International Organisation for Biological Control (IOBC) Organisation Internationale de Lutte Biologique (OILB)



IOBC is affiliated with the International Council of Scientific Unions (ICSU) as the Section of Biological Control of the International Union of Biological Sciences (IUBS)

IOBC-Global Newsletter 116 – February 2025

Editor: John M. Holland, E-mail: secretary-general@iobc-global.org

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Dear readers,

Welcome to my first newsletter as the new Global Secretary. Firstly, I would like to offer our sincere thanks to Joop van Lenteren for his outstanding contribution to IOBC Global serving as president, vice-president and secretary general. His final contribution has been to oversee the change of IOBC Global to a not-for profit organization which will help hugely allowing us to use more of our financial resources for biocontrol activities. This has been a monstrous task involving much bureaucracy! The executive committee are most grateful to him for completing the process before retiring.

The future newsletters will now be published in February and September to avoid overlap with other regional newsletters and busy Christmas and holiday periods. Please keep sending your contributions to our newsletter, whenever they are ready, and I will incorporate them in the next newsletter. Please send to me at secretary-general@iobc-global.com

John Holland (retired entomologist/agroecologist), Dorset, England

Message from the new President

I hope all had a joyous and restful festive season and that 2025 is a productive year for you all and for our discipline. This is a year of transition for IOBC Global, with a new incoming Executive Committee (2025-2028. President: Raghu Sathyamurthy (CSIRO, Australia; APRS); Vice Presidents: Rose Buitenhuis (Vineland Research and Innovation Centre, Canada; NRS), and Vanda Bueno (Department of Entomology, Federal University of Lavras, Brazil; NTRS); Secretary General: John Holland (retired entomologist/agroecologist;



WPRS); Treasurer: Pablo Urbaneja-Bernal (Institute of Agrifood Research and Technology, Spain; WPRS) Past President: Martin Hill (Rhodes University, South Africa; ATRS)).

We are honoured to pick up the baton from our outstanding predecessors (2021-2024. President: Martin Hill (Rhodes University, South Africa; ATRS); Vice Presidents: Ronny Groenteman (Landcare Research, New Zealand; APRS), and Yulin Gao (Chinese Academy of Agricultural Sciences, China; APRS); Secretary General: Joop Van Lenteren (Wageningen University, Netherlands; WPRS);



Treasurer: Alejandro Tena (Insituto Valenciano de Investigaciones Agrarias, Spain; WPRS) Past President: George Heimpel (University of Minnesota, USA; NRS)); sincere thanks to all of them on behalf of the global biocontrol community.

The Exec plans to meet at a higher frequency (monthly-quarterly) this year as we come up to speed with our roles.

Emerging priorities for the Exec this year include, (a) renewal of the publishing agreement for our flagship journal *BioControl*; (b) engaging with policy makers on harmonising regulations across countries for biocontrol solutions; and (c) supporting the vibrancy of our Regional Sections and Working Groups. The Exec is always keen to receive ideas on how best IOBC Global can further support the global biocontrol community; please get in touch with us (secretary-general@iobc-global.org; president@iobc-global.org).

I am particularly keen to meet with as many of the Regional Sections and Working Groups as possible. If you have a meeting planned this year that enables virtual attendance, please reach out to me and I will do my best to join virtually.

In the first quarter of this year, I will be representing IOBC Global at CABI's 2025 Regional Consultations of Asia-Pacific Member Countries (18-20 February; Kuala Lumpur, Malaysia) and the Second International Conference on Biological Control: Biocontrol Contributions to One Health (25– 28 February; Bengaluru, India). If there are other forums in which IOBC Global engagement would be of value, please reach out to let me know.

Video-Interview: Who is Raghu Sathyamurthy, the new IOBC-Global President?

In October 2024 the webmaster Madeleine Buehler had the chance to meet Raghu Sathyamurthy personally in Brisbane. She took the opportunity to ask him some questions and record the interview in a video.

Raghu outlines his career, lets the audience know what opportunities



he sees for IOBC, where he would like to focus during his term and much more. Last but not least, Raghu talks about what defines him as a private person, what his favourite hobby is and what he would like to pass on to the next generation of biocontrol scientists and practitioners.

"Have a passion and follow it through with conviction!", is the take home message of the new IOBC-Global president.

