



**IOBC-APRS
Newsletter No. 12
March 2021**



Message from your President

Dear Members,
As this issue of the newsletter goes to press we are reeling from the tragic news of the passing of our friend, Distinguished Professor Steve Wratten. No one in the biocontrol world can have failed to have heard of Steve's pioneering work in the field; and anyone who has caught one of his entertaining talks will remember him as a passionate advocate of biocontrol for sustainable agriculture. A eulogy for Steve appears later in this issue.

Plans for the second International Congress on Biological Control are moving ahead as an online event. It's a shame to miss the opportunity to catch up with colleagues and to make new contacts in the usual face-to-face manner but the online platform delivers at least some of the communication benefits of a traditional conference. You can find out more about the meeting at www.iobc-icbc.com.

The number of members has increased to well over two hundred, representing almost 20 countries in our region. It's great to see this growth, especially for Chinese scientists. A number of members – including myself – have been battling with the mechanics of paying our subscriptions. If PayPal does not work for

you, please contact Mike Cripps, our Treasurer, and he can give you bank details for an online transfer of funds. At just NZ\$60 it's a small price to pay to remain part of the dynamic world of biological control researchers and practitioners.

Stay safe everyone!

Geoff Gurr



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APRS President is acknowledged in Australia

Engagement Australia Excellence Award.

Geoff Gurr, Charles Sturt University (Orange) and the Graham Centre for Agricultural Innovation, has won the prestigious Engagement Australia Excellence Award for research impact at a glittering on-line ceremony which Geoff said felt like being at the Oscars. The award acknowledges a project initiated 10 years ago in collaboration with colleagues in Asia to solve a serious pest problem in rice using innovative and sustainable practices leading to reduced pesticide use and higher yields for

growers. Geoff has subsequently expanded beyond rice to other industries like pine plantations, sweet potato and cotton, particularly in Australia. He stresses that the award recognises a team of researchers, post-docs and research students who have all contributed significantly to the outcomes and impact of the research. The most satisfying aspect of his work for Geoff is that it finds solutions that make a difference in the "real world". [Engagement Australia](#) is the peak alliance of Australian and New Zealand universities, which believes engaged universities consider their core public purpose is as a centre of knowledge creation and societal improvement.

Geoff was also recently named by the *Australian* newspaper as the leader in the field of entomological research with the highest number of citations from papers published in the last five years in the top 20 journals in the field.

Article reproduced with thanks from the Central Western Daily, Author Jude Keogh.

Geoff Gurr with his new award



Eulogy—Distinguished Prof Steve Wratten

IOBC-APRS recently (March 2021) lost one of its long standing members. Dr Steve Wratten passed away in New Zealand. Steve was awarded Lincoln University's most prestigious title of Distinguished Professor in 2019. He also garnered many awards, including Fellowships of the Royal Society of New Zealand and the Entomological Society of America, and produced eight books and over 400 refereed publications.

He began an illustrious academic career as a lecturer in Zoology at London University in 1971 and later moved to Cambridge University in 1972, lecturing in Applied Entomology. In 1975 he joined Southampton University as a lecturer in Biology. Steve moved to New Zealand and Lincoln University in 1993 and was soon promoted to Professor of Ecology, a position he held until his death. He held three doctorates and an Honorary Professorship in the Chu Kochen Honors College at Zhejiang University, China.

Professor Wratten's areas of expertise included ecology, biological control of pests and enhancing ecosystems on farmlands. He was a proponent of using non-crop plants to provide SNAP (shelter, nectar, alternative food and pollen) to help natural enemies of pests. In 2018 Steve was awarded a James Cook Research Fellowship in Biological Sciences to conduct research in New Zealand on pollen nutritional quality for honey bees. Steve was one of IOBC's long standing and active members who always had a passion for training the next generation and passing on his knowledge and enthusiasm. Steve's services were often called upon by international groups to run workshops and to help growers and their advisors with implementation of ideas and practices to reduce inputs in agriculture. In practice, this involves their understanding the power of ecosystem (nature's) services such as soil formation and improvement, biological control of pests, and pollination. We will all miss his interesting insights into ecology, the environment and the world at large.



Photo: Lincoln University to RSNZ

Steve attributed his interest in entomology to a school teacher who took him and others on "nature walks" after school in the UK where he grew up.



Photo: G. Gurr.

Steve, entertaining participants at the IOBC-supported workshop on conservation biological control held at Lincoln University in November 2018".



