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Souvenir

ESI Foundation Day 2026 and Awards Ceremony: Honouring Excellence in Entomological Sciences

on

27th January 2026

Venue: Kerala Agricultural University, Thrissur, Kerala

Organized by

Entomological Society of India, New Delhi
Kerala Agricultural University, Vellanikkara, Thrissur
Indian Council of Agricultural Research, New Delhi
ICAR- Indian Agricultural Research Institute, New Delhi 110012

Souvenir

ESI Foundation Day 2026 and Awards Ceremony: Honouring Excellence in Entomological Sciences

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Entomological Society of India, New Delhi
Kerala Agricultural University, Vellanikkara, Thrissur
Indian Council of Agricultural Research, New Delhi
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ESI Foundation Day- 2026
&
Awards- 2024 Ceremony

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Entomological Society of India, New Delhi
Kerala Agricultural University, Vellanikkara, Thrissur
Indian Council of Agricultural Research, New Delhi
ICAR- Indian Agricultural Research Institute, New Delhi,
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at
Kerala Agricultural University, Vellanikkara, Thrissur

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THE ENTOMOLOGICAL SOCIETY OF INDIA
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Foreword

The Entomological Society of India (ESI), now in its ninth decade of distinguished service, stands as a beacon of excellence with a vibrant membership of over 1,600 dedicated entomologists. Over the years, ESI has continually evolved its initiatives to recognize outstanding practitioners, inspire young researchers, and honour contributions that shape the discipline's broader impact.

Our awards spanning best Ph.D. theses, exceptional teachers, senior scientists, young scientists, and industry leaders reflect this enduring commitment. This year, we are proud to confer the Lifetime Achievement Award upon *Dr. B.V. Patil*, in recognition of his pioneering work in integrated pest management, crop protection, and agricultural education. Select Life Fellows are also being elevated to Honorary Fellows, underscoring our resolve to celebrate excellence with dignity, transparency, and respect. It is indeed befitting that eminent scientists are honoured with the purpose of encouraging and advancing the science of entomology.

Complementing these recognitions, ESI continues its Annual Lecture Series, now in its fourth edition, as the Foundation Day lecture. We are privileged to welcome eminent speaker *Dr. Hema Somanathan* from IISER, Thiruvananthapuram, whose presence will make this occasion truly memorable. Another hallmark initiative, the Entomology Students' Conclaves (ESCs), unites young researchers through interactive sessions, paper presentations, and mentorship on cutting-edge topics strengthening the next generation's skills and contributions to sustainable pest management.

Parallelly, our flagship Indian Journal of Entomology (IJE) and the online magazine *Indian Entomologist* have embraced global publishing standards, enhancing both quality and accessibility. Together, these efforts reaffirm ESI's mission to elevate entomology in India.

Looking ahead, EntoFrontiers 2026, jointly organized with Kerala Agricultural University, ICAR, and IARI, embodies this vision. The conference will deliberate on themes such as IPM, insect–microbe/plant interactions, biodiversity, climate change, toxicology, CRISPR & RNAi, biopesticides, insect-based enterprises, and ecosystem services. The Students' Conclave will spotlight biodiversity, taxonomy, biological control, physiology, vectors, ecology, climate change, and beneficial insects. Keynotes, plenaries, oral and poster sessions, panels, networking, cultural exchange, travel grants, and post-conference tours will enrich this academic celebration.

As we look forward, I emphasize the progression of entomology in India. Our discipline has been pivotal in agricultural transformation from the Green Revolution to today's climate-resilient innovations. To meet emerging challenges, entomology must evolve as a science of solutions:

- Integrating cutting-edge tools like CRISPR, RNAi, and metagenomics to redefine pest management.
- Promoting eco-friendly strategies such as biocontrol, bioagents, and insect-mediated services to align agriculture with biodiversity conservation.
- Empowering student-led innovation to ensure continuity of knowledge and inspire future discoveries.
- Strengthening collaborative networks across academia, industry, and policy to amplify India's global leadership in sustainable entomology.

EntoFrontiers 2026 is not merely a conference—it is a movement to advance entomology as a cornerstone of sustainable agriculture, ecosystem health, and national food security.

On behalf of the organizing institutions, I extend my warmest wishes for the success of this conclave and welcome all delegates to Thrissur, the cultural capital of Kerala. May this gathering inspire us to uphold entomology as a beacon of sustainability and a pillar of national progress.

V. V. Ramamurthy
President, ESI

ABOUT ESI & ESI AWARDS

The Entomological Society of India (ESI), founded in 1938, is among the largest professional societies in the country, serving entomologists and researchers across allied disciplines. Since its inception, ESI has been at the forefront of advancing entomological science through its publications, conferences, symposia, technical bulletins, and books, thereby fostering the dissemination of knowledge and innovation.

