

International Organisation for Biological Control (IOBC)

Asia & Pacific Regional Section, IOBC-APRS

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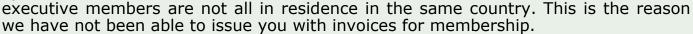


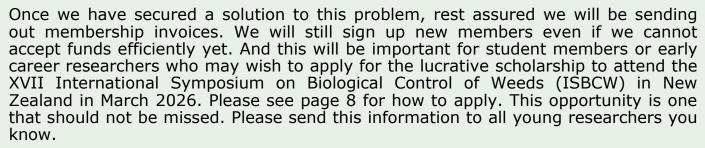
Message from your President

Hello valued members from Asia and the Pacific!

I hope this finds you all well and prosperous. This edition of our newsletter has been compiled by our new Secretary-General, Sreerama Kumar Prakya, and we are most grateful to be welcoming him to the executive. If you have not met Sreerama previously, please read about him on the next page.

From our APRS executive we continue to have issues with financial administration. In Australasia the banks will not open accounts for small societies like our own when the





Toni

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Discover the story of pico beetles in Vanuatu on pages 3-4

Transition of office: Sreerama Kumar Prakya installed as Secretary-General of IOBC-APRS

Sreerama Kumar Prakya serves as a Principal Scientist at the ICAR-National Bureau of Agricultural Insect Resources in Bengaluru, India. With over 30 years of experience in research and development, his expertise spans a wide range of disciplines including plant pathology, acarology, entomology and weed science. Biological control is his forte.

Following the completion of his PhD in 1997, he broadened his scientific expertise through a series of international training programmes. These included specialised courses on biological control at CABI in the UK and The University of Queensland in Australia, as well as participation in the Acarology Summer Program at Ohio State University in the USA. Collectively, these experiences enriched his global outlook on pest and weed management.

His accomplishments include the introduction of the exotic rust fungus *Puccinia spegazzinii* for classical biological control of the invasive weed *Mikania micrantha* in India; development of the acaropathogenic fungus *Hirsutella thompsonii* into a mycoacaricide for the coconut mite, *Aceria guerreronis*, and the broad mite, *Polyphagotarsonemus latus*; and mass production and field use of the predatory mite *Typhlodromus* (*Anthoseius*) *transvaalensis* ('Shatpada Treat') to counter phytophagous mites and thrips.

Sreerama Kumar has presented his research at numerous scientific conferences across the globe, reflecting his active engagement with the international scientific community. He recently concluded a distinguished seven-year tenure as Editor of the *Society for Invertebrate Pathology (SIP) Newsletter*, and was honoured with the Society's 20-year service pin. In February 2025, he served as Chief Organising Secretary of the highly successful *Second International Conference on Biological Control: Biocontrol Contributions to One Health*, held in Bengaluru, India (see the report featured on pages 5–6).

Sreerama Kumar's current focus is on biocontrol in protected and open-field crops. His creative pursuits span digital art, cartooning, painting, crafts and photography.

The IOBC-APRS warmly welcomes its newly appointed Secretary-General to the Executive Committee.



Innovative biocontrol solutions for Vanuatu's pasture weeds

Vanuatu is leading the way amongst Pacific Island nations in seeking natural solutions to invasive weed challenges. Vanuatu recently undertook the world's first ever releases of two novel agents: the hibiscus bur lace bug (*Haedus vicarius*) and the pico beetle (*Leptinotarsa undecimlineata*). The release of these novel biocontrol agents represents a major advance in invasive species management in Vanuatu and the region.



Lace bug adults and nymphs on the underside of hibiscus bur leaf

The hibiscus bur lace bug was introduced on Efate in July 2024 to target hibiscus bur (*Urena lobata*), while the pico beetle was released in November 2024 to combat prickly solanum (*Solanum torvum*), or pico as it commonly called in Vanuatu. Although this species belongs to the same genus as the notorious Colorado potato beetle (*Leptinotarsa decemlineata*), a serious pest of potatoes and related crops in temperate regions, the pico beetle is a distinct tropical species that poses no threat to those crops and is host-specific to prickly solanum.

Following their successful release on Efate, both biocontrol agents were released in Santo in late 2024 and more recently in Malekula in April 2025. These releases mark the ongoing efforts by Manaaki Whenua Landcare Research (MWLR) to develop novel natural enemies for invasive pasture weeds in Vanuatu which first began in 2018.

Hibiscus bur and prickly solanum are two of the most problematic pasture weeds in Vanuatu. Both thrive in open fields, pastures, forest edges and along roadsides, forming dense thickets that smother and make grazing lands inaccessible, and may also displace native vegetation in natural habitats. They are both pantropical weeds that are present in several other countries in the Pacific region.

Hibiscus bur is a woody shrub that grows up to 2 m tall. Its pink, hibiscus-like flowers produce prickly seed burs that easily attach to livestock, clothing, and equipment, spreading rapidly across grazing lands. The hibiscus bur lace bug is a sap-sucking insect which causes leaf yellowing (chlorosis) and defoliation.

Prickly solanum has sharp spines which makes manual removal difficult, while its resilient root system enables rapid regrowth,

making it a persistent problem for farmers across its invaded range. Both the pico beetle adults and larvae strip the plant of its leaves and green stems and repeated feeding cycles can kill prickly solanum plants.

Monitoring of establishment of the lace bug and beetle was conducted in April, yielding some promising results. Adult beetles and larvae, along with visible feeding damage was seen on prickly solanum at all sites on Efate and Santo. The characteristic 'skeletonising' of leaves, where only the main veins remain, was already evident, and the beetles were estimated to have already dispersed up to 1 km away from release sites within just a few months.



Adult pico beetles



First release of pico beetles in Vanuatu

At the hibiscus bur release sites, early signs of lace bug establishment were recorded. The presence of characteristic white specks at the centre of the leaves made it easier to detect nymphs and adult lace bugs on the underside of the foliage. The populations are slowly building up but have not yet moved far from the release sites.

These early results are very encouraging, but confirmation of establishment will only be confirmed after a year has elapsed, once the insects have survived through both the wet and dry seasons.

The other priority novel weed target for Vanuatu is wild peanut (Senna tora, S. obtusifolia). Work is still underway to try to find a suitable biocontrol agent for this novel target. Vanuatu has also, as part of this programme, released other agents including: a gall mite (Colomerus spathodeae) for African tulip tree (Spathodea campanulata), a psyllid (Heteropsylla spinulosa) for giant sensitive plant (Mimosa diplotricha), a beetle (Calligrapha bicolorata) for parthenium (Parthenium hysterophorus) and a lace bug (Carvalhotingis visenda) for cat's claw creeper (Dolichandra unguis-cati). There are also plans to release soon a fly (Ophiomyia camarae) and bud mite (Aceria lantanae) for lantana (Lantana camara), and a beetle (Paradibolia coerulea) — a second agent for African tulip tree.

This project is part of the Pacific Regional Invasive Species Management Support Service's (PRISMSS) Natural Enemies – Natural Solutions (NENS) Programme, which is led by MWLR. The project is being undertaken in collaboration with Biosecurity Vanuatu and the Vanuatu Agricultural Research and Technical Centre, and with support from Biosecurity Queensland. The Malaysian Agricultural Research and Development Institute and the University of the West Indies assisted with sourcing the hibiscus lace bug and pico beetle respectively. Funding is provided by New Zealand's Ministry of Foreign Affairs and Trade (MFAT).



VARTC staff releasing pico beetles in Santo



Pico beetles feeding on a leaf



Prickly solanum plant defoliated by pico beetles

<u>Restoring Island Resilience (RIR)</u>: The <u>Pacific Regional Invasive Species Management Support Service (PRISMSS)</u>- Restoring Island Resilience (RIR) is a New Zealand-PRISMSS collaboration project that aims to improve Pacific Island Countries and territories livelihoods and resilience to climate change by reducing the impact of invasive species on natural and agricultural ecosystems through the five PRISMSS programmes.

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

The Second International Conference on Biological Control: Biocontrol Contributions to One Health (2icbc2025) was held successfully from 25–28 February 2025 at Radisson Blu Atria in Bengaluru, India. Organised by the Society for Biocontrol Advancement (SBA) in collaboration with the Indian Council of Agricultural Research – National Bureau of Agricultural Insect Resources (ICAR–NBAIR), the conference brought together more than 400 participants, including eminent scientists, international experts, policymakers, industry leaders and early-career researchers. Representatives from countries such as Australia, Germany, Indonesia, Italy, Japan, Kenya, the Netherlands, Taiwan and the United States, besides India convened to explore the critical role of biological control in advancing sustainable agriculture, integrated pest management and ecosystem health, all within the overarching framework of One Health.