Volume 66, issue 1, February 2021

Special Issue: Revisiting the Biosafety of Exotic Generalist Arthropod Biological Control Agents

Issue editors

David A. Andow, Barbara I. P. Barratt, Robert S. Pfannenstiel & Débora Pires Paula

Exotic generalist arthropod biological control agents (GABCAs) were historically haphazardly used pre-1888. Nearly all of the environmentally destructive generalist biological control agents were introduced during this period, including the infamous mongoose and cane toad. Since then their use has been marginalized in classical and augmentative biological control due to their broad diet breadth. But global increasing demand for a more sustainable pest control is encouraging their reconsideration.

This special issue compiles a collection of papers revealing that risks of several exotic GABCAs were overestimated, not all generalists are riskier than specialists and their environmental risk assessment (ERA) solely based on exposure analysis is inadequate.

Content:

- Taylor and Snyder review nine case studies & suggest that generalists are not more risky because they have diffuse interaction networks that do not necessarily result in strong non-target effects.
- Loomans review 5 case studies from Europe that models would predict are too risky to recommend for introduction. 3 of the cases failed to establish and 2 created no adverse effects.
- Nechols raises the broad concern that consideration of climate change needs to be incorporated into risk assessments.
- Todd et al and McGrath et al propose quantitative methods for analysis of non-target species at risk from generalist biocontrol agent introductions.
- Paula et al examine population consequences associated with the enemy release hypothesis (ERH)
- Paranhos et al reveal the case study of a generalist Tephritid parasitoid from Brazil.
- Wang et al review the status of generalist wood borer parasitoids and potential spillover effects.
- Paula et al then present their comprehensive new Environmental Risk Assessment for generalists, the culmination of a year developing and improving it with numerous experts, and holding a symposium and a workshop.
- Cedola then conducted a retrospective analyses of 13 Argentinian biocontrol agents using the new ERA and made specific predictions on which BCA's might be having non-target effects on native species.
- Congratulations to David Andow, Barbara Barratt, Robert Pfannenstiel and Debora Paula and all contributors for this significant piece of research, that will undoubtedly impact on the practise of biological control into the future.

Treasurer's Corner—APRS Membership

Our total membership to the end of 2020 was 212, and comprised of

Regular members: 116

Student/unwaged members: 7

Honorary members: 3

Fee-waived members: 40

Unpaid members: 46



It was nice to see many new members join from China and Pakistan this year. While total membership is now strong at 212, it is important to note that 46 have not paid their 2020 subs and the executive will have to make a decision on whether to retain them if their invoices remain outstanding. In the case of fee-waived members this is because their country does not permit them to access PayPal, our preferred method of receiving membership fees in a range of international currencies.

Our greatest membership is now from China, followed by Pakistan, Australia, New Zealand, India, and then another 12 member countries each represented by 1 or 2 members.

It is great to have you all on board!

Mike Cripps

Your IOBC-APRS Executive

A reminder that your local executive are Geoff Gurr (President), Yulin Gao (Vice President), Mike Cripps (Treasurer), Mark McNeill (Vice-President), Toni Withers (Secretary General) and Bill Palmer (Past President).

You can contact any of us, become a member, or access the forms through these pages:

<http://aprs.iobc.info/>

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

Follow us on Facebook too:

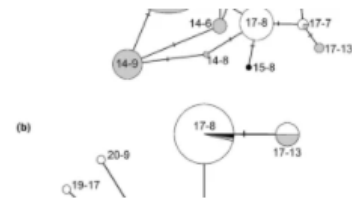


Members recent papers in the IOBC journal

The role of overseas genetic surveys to potentially accelerate biological control development for a new *Hydrilla verticillata* introduction in the USA

Nathan E. Harms, Dean A. Williams & Matthew F. Purcell

OriginalPaper | Published: 22 September 2020 | Pages: 271 - 280



Prospects for classical biological control of *Marchalina hellenica* in Australia

Dimitrios N. Avtzis, Umar K. Lubanga, Greg K. Lefoe, Raelene M. Kwong, Nikoleta Eleftheriadou, Anneliza Andreadi, Stephen Elms, Richard Shaw & Marc Kenis

BioControl 65, 413–423(2020) | [Cite this article](#)



The role of overseas genetic surveys to potentially accelerate biological control development for a new *Hydrilla verticillata* introduction in the USA