ESI's publishing legacy is distinguished:

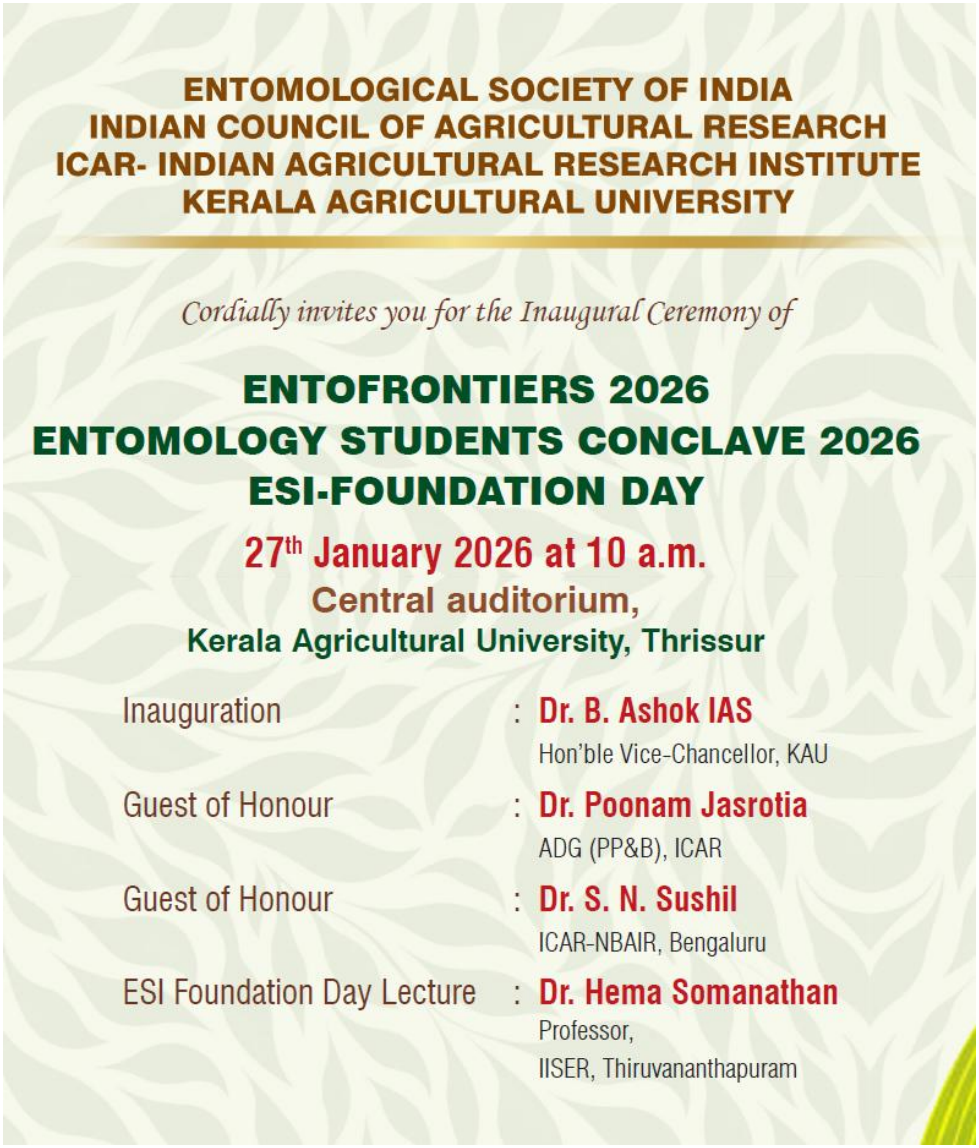
- Indian Journal of Entomology (IJE), established in 1939, is a leading quarterly journal (ISSN 0367-8288 for print; ISSN 0974-8172 online). Since 1956, it has been published regularly in March, June, September, and December, featuring high-quality original articles and reviews across both basic and applied entomology. Its scope spans taxonomy, toxicology, ecology, biodiversity, pest management, pesticides, biopesticides, botanicals, and biotechnological approaches, while embracing frontier technologies such as remote sensing, crop-pest modelling, and molecular entomology.
- Bulletin of Entomology (since 1967), Bionotes (since 2020), Indian Entomologist (since 2020), and Hexapoda, Insecta Indica (since 2023) further enrich the society's publishing profile.