The event was supported by an esteemed network of international and national coorganisers and knowledge partners, reflecting a strong commitment to advancing plant protection in general and biological control in particular. International collaborators included the Asia–Pacific Association of Agricultural Research Institutions (APAARI), CABI BioProtection, the International Association for the Plant Protection Sciences (IAPPS), the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) and the International Organisation for Biological Control – Asia and the Pacific Regional Section (IOBC–APRS). National support was provided by the Directorate of Plant Protection, Quarantine and Storage (DPPQS), the Entomological Society of India (ESI), and the Plant Protection Association of India (PPAI), each contributing valuable expertise and insight to the event. The Opening Ceremony was graced by the presence of Raghu Sathyamurthy, President of IOBC–Global, who served as the Chief Guest and set an inspiring tone for the event.



Raghu Sathyamurthy delivered an engaging address to the attendees during the Opening Ceremony

The programme featured five plenary speeches and thematic sessions that included lead, oral and rapid oral presentations, fostering active engagement across generations of researchers.

The conference served as a vital platform for addressing a range of issues under the following themes: (1) Biocontrol Entrepreneurship: Industries, Start-Ups and Incubation Centres; (2) Biodiversity, Biosecurity and Biosystematics of Crop Pests and Natural Enemies; (3) Invasive Alien Pests, Diseases and Weeds: Biocontrol Interventions; (4) Biocontrol-Compatible Technologies, Conservation Strategies and Pollinators; (5) Climate-Resilient Biocontrol Technologies; (6) Ecological Chemistry in Biological Control: Pheromone Synthesis, Sensors and Nanotechnology; (7) Genomics in Biological Control and Pest Management; (8) Integration of Macrobials and Microbials in Organic Farming; and (9) Information and Communication Technology in Biological Control: Artificial Intelligence, Internet of Things, Mobile Apps, Drones and Robotics.

An "Industry-Regulators-Academia Interface Meeting Interface Meeting" and a "Panel Discussion: Potential of Biological Control to Gradually Replace Chemical Control — Myth or Reality?" were also part of the agenda. Additionally, the conference hosted two concurrent Satellite Symposia: "Insect Multi-Omics: Molecular Insight Meets Pest Management Solutions" and "Chemoecological Innovations in Modern Pest Management".

Key discussions focussed on biological control as an alternative to synthetic pesticides, safeguarding human health, biodiversity and ecosystem balance. Groundbreaking insights on biocontrol applications, microbial biopesticides, insect pheromones and nanotechnological interventions for pest management were presented.

Illustrious scientists, including Johannes Jehle (JKI), Shiroma Sathyapala (FAO), Subba Reddy Palli (University of Kentucky), Surendra Dara (Oregon State University), Rangaswamy Muniappan (Virginia Tech), Anantanarayanan Raman (Charles Sturt University), Merid Negash Getahun (icipe), Nagalingam Kumaran (CSIRO), Ramasamy Srinivasan (World Vegetable Center) and Sevgan Subramanian (icipe), among others, shared their expertise on a diverse array of topics spanning biocontrol and related disciplines.

Senior Indian policymakers emphasised global collaboration, sustainable agriculture and the need for quality regulation in biocontrol products.

The conference spotlighted microbial biopesticides, insect pheromones, and nanotech-based pest solutions, and saw the release of publications, mobile apps and technical bulletins. Awards were conferred for outstanding contributions.

On the concluding day, delegates toured ICAR-NBAIR to interact with innovators and discover state-of-the-art biocontrol solutions.

— Prepared by Prakya Sreerama Kumar, Deepa Bhagat and Satya Nand Sushil, ICAR-National Bureau of Agricultural Insect Resources, Bengaluru, India

Join IOBC-APRS, become a member now!

https://aprs.iobc.info/membership_application.html

Individual membership is available to anyone actively involved in or interested in the field of biological control.

There are many benefits to becoming a member of the IOBC-APRS.

Discounted fees available for students/unwaged.



Kia ora | Greetings,

Please visit the <u>ISBCW2026 website</u>: **isbcw-rotorua.com** to explore the latest news and information. Don't miss out on future updates!

Abstract submission and submission of workshop ideas are now open!

For abstract submission:

Check the 'Session Topics' page https://isbcw-rotorua.com/session-topics/ to find out what topics we expect to cover.

Find the topic that best fits the work you wish to present.

Consider also which session topic may be a secondary fit for you in case we cannot fit you in the session of your first preference.

We seek submissions for:

Full-length oral presentations (20 min including 5 min question time)

Short-form oral presentations (5 min, no question time allowed)

Posters (size A1, landscape orientation)

Key dates: Submission for both workshops and presentation abstracts is open until **30 September 2025**.

We will notify you if your abstract/workshop idea has been accepted by the **first week of October 2025**. Note that we can consider early notification of acceptance where advanced notice is needed for travel approvals.

