversity, inbreeding and outbreeding investigated in six reared or released biocontrol agents
11:45	Stephen Goldson	Rapid biocontrol evolution in New Zealand's species-sparse pasturelands; its causes and effects
12:05	Jason Tylanakis	Food webs, multiple enemies and the sustainability of biological control
12:25	Marie-Claude Bon	Benefits of pre-release population genetics: a case study using <i>Psytalia lounsburyi</i> , a biocontrol agent of the olive fruit fly in California

12:45 Lunch Break

13:45 Scientific Session 3

Session 3: How well do we understand non-target impacts in arthropod biological control?

Session Organizers: Roy VAN DRIESCHE, University of Massachusetts, Amherst, Massachusetts, U.S.A. and Mark HODDLE, University of California Riverside, California, U.S.A.

13:45	Roy van Driesche	Introduction & Non-target effects of insect biological control: concepts, examples and trends
14:05	Steve Naranjo	Displacement of native natural enemies by introduced biological control agents in agro-ecosystems: a serious non-target effect or not?
14:25	Mark Wright	Assessing host use and population level impacts on non-target species by introduced enemies: can host range testing provide insight?
14:45	George Heimpel	Parasitoid host ranges: comparing studies from the laboratory and field
15:05	Jacqui Todd	The way forward: can predictive models help identify the most appropriate non-target species for host specificity testing?
15:25	Gonzalo Avila	What olfactometer tests were able to tell us about non-target risk that no-choice and choice tests could not

15:45 Coffee/Tea Break

16:15 Scientific Session 4

Session 4: Regulation and access and benefit sharing policies relevant for classical biological control approaches

Session Organizers: Barbara BARRATT, AgResearch Limited, Mosgiel, New Zealand and Peter MASON, Agriculture and Agri-Food, Ottawa, Canada.

16:15	Peter Mason	Introduction
16:20	Clark Ehlers	The New Zealand system to assess the environmental benefits and risks of releasing new biocontrol agents of arthropods
16:40	David Smith	Practical and implementable mechanisms for compliance with the Nagoya Protocol: access and benefit sharing
17:00	Barbara Barratt	Access and benefit sharing: best practices for the use and exchange of invertebrate biological control agents
17:20	Peter Mason & Barbara Barratt	Facilitated discussion

18:00 End - Scientific Sessions

Tuesday, 12 September 2017

08:00 House-keeping

08:15 Scientific Session 5

Session 5: The role of native and alien natural enemy diversity in biological control

Session Organizers: Tania ZAVIEZO, Universidad Catolica de Chile, Santiago, Chile and Audrey GREZ, Universidad de Chile, Santiago, Chile

08:15	Audrey Grez	Introduction & Native coccinellids and biological control: a positive partnership that can be threatened by the invasion of an exotic species
08:35	William E. Snyder	Conserving biodiversity to control pests in the soil, on plants, and in the sky
08:55	Jian Duan	Effects of North American native and introduced natural enemies on emerald ash borer population dynamics
09:15	Stéphanie Aviron	Relationships between diversity of natural enemy communities and pest predation levels dscape contexts in hedgerow network landscapes
09:35	Manoharie Sandanayaka	Establishment of <i>Mastrus ridens</i> (Hymenoptera: Ichneumonidae), an ecto-parasitoid of codling moth, in New Zealand
09:55	Miriam Frida Karlsson	Exotic or native? Interspecific competition in the parasitization of the fruit fly <i>Ceratitis cosyra</i>

10:15 Coffee/Tea Break

10:45 Scientific Session 6

Session 6: Frontiers in forest insect control

Session Organizers: Brett HURLEY, University of Pretoria, Pretoria, South Africa and Simon LAWSON, University of Sunshine Coast, Sippy Downs, Australia