In addition to its scholarly contributions, ESI has instituted a series of prestigious awards to recognize excellence and inspire future progress in the discipline:

- ESI Young Entomologist Award (introduced in 2020)
- ESI Senior Entomologist Award and ESI Best Ph.D. Thesis Award (introduced in 2021)
- ESI Best Teacher Award (introduced in 2022)
- ESI Industry Award (introduced in 2023)

Each year, these honours are conferred upon outstanding young and senior entomologists, exemplary teachers, industry leaders, and doctoral scholars. Through these recognitions, ESI seeks to encourage, acknowledge, and promote the remarkable contributions of entomologists across India, reinforcing its mission to advance entomology as a science of solutions and societal relevance. The Society places strong emphasis on nurturing future generations through Entomology Student Conclaves from 2024 onwards, ESI is the first society in India to organize Student conclave for the benefit of young researchers.

Programme schedule for ESI Foundation Day and Awards Ceremony



PROGRAMME SCHEDULE

10.00 a.m.	**ICAR Invocation song** **KAU Invocation song**	
10.05 a.m.	**Welcome address**	**Dr. Sachin S. Suroshe** General Secretary, ESI
10.10 a.m.	**Presidential address**	**Dr. V. V. Ramamurthy** President, ESI
10.20 a.m.	**Lighting the lamp by dignitaries & Inaugural address by the Chief Guest**	**Dr. B. Ashok IAS** Hon'ble Vice-Chancellor, KAU
10.35 a.m.	**Address by Guest of honour**	**Dr. Poonam Jasrotia** ADG (PP&B), ICAR
10.45 a.m.	**Address by Guest of honour**	**Dr. S. N. Sushil** ICAR-NBAIR, Bengaluru
10.55 a.m.	**ESI Award Ceremony and Release of Books of Abstract of the Conference and Souvenir of ESI Foundation Day**	**All the Dignitaries on the Dias** Hon'ble Vice-Chancellor, KAU
11.10 a.m.	**Felicitation**	**Dr. A. Sakeer Hussain** Registrar, KAU
11.15 a.m.	**Felicitation**	**Dr. K. N. Anith** Director of Research, KAU
11.20 a.m.		**Felicitating the Dignitaries**
11.25 a.m.	**Vote of thanks**	**Dr. Mani Chellappan** Dean, CoA, Vellanikkara
	National Anthem	
11.30 a.m.		**Tea Break**

PROGRAMME SCHEDULE

Chairman : **Dr. V. V. Ramamurthy**
President, ESI

Co-Chairman : **Dr. Poonam Jasrotia**
ADG (PP&B), ICAR

Convenor : **Dr. S. Subramanian**
ESI Zonal President, ICAR-IARI, New Delhi

11.45 a.m.	**Introduction of the Speaker by the Chairman**	**Dr. V. V. Ramamurthy** President, ESI
11.50 a.m.	**ESI Foundation Day Lecture**	**Dr. Hema Somanathan** Professor, School of Biology, IISER, Thiruvananthapuram
12.45 p.m.	**Felicitating the Speaker**	**Dr. V. V. Ramamurthy** President, ESI
12.50 p.m.	**ESI Special lecture on "Anusandhan National Research Foundation: Catalyzing India's Rise as a Research and Innovation Powerhouse"**	**Dr. Pramod Kumar Prasad** Scientist Anusandhan National Research Foundation (ANRF)
01.15 p.m.	**Vote of thanks**	**Dr. S. Subramanian** ESI Zonal President, ICAR-IARI, New Delhi


ESI
Foundation
Day
Lecture 2026

Prof. Hema Somanathan
School of Biology
Indian Institute of Science Education and Research
Maruthamala PO, Vithura
Thiruvananthapuram – 695551, Kerala
Email: hsomanathan@iisertvm.ac.in

Why study the sensory ecology of tropical bees?

Bees are amongst the most familiar insects known to humankind. Our current understanding of bee sensory systems, ecology and behaviour is significantly limited by a narrow focus on two "model" species: the European honeybee (*Apis mellifera*) and the buff-tailed bumblebee (*Bombus terrestris*). While these species have been instrumental in establishing the foundations of invertebrate sensory research, such as Karl von Frisch's discovery of color vision and the symbolic "dance" language, the remaining nearly 20,000 bee species found across diverse geographies and phylogenies remain understudied in all these perspectives.

This geographic and phylogenetic bias that has resulted in the dominance of *A. mellifera* and *B. terrestris* in research is largely due to the ease of procuring colonies, as they are central to global apiculture and greenhouse cultivation. Consequently, much of what is known about visual, olfactory, and tactile perception in bees stems from these two temperate species. However, sensory systems are tuned to the specific environments in which an animal operates. Tropical and temperate habitats differ vastly in terms of floral diversity, abundance, and seasonality, which imposes different selective pressures on the evolution of bee senses.