We will send future updates only to those who have registered.

Thank you!

If you might need assistance contact: info@isbcw-rotorua.com

Lynley Hayes

Co-Chair, ISBCW2026

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Funding options for scholarships to attend ISBCW and requirements for eligibility



Thanks to the generous support of sponsors, ISBCW is pleased to offer funding assistance to help some attendees to join us at the ISBCW2026 in New Zealand. The symposium is committed to building a diverse and inclusive audience — one that brings together not only researchers, but also students, practitioners, policymakers, and others working with or affected by weed biocontrol in their daily lives.

ISBCW and IOBC-APRS warmly encourage you to submit an abstract if you would like to share your experiences or insights. Priority for funding will be given to participants with accepted abstracts (oral papers and posters), contributions do not need to present scientific research.

If there is anything else the organising committee can do to support your attendance — such as providing an invitation letter, an early consideration for your abstract, or other ways we might support you — please don't hesitate to get in touch with us.

If you would like to apply for funding support, please fill out the application form and send it to: info@isbcw-rotorua.com

Applications close 30 September 2025. We hope to be able to inform applicants about the outcome in mid-October 2025.

IOBC ATTENDANCE SCHOLARSHIPS

IOBC-APRS is offering **NZD\$ 5,000** for one currently enrolled post-graduate student or recent graduate (no more than 2 years post-graduation at the time ISBCW2026 is held) from the Asia/ Pacific region. They must have an oral or poster presentation accepted; must be a resident in Australasia/ Asia/ Pacific region; and must be a member of IOBC-APRS or agree to join.

IOBC-Global is offering: New Zealand applicants up to €500 per person.

Other countries of residence applicants up to €1,000 per person.

Link for more information and application form:

XVII International Symposium on Biological Control of Weeds

Writing partnership

Non-native English speakers sometimes need help in preparing scientific articles for publication in English language journals.

IOBC-Global is establishing a pool of volunteers to help review and edit these articles, especially for young scientists and those who cannot afford to pay for professional services. The editing is not focussed on scientific content, but rather on language use and clarity.

Eligibility criteria for authors who wish to benefit from the writing partnership:

- 1. At least one author (preferably the lead author) must be a paying member of IOBC.
- 2. The service is intended for early career authors who have little experience in scientific writing, and have no access to paid editing services.
- 3. Authors can use the service only once.

The editing is only for clarity of English language. It does not constitute scientific advice and does not review the scientific quality of the work. It does not replace peer review.

Members are requested to promote this initiative in media outputs — social, websites and newsletters.

Please contact the <u>Secretary General</u> if you are willing to volunteer, suggesting how many manuscripts you may be willing to edit annually along with your areas of interest.

BioControl special issues

IOBC colleagues are invited to propose innovative ideas for special issues in our journal *BioControl*, published by Springer. Contributing to *BioControl* not only enhances scientific visibility but also strengthens the profile of our organisation.

The journal recently achieved an impact factor of 2.7, ranking in the top 25% of entomology journals. With a swift editorial process — typically around 15 days from submission to first decision — authors benefit from rapid feedback and high satisfaction. Additionally, *BioControl* plays a vital role in supporting IOBC financially.

In recent years, four special issues have been successfully published, yet there is a growing need for more. These initiatives often stem from our conferences and collaborative networks:

2021 – Revisiting the Biosafety of Exotic Generalist Arthropod Biological Control Agents (Editors: David A. Andow, Barbara I.P. Barratt, Robert S. Pfannenstiel, Débora Pires Paula)

2023 – Access and Benefit Sharing and Biological Control Genetic Resources (Editors: Peter G. Mason, Barbara I.P. Barratt)

2024 – Biological Control of Weeds and Arthropods (Editors: M. Schwarzländer, Peter G. Mason)

2024 – Conservation Biological Control of Stink Bugs (Editors: Fernanda Cingolani, Raul Alberto Laumann)

If you have ideas for future special issues, please reach out to the Editor-in-Chief, Eric Wajnberg, at eric.wajnberg@inrae.fr.

You are also encouraged to submit your own manuscripts to *BioControl*, and where relevant, reference *BioControl* publications in work submitted elsewhere.

With sincere thanks,

John Holland, Secretary-General, IOBC-Global

International Organisation for Biological Control – Asia and Pacific Regional Section

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IOBC-APRS Newsletter

Editor Sreerama Kumar PRAKYA (India)

To be featured in the next issue ...



Status of *Mikania micrantha* biocontrol in Vanuatu and other countries in the region ... by Michael Day