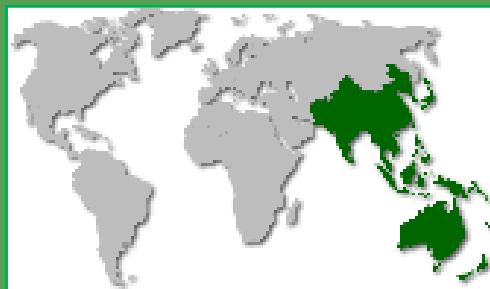




# International Organisation for Biological Control (IOBC)

Asia & Pacific Regional Section, IOBC-APRS

## IOBC-APRS Newsletter No. 11 November 2019



### Message from your President



Dear Members,

**T**he IOBC Executive Committee for global recently met in Perugia, Italy. The term of the current Global Exec Committee is coming to an end in 2020 and they will need some new blood! Please consider nominating yourself or suggesting to a colleague that they do so. IOBC Global has openings in all of the positions:

President, Vice President, Secre-

tary-General, and Treasurer.

All that they need is a descriptive paragraph of the person running, along with a rationale for the candidacy for the particular post and a head-shot photo. Please send this to Ronny Groentemann (our current Secretary Treasurer) by November 20 of this year, and let any of us know if you have any questions. The balloting will be done in association with the December 2019 IOBC newsletter.

Send to: Dr Ronny Groenteman, the global Secretary-General before 30 November 2019. (email : [secretary-general@iobcglobal.org](mailto:secretary-general@iobcglobal.org)).

Please see the IOBC announcement (p7) on the 2nd International Congress of Biological Control, which we will hold in Davos, Switzerland, in 2021. We seek ideas for symposia of specific interest to the Asia Pacific Region.

Meanwhile the International Congress of Entomology (p9) will include lots of biological control work. Some relevant sections with multiple symposia include: Biological control and insect pathology, Ecosystem Services, Interactions and communication between trophic levels.

Geoff Gurr

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## Report from 2nd International Workshop on Predatory Mites

The 2nd international workshop of IOBC-APRS (International Organisation of Biological Control, Asia and Pacific Regional Section) Predatory Mites as Biological Control Agents Working Group was successfully held in Chongqing, China on 16-19 October 2019. This workshop was co-sponsored by IOBC-APRS, Institute of Plant Protection of Chinese Academy of Agricultural Sciences (IPP-CAAS), and Southwest University.

The IOBC-APRS Predatory Mites as Biological Control Agents Working Group was established in November 2014. The convenor of this working group is Professor Dr. Xuenong Xu, of IPP-CAAS. This working group had its first workshop held in Beijing in 2016.

The 2nd workshop was hosted by Dr. Hongbo Jiang, Southwest University. Prof. Dr. Jinjun Wang (Vice Principal of Southwest University) and Prof. Dr. Yulin Gao (Vice President of IOBC-APRS) addressed the workshop. More than 50 scientists and students from New Zealand, Austria, Italy, Vietnam, India, Pakistan, Egypt, Australia, Canada, Nigeria, and China participated in this workshop.

The theme of the 2nd workshop was “Predatory mites: as or beyond natural enemies”. Predatory mites are successful, highly commercialized, and widely applied natural enemies and biological control agents. But they also have other interesting features. Lately, more and more attentions have been paid on their behavior, microstructure, genetics and molecular biology, etc. This topic implied our interests and endeavor not only in utilizing predatory mites as biological control agents against more target pests, but also in exploring their values in other aspects, such as in fundamental and theoretical research.

A total of 24 abstracts were received for this workshop. Prof. Jinjun Wang introduced insect and mite fundamental research in Southwest University. Prof. Xuenong Xu introduced history and updates of predatory mite research in China. Dr. Zhiqiang Zhang (Prof. of University of Auckland, New Zealand) and Dr. Peter Shausberger (Prof. of University of Vienna, Austria) provided invited talks regarding impact of predatory mite immature experiences on biological control efficiency. Other presentations focused on predatory mite resource survey and evaluation, resistance screening, nutrition requirement and mass production techniques, reproduction mechanisms, and integrated applications, etc. The presentations are informative and impressive, which prompted heated discussions and exchanges of ideas.