Sensory evolution is driven by the need to maximize information gain while minimizing the metabolic cost of processing that information. In the tropics, flowering patterns are far more nuanced and complex than in temperate regions, varying significantly across habitats and years. This high heterogeneity influences how bees utilize resources and likely shapes their sensory

adaptations. For instance, while several tropical species are reported to be unspecialized generalists, others with limited flight capabilities may exhibit different patterns of resource use that have yet to be robustly tested.

Research into species beyond the traditional models has already revealed unique visual capabilities. Stingless bees in Australia, Brazil, and India show marked differences in their innate color preferences and contrast sensitivity when compared to European honeybees. Neotropical orchid bees (*Euglossa*) have ocelli with focused monocular visual fields to detect features above the horizon and possess photoreceptors that likely detect polarized light.

While the basic photoreceptor patterns of hymenopterans are conserved, typically featuring three peaks at 340 nm (UV), 430 nm (blue), and 535 nm (green), the way this information is processed to guide behavior varies. For example, naïve *Apis cerana* (the Eastern honeybee) foragers spontaneously prefer long-wavelength colors, whereas naïve foragers of the model species prefer UV-reflecting blue. This suggests that habitat-specific differences can lead to distinct sensory biases in different bee species.

Sociality and life history traits affect sensory ecology. Social species must secure far greater quantities of resources than solitary ones, which may impact their learning rates, memory, and foraging distances. A study comparing the social bumblebee *B. bimaculatus* and the solitary/facultatively social carpenter bee *X. virginica* found that the bumblebee had a higher rate of learning, though both retained the information equally well. Additionally, tropical bees often live longer as individuals or colonies and may engage in migration to survive resource scarcity, traits that likely place unique demands on their sensory systems.

A prominent evolutionary event in tropical bees is transition to nocturnality. Some species, like the giant Asian honeybee (*Apis dorsata*), are facultatively nocturnal, extending their foraging into moonlit nights to exploit rewarding flowers. These bees possess anatomical adaptations like larger eyes and wider rhabdoms to increase sensitivity. Truly nocturnal species, such as the carpenter bee *Xylocopa tranquebarica*, possess adaptations for dim light that allow them to

maintain color vision even at starlight levels. These nocturnal bees are often opportunistic generalists that feed on "diurnal leftovers," suggesting a foraging strategy with diminishing returns compared to their diurnal counterparts.

Finally, I wish to point out disconnect between sensory physiology (often laboratory-based) and pollination ecology (often field-based). Bridging these fields is vital for understanding the mechanisms behind plant-pollinator networks. Furthermore, the threat of rising global temperatures is already altering flowering phenology, particularly in the tropics. Understanding the sensory ecology of tropical bees is therefore a "critical gap" that must be addressed to predict how these vital mutualistic partnerships will respond to global change. Expanding research to include more species across the phylogeny and from tropical regions will provide a more comprehensive view of how ecology shapes the bee's world and what the implications are for the conservation of bees.

References:

Warrant, Eric, and Hema Somanathan. "Colour vision in nocturnal insects." *Philosophical Transactions of the Royal Society B* 377, no. 1862 (2022): 20210285.

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Somanathan, Hema. "Why diversity matters for understanding the visual ecology and behaviour of bees." *Current Opinion in Insect Science* 64 (2024): 101224.

ENTOMOLOGICAL SOCIETY OF INDIA

Congratulations

ESI Lifetime Achievement Award (ESI-LAA)

Dr. B.V. Patil
Former VC, UAS, Raichur, Karnataka

ESI Honorary Fellow (ESI-HF)

Dr. Raju SVS
Hon'ble Vice Chancellor
BUAT, Banda, Uttar Pradesh

Dr. S.V. Sarode
Former Director of Research,
Dr PDKV, Akola

Dr. Poonam Jasrotia
ADG PP&B, ICAR, New Delhi

Dr. V. V. Belavadi
Former Head, UAS, GKVK, Bengaluru

Dr. Pramod Kumar Prasad
ANRF, New Delhi

Dr. B.V. Patil
Former Vice Chancellor
University of Agricultural Sciences,
Raichur, Karnataka 584104