Watch the video! https://youtu.be/opi3K5XJuzA

News from the Regional Sections

IOBC Promotes Research Beyond Political Borders: Members of EPRS are invited to join WPRS

While most of the regional sections of IOBC define their areas based on globally accepted geographic and climatic criteria, there has always been a debate on the border between the East- and the West Palearctic Regional Sections. Both sections have their core parts in Europe, and the border between them has been artificial since the beginning, mostly reflecting the political landscape from times of the "cold war". The Executive Committee and the Council of IOBC-Global decided at their General Assembly at San José in Costa Rica on June 23, 2024, that it is high time to end this separation. By doing this, IOBC aims to support exchange and collaboration between as many biocontrol scientists and practitioners as possible across the entire Palearctic region.

According to the Statutes of IOBC-Global, members may request affiliation to any Regional Section. The historical border between EPRS and WPRS is therefore not binding. As a first step, IOBC-WPRS invites partners from eastern European countries, with whom it is already co-operating in research activities and meetings, to change their affiliation. On a mid-term perspective, this process may lead to a formal merger of the two regional sections into one.

Upcoming meetings of IOBC-Global Working Groups

Mass Rearing and Quality Assurance (MRQA)

Contact: Rose Buitenhuis; Email: Rose.Buitenhuis@vinelandresearch.com;

Next meeting will be held in Tucson, AZ, USA, October 27-31, 2025.

The workshop objective is to explore opportunities for advancing the rearing of high quality entomophagous and phytophagous insects and mites, entomopathogenic nematodes, and other invertebrates for plant and animal pest management, human and animal food, and a variety of other uses. The program will consist of symposia on current "Hot topics," invited and submitted presentations and posters on mass rearing and quality assurance. Presentations will serve as a basis for discussion and exchange, with the final aim of improving collaboration among scientists and practitioners.

General topics for the sessions include:

- 1. Mass rearing and evaluating biological control agents for crop pests
- 2. Mass rearing for SIT and other autocidal pest control
- 3. Methods for assessing the quality of biological control products
- 4. Mass rearing insects for food and feed
- 5. Open session on rearing invertebrates

More information on IOBC-MRQA: <u>https://www.mrqa.eu</u>

Ecology of Aphidophaga

Contact: J.P. Michaud; Email: jpmi@ksu.edu Next meeting to be held at the Università di Bologna, in Bologna, Italy, from 8-12 September, 2025. The local organizer is Dr. Laura Depalo (laura.depalo@unibo.it)

Biological Control and Management of Parthenium Weed

Contact: Lorraine Strathie; Email: strathiel@arc.agric.za

SECOND ANNOUNCEMENT: Fourth International Workshop of the IOBC Global Working Group on Biological Control and Management of Parthenium Weed

Jessore, Patuakhali Science and Technology University, Patuakhali and Dhaka in Bangladesh, 2-5 March 2025



The International Organization for Biological Control (IOBC) and the USAID Bangladesh Mission-supported Feed the Future Bangladesh Integrated Pest Management Activity (IPMA), managed by Virginia Tech, USA are jointly organizing the Fourth International Workshop of the IOBC Global Working Group on Biological Control and Management of Parthenium Weed (*Parthenium hysterophorus*) in Bangladesh from 2-5 March 2025. The event will review biological control and management of the weed regionally and globally, with an emphasis on accelerating research and development, as well as fostering international collaboration. Presentations on parthenium weed will include, but are not restricted to, the biology, ecology, distribution, and impact of the weed, biological as well as other control methods, and integrated management of this weed.

Date	Time	Programme of activities	Accommodation
Sat 1 March		Foreign delegates arrive in Dhaka.	Hotel Bengal Blueberry,
2025			Dhaka
Sun 2 March	Morning	Fly from Dhaka to Jessore.	
		Meet at Jessore airport at 10am.	
		Bus will take delegates to view parthenium	
		infestations in fields.	
	Afternoon	Bus will take delegates to Barisal.	Overnight at Hotel
			Grand Park, Barisal
Mon 3 March	Morning	Visit Patuakhali Science and Technology University	
		by bus to observe <i>Zygogramma bicolorata</i> rearing.	
	Afternoon	Travel to Dhaka by bus.	Hotel Bengal Blueberry,
			Dhaka
Tues 4 March	Morning	Inaugural session of Workshop.	Hotel Bengal Blueberry,
	Afternoon	Presentations and discussions.	Dhaka
Wed 5 March	Morning	Continuation of presentations and discussions.	Hotel Bengal Blueberry,
	Late afternoon	Conclusion of Workshop.	Dhaka
	Evening	Departure of delegates.	1

Registration fees, bus transport and two workshop lunches are sponsored by the Feed the Future Bangladesh IPM Activity, so are at no cost to delegates. Airfares, accommodation and other meals are for delegates' own cost.