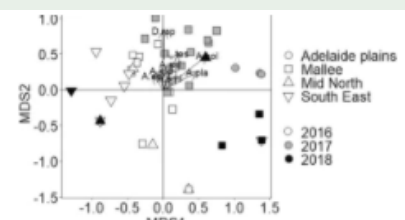
Nathan E. Harms, Dean A. Williams & Matthew F. Purcell

BioControl 66, 271–280(2021) | [Cite this article](#)

Prospects for microbial control of the fall armyworm *Spodoptera frugiperda*: a review

Jingfei Guo, Shengyong Wu, Feng Zhang, Chaolong Huang, Kanglai He, Dirk Babendriener & Zhenying Wang

BioControl 65, 647–662(2020) | [Cite this article](#)



Parasitoid communities and interactions with *Diuraphis noxia* in Australian cereal production systems

Thomas Heddle, Maarten Van Helden ... Kate Muirhead

OriginalPaper | Published: 29 June 2020 | Pages: 571 - 582

Impact of the gall fly, *Urophora stylata*, on the pasture weed, *Cirsium vulgare*, in New Zealand

Michael Cripps, Jovesa Navukula, Seona Casonato & Chikako van Koten

BioControl 65, 501–513(2020) | [Cite this article](#)

For these articles and more, go to: <https://www.springer.com/journal/10526>

Second International Congress of Biological Control (ICBC2)

This amazing congress is now available to us all 100% virtual, on-line. **26-30 April 2021**

<https://www.iobc-icbc.com/>

Register Now

The **International Congress of Biological Control** is the flagship event of the International Organisation for Biological Control (IOBC) which promotes environmentally safe methods of pest and disease control.



The 2021 congress, co-organized by [CABI](#) and [IOBC](#), builds on the 1st International Congress of Biological Control (Beijing, 2018) and the 1st International Conference of Biological Control (Bengaluru, 2018). ICBC2 will provide a platform for multi and inter-disciplinary biological control research and application.

Registration cost is \$350 Swiss Francs = \$2,459 Chinese Yuan = \$490 AUD

The timing for the sessions being screened from Europe generally work out to be live in the late evening for India and China, but the early hours of the morning for Australia and New Zealand.

For example:

Monday 26 April Plenary 2—Interdisciplinarity in biological control (G. Heimpel and N. Mills)

- 19:30-21:30 New Delhi, 22:00– midnight Beijing, midnight to 0200 Sydney

Tuesday 27 Concurrent sessions 1-4 talks — Genetic improvement, Climate change, African biocontrol

- 16:30-18:30 New Delhi, 19:00– 21:00 Beijing, 21:00- 23:00 Sydney

Tuesday 27th April Concurrent sessions 5-8 talks— Regulatory developments, Molecular tools, Trichoderma, Cactus pests and pest cacti

- 19:30-21:30 New Delhi, 22:00– midnight Beijing, midnight to 0200 Sydney

Wednesday and Thursday are even more concurrent sessions with an amazing program of talks, and Friday has more plenaries. We encourage you all to be a part of this congress from the comfort and safety of your homes.

Please see the full programme now on-line for details.

For the detailed programme please access the pdf from:

https://www.iobc-icbc.com/WEBS/ICBC2.pages.download/ICBC2_Program_A4.pdf



Tribute to the life work of Stefan Nesar, 16 April 1942 - 17 February 2021

Many members will be saddened to hear of the recent death of Dr Stefan Nesar in South Africa. Stefan achieved his PhD at the Australian National University many years ago. Since then he has maintained a keen interest in our part of the world. Stefan's speciality within the biocontrol discipline was the foreign exploration for new agents for both weeds and insects. His travels took him all over Australia, the Americas and Africa. His exploits were legendary and he mentored many of his, not necessarily junior, colleagues. Everyone learned from this wonderful ecologist/entomologist.

The following tribute to Stefan was received from The Mountain Club of South Africa (Magaliesberg Section) where Stefan and Otilie were very active members who campaigned fiercely to keep unwanted invasive weeds out of the area. Here's an excerpt:

"Stefan Nesar was not someone who can be 'summed up' in years, numbers, awards, places and the like in an 'In Memoriam'. He was too special and will evoke unique memories in everyone who came in contact with him.

It was as if Stefan would live forever. After all, he, with his gray beard, had been christened "le tonton" (The Uncle) by the locals in Réunion in the 1980s; then "Oom Boom" during the 1990s tree weekend - and he actually looked the same right up until the end.

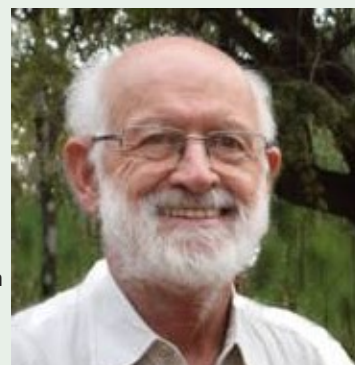
When I think of Stefan, what stands out is his formidable intellect, his fine sense of humour - with a good dollop of cynicism - and his well thought-out and well-formulated opinions, always with the wider set-up in mind. I see him with long strides comfortably moving gracefully over rocky terrain, his sharp brown eyes seeing much more than anyone else. Behind every tuft of grass and next to any stone he found a miracle of nature that he could explain with intimate knowledge to any layman. Children hung on to his words. One could ask him anything at any time and he was happy to share his knowledge. His general knowledge - especially about nature - was staggering.

As an entomologist and scientist he was highly respected and made an impact of world importance. He was highly civilized, well-mannered and moderate. Through his work, and also the Mountain Club, he was well-travelled.

Stefan was a true plant lover and was enthusiastic about the seedlings he propagated: blue *scilla* from the slopes of the Drakensberg, blood-red *cyrthantus* from the steep Eastern Cape cliffs, purple *streptocarpuses* from mossy forests. Many people boast of rare and beautiful flowering plants that he gifted so generously.

Life was an eternal experiment for him. Everything was investigated and questioned. His microscope was actually a kind of an extension of him. His brain and his hands did not rest easily. At home he cooked jam, made liqueurs and recently even chips from beetroot."

It was so unexpected and quick. "



Mite taxonomist made a Fellow of the Royal Society in NZ

As biocontrol experts, we all know the importance of taxonomists, who assist us with identification of pests and potential beneficial biocontrol agents. When the role of taxonomy is recognised we thought it should be celebrated.

Zhi-Qiang Zhang has made outstanding contributions to Mite Taxonomy. He has been made a Fellow (Ngā Ahurei a Te Apārangi Fellow) of the Royal Society of New Zealand. Congratulations.

He significantly advanced global taxonomy by founding and leading two of the largest international journals in biodiversity research: *Zootaxa* and *Phytotaxa*. *Zootaxa* is now by far the most important journal in biodiversity discovery. These pioneering journals have greatly reduced barriers to global biodiversity description and changed the way taxonomy is communicated globally. Zhi-Qiang is a world-leading authority on the systematics and ecology of mites and has made outstanding global contributions to acarology.



Symposium on Insect-Plant Interactions 2021

The 17th Symposium on Insect-Plant relationships in Leiden is open for registration. It will be held online from the **25th to the 30th of July 2021**. **Website:** <https://www.universiteitleiden.nl/sip2020>



22nd Australasian Weeds Conference (22AWC) Now 2022

Weed Management Society of Australia and the Council of Australasia Weed Societies (CAWS) will be hosting this conference at the iconic Adelaide Oval in 2021. 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: <http://wmssa.org.au/22awc>

22nd AUSTRALASIAN WEEDS CONFERENCE
25-29 Sep 2022 - Adelaide Oval
#22AWC | 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

26th International Congress of Entomology Now 18-23 July 2022

The International Congress of Entomology returns to Europe, for the first time in 25 years!

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. The ICE2020Helsinki congress will be arranged in sections representing major fields of entomological interest. Session topics have been selected and are available on website.

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



Australian Entomological Society Conference December 2021

The University of Adelaide, South Australia, will be hosting the AES Scientific Conference on 5–8 December 2021

It will be a joint meeting with the Australian chapter of the International Union for the Study of Social Insects (IUSSI) and the Society of Australian Systematic Biologists (SASB).

<https://www.austentsoc.org.au/events/upcoming-events/>



New Zealand Plant Protection Society Conference August 2021

The Napier conference Centre, Hawke's Bay, New Zealand, will be the venue for the 2021 New Zealand Plant Protection Annual Conference.

Oral presentations include invited speakers and summaries of papers published in our peer-reviewed journal, [New Zealand Plant Protection](#). The conference also features a lively poster session.

Abstracts are due by 30 March 2021

<https://nzpps.org/events/nzpps-conference-2021/>



New Zealand Plant Protection Society (Inc)

17th International Auchenorrhyncha Congress—Now 2023

The 17th International Auchenorrhyncha Congress has been postponed to 2023 due to concerns about international travel.

It will be held at Tagaytay, the Philippines in July 2023.



Photo: amentsoc.org