Citation

Dr. Basavaraj Veeranagouda Patil stands as a pioneering figure in Indian agricultural entomology, renowned for his foundational role at the University of Agricultural Sciences (UAS), Raichur, and lifelong dedication to pest management, with his career exemplifying transformative contributions to crop protection and education. Over a distinguished 34-year tenure as an entomologist, he specialized in pest management for field crops, particularly cotton, pioneering Integrated Pest Management (IPM) demonstrations across vast areas using farmer-participatory approaches that significantly reduced chemical pesticide use while boosting yields by 20-25% in programs like the National Information System for Pest Management. His international expertise shone through roles as an FAO consultant on cotton IPM in Vietnam and whitefly management in Iran, alongside guiding 10 Ph.D. scholars and 36 M.Sc. (Agri.) students to foster the next generation of scientists. With over 250 research articles highlighting innovations in IPM modules, biocontrol agents, and botanicals presented at global forums, he also led key projects such as the NFSM-funded 'Integration of Radiation Technology in Red Gram Pest Management' during his time as Director of Education. As the founder Vice-Chancellor of UAS Raichur, established around 2014, Dr. Patil shaped its vision for agricultural advancement in Karnataka's arid regions, overseeing critical activities, annual reports, and infrastructure growth that emphasized research, extension services, and farmer engagement, earning him lasting recognition as a former VC post-retirement. Among his accolades, Patil received the Lifetime Achievement Award from the Cotton Research and Development Association of India for excellence in cotton pest management, alongside fellowships from

the Royal Entomological Society of England and the Entomological Society of India; more recently, he chaired the RAC committee at NBAIR, Bengaluru. Dr. Patil's enduring legacy thrives through empowered farmers, robust institutions like UAS Raichur, and advanced IPM practices that continue to sustain Indian agriculture. ESI recognizes Dr. B.V. Patil's outstanding contributions to entomology and society, honoring him with the prestigious ESI Lifetime Achievement Award.

****

Dr. S.V.S. Raju
Vice Chancellor
Banda University of Agriculture & Technology
Banda, Uttar Pradesh, 210001

Citation

Dr. S.V.S. Raju, a distinguished entomologist from Banaras Hindu University (BHU), serves as Vice Chancellor of Banda University of Agriculture & Technology (BUAT), exemplifying a lifelong dedication to agricultural sciences, particularly insect pest management. Born on July 10, 1962, he earned his bachelor's and master's degrees in agriculture from universities in Maharashtra and Himachal Pradesh before completing his PhD in Entomology at BHU in 1990, which laid the foundation for his expertise in insect taxonomy and pest control. Joining BHU in 1991, Prof. Raju rose steadily to become Professor of Entomology and Agricultural Zoology, serving as Head of the Department, Director of the Institute of Agricultural Sciences from August 2023, Vice-President of the University Sports Council, and Chief Patron of key hostels, while also holding administrative roles such as Member-Secretary of the Departmental Research Committee and contributing to BHU's Research Development Council. His research contributions center on integrated insect-pest management, biological control in horticultural crops, insecticide resistance mechanisms, beekeeping, and climate change impacts on pests; he completed major ICAR-funded projects, including studies on diamondback moth resistance, supervised 46 M.Sc. and 19 Ph.D. students (with more ongoing), co-supervised over 45 theses, and published over 120 research papers, 2 books, several chapters, bulletins, and edited 11 books, with his Google Scholar profile highlighting works on brinjal pests and aphidology. Among his honors are the Environmental Conservation Award-2017,

recognition as the best Associate NCC Officer at the national level, and various university scholarships; he also edited the Journal of Aphidology and served as Consulting Editor for the American Bibliographical Institute. Appointed BUAT's Vice Chancellor in early January 2025, Prof. Raju now leads efforts in teaching, research, and extension services in agriculture, bolstered by international visits for collaborations that underscore his global outlook, while remaining active in science communication and institutional growth as a married Indian academic.

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Dr. S.V. Sarode
Former Director of Research
Dr. Panjabrao Deshmukh Krishi Vidyapeeth
Akola, Krishi Nagar, Maharashtra 444104

Citation

Dr. S.V. Sarode served as the former Director of Research at Dr. Panjabrao Deshmukh Krishi Vidyapeeth (Dr. PDKV), Akola, Maharashtra, with a distinguished career centered on agricultural entomology. Having privilege to serve for about 35 years in four distinguished organizations viz., ICAR-IIHR, Bengaluru, Pest Control India, New Delhi, IGKVV, Raipur & PDKV, Akola worked on various subject matters such as Insect Toxicology, Pesticides residues, Pheromones, Biocontrol, Biopesticides, Biosystematics, Insect Resistance, Integrated Pest Management, etc. with a great interest of farmer's centric research and extension.