10:45	Brett Hurley	Introduction & Investigating the complex gall community of <i>Leptocybe invasa</i>
11:05	Toni Withers	Larval parasitoids for biocontrol of invasive <i>Paropsine defoliators</i>
11:25	Michelle Schröder	Biological control of the <i>Goniopteris scutellatus</i> species complex: testing the species, climatic and phenological mismatch hypotheses
11:45	Fernanda Colombardi	A successful case of classical biological control of a gall wasp
12:05	Carlos Wilcken	Biological control of <i>Thaumastocoris peregrinus</i> (Hemiptera: Thaumastocoridae) in <i>Eucalyptus</i> plantations in Brazil: an update
12:25	Joseph Elkinton	Ecology and biological control of outbreak populations of winter moth in the northeastern United States

12:45 Lunch Break

13:45 Scientific Session 7

Session 7: Biocontrol Marketplace I – Free Topics

Session Organizers: Yelitza COLMENAREZ, CABI, Botucatu, Brazil and R. SRINIVASAN, World Vegetable Center, Shanhua, Tainan, Taiwan

13:45	Yelitza Colmenarez & R. Srinivasan	Introduction
13:50	Hannah Broadley	Friend or Foe: the role of native, nature enemies in the biological control of winter moth
14:10	Simon Lawson	BiCEP: progress in a global collaboration for the biological control of Australian-origin eucalypt pests
14:30	S.P. Ong	Introduction of <i>Tachardiaephagus somervilli</i> , an encyrtid parasitoid, for the indirect biological control of an invasive ant on Christmas Island
14:50	Alberto Urbaneja	<i>Orius laevigatus</i> induces plant defenses in sweet pepper
15:10	Meritxell Pérez-Hedo	The role of tomato plant volatiles mediated by zoophytophagous mirid bugs

15:30 Coffee/Tea Break

16:00 Poster Session 1 (see poster presentation at the end of programme)

17:30 End – Scientific Sessions

Wednesday, 13 September 2017

08:00 House-keeping

08:15 Scientific Session 8

Session 8: Weed and arthropod biological control: mutual benefits and challenges

Session Organizers: Hariet HINZ, CABI, Delémont, Switzerland and George HEIMPEL, University of Minnesota, St. Paul, Minnesota, U.S.A.

08:15	Hariet Hinz & George Heimpel	Introduction
08:20	Hariet Hinz	Keynote Address Weed and arthropod biological control: mutual benefits and challenges
08:50	Hariet Hinz & George Heimpel	Facilitated discussion

09:30 Coffee/Tea Break

10:00 Field Excursion

19:00 Dinner

22:00 End

Thursday, 14 September 2017

08:00 House-keeping

08:15 Scientific Session 9

Session 9: Maximizing opportunities for biological control in Asia's rapidly changing agro-environments

Session Organizers: Kris A.G. WYCKHUYS, International Center for Tropical Agriculture (CIAT), Hanoi, Vietnam and Yanhui LU, Institute for Plant Protection of the Chinese Academy of Agricultural Sciences, Beijing, PR China

08:15	Kris Wyckhuys & Yanhui Lu	Introduction
08:35	Geoff Gurr	From molecule to landscape - integrating molecular biology and landscape ecology to open new opportunities for biological control in East Asia
08:55	Kris Wyckhuys	Phytopathogens and soil nutrients jointly shape efficacy of mealybug biological control in Asia's cassava cropping systems
09:15	Yanhui Lu	Recent change of biocontrol services in cotton agro-ecosystem of northern China
09:35	Michael Furlong	Know your enemies: suppression of <i>Plutella xylostella</i> and <i>Crociodolomia pavonana</i> by different predators in West Java, Indonesia
09:55	Ramasamy Srinivasan	Biological control in vegetable <i>Brassica</i> pest management in tropical Asia: where do we currently stand?

10:15 Coffee/Tea Break

10:45 Scientific Session 10

Session 10: Biological control based Integrated Pest Management: does it work?

Session Organizers: Mohamad ROFF, MARDI, Selangor, Malaysia and Fang-Hao WAN, Institute for Plant Protection of the Chinese Academy of Agricultural Sciences, Beijing, PR China

10:45	Mohamad Roff & Fang-Hao Wan	Introduction
10:50	Sivapragasam Annamalai	Successful integrated pest management with biological control: case of the diamondback moth in Malaysia
11:10	Maolin Hou	A practice of <i>Trichogramma</i> -based IPM of rice insect pests
11:30	Yin-Quan Liu	Conservation biological control and IPM practices in Brassica vegetable crops in China: a step further
11:50	Kent Daane	Biological control of olive fruit fly in California – release, establishment and impact of <i>Psytalia lounsburyi</i> and <i>Psytalia humilis</i>
12:10	Arnaud Costa	Biological control and potential challenges to develop its use in Vietnam

12:30 Lunch Break

13:45 Scientific Session 11

Session 11: Exploring the compatibility of arthropod biological control and pesticides: models and data

Session Organizers: John BANKS, California State University Monterey Bay, Seaside, California, U.S.A. and John STARK, Washington State University, Washington, U.S.A.

13:45	John Stark	Introduction & How differential stage susceptibility to pesticides affects the success of biocontrol agents
14:05	Nick Mills	Orchard pesticides and natural enemies: lessons from the lab and field
14:25	Carmen Blubaugh	Pesticide use and floral resources differentially affect communities of predators, parasitoids, and pests at a regional scale
14:45	Roger Vargas	Integration of biopesticides with natural enemies for control of tropical fruit flies (Diptera: Tephritidae)
15:05	John Banks	Protecting assemblages of biocontrol species: modeling a surrogate species approach
15:25	Matt Hill	Disruption of biological control due to non-target effects of pesticides in Australian grains

15:45 Coffee/Tea Break

16:15 Poster Session 2 ((see poster presentation at the end of the meeting))

17:30 End – Scientific Sessions

Friday, 15 September 2017

08:00 House-keeping

08:15 Scientific Session 12

Session 12: Successes and uptake of arthropod biological control in developing countries

Session Organizers: Ulrich KUHLMANN, CABI, Delémont, Switzerland and Matthew COCK, CABI, Egham, United Kingdom.

08:15	Matthew Cock	Introduction
08:35	Ulrich Kuhlmann	Classical biological control of insects in developed and developing countries: a comparison using BIOCAT database
08:55	Julien Dougoud	Plantwise country data on extension and the uptake of augmentative biological control using arthropods
09:15	Feng Zhang	The importance of local production to foster the uptake of augmentative biological control in developing countries
09:35	Sarina Macfadyen	Understanding the ecology and impact of parasitoids of whitefly (<i>Bemisia tabaci</i> , species complex, Aleyrodidae) in cassava in East Africa
09:55	Julien Lamontagne-Godwin	Success and failures in IPM in Africa and Asia: the significance of biocontrol

10:15 Coffee/Tea Break

10:45 Scientific Session 13

Session 13: Socio-economic impacts of biological control

Session Organizers: Steve NARANJO, USDA-ARS, Phoenix, Arizona, U.S.A. and Jörg ROMEIS, Agroscope, Zurich, Switzerland

10:45	Steve Naranjo & Jörg Romeis	Introduction
10:50	Roger Day	Success and impact in classical biological control: some examples from developing countries
11:10	Karen Jetter	Cost of biological control of invasive arthropods
11:30	Beatrice Muriithi	Assessment of the economic and poverty impacts of biological control of cereal stemborers in Kenya using the economic surplus modeling approach
11:50	Enric Frago	Socio-economic impacts and extension process of conservation biological control in mango orchards in Réunion Island
12:10	Peter Ellsworth	Chronicling the socio-economic impact of integrating biological control, technology, and knowledge over 25 years of IPM in Arizona

12:30 Lunch Break

13:45 Scientific Session 14

Session 14: Marketplace II – Free topics

Session Organizers: Sunday EKESI, International Center of Insect Physiology & ecology (ICEPE), Nairobi, Kenya and Wai Hong LOKE, CABI, Selangor, Malaysia

13:45	Sunday Ekesi & Wai Hong Loke	Introduction
13:50	Jörg Romeis	Do GM plants with stacked insecticidal traits pose an increased risk to biological control?
14:10	René F.H. Sforza	Initial evaluation of two native egg parasitoids for the control of <i>Bagrada hilaris</i> , an invasive stink bug in western USA
14:30	Samira Mohamed	Old and new host-parasitoid associations: parasitism of the invasive fruit fly <i>Bactrocera</i> species and five African fruit fly species
14:50	Chitra Shanker	Harnessing of floral and faunal biodiversity of rice ecosystems for conservation biological control
15:10	Sevgan Subramanian	Seasonal abundance of <i>Plutella xylostella</i> (Lepidoptera: Plutellidae) and diversity of its parasitoids along Eastern Afromontane

15:30 Coffee/Tea Break

16:00 Business Meeting

- **General issues**
- **Next venue of 6th ISBCA 2021**

16:30 End of Scientific Sessions

Poster Presentations

01	Rory Mc Donnell	Discovery of <i>Phasmarhabditis hermaphrodita</i> (Nematoda) in the U.S. and its potential importance in the biological control of invasive gastropods
02	Rory Mc Donnell	Feeding behavior of <i>Rumina decollata</i> (Gastropoda) raises questions about its efficacy as a biocontrol agent of <i>Cornu aspersum</i> (Gastropoda)
03	Marie-Claude Bon	Genetic diversity and origins of <i>Halyomorpha halys</i> in the U.S. and of its potential biocontrol agent unexpectedly recovered from the wild in the U.S.
04	Kim Jensen	Variable performance and improvement by crossing in commercial populations of the pirate bug <i>Orius majusculus</i>
05	Jörg Romeis	Parasitoids of <i>Drosophila</i> in Switzerland and their potential for biological control of the invasive <i>Drosophila suzukii</i>
06	Kim Hoelmer	Native North American vs. Asian parasitoid natural enemies of invasive brown marmorated stink bug
07	Navies Maisin	Insect natural enemies: review and future application for CPB management in cocoa
08	Pavel Kindlmann	Spreading of alien species and diversity of communities
09	Shiroma Sathyapala	Classical biological control of insect pests in forestry: a practical guide
10	Sevgan Subramanian	Diversity of edible Saturniids (Lepidoptera: Saturniidae) and their parasitoids in Kenya
11	Carlos Wilcken	Action of <i>Bacillus thuringiensis</i> on eucalyptus snout beetle <i>Gonipterus platensis</i> (Coleoptera: Curculionidae) larvae
12	Brett Hurley	Host specificity testing of <i>Psyllaephagus bliteus</i> , an accepted biocontrol agent of <i>Glycaspis brimblecombei</i> , reveals a new host
13	Medea Burjanadze	Potential of entomopathogenic <i>Hyphomycetes</i> for control of forest and urban Lepidoptera pests in Georgia
14	Ketevan Koridze	Diversity of entomopathogenic fungi from forest ecosystem of Georgia
15	Shu Li	Innate positive chemotaxis to pollen from crops and banker plants in predaceous biological control agents: towards new field lures?
16	Jacques Brodeur	Estimating parasitoid suppression of aphid populations in the field
17	Josée Doyon	Does patch-guarding behaviour in parasitoids deter or attract arthropod egg predators?
18	Radek Michalko	The behavioural type of a top predator drives the short-term dynamic of intraguild predation
19	Daniela Weber	The effect of plant resistance on biological control of insect pests
20	Shakira Fataar	Conservation biological control of <i>Pieris rapae</i> through promotion of its antagonist <i>Cotesia rubecula</i>
21	Kim Jensen	Cold acclimation increases cold tolerance but reduces predation rate and reproduction in the predatory mite <i>Geolaelaps aculeifer</i>
22	Floriane Chardonnet	Mass-rearing optimization of the parasitoid <i>Psytalia</i>

