



**IOBC-APRS
Newsletter No. 9
August 2018**



Message from the President



Dear Members, It's an exciting time to be involved in biological control! Globally, pesticides of various types remain the mainstay of weed, pest and plant disease management strategies - but pressure is mounting for change. Resistance, consumer pressure and bans on products (such as neonicotinoids in many countries) are all helping set the stage for greater use of biological control.

Evidence for this comes from industry itself; with some sectors investing heavily in developing biological control strategies. In Australia, Hort Innovation, the main research provider and supported by industry levies, recently awarded a million dollar grant to develop conservation biological control strategies for vegetable growers. This follows work in East Asia in which secondary crops such as sesame were established in the edges of rice fields to promote natural enemies. This simple approach was found to work so effectively that farmers sprayed two-thirds less frequently and enjoyed the benefit of increased yields and profits. It's now recommended practice for rice growers in China and has triggered interest in other countries and crop types. In March this year, for example, I spoke to two very large audiences at workshops on conservation biological control in Japan where – somewhat 'below the radar' there is a groundswell of activity in this approach.

The First International Congress of Biological Control held in Beijing in May 2018 was further evidence that biological control is shifting up a gear. Most significantly this was the first biological control conference that broke down the barriers between differing target and agent taxa, as well as between biocontrol approaches. As a researcher that works principally in conservation biological control of arthropod pests, I found it extremely stimulating to learn from researchers working on vertebrates, weeds and other targets and across the full range of approaches. This must be the way forward; to share ideas across the full breadth of our diverse field rather than hunkering down in traditional silos.

Truly, it's an exciting time to be involved in biological control!

Geoff Gurr

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The First International Congress of Biological Control in Beijing

The highly successful First International Congress of Biological Control was held in Beijing in May of 2018. The meeting was sponsored jointly by the Chinese Academy of Agricultural Sciences and the China Society of Plant Protection – and the IOBC. One of the over-arching themes of the Congress was interdisciplinarity biological control.



Over 1,000 attendees with representation from over 40 countries covering all continents.

Furthermore IOBC Global funded the travel of 9 young scientists to ICBC Beijing in May. The award winners were talented young scientists indeed and represented a broad range of research expertise in biological control – covering biological control of insects, weeds and plant pathogens and hailing from all over the world.

These young scientists were: **Elena Maria Colombo** (Italy), **Elynn Bitume** (USA), **Maxime Damien** (France), **Xhinghu Qin** (UK/China), **Wang Yi** (China), **So Eun Park** (S. Korea), **Jong Cheol Kim** (S. Korea), **Soul Midingoyi** (Kenya) **Boyang Shi** (Australia).

Also selected for an award but unable to attend was: **Uyi Osariyekemwen** (Nigeria).

Yulin Gao and Mark McNeill



Treasurer's Corner

Our membership continued to track upwards in 2018. and we recruited some new members at the ICBC in Beijing. Welcome to all of you! The bulk of members (~80%) are from New Zealand, Australia and China, with the remaining 20% of members from India, Japan, Vietnam, Pakistan, and Philippines. This year we have successfully transitioned to using PayPal to invoice and pay membership subs. I hope this worked well for everyone. Please continue to encourage your colleagues to join:

http://www.aprs.iobc.info/membership_application.html

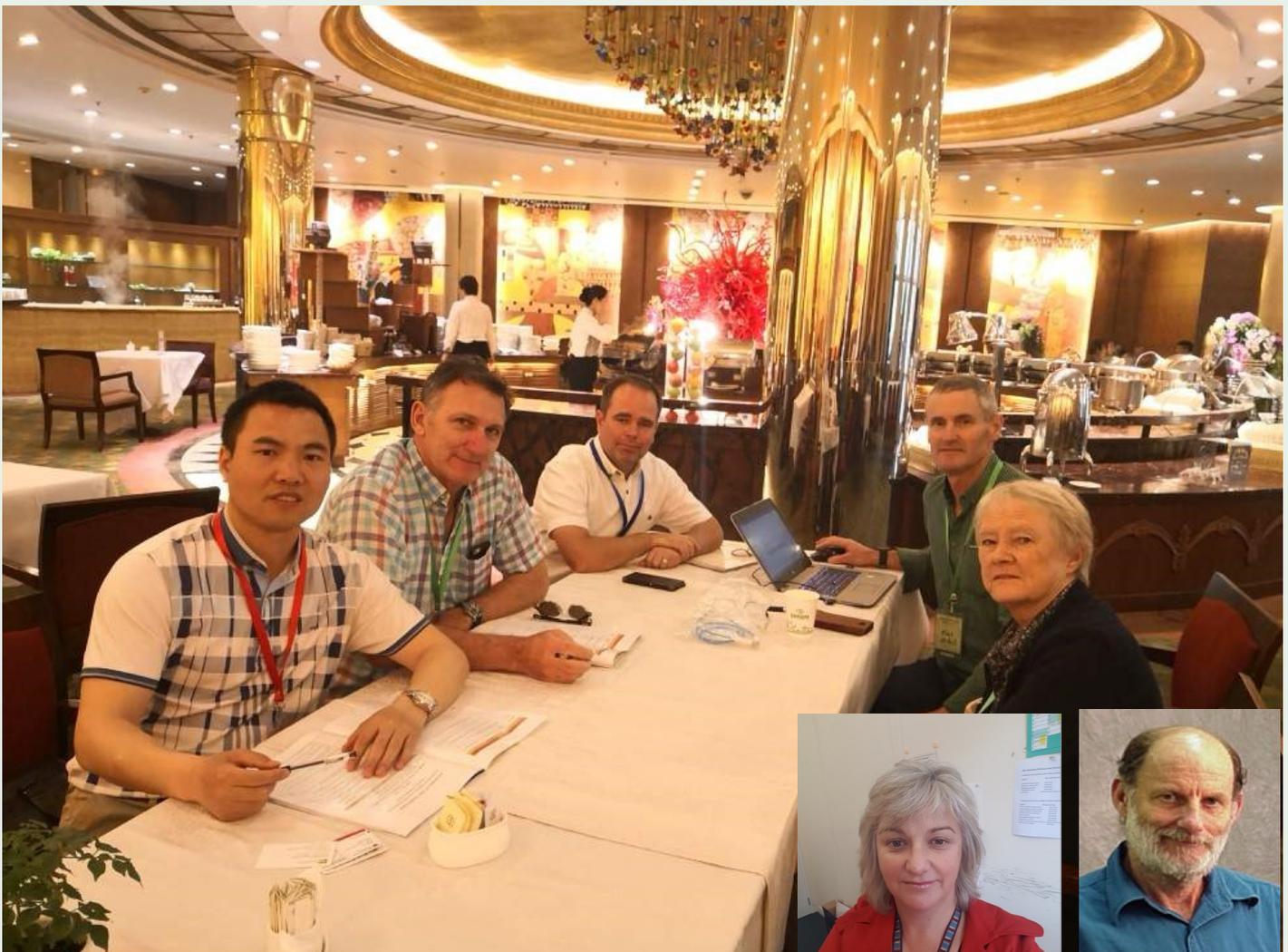


Mike Cripps

Your IOBC-APRS Executive 2018

The Beijing ICBC meeting provided the opportunity for almost all the new IOBC-APRS executive the ability to get together.

Pictured clockwise from the left are Yulin Gao (Vice President), Geoff Gurr (President), Mike Cripps (Treasurer), Mark McNeill (Vice-President), Barbara Barratt (Ex officio Global). Inserted are Toni Withers (Secretary General) and Bill Palmer (Past President).



Dr Barbara Barratt awarded New Zealand Plant Protection Medal



Our very own Barbara Barratt was recently awarded the New Zealand Plant Protection Medal for an outstanding career contributing in particular to Biological Control. It is wonderful to see biological control being given the attention that it deserves. As you may know, Barbara has contributed significantly to the knowledge and literature addressing the potential risks of biological control agents to non-target organisms.

Congratulations from all of us.



A first: New Zealand approves pre-emptive biological control

The Brown Marmorated Stink Bug (*Halyomorpha halys*) poses one of the highest risk biosecurity threats to countries such as Australia and New Zealand. In a first, the New Zealand EPA (Environmental Protection Authority) this month approved the release of a biocontrol agent, the Samurai Wasp, *Trissolcus japonicus*. It was argued that an incursion by the brown marmorated stink bug would lead to widespread use of broad-spectrum agrichemicals, which are likely to adversely affect sustainable practices and access to export markets for New Zealand produce.

The EPA approved the release to occur in the future ONLY if BMSB successfully breaches New Zealand's biosecurity system and establishes. A number of strict measures were placed on this, the first ever pre-emptive biological control release approval. Only the New Zealand government Ministry for Primary Industries (MPI) may evoke the approval, as it is responsible for managing any future incursion responses and has the expertise to manage the timely release. The samurai wasp may only be released in New Zealand after a stink bug invasion has been detected, and only at the location of the incursion. <https://epa.govt.nz/news-and-alerts/latest-news/enter-the-samurai/>



Brown Marmorated Stink Bug is not yet in Australia or New Zealand



A Samurai wasp emerges from stink bug eggs.

Christopher Hedstrom

9th International Workshop on Management of Eupatorieae and other Invasive Weeds

Kuala Lumpur, Malaysia, 5 – 8 March 2019

FIRST
ANNOUNCEMENT

Jointly organized by



9th International Workshop on Biological Control and Management of Eupatorieae and other invasive weeds: this workshop is organized under the auspices of the International Organisation for Biological and Integrated Control (IOBC), and CABI Southeast Asia. The first workshop was held in 1988 to facilitate the management and biological control of *Chromolaena odorata* in resource-poor tropical and subtropical countries. In 2003, the scope of the workshop was expanded to include closely related species such as *Mikania micrantha*, while retaining an emphasis on the tropics. Malaysia has been selected as the host country for this 9th workshop, the first to be held in Southeast Asia. The tribe Eupatorieae, which includes *Chromolaena odorata* and *Mikania micrantha* are widespread in Southeast Asia and have significant economic impacts to agriculture, the environment and livelihoods. The entire region has been shown to be highly climatically suitable for the weeds. Other species of invasive alien plants for which there are good biological control agents available and which could be included in this workshop if the interest exists, include *Salvinia molesta*, *Pistia stratiotes* and *Parthenium hysterophorus*.

REGISTRATION FEES

Local	International
RM 1400	USD 400

* Includes 4 day workshop, meals and field visits
**Accommodation not included

MARK YOUR DATE & REGISTER NOW!

Contact: Secretariat,
CABI Southeast Asia, Building A19, MARDI Headquarter,
43400 Serdang, Selangor, MALAYSIA
Email: h.chan@cabi.org
Fax +603-89426490, Tel: +603-89432921

Visit the site for more information:

<http://www.iobcinvasiveweeds2019.org>

IOBC – Asia-Pacific Regional Section: an International Training Workshop in Conservation Biological Control of Insect Pests

Seeking interest in the **International Workshop on Conservation Biological Control of Insect Pests, Lincoln University, New Zealand, 12–15 November 2018.**

This workshop is a follow-up to that held simultaneously in Beijing and Hanoi in September 2017, which covered all aspects of insect biological control. The proposed workshop will concentrate on Conservation Biological Control (CBC) only. It will target researchers, teachers and especially graduate students and early-career scientists researching or working in biological control in any geographic region.

Of the three main types of biological control of insect pests, CBC is the newest and the fastest growing. There has been a global exponential increase in citation rates for publications in the area of CBC since 1990 (Prof. G.M. Gurr, pers. comm.) and the rate of increase is continuing. This indicates the importance of this 'sustainable' approach to pest management.

A group of experts, mainly from the Asia-Pacific region, will lead the programme, including Prof. Steve Wratten (Lincoln University, NZ), Prof. Geoff Gurr (Charles Sturt University, Australia), Dr Kris Wyckhuys (Vietnam) and Prof. Jonathan Lundgren (USA).

Inexpensive single accommodation and food is available on the Lincoln University campus. Other accommodation and food options are available locally in Lincoln and in Christchurch, 17km away. Our aim is to make this important event a true workshop that involves interactive, blended-learning methods and small-group work.

If you wish to attend this workshop, please **REGISTER ONLINE** as soon as possible. We will then email you an invoice for the total amount to pay and methods of payment.

For more information please email Janine Johnson (janine.johnson@lincoln.ac.nz) or Michelle Boyle (michelle.boyle@lincoln.ac.nz).



Provisional Programme—**International Workshop on Conservation Biological Control of Insect Pests**

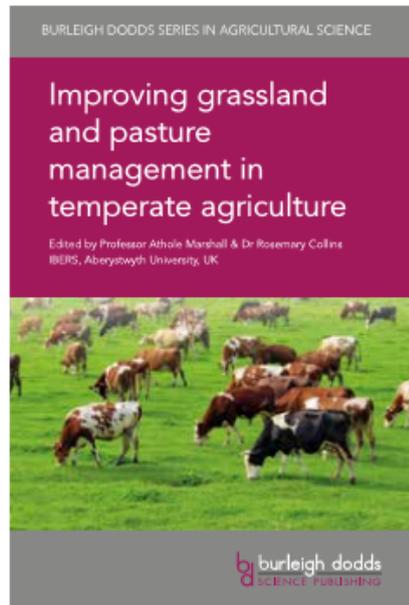
12th to 15th November 2018, Lincoln University, Lincoln, New Zealand

Time	Location	Details
Sunday 11th November		
		Arrivals and settling.
18:00	Mrs O's, Dining Hall	Optional: Evening drinks at Mrs O's on campus. Nibbles provided but buy your own drinks.
Monday 12th November		
10:00	Function Room A, Food & Function Centre (Rm A, F&F Centre).	Workshop begins. Registration, welcome, introductions, plan for the week. Prof Steve Wratten.
11:00		Presentation: ' <i>The global context for this workshop</i> '. Prof Steve Wratten, Bio-Protection Research Centre.
11:45	Lunch break – <i>there are several options on campus to purchase your lunch</i>	
13:00	Rm A, F&F Centre	Visit to workshop experimental sites on campus – further details provided below*.
15:00		Presentation: ' <i>Latest research developments in Europe from working groups of IOBC wprs region</i> '. Prof John Holland (Game and Wildlife Trust, UK).
15:30		Establish working groups and discuss project ideas.
Tuesday 13th November		
09:15	Rm A, F&F Centre	Presentation: ' <i>What's wrong with modern agriculture and how to fix it</i> '. Prof Jon Lundgren (Ecdysis Foundation: The Blue Dasher Farm Initiative).
10:00		An opportunity to talk about experiences from your own country.
11:00		An interactive workshop: ' <i>The biodiversity spiral: a new approach to understanding ecosystem services and how to implement them on farmland</i> '. Facilitated by Dr Mauricio Gonzalez Chang (Universidad de Aysén, Chile) and Morgan Shields (Bio-Protection Research Centre, NZ).
12:00	Lunch break – <i>there are several options on campus to purchase your lunch</i>	
13:00	Rm A, F&F Centre	A discussion of what experiments would be appropriate for group work. What techniques and procedures are available within the Bio-Protection Research Centre and campus for use in group work.
14:00		Set up experiments at the three field sites/begin field observations. Infra-red video techniques will be available.