The residues of several pesticides were estimated on various vegetables and fruit crops to determine the waiting period for safe consumption of the commodity so as to recommend them appropriately. The effect of different processes was also examined on reduction of the residues for its safe uses. Scientific studies on utilization of sex pheromones as tool in pest management were conducted throughout the country with collaborative approaches with Universities/ Institutes/ Central & State agencies to promote the concept in plant protection for the first time during Nineteen eighties. The research and demonstrations on monitoring, mass trapping and mating disruption of insect pests of bollworms of cotton, pod borer of pigeon pea and chickpea, codling moth on apple etc. revealed the milestone technology in the pest management program.

The Biocontrol Laboratory in the University was created for research and mass production of bio-agents, *Trichogramma*, *Chrysoperla* and bio-pesticides, *HaNPV*, *SlNPV*, *Trichoderma* etc. to popularize their uses as ecofriendly approaches in

plant protection. Dose-response studies, standardization of production processes along with effects of pesticides on bio-agents were undertaken. Several front-line demonstrations and trainings for entrepreneurs and farmers were conducted throughout the Vidarbha region to educate the people. As a result, several Biocontrol factories have come in existence. The revolving fund was also initiated for the first time in the University to sustain the research and production of bio-agents and bio-pesticides.

Use of plant products especially neem extracts, neem oil etc. were explored and several plant protection modules were developed for successful and economical management of insect pests of various crops. Uses of bio-pesticides and plant products along with half dose of recommended insecticides were advocated for management of cotton and pulses pests and became most popular. Under the biodiversity program, the biosystematics laboratory with modern facilities was established in the university at Akola/Nagpur and several species of insects of Western region of the country were collected, studied, identified and preserved in the insect's museum.

New chemical molecules and different Bt cotton genotypes were tested for bio-efficacy studies for further recommendations. The calendar-based application of pesticide schedule on citrus proved boon to save the citrus industry in Vidarbha which was facing problems of black fly infestation and die back locally known as 'kolshi'. He published more than 107 research papers, 27 books/bulletins, >40 TV/radio talks and many other publications during his tenure.

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Dr. Poonam Jasrotia
ADG PP and B
Indian Council of Agricultural Research (ICAR)
New Delhi, 110001

Citation

Dr. Poonam Jasrotia, the first woman to serve as Assistant Director General (ADG) for Plant Protection and Biosafety at ICAR Headquarters, New Delhi, has built an illustrious career in crop science, blending groundbreaking research with visionary leadership. Her journey began with a passion for entomology during undergraduate studies at CSHPKV, Palampur. Earning gold medals in B.Sc. Agriculture (crop protection focus) and her Ph.D., she excelled in biological control and integrated pest management (IPM), laying the foundation for her expertise.

She launched her professional path as Assistant Professor at SKUAST, Jammu in 2004, followed by postdoctoral research at prestigious institutions: Agricultural Research Organization (ARO), Volcani Center, Israel (2005-2007); North Carolina State University, Raleigh, USA (2007-2008); and Great Lakes Bioenergy Research Center (GLBRC), Michigan State University, USA (2008-2012), where she coordinated interdisciplinary projects blending research and management. Joining ICAR in 2012 as Senior Scientist at ICAR-Directorate of Groundnut Research (DGR), Junagadh, she shifted to ICAR-Indian Institute of Wheat and Barley Research (IIWBR), Karnal in 2015. There, as PI-Coordinator and PME In-Charge for AICRP on wheat and barley, she spearheaded work on climate change, pest management, insect ecology, biocontrol, host plant resistance, pesticide residues, and nanotechnology.

Her contributions are significant, she co-developed eight wheat varieties (DBW173, DBW187, DBW222, DBW303, DBW332, DBW327, DBW296, DBWH221) and two barley varieties (DWRB160, DWRB182), alongside six genetic stocks, including three aphid-resistant barley lines (BCLA3, BCLA11-

6, HLR-20). Focusing on aphid resistance mechanisms in wheat and barley, she identifies novel sources for varietal development and pioneer's botanical alternatives to synthetic chemicals for stored grain pests. Under joint guidance with CCSHAU, Hisar, she mentored 3 M.Sc. and 4 Ph.D. entomology students. Her prolific output includes over 70 research papers, 3 books, 12 book chapters, and 100+ popular articles.

Honored with the Nanaji Deshmukh Award 2022, Best Scientist Awards (2021, 2020), Distinguished Female Scientist Award (2020), and Netherlands Fellowship (2018), Dr. Jasrotia now drives national priorities as ADG: climate-resilient crops, digital surveillance via drones and sensors, Pest Diagnostics Centers, robust IPM, anti-pesticide misuse regulations, biotech investments, public-private partnerships, organic farming, and biodiversity. Championing innovation through funding, startups, and farmer dialogues, she integrates indigenous knowledge, advancing sustainable agriculture and fortifying India's plant protection amid climate challenges.