		<i>lounsburyi</i> for biological control of the olive fruit fly
23	David Haviland	Evaluation of six spotted thrips, <i>Scolothrips sexmaculatus</i> , for biological control of spider mites in California almonds
24	Olivia Reynolds	Area-wide integrated pest management incorporating the sterile insect technique: gut microbiota impacts on tephritid fitness and performance
25	Rostislav Zemek	Non-target impacts of <i>Isaria fumosorosea</i> (Hypocreales: Cordycipitaceae) on natural enemies of arthropod pests
26	Feng Zhang	Releases of <i>Trissolcus japonicus</i> and <i>Anastatus</i> sp. for suppression of <i>Halyomorpha halys</i> in kiwifruit orchard
27	Jacqui Todd	Caught on camera: confirmation of natural enemies attacking pest leafrollers in kiwifruit orchards
28	Shakira Fataar	Biology of <i>Telenomus laeviceps</i> , an egg parasitoid of the cabbage moth <i>Mamestra brassicae</i>
29	Radek Michalko	Alteration of predatory behavior of a generalist predator by exposure to two insecticides
30	Ondrej Kosulic	Impact of plant extracts of <i>Embelia ribes</i> and two commercial pesticides on mortality and predator activity of a generalist predator <i>Oxyopes lineatipes</i>
31	Ronny Groenteman	Vespula biocontrol in New Zealand
32	Jian Liu	The rich tapestry of biological control targets and agents in sweet potato production systems of Papua New Guinea
33	Yelitza Colmenarez	<i>Acerophagus papayae</i> (Hymenoptera: Encyrtidae) as a biocontrol agent of <i>Paracoccus marginatus</i> (Hemiptera: Pseudococcidae) in Barbados
34	Sunday Ekesi	Economic impact of biological control of mango-infesting fruit flies: a case study of Kenya
35	Kris Wyckhuys	'Nothing kills insects', or how farmer perceptions hamper adoption of biocontrol innovations
36	Hao-Sen Li	Evolution and potential non-target effect of the introduced biological control agent <i>Cryptolaemus montrouzieri</i>
37	Zhongren Lei	Bioassay and scanning electron microscopic observations reveal high virulence of entomopathogenic fungus, on the onion maggot
38	Laila Alshuraym	Laboratory evaluation for entomopathogenic fungi against the red palm weevil, <i>Rhynchophorus ferrugineus</i> Olivier
39	Meriam Mohd Yusof	Effect of release frequency of egg parasitoid as a biological control agent for cocoa pod borer
40	Lian-Sheng Zang	New progress in mass production of <i>Trichogramma</i> and field application for biological control on agricultural pests in China
41	Hai Hong Wang	Sublethal effects of <i>Beauveria bassiana</i> (Ascomycota: Hypocreales) on life table parameters of <i>Frankliniella occidentalis</i> (Thysanoptera: Thripidae)
42	Fan Zhang	Efficacy of multicolored lady beetle <i>Harmonia axyridis</i> against aphid <i>Myzus persicae</i> on vegetables under greenhouse conditions
43	Su Wang	Conservation biological control in organic orchard
44	Xiaojun Guo	The control effect of large-area application of sex pheromone to <i>Grapholitha molesta</i> in peach orchard

45	Min Raj Pokhrel	The success of introduced dung beetles as a neo-classical biocontrol agents in the Northern Tablelands of New England, NSW Australia
46	Gandhi Gracy Ramasamy	Virtual screening of insecticidal effect on egg parasitoid <i>Trichogramma chilonis</i> Ishii by molecular docking