International Organisation for Biological Control (IOBC)
Asia & Pacific Regional Section, IOBC-APRS

# IOBC-APRS Newsletter No. 10 May 2019

## Message from your President


Dear Members,

IOBC—IOBC—Global (our parent body) are currently calling for proposals to provide financial assistance to any regions who see a need to organise a practical training course in biological control. Early-career practitioners or researchers will be provided support to run/ attend up to three courses per year. What a wonderful opportunity! If you have an idea for an appropriate course for 2020, please make contact with Dr Ronny Groenteman, the global Secretary-General before 30 November 2019. (email : secretary-general@iobcglobal.org).

## Contents



Since our last regional newsletter in 2018, your executive have been involved in a number of things. Barbara Barratt attended the ISBCW (International Symposium on the Biological Control of Weeds) in Switzerland last year. At this meeting a vote was initiated and since passed that IOBC would start engaging with members over the next four years with a view to forming a new Global Working Group for Classical Biological Control of Weeds. Raghu Sathyamurthy, CSIRO Australia, will be our regional point of contact over this time. The global executive believes this will facilitate efforts to further raise the profile and awareness of weed biological control and to provide better mechanisms for lobbying. The launch of this working group may take place at the next ISBCW in Iguazu, Argentina, in May 2022. Please do not hesitate to contact Raghu if you have ideas for this working group. Considering the number of weeds of Eurasian origin that are now impacting upon other regions such as Europe and North America, I am sure this working group can only have beneficial outcomes for us all.

Geoff Gurr

## Report from Management of Eupatorieae weeds workshop

The 9th IOBC International Workshop on the Biological Control and Management of Eupatorieae species was held at the Everly Hotel, Kuala Lumpur, Malaysia from 19-22 March 2019. The workshop was organised by CABI Malaysia and was attended by over 40 people, representing nine countries from Africa, Asia and the Pacific regions.

The workshop was officially opened by Datuk Dr. Mohamed Roff bin Mohd. Noor, Director General, Malaysian Agricultural Research and Development Institute (MARDI). There were numerous talks on the impact of various agents on *Chromolaena odorata* and *Mikania micrantha* in several countries. The gall fly *Cecidochares connexa* has been intentionally released in 12 countries and has established in 10 countries. However, it has now spread naturally to six countries, including into Malaysia from north Sumatra. In countries where impact studies have been conducted, it is reducing populations of chromolaena to where the weed is no longer causing severe economic and environmental impacts.

In Indonesia, the gall fly is proving effective in some regions but around Bogor, where it is cooler, wetter and at a higher elevation, the gall fly is not controlling chromolaena as well. More research is being conducted by BIOTROP and there is discussions on whether there is a need to import other effective agents from elsewhere.

The Plant Protection Research Institute (PPRI) in South Africa has been under taking research on chromolaena for over 20 years. Unfortunately, South Africa has a different biotype of chromolaena to Asia and West Africa and the gall fly does not attack it. PPRI have successfully released two other biological control agents that have established and providing some degree of control. PPRI are also working on several other potential candidtes, including another species of gall fly in the hope of achieving better control. If successful, these additional agents could be utilized by other countries where chromolaena is a problem.

The rust *Puccinia spegazzinii*, a biological control agent for *Mikania micrantha*, has establish in six of the nine countries where it has been released. In Papua New Guinea and Vanuatu where, monitoring has been conducted, mikania populations have decreased by about 50%.


**Datuk Dr. Mohamed Roff bin Mohd. Noor, Director General of MARDI opens the 9th IOBC International Workshop on the Biological Control and Management of Eupatorieae species**

## Report from Eupatorieae weeds workshop continued...

There were also presentations on the status of biological control of mikania in India, Fiji, and the Cook Islands. In India, the rust failed to establish and there are plans to re-introduce the rust, based on its effectiveness in other countries. In Fiji, studies are being conducted to monitor its spread and impact, following its release 10 years ago. The rust has recently been introduced into the Cook Islands and already, it is showing potential to reduce populations in areas where it has been released.

Both the gall fly for chromolaena and the rust for mikania have been released in only a fraction of the countries in which the respective weeds occur. Thus, there is scope to promote their usefulness and opportunities to introduce them into other countries where either or both weeds occur.

Peripheral to the biological control talks, there were presentations on regional cooperation, networking and the Nagoya Protocol. These presentations were highly relevant to promoting biological control in the Asian-Pacific region, as well as elsewhere. The third day of the workshop discussed salvinia, parthenium and other species which have the potential to become weedy.

On the fourth day, participants were taken into the field to observe biological control agents in action, particularly the gall fly on chromolaena. Biological control agents were also observed on *Lantana camara* and *Mimosa pigra*. Numerous other weeds were seen, such as *Mikania micrantha* and *Mimosa diplotrica,* for which effective biological control agents are available.

The workshop was designed to maximize discussion. The half hour discussions at the end of each session proved very useful for debating various topics.

Some of the actions arising from the workshop were CABI will take a lead role in increasing the awareness and promoting biological control in the region. MARDI has indicated it wants to re-establish biological control projects and have already met with researchers from Landcare Research NZ to collaborate on a new project based in the Pacific, working on weeds native to SE Asia.

## Photos from the Eupatorieae weeds workshop continued...

Dr Soekisman (BIOTROP) showing participants the gall fly *Cecidochares connexa* on a patch of *Chromolaena odorata* during the field trip in KL.

Michael Day ((Biosecurity Queensland) showing participants insects attacking *Urena lobata*, a plant native to Malaysia but problematic to Vanuatu. A New Zealand Ministry of Foreign Affairs and Trade project with Landcare Research will be conducting surveys in Malaysia looking for potential weed biological control candidates of *U. lobata*.

## Treasurer's Corner

Our membership continues to increase. 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

*Toni Withers*

*Secretary-General*

A reminder that your local executive are Geoff Gurr (President), Yulin Gao (Vice President), Mike Cripps (above, Treasurer), Mark McNeill (Vice-President), Barbara Barratt (Ex officio Global), Toni Withers (Secretary General, pictured left) and Bill Palmer (Past President).

You can contact any of us or become a member by accessing these pages:

http://aprs.iobc.info/

http://www.iobc-global.org/rs_aprs.html

## IOBC-APRS Facebook Page

Our Facebook page is a closed group accessible only to members. Members can 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 it. 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 newsfeed. Thanks Bill Palmer for keeping it so up to date!

# Members recent papers in the IOBC journal

BioControl (2019) 64:103–114
https://doi.org/10.1007/s10526-018-09917-x

## With or without you: stem-galling of a tephritid fly reduces the vegetative and reproductive performance of the invasive plant *Chromolaena odorata* (Asteraceae) both alone and in combination with another agent

Pascal Osa Aigbedion-Atalor · Michael D. Day · Itohan Idemudia · David D. Wilson · Iain D. Paterson

Received: 23 June 2018 / Accepted: 26 November 2018 / Published online: 3 December 2018



BioControl (2018) 63:313–317
https://doi.org/10.1007/s10526-018-9888-2

EDITORIAL

## Constraints in weed biological control: contrasting responses by implementing nations

M. Schwarzländer · V. C. Moran · S. Raghu

**Acknowledgements** The papers in this Special Issue were delivered as presentations as part of a symposium entitled "Rise or demise? A global outlook on the future of classical biological weed control" at the 25th International Congress of Entomology in Orlando, Florida, USA from 25 to 30 September 2016.

BioControl (2019) 64:91–101
https://doi.org/10.1007/s10526-018-09915-z

## Folivory impact of the biocontrol beetle, *Cassida rubiginosa*, on population growth of *Cirsium arvense*

Michael G. Cripps · Sarah D. Jackman · Chikako van Koten

Received: 9 July 2018 / Accepted: 26 November 2018 / Published online: 30 November 2018


**Abstract** The folivorous beetle, *Cassida rubiginosa* Müller (Coleoptera: Chrysomelidae), was released in New Zealand in 2007 as a biocontrol agent against the

**Introduction**

*Cirsium arvense* (L.) Scop. (Californian

## Some CABI projects in our region

The Climate Smart project began in 2015 in Tra Hat in Vietnam, Rohal Soung in Cambodia and Ekxang in Laos. Crop pests and diseases in these villages were assessed and "pest-smart" practices were developed that are environmentally friendly and will be resilient to climate change. Training (gender-based) of plant health advisors has taken place to skill them in running training and education clinics, and these have occurred already in all three areas.

The project has created a lot of interest because of its approach to managing pests and diseases.

For more information contact the Plantwise Regional Team Leader for CABI in Malaysia:

Sivapragasam Annamalai Email: e.siva@cabi.org

Improved management of cocoa pod borer in Papua New Guinea. This project with ACIAR concluded in 2018 with development of region-specific extension strategies to assist with managing this serious invasive pest.

For more information contact the project advisor in IPM in Malaysia:

Muhammad Faheem Email: m.faheem@cabi.org

**Plant clinics in Asia: reducing the use and risks of pesticides** (PDF)

One of the key aims of the Plantwise programme, led by CABI, is to reduce pesticide misuse. Through plant clinics, farmers are provided with a range of Integrated Pest Management (IPM) options by plant doctors who emphasise pest monitoring and prevention options before direct control measures.

Country surveys carried out in Cambodia, Myanmar, Thailand and Vietnam in 2017 revealed that, after attending plant clinics, both men and women farmers had reduced the frequency of pesticide applications on their crops, replaced the most toxic chemicals with safer alternatives, increased the use of non-chemical options to tackle pests and diseases, stopped applying pesticides on the advice of friends and agro-dealers, and reported a dramatic decrease in health problems.

# 27th Asian Pacific Weed Science Society Conference, 3 September Sarawak, Malaysia


*"weed science for sustainable agriculture and environment"*

This will be a significant conference for researchers, practitioners, and consumers to meet and discuss the development and challenges in weed management.

Riverside Majestic Hotel, Kuching, Sarawak, 3-6 September 2019.

Submit abstracts for oral or poster submissions now. Submissions close 31 May 2019

Notification of acceptance will be received by end of June.

More information: https://www.apwss2019.org/

Scientific programme:

- Weed biology, physiology and ecology
- Weed management in cropped areas
- Weed management in non-cropped areas and aquatic system
- Herbicide resistant weeds and herbicide tolerant crops
- Allelopathy and allelochemical in weed management
- Biological weed control
- Climate change impact on crop-weed interaction and management
- Invasive weed management
- Weed risk assessment, management and quarantine method
- Herbicide behaviour in soil and water
- Education and extension in weed science
- Herbicide formulation and application technology
- Novel herbicides and herbicide mode of action
- Utilization of weeds for value-added products
- Precision and advances in weed control technology

# Ecology of Aphidophaga, Montreal Canada. 16-20 September 2019

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.

- 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**

**Early Registration closes 31 May**

**Abstract submissions until June 30**


# 20th NSW Weeds Conference 26 Aug 2019 Newcastle, Australia

Weeds are a serious threat to Australia's native flora and fauna and add pressure to our economy. Recent technologies, policies and innovations are helping us manage weeds more effectively - but more work is needed. This conference provides an opportunity for the NSW weeds management community to showcase new research and ideas for controlling and eradicating weeds. It's a chance to network and build strategic partnerships and invest in a shared vision for our industry's future.

Conference session themes include:

- Measuring success in weed management
- Weeds in the urban landscape
- Weeds management in rural settings
- Putting the we in weeds: working together

**Website:** https://www.nswweedsconf.org.au

## #BIOCONTROLASIA 25 September 2019 Chengdu, China

New Ag International, 2BMonthly and IBMA have joined forces to bring you this conference:

https://lifesciences.knect365.com/biocontrol-asia/


**Topics will include:**

- Global Biocontrol Market
- Regional Biocontrol Market in Asia
- Industry trends in Asia
- Biocontrol Regulatory in China and other Asian countries
- How IPM is helping adoption of Biocontrol
- Biocontrol as a business – adoption by growers and distributors

## Biocontrol of Forest Insect Pests and Pathogens, 6 Nov, Pretoria

IUFRO INTERNATIONAL UNION OF FOREST RESEARCH ORGANIZATIONS

The IUFRO working group 7.03.13 focuses on research related to the biological control of forest insect pests and pathogens. The meeting will be held at the newly opened facilities of the Future Africa Campus (www.futureafrica.science) of the University of Pretoria, in Pretoria, South Africa. The meeting will be not large, and will be held from Nov 6th to 8th, with a post-meeting field trip from the 8th to 11 November focussing on plantation forestry and the main pests of pine and eucalyputs. The field trip will also include a visit to the Kruger National Park.

**Website**: https://www.fabinet.up.ac.za/index.php/event/iufro/

## 6th Int. Entomophagous Insects Conference, Italy, 9 Sept 2109

The International Entomophagous Insects Conference – IEIC (originated from the merging of the International Entomophagous Insects Workshop and the European Parasitoid Workshop), will be held in the ancient Monumental Complex of the San Pietro Abbey, which is the location of the DSA3 (Department of Agricultural, Food and Environmental Sciences) of the University of Perugia.

Early bird and abstract submissions close 5th May 2019

**Website:** http://www.ieic6.it

# 1st announcement: 2nd International IOBC-APRS Workshop – Predatory Mites as Biological Control Agents 16-19 October 2019, Chongquing, China

**This workshop follows the successful first workshop held in 2014**

This workshop provides opportunities to bring together international students, researchers and pest management practitioners dealing with all aspects of predatory mites and other biological control related fields.

The theme of the 2nd workshop is "**Phytoseiid mites: as or beyond natural enemies".** This topic implies our interest and endeavor in utilizing predatory mite as biological control agents against more target pests, as well as excellent experimental materials of more fundamental and theoretical research. We will especially focus on how we should utilize rich predatory mite resources and develop the predatory mite research in the Asia-Pacific region.

**Scientific committee**:

- Xuenong Xu (IPP-CAAS)
- Yulin Gao (IPP-CAAS)
- Huai Liu (CPP-SWU)
- Geoff Gurr (IOBC-APRS)
- Zhiqiang Zhang (Landcare Research & University of Auckland, New Zealand)
- Norihide Hinomoto (Central Region Agricultural Research Center, NARO, Japan)
- Shingo Toyoshima (Kanaya Tea Research Station, Institute of Fruit Tree and Tea Science, NARO, Japan)

Titles for abstracts or posters email to liuhuai@swu.edu.cn before July 30th, 2019

**Topics for contributed oral papers and posters include but are not limited to the following list:**

1. Taxonomy, Phylogenetics and Evolution
2. Resource Survey, Optimization and Evaluation
3. Product Development and Application
4. Physiological Regulation and Gene Function

Accommodation will be at this 5 star Haiyu Hot Spring Hotel, with a shuttle provided between the hotel and CPP-SWU during the workshop.

Contact: Prof Huai Liu: liuhuai@swu.edu.cn

SAVE THE DATE

## Australasian Plant Pathology Society Conference, 25 Nov, 2019

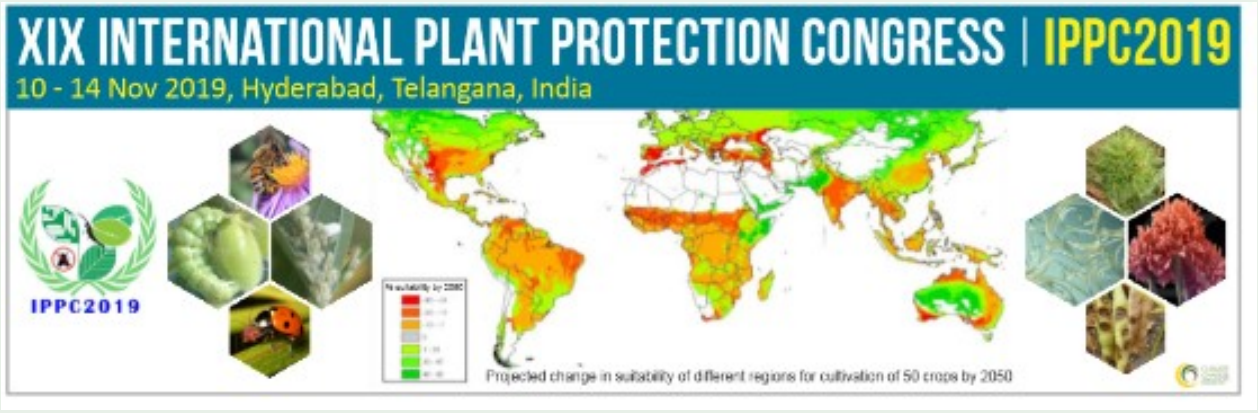

This conference will be the climax of the APPS 50th birthday celebrations, where we celebrate our "Strong foundations and highlight the latest advances in plant pathology that will lead to "Future Innovations".

Excellent scientific presentations by local and international speakers will be the backbone of our meeting, supported by engaging field tours and workshops allowing conference participants to experience plant pathology up close and to visit key agricultural sites in the areas surrounding Melbourne.

**More Information:** http://www.apps2019.org/index.php

Contact: info@apps2019.org

## XIX Int Plant Protection Congress 10 Nov, India, IPPC2019




The program of IPPC2019 is aimed at addressing the key issues in crop protection against the backdrop of climate change and mounting pressure on natural resources to meet the growing need for nutritious and safe food, conservation of biodiversity and creating opportunities for economic growth.
The IPPC2019 will provide a great opportunity to present, discuss and disseminate the recent advances in crop protection, and establish contact and collaboration between crop protection scientists from different parts of the world. The deliberations of IPPC2019 will include plenary speeches and concurrent sessions in different disciplines of crop protection to create an awareness of the exciting advances that have been realized in addressing the challenges of nutritional, environmental and societal sustainability through innovative science, partnerships and an enabling policy environment.

**Website:** http://ippc2019.icrisat.org