Wednesday 14th November		
09:15	Rm A, F&F Centre	Presentation: <i>'What makes a successful conservation biocontrol project: achieving real outcomes'</i> . Professor Geoff Gurr (Charles Sturt University, Australia).
10:00		Return to the field plot to collect over-night data and continue with field observations.
12:30	Lunch break – <i>there are several options on campus to purchase your lunch</i>	
13:30	Rm A, F&F Centre	Begin analysing group work data. Prepare simple PowerPoint presentations.
18:00	Mrs O's, Dining Hall	BBQ dinner and Social Evening (outdoors if weather permits).
Thursday 15th November		
09:15	Rm A, F&F Centre	Presentation: <i>'Enhancing the uptake of CBC in developing countries'</i> . Dr Kris Wyckhuys (University of Queensland & IPP-CAAS, Australia).
10:00		Visit to the Lincoln University vineyards. Discussion: What would you do to make them more sustainable? What experiments would you do to achieve this?
12:00	Lunch break – <i>there are several options on campus to purchase your lunch</i>	
13:00	Rm A, F&F Centre	Group PowerPoint presentations. What worked, what did not? Unanswered research questions.
17:00		Workshop wrap-up, photos and farewells.

A new book has been published including a chapter: "Biocontrol of weeds in Temperate Pastures" by G. Bourdot and M. Cripps

BURLEIGH DODDS SERIES IN AGRICULTURAL SCIENCE



NOW AVAILABLE

About the book

In many countries there has been a shift to intensive grassland livestock systems with higher environmental impact. There is also greater understanding of the wider role of grasslands in delivering ecosystem services. This collection reviews current research into the more sustainable use of agricultural grassland.

About the editor

Professor Athole Marshall Head of the internationally-renowned Public Good Plant Breeding Team at the Institute of Biological, Environmental and Rural Sciences (IBERS), Aberystwyth University, UK. The team is noted for its work in breeding new varieties of forage grasses, legumes and oats. Professor Marshall is Past President of the European Grassland Federation.

Dr Rosemary Collins is a Principal Investigator at IBERS focussed on developing new varieties of legumes such as clover for a more sustainable agriculture.

Improving grassland and pasture management in temperate agriculture

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Biological weed control in temperate grasslands

Graeme W. Bourdôt and Michael G. Cripps, AgResearch Limited, New Zealand

- 1 Introduction
- 2 Classical biological control of weeds
- 3 Prospects for classical biological weed control in temperate pastures
- 4 Biological herbicides
- 5 Future trends
- 6 Conclusion
- 7 Where to look for further information
- 8 References

Members recent papers in the IOBC journal

[BioControl](#)

August 2018, Volume 63, [Issue 4](#), pp 505–518 | [Cite as](#)

Modelling the potential geographic distribution of *Trissolcus japonicus*: a biological control agent of the brown marmorated stink bug, *Halyomorpha halys*

Authors [Authors and affiliations](#)

G. A. Avila , J. G. Charles

[Open Access](#) | Article

First Online: 05 January 2018

7

Shares

799

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Citations



[BioControl](#)

August 2018, Volume 63, [Issue 4](#), pp 521–531 | [Cite as](#)

Breakdown in classical biological control of Argentine stem weevil: a matter of time

Authors [Authors and affiliations](#)

Federico Tomasetto , Silvio Cianciullo, Marco Reale, Fabio Attorre, Oluwashola Olaniyan, Stephen L. Goldson

Article

First Online: 19 March 2018

7

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International Conference on Biocontrol, Bengaluru, India



1st INTERNATIONAL CONFERENCE ON BIOCONTROL

APPROACHES & APPLICATIONS

27 - 29
September
2018

ICBC 2018 ORGANIZERS

Society for Biocontrol Advancement (SBA),
Bengaluru, India

ICAR- National Bureau of Agricultural
Insect Resources (NBAIR),
Bengaluru, India

Indian Council of Agricultural
Research (ICAR),
New Delhi, India

IN COLLABORATION WITH,

Centre for Agriculture and Biosciences
International (CABI), United Kingdom

IOBC Parthenium Working Group &
Tuta Working Group

The International Association for the Plant
Protection Sciences (IAPPS)

Mail Us @

icbc2018bengaluru@gmail.com

ICBC 2018
CONFERENCE VENUE

HOTEL LE MERIDIEN
BENGALURU, INDIA



ICAR - NATIONAL BUREAU OF
AGRICULTURAL INSECT RESOURCES
H.A. Farm Post, Bellary Road, Hebbal,
Bengaluru - 560024, India.

www.icbc2018bengaluru.com
icbc2018bengaluru@gmail.com

Contact Us



icbc2018bengaluru@gmail.com

Another first for biological control conferences has been announced for our region. This will be held 27-29 September in Bengaluru, India.