For full details of the Second Announcement and registration form please contact Madhab Chandra Das (e-mail <u>madhabcd@vt.edu</u>) and for abstract submission details please contact Lorraine Strathie (e-mail <u>StrathieL@arc.agric.za</u>), to be submitted by 31 December 2024.







OUTREACH & INTERNATIONAL AFFAIRS CENTER FOR INTERNATIONAL RESEARCH, EDUCATION, AND DEVELOPMENT

Biocontrol related events

Second International Conference on Biological Control: Biocontrol Contributions to One Health (2icbc2025)

The four-day conference is scheduled for 25–28 February 2025 in the vibrant city of Bengaluru, India. https://icbc2025.eventsdashboard.in

The Iranian International Congress of Entomology (5IICE)

This will be held on September, 14-16, 2025 at <u>Iranian Research Institute of Plant Protection</u>, <u>Tehran</u>. <u>https://5iice.areeo.ac.ir/</u>

Entomology 2025: Bridging Generations with Innovation, Legacy, and Passion

The next annual meeting of the Entomological Society of America will be held November 9-12, 2025, Portland, Oregon, USA.

XVII International Symposium on Biological Control of Weeds (ISBCW 2026)

Rotorua, Aotearoa New Zealand

The International Symposium on Biological Control of Weeds (ISBCW) is the most important

event for weed biocontrol scientists from all over the world. Approximately every four years, this gathering provides an opportunity for participants to exchange advances, renew ties of friendship, develop new collaborations, and discuss the way forward. Since its inception in 1969, the symposium has become an essential meeting point for all those involved in weed biocontrol activities.

Join us for the next symposium and be part of this vibrant exchange of ideas, innovations, and developments.

Website: https://isbcw-rotorua.com

Please see the complete lists of upcoming events related to biocontrol activities at the website of IOBC Global: <u>www.IOBC-Global.org</u>, and of IOBC-WPRS: <u>www.IOBC-</u> <u>WPRS.org/meetings</u>



News from the Editor of BioControl

Send your most innovative, stimulating and top-level works to *BioControl*!

BioControl is the official journal of the IOBC. Over the years, it has established a leading role in publishing the finest and most exciting works in all aspects of biological control of invertebrate, vertebrate and weed pests, and plant diseases. Coverage includes the biology and ecology of organisms for biological control, and various facets of their use including any biological means of control for integrated pest management (IPM), such as plant resistance, pheromones and intercropping. Interdisciplinary papers with a global perspective on the use of biological control in integrated pest management systems are strongly encouraged. Developments in molecular biology that have direct relevance to biological control will also be considered for publication. Besides original research articles, *BioControl* also publishes review papers and forum articles.

All Associated Editors are working hard and prioritising the aim to reduce the time from manuscript submission to final decision, and consequently the average decision time has drastically decreased over the last years and will probably still decrease in the future. Besides the efficiency of all Associated Editors, the success of *BioControl* is also deeply rooted with the professional Editorial Office which is provided by our publisher (Springer). This team, coupled with a well-designed web site handling the manuscripts (<u>http://www.editorialmanager.com/bico/</u>), contributes to the smooth and rapid processing of all manuscripts submitted.

These efforts led to a good Impact Factor of the journal over the years. The last Impact Factor (for 2023) arrived last June. BioControl has now an Impact Factor of 2.2, and the next one (for 2024; that can now be estimated) will be higher.

Globally, *BioControl* success reflects a collective commitment in which authors send us their finest and most exciting research in the field of biological control, and both Associated Editors and reviewers provide rapid and thorough evaluation. This is what motivates us to develop the international audience of the journal, hoping that the success will continue over the years. For this, we invite all scientists working on biological control to submit us their most innovative, stimulating and top-level manuscripts, especially – but not only – review article proposals.

Finally, *BioControl* also publishes Special Issues on a regular basis. This idea is to shed light on a specific, important topic related to biological control for which new recent results are available. Special Issues published over the last five years were all successful, so the journal would be delighted to consider all new proposals in this respect. Anyone willing to edit such a special issue should contact the Editor-in-Chief of the journal. A discussion will then rapidly be launched to see how this can be organized efficiently.

Eric Wajnberg, Editor-in-Chief of BioControl, eric.wajnberg@inrae.fr

ORBITUARY

Prof. Dr. Stefan Pruszyński (18 August 1940 – 2 January 2025)



The biological community has lost a leading figure in pest control in Poland, Stefan Pruszyński. For 45 years he was associated with the Institute of Plant Protection in Poznań, Poland. For 18 years (1989-2007) he was the Director of this Institute. Under his leadership the Institute underwent enormous development. New scientific programs and new scientific facilities were created. A Congress Center and a hotel were built, as well as modern laboratories. The professor founded and was the editor-in-chief of two scientific journals on plant protection: Progress in Plant Protection and Journal of Plant Protection Research.