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Dr. Vasuki V. Belavadi
University of Agricultural Sciences (UAS)
GKVK Bangalore - 560065

Citation

Dr. V.V. Belavadi renowned for his lifelong dedication to bee research at the University of Agricultural Sciences (UAS), Bangalore. He is the Fellow of the Royal Entomological Society (FRES) since 1995 and ICAR Emeritus Scientist (2018–2021). As Professor and Head of the Department of Entomology at UAS's College of Agriculture on the GKVK campus, he mentored young entomologist while pioneering advancements in apiculture, pollination biology, and bee taxonomy. Trained initially in insect taxonomy and systematics, his scientific curiosity gradually led him to the intricate world of bees. Over the years, he meticulously documented the diversity of honey bees and stingless bees across South India, with special focus on *Apis cerana indica* and *Tetragonula* species. His studies not only enriched knowledge of Indian bee fauna but also emphasized their indispensable role in pollination, biodiversity maintenance, and ecosystem health.

His career began with mapping the 'island hopping' of Leucaena psyllid in the Andamans (1987) and a major milestone of his career was pioneering work in pollination biology. Beginning in the early 1990s, he initiated long-term studies on pollination in crops such as small cardamom and coffee, unraveling complex interactions between bees and flowering plants. His research demonstrated the importance of floral resources, pollen diversity, and bee foraging behaviour in improving seed set and crop productivity. These findings contributed significantly to sustainable horticultural practices in Karnataka's diverse agroecosystems. He organized the National Symposium on Social Insects (1998) and a winter school on Pollination Biology (2004). His innovations included

easy nesting site enhancements for pigeon pea and economic valuations pegging pollination services at Rs. 34,000 crores across six crops.

As a prolific mentor, guided 10 M.Sc. and 9 Ph.D. students while delivering UG courses in basic Entomology and PG courses in Insect Ecology, Principles of Taxonomy, Classification of Insects, and Advanced Insect Systematics. He also contributed to newsletters on honeybee diversity in the South Indian Western Ghats, supported IAEA publications on insect-environment interactions, and collaborated on stingless bee floral resources for the Zoological Survey of India. A prolific contributor with 142 research papers, 10 book chapters, 2 books, and 30 popular articles, he led ten funded projects (DBT, DST, ICAR, Coffee Board, Monsanto), including a Niche Area of Excellence in insect-mite taxonomy and an Indo-German study on urbanization's impact on pollinators. As FAO Fellow (University of Southampton, 1994), FAO Global Pollination Project consultant (2010–2012), and UNEP midterm evaluator, he founded the Indian Pollination Initiative, hosting three Asian Bee Meets (2018–2020) and webinar series on bee behavior (2020). His holistic legacy, blending taxonomy, molecular insights, and sustainable practices bolsters India's agricultural resilience through mentorship, and publications.

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Dr. Pramod Kumar Prasad
Anusandhan National Research Foundation (ANRF)
New Delhi - 110016

Citation

Dr. Pramod Kumar Prasad is working as Scientist-E in Anusandhan National Research Foundation (ANRF) (Erstwhile Science and Engineering Research Board), a Statutory Body created by Act of Parliament, Govt. of India. He was awarded PhD in Zoology from North-Eastern Hill University (A Central University), Shillong, Meghalaya. His area of research covers fields of Molecular Biology, Parasitology and Bioinformatics. Work done by him during PhD provided "PCR-based diagnostic markers for species discrimination of zoonotic trematode parasites" for correct diagnosis and development of novel therapeutic and preventive strategies. The work resulted in research papers in high impact International and National Journals and DNA sequences in GenBank.

Presently he is working as Program officer for Prime Minister – Early Career Research Grant (PM-ECRG), MAHA MedTech Mission, National Post Doctoral Fellowship (NPDF), Partnerships for Accelerated Innovation and Research (PAIR) and International Travel Support (ITS) programs of ANRF in addition to erstwhile SERB programs. In SERB he worked as Member Secretary for implementation of programs such as Young Scientist – Life Sciences (YSS, ECRA, SRG and NPDF), EMEQ, DIA, STAR, TETRA, 3D-BIOPRINTING IRHPA, COVID-19 IRHPA and PAC-Organismal and Evolutionary Biology – Animal Sciences, Biomedical and Health Sciences. Prior to joining SERB, he was involved in the implementation of Internship and Faculty Award components of Innovation in Science Pursuit for Inspired Research (INSPIRE) program of Department of Science and Technology, Govt. of India (DST).