**Participants in Chongqing for the Predatory Mites as Biological Control Agents Working Group second successful meeting**





## 2nd International Workshop on Predatory Mites cont..



The convenor of the working group Professor Dr. Xuenong Xu, of IPP-CAAS (left) and participants of the Predatory Mites as Biological Control Agents Working group conference

## 2nd International Workshop on Predatory Mites cont..



Three students were presented with awards for their presentations (see below). They were Chuanbei Tian (Ph.D. candidate, Southwest University), Zhongqiu Xie (Master student, IPP-CAAS), and Siqiong Tang (Master student, Shihezi University).

Participants also visited the labs of insect molecular ecology, insect systematics and evolution, insect ecology and pest biocontrol, Southwest University, as an example of fundamental research platforms for insect and mite research in China.

At the end of the workshop, members of the working group reached the decision to hold the next workshop in Beijing, 2021. The 3<sup>rd</sup> workshop will be held together with the 13<sup>th</sup> The Symposium of Acarology in China, so that the participants will have a chance to get better ideas about Acarology research in China.

*Yulin Gao*



Best student presentations: Chuanbei Tian (Southwest University), Zhongqiu Xie (IPP-CAAS), and Siqiong Tang (Shihezi University).

Congratulations!

恭喜



## Treasurer's Corner

Our members continue to utilise PayPal for receiving invoices and paying membership subs. If you have any technical difficulties with this method please contact me. Please continue to encourage your colleagues to join too!:

[http://www.aprs.iobc.info/membership\\_application.html](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), Ronny Groenteman (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](http://www.iobc-global.org/rs_aprs.html)

## IOBC-APRS Facebook Page

Our Facebook page is a closed group accessible only to members. Members post new topics and post-graduate and job opportunities on this page. 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!



## Our members are so busy! Recent papers in the IOBC journal:

[BioControl](#)

August 2019, Volume 64, [Issue 4](#), pp 367–379 | [Cite as](#)

### Experimental assessment of the biosafety of *Trissolcus japonicus* in New Zealand, prior to the anticipated arrival of the invasive pest *Halyomorpha halys*

Authors

[Authors and affiliations](#)

J. G. Charles, G. A. Avila , Kim A. Hoelmer, Sophie Hunt, Robin Gardner-Gee, Frances MacDonald, Vicky Davis



[BioControl](#)

October 2019, Volume 64, [Issue 5](#), pp 553–561 | [Cite as](#)

### Weed floral resources and commonly used insectary plants to increase the efficacy of a whitefly parasitoid

Authors

[Authors and affiliations](#)

Salah-Eddin Araj , Morgan W. Shields, Stephen D. Wratten

[BioControl](#)

June 2019, Volume 64, [Issue 3](#), pp 233–247 | [Cite as](#)

### Exploration for candidate biological control agents of the submerged aquatic weed *Hydrilla verticillata*, in Asia and Australia 1996–2013

Authors

[Authors and affiliations](#)

Matthew Purcell , Nathan Harms, Michael Grodowitz, Jialiang Zhang, Jianqing Ding, Greg Wheeler, Ryan Zonneveld, Roch Desmier de Chenon


[BioControl](#)

June 2019, Volume 64, [Issue 3](#), pp 291–301 | [Cite as](#)

### Establishment and seasonal activity in New Zealand of *Mastrus ridens*, a gregarious ectoparasitoid of codling moth *Cydia pomonella*

Authors

[Authors and affiliations](#)


John G. Charles , W. R. Manoharie Sandanayaka, James T. S. Walker, Peter W. Shaw, Asha Chhagan, Lyn M. Cole, Kate Colhoun, Vicky A. Davis, D. Roger Wallis

These latest papers available **on-line first** at: <https://www.springer.com/journal/10526>

### Life history traits of *Nesidiocoris tenuis* on *Bemisia tabaci* and *Thrips palmi*

Authors

[Authors and affiliations](#)

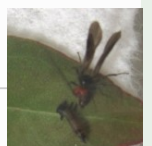
Eizi Yano , Miku Nakauchi, Takahito Watanabe, Hiroshi Watanabe, Shun Hosaka, Satsuki Nishimori, Saki Miura, Ikuo Kandori, Norihide Hinomoto

### Host testing of *Eadya daenerys*, a potential biological control agent for the invasive chrysomelid pest *Paropsis charybdis*, predicts host specificity to eucalypt-leaf feeding Paropsina

Authors

[Authors and affiliations](#)

T. M. Withers , C. L. Todoroki, G. R. Allen, A. R. Pugh, B. A. Gresham



## Call for symposium topics from APRS for ICBC2 in 2021

**W**e are happy to announce the **Second International Congress of Biological Control (ICBC2)**, which will be held in **Davos Switzerland April 26 – 30, 2021**. So please save these dates!