Professor S. Pruszyński was a valued scientist not only in Poland but also worldwide. He conducted extensive research on the introduction of natural enemies of the Colorado potato beetle to

Poland: *Podisus bioculatus* and *P. maculiventris*. He published many works on the importance of ladybirds (Coccinellidae) in agricultural plants. He was the co-author of research on the biological control of greenhouse plant pests, which ended with the successful use of these results in practice. In addition, he dealt with the implementation of bacterial biopreparations in the protection of field crops. He developed programs for the protection of cereals against aphids and programs for the protection of energy plants. He was the author of over 140 publications and many others articles, mainly on biological and integrated pest control of greenhouse and field crops.

He was also active in the work of IOBC. Since 1993 he was the vice president of EPRS/IOBC and since 2000 the vice president of IOBC Global. On 7 July 2008 in Durban, South Africa The International Organization for Biological Control (IOBC) on the occasion of its 50th Anniversary awards an honorary membership to Prof. Dr. Stefan Pruszyński for his past, current and future contributions to the field of biological control. The Professor has received many awards and medals. In 2015 the University of Life Sciences in Poznań awarded him the degree of doctor honoris causa.

We are saying goodbye not only to an outstanding scientist and director, but also to an extremely kind and warm colleague. The Professor was a person of high personal culture, always ready to help and offer valuable advice. We will always be proud that he was a member of our Institute's community and grateful that we could cooperate with him.

Stefan passed away on the 2nd January 2025. Our thoughts are with his children, and many of close friends and colleagues.

Prof. Dr. Danuta Sosnowska, Institute of Plant Protection - National Research Institute,

Head of the Department of Biological Methods, Poznań, Poland

RECENTLY PUBLISHED BOOKS

"Biological Control of Parthenium Weed in Ethiopia" by Wondimagegnehu Mersie and Lidya Alemayhu Chala

The invasive parthenium weed (*Parthenium hysterophorus* L.) occurs widely in Ethiopia, other eastern and southern African countries, as well as numerous other countries globally. In Ethiopia, parthenium weed reduces the yield of staple food crops such as teff (*Eragrostis tef* (Zucc) Trotter) and sorghum (*Sorghum bicolor* L.). It displaces valuable species in pasture lands, thereby negatively impacting livestock production. During the dry season, when unavailability of pasture grasses forces cows to forage on parthenium weed, their milk becomes tainted, causing losses in market value. Parthenium weed also occurs widely in urban areas and around rural homesteads. Residents who live in parthenium weed-infested urban and rural areas are constantly exposed to this plant, including to its pollen. Many individuals are allergic to parthenium weed and exposure can aggravate the health of those with respiratory-related illnesses. Parthenium weed also produces allelopathic compounds, thereby displacing surrounding native plants and damaging plant diversity.

To tackle the damage caused by parthenium weed, a project entitled "Biological Control of the Invasive Weed *Parthenium hysterophorus* in East Africa" was initiated in 2005 and ran until 2022. The project was led by Wondimagegnehu Mersie at Virginia State University, USA and funded by the U.S. Agency for International Development (USAID), through the IPM Innovation Lab Office at Virginia Tech. The aims of the project included to introduce, evaluate, rear and release selected host-specific natural enemies of parthenium weed in Ethiopia, and later on, in Uganda and Kenya. Two natural enemies of parthenium weed, namely the leaffeeding beetle *Zygogramma bicolorata* (Pallister) (Coleoptera: Chrysomelidae) and the stemboring weevil *Listronotus setosipennis* (Hustache) (Coleoptera: Curculionidae) were introduced into Ethiopia and field-released after their host-specificity was determined under quarantine conditions and approved by relevant governing authorities. These two biocontrol agents have now established in various regions of Ethiopia.

The research-based information generated by the above project was collated in a recently published book, entitled "Biological Control of Parthenium Weed in Ethiopia". The book documents the opportunities, challenges and accomplishments of the Parthenium Project. It is comprised of 13 chapters, with text, photos and illustrations. The introduction and second chapter summarize the available scientific information on the biology of parthenium weed as well as its distribution in Ethiopia. This is followed by a discussion on the impacts of parthenium weed on crops, livestock, human health, as well as on the environment. Chapter 4 deals with current management practices implemented to control the weed in Ethiopia. In chapter 5, the biological control of parthenium weed is discussed in detail. The authors describe the steps that were followed in introducing, rearing and releasing the two natural enemies of parthenium weed in Ethiopia, including diagrams and photos. Chapter 6 presents results of host range tests conducted on Z. bicolorata and L. setosipennis, conducted in approved guarantine facilities prior to release. The steps taken and the facilities used to mass rear the two biocontrol agents are described in chapter 7. In chapter 8, the release of the two biocontrol agents in various regions of Ethiopia is discussed. Chapters 9 and 10 provide data on the establishment of Z. bicolorata and L. setospennis, respectively. The unusually high incidence of the winter rust (*Puccinia abrupta* var. *partheniicola*) on parthenium weed in Ethiopia during the 2021 season is explained in chapter 11. The authors conclude the book by summarizing the accomplishments of the Parthenium Project in chapter 12, and finally, in chapter 13, by acknowledging the support provided to the project by individuals and institutions.

This book provides a useful resource for classroom teaching and for the field management of parthenium weed. The book may also serve as a model to develop biological control measures for other invasive plant species in Ethiopia and elsewhere. For further information and to order the book, contact Wondimagegnehu Mersie at mersiew@gmail.com.

Regional sections of IOBC Global





APRS

Asia-Pacific Regional Section (<u>APRS</u>) Contact: Dr. Toni Withers; E-mail: toni.withers@scionresearch.com



ATRS

Afrotropical Regional Section (<u>ATRS</u>) Contact: Dr. Désiré Gnanvossou,; E-mail: d.gnanvossou@gmail.com



EPRS

East Palearctic Regional Section (<u>EPRS</u>) Contact: Eduard A. Sadomov, Moscow, Russia; E-mail: o.krivchenko87@yandex.ru



NRS

Nearctic Regional Section (<u>NRS</u>) Contact: Ricky Lara; E-mail: jlara007@ucr.edu



NTRS

Neotropical Regional Section (<u>NTRS</u>) Contact: M. Fernanda Cingolani; E-mail: fernandacingolani@cepave.edu.ar



WPRS

West Palearctic Regional Section (<u>WPRS</u>) Contact: Dr. Paula Baptista <u>info@iobc-wprs.org</u>

IOBC-Global Working Groups

Please check the IOBC Global website for meeting dates and access.



Mass Rearing and Quality Assurance (<u>MRQA</u>) Contact: Rose Buitenhuis; Email: Rose.Buitenhuis@vinelandresearch.com; Website: https://www.mrqa.eu



Ecology of Aphidophaga Contact: J.P. Michaud; Email: jpmi@ksu.edu



Biological Control and Management of Eupatorieae Weeds

Contact: Michael Day; Email: tropicalweedbiocontrol@gmail.com



International Working Group on *Ostrinia* and other maize pests (IWGO)

Contact: Ulli Kuhlmann; Email: u.kuhlmann@cabi.org



Biological Control and Management of Parthenium Weed Contact: Lorraine Strathie; Email: strathiel@arc.agric.za

http://apwss.org.in/APWSS Working Group Newsletter.aspx



Biological Control of Diamondback Moth & other Crucifer Insects Contact: R. Srinivasan; Email: srini.ramasamy@worldveg.org



IOBC Global Cactus Working Group

Contact: Iain Paterson; Email: i.paterson@ru.ac.za; website: www.ru.ac.za/centreforbiologicalcontrol/globalcactusworkinggroupgcwg



Working Group: Classical Weed Biological Control (CWBC)

Contact: Harriet Hinz (CABI, Switzerland), h.hinz@cabi.org Website: https://www.iobc-global.org/global_sg_Classical_Weed_BC.html



Study Group: Biological control of insect pests of Solanaceous Crops (IOBC-BiCoSol)

Contact: Yulin Goa (Institute of Plant Protection, Chinese Academy of Agricultural Sciences) gaoyulin@caas.cn



IOBC Global Commission on Biological Control and Access and Benefit Sharing Contact: Martin Hill; Email: m.hill@ru.ac.za

Join IOBC

Membership in IOBC is open to all individuals and all organizations, public or private, who desire to promote the objectives of biological control. There are four categories of membership:

- Individual Membership is open to all individuals engaged or interested in biological control.
- Institutional Membership is open to any institution, including government departments, academies of science, universities, institutes and societies participating in biocontrol activities.
- Supporting Membership is open to any person or institution interested in promoting the objectives of the Organization.
- Honorary Membership may be conferred by the Council to anyone who has made outstanding contributions to biological control.

For more information and application forms: http://www.iobc-global.org/membership.html