The main theme for the conference is 'Biological Control: Approaches and Applications.' Sub-themes will include:

Biodiversity and biosecurity

Conservation strategies

Biotechnological approaches in biocontrol

Production and utilization of macrobials for insect pest management

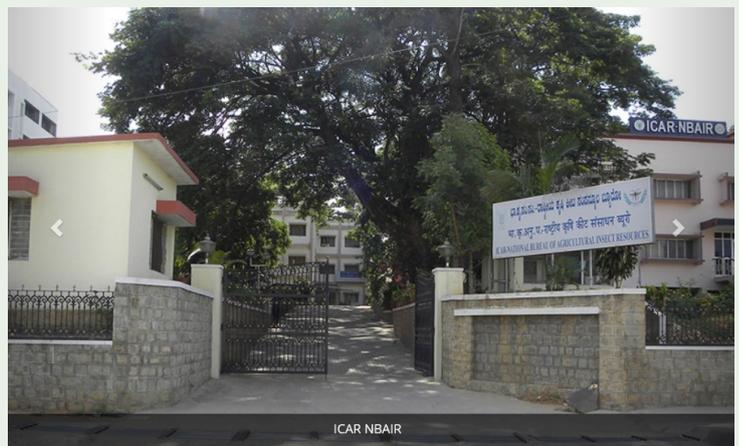
Production and utilization of microbials for insect pest management and disease management

Biological control compatible approaches

Biological control of invasive pests and weeds

Biological control: industrial perspective and policy issues

IOBC Parthenium Working Group workshop



ICAR NBAIR



NBAIR Quarantine Lab

For more information see: [icbc2018bengaluru](http://icbc2018bengaluru.com)

16-20 September 2019 IOBC-Global Working Group Meeting: 14th International Symposium Ecology of Aphidophaga, Montreal (Quebec) Canada

The Symposium will be held in the Science Faculty of the University of Quebec at Montreal (Université du Québec à Montréal – UQAM) located in downtown Montreal.

It will be 20 years since the last Aphidophaga was held in the province of Quebec in Canada and we are grateful to the Scientific Committee of Aphidophaga and the International Organization of Biological Control (IOBC) for choosing Montreal as the venue for the 14th Symposium. We are also grateful to the IOBC for supporting the meeting. We look forward to welcoming you to Montreal in 2019 for Aphidophaga 14.

- Topics: Life cycle, voltinism and diapause
- Food relations (including non-aphid food of aphidophaga)
- Behaviour
- Systematics and morphology, Phylogeny
- Population dynamics, Modelling
- Distribution and seasonal adaptation
- Parasitoids and pathogens of aphidophaga
- Parasitoids and pathogens of aphids
- Tritrophic interactions
- Intraguild interactions
- Invasive aphidophaga
- Chemical ecology
- Integrated pest management



www.aphidophaga14.uqam.ca

Email: aphidophaga14@uqam.ca

Phone (E. Lucas)

+1-514-987-3000 ext. 3367#

IOBC-APRS Facebook Page

Finally a reminder to APRS members about the Facebook page to complement our other communications of the web page, emails and six monthly Newsletter. Our Facebook page is a closed group accessible only to members. Members will be able to post new topics themselves and so not rely on things filtering down from the Committee. Another useful facility is that documents can be stored and shared under 'Files'.

We strongly encourage you to join. Please go to <https://www.facebook.com/groups/1132093136801336/> and "join" the group. Also make sure to click on the Notifications button and select "ALL POSTS" so that our posts will make it into your news-feed. Thanks Bill Palmer for keeping it so up to date!