This congress builds upon the first International Congress on Biological Control (held in Beijing in 2018), and the First International Conference of Biological Control (held in Bengaluru, India in 2018). Following the lead of these two meetings, the combined ICBC2 will provide a platform for multi- and inter-disciplinary biological control research and application. This congress is unique in serving as a meeting point for scientists and practitioners that are working on a wide breadth of biological control targets including insect pests, plant and animal diseases, weeds and invasive vertebrates.



Biological control science has experienced transformational advances in various critical areas over the past decades including risk assessment, commercial mass-rearing, and the elucidation of complex interactions. The discipline is therefore more poised than ever to contribute substantially to solving the world's grand environmental and health challenges. A key to harnessing these advances for maximum benefit is to create strong linkages among different sub-disciplines, targets and approaches of biological control.

We hope that you can join us in this effort to broaden linkages in biological control science and increase the reach of biological control solutions worldwide. **We are currently seeking ideas for symposia of interest to your region:** [groentemanr@landcareresearch.co.nz](mailto:groentemanr@landcareresearch.co.nz)

Or please contact one of the Organizing Committee:

- Ulli Kuhlmann CABI Delemont, Switzerland
- George E. Heimpel IOBC Global, University of Minnesota, USA
- Barbara Barratt IOBC Global, AgResearch, New Zealand: [Barbara.barratt@agresearch.co.nz](mailto:Barbara.barratt@agresearch.co.nz)
- Gopalsamy Sivakumar National Bureau of Agricultural Insect Resources, India



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



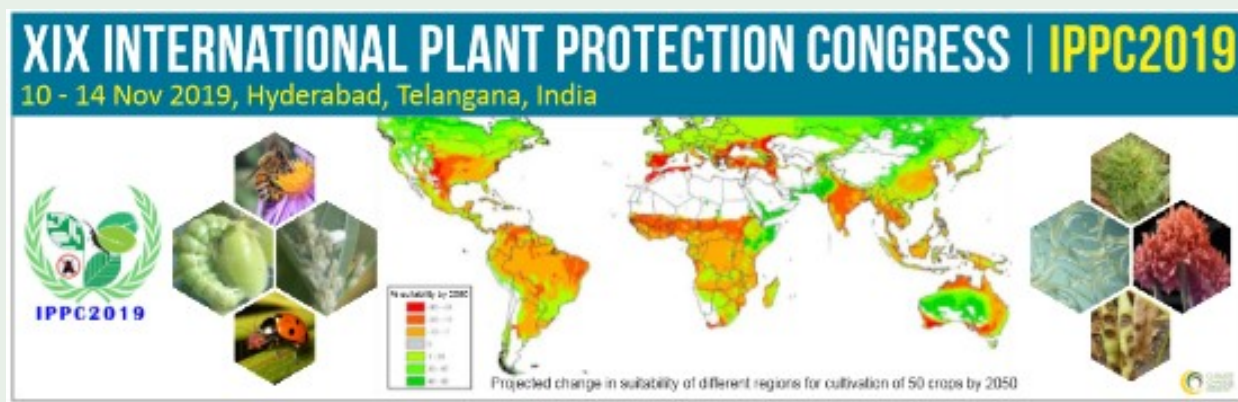
This conference will be the climax of the APPS 50th birthday celebrations, where we celebrate our "Strong foundations and highlight the latest advances in plant pathology that will lead to "Future Innovations".

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:** <https://www.apps2019.org/>

**Contact:** [info@apps2019.org](mailto: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>



## 50th Australian Entomological Society Conference, 1-4 Dec 2019, Brisbane, Australia

AUSTRALIAN ENTOMOLOGICAL SOCIETY  
50th AGM & Scientific Conference

1-4 Dec 2019  
Brisbane Convention  
& Exhibition Centre

Understanding the Australian biota in a changing world

in association with the:  
SOCIETY OF AUSTRALIAN SYSTEMATIC BIOLOGISTS  
and  
AUSTRALASIAN ARACHNOLOGICAL SOCIETY



The Organising Committee is pleased to open invitations for you to attend the 2019 combined conference of the Australian Entomological Society (AES), the Society of Australian Systematic Biologists (SASB) and the Australasian Arachnological Society (AAS).

For more information: <https://www.aesconferences.com.au/>

## XXVI ICE: International Congress of Entomology, 19-24 July 2020 Helsinki, Finland

The ICE2020Helsinki congress will be arranged in sections representing major fields of entomological interest. Each section will include a number of symposia.

The ICE2020Helsinki congress intends to attract world-leaders as symposium organizers who will be able to identify cutting-edge topics and to assemble the best-available established researchers, and excellent younger researchers, to present their work.

Website: <https://www.ice2020helsinki.fi>



## 21-27 September 2020: 20th Organic World Congress (OWC), Rennes, France

Every three years, the organic sector assembles to host the Organic World Congress (OWC), the world's largest organic gathering.

Drawing from the motto, '**From its Roots, Organic Inspires Life**', OWC 2020 will aim to provide organic and likeminded stakeholders working toward sustainable agriculture, value chains, and consumption with an opportunity to exchange their knowledge, innovations, and experiences. The congress offers momentum and inspiration to all who take part and is seen as a leading event for the global organic sector.

Submissions Open just until October 21st.

Website: <https://owc.ifoam.bio>



## 25-29 Oct 2020: 22nd Australasian Weeds Conference, Adelaide, Australia

Weed Management Society of Australia and the Council of Australasia Weed Societies (CAWS) will be hosting this conference at the iconic Adelaide Oval in 2020. Situated right in the heart of the city, framed by the River Torrens and surrounding precinct, it will be an impressive and picturesque setting.

The program for 22 AWC will be industry led, from cutting edge weed science to chemical innovations and case studies. The society is currently inviting contributions through a call for abstracts for either a talk or poster at the conference.

Website: [www.wmssa.org.au/22awc/](http://www.wmssa.org.au/22awc/)

A banner for the 22nd Australasian Weeds Conference. The left side features a night view of the Adelaide Oval with the text: 22nd AUSTRALASIAN WEEDS CONFERENCE, 25-29 Oct 2020 - Adelaide Oval, #22AWC | wmssa.org.au/22awc. The right side has a purple background with a stylized leaf logo and the text: 22AWC | A WEED ODYSSEY: INNOVATION FOR THE FUTURE, WEED MANAGEMENT, RESEARCH, BIOSECURITY, POLICY. At the bottom right are logos for the Council of Australasian Weed Societies Inc. and the Weed Management Society of South Australia. A photo credit 'PHOTO: BEN GOODE' is at the bottom left.

**22nd AUSTRALASIAN WEEDS CONFERENCE**  
25-29 Oct 2020 - Adelaide Oval  
#22AWC | [wmssa.org.au/22awc](http://wmssa.org.au/22awc)

**22AWC | A WEED ODYSSEY: INNOVATION FOR THE FUTURE**  
WEED MANAGEMENT, RESEARCH, BIOSECURITY, POLICY.

Council of Australasian Weed Societies Inc. Weed Management Society of South Australia

PHOTO: BEN GOODE





*Commercial producers of biological control agents  
for Integrated Pest Management (IPM) programs.*

## KEY PESTS      BIOCONTROL SOLUTION



**TWO SPOTTED MITE**



**PERSIMILIS**



**CALIFORNICUS**



**OCCIDENTALIS**



**WHITEFLY**



**LAILAE**



**NESIDIOCORIS**



**ENCARSIA**



**ERETMOCERUS**



**DIAMONDBACK MOTH**



**DIADEGMA**



**FUNGUS GNAT / THRIPS**



**HYPOASPIS 'M'**



**DALOTIA**



**HYPOASPIS 'A'**



**THRIPS**



**LAILAE**



**CUCUMERIS**



**ORIUS**



**THRIPBIUS**



**RED SCALE**



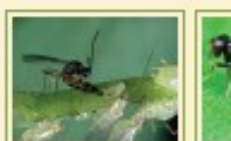
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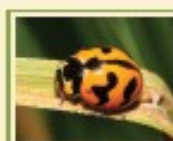
**APHIDIUS 'E'**



**APHELINUS**



**APHIDIUS 'C'**



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