ENTOMOLOGICAL SOCIETY OF INDIA

Congratulations

ESI Best Teacher Award (ESI-BTA)

Dr. Gagana Kumar Mahapatro
ICAR-IARI, New Delhi

Dr. Kolla Sreedevi
ICAR-NBAIR, Bengaluru

ESI Industry Award

Dr. Chakradhar Pal
PI Industries Ltd

Dr. Markandeya Gorantla
ATGC Biotech Pvt. Ltd.

ESI Senior Entomologist Award (ESI-SEA)

Dr. Berin Pathrose
KAU, Kerala

Dr. M. Kannan
TNAU, Coimbatore

Dr. T. Ramasubramanian
ICAR-SBI, Coimbatore

Dr. Sachin S. Suroshe
ICAR-IARI, New Delhi

Dr. C. M. Senthil Kumar
ICAR-IISR, Kerala

ESI Young Entomologist Award (ESI-YEA)

Dr. Bhupendra Kumar
BHU, Uttar Pradesh

Dr. Kiran Gandhi Bapatla
ICAR-CRRI, Andhra Pradesh

Dr. Shivakumara K. T.
ICAR-NBAIR, Bengaluru

ESI Best Ph.D Thesis Award

Dr. Deeksha M. G.
ICAR-IARI, New Delhi

Dr. M. N. Rudra Gouda
ICAR-IARI, New Delhi

Dr. Mayank Kumar
GBPUA&T, Uttarakhand

Dr. Rajgopal N. N.
ICAR-IARI, New Delhi

Dr. Suresh R. Jambagi
UAS-GKVK, Bengaluru

The ESI Awards Committee is grateful to all the nominees, reviewers and members of the Judging Committee for their support in this Endeavour of the Society

ESI Best Teacher Awardees-2024

Dr. Gagana Kumar Mahapatro
Principal Scientist
Division of Entomology, ICAR- Indian Agricultural Research Institute, New Delhi 110012

Citation

Dr. Gagan Kumar Mahapatro, born in Koraput (Odisha) earned his Graduation and Post-Graduation degrees (Gold Medallist) from OUAT, Bhubaneswar. After completion of Ph D from IARI, he served as Asst. Professor in Kerala Agriculture University (1999-2006), Sr Scientist in IARI (2007-2011), National Fellow ICAR (2011-2017), Head of Regional Station, IARI Pune (2017-2023) and currently serving as Principal Scientist in IARI itself. Under the National Fellow project, comprehensive review of ITKs across the country is Zmade on termites. Frontier sciences are used in termite research encompassing molecular and biotechnological tools, insect nutritional & physiological studies, behavioural-, toxicological- aspects, survey & surveillance etc. Research endeavours were also directed on termiticidal seed-treatment for few major-crops – wheat, maize, groundnut, chickpea and soybean. An eco-friendly termite-control strategy Pusa-Push-Pull-Strategy was innovated, and validated in wheat-maize agro-ecosystem. This eco-technology is climate-smart, conservation-smart, carbon-smart and cash-smart. The web-portal on termites, www.termitexpert.in, is a milestone achievement (>2 million visits, covering >90 countries globally). Other notable achievements are the IPM and Ant technology in cashew, cashew hybrid Poornima, papaya variety Pusa Madhu approved for Delhi State, papaya PRSV tolerant lines PS-2 & PS-5, Selection-24 (tomato line) registered in NBPGR Germplasm bank. He has >375 publications (>110 research articles) to his credit, and guided dozen of PhD & M Sc students.

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Dr. Kolla Sreedevi
Principal Scientist & ICAR National Fellow
ICAR-National Bureau of
Agricultural Insect Resources
Bengaluru 560024, Karnataka

Citation

Dr. Kolla Sreedevi working as Principal Scientist and ICAR National Fellow at ICAR-National Bureau of Agricultural Insect Resources (NBAIR), Bengaluru is specialized in Insect taxonomy and systematics and currently working on biosystematics of family Scarabaeidae of order Coleoptera. She has 20 years of teaching and research experience in Agricultural Entomology. Dr. Sreedevi taught UG and PG courses in Entomology while in teaching at S. V. Agricultural College, ANGRAU, Tirupati, Andhra Pradesh and at ICAR-Indian Agricultural Research Institute (IARI), New Delhi and served as Academic Advisor, NSS nodal officer, Study tour leader, Warden, etc.

Dr. Sreedevi has discovered and described 32 new scarab species apart from documentation of 118 new distributional records, redescriptions, preparation of checklists, catalogues, diagnostic keys and distribution maps for predominant white grub species. She is also specialized in molecular taxonomy and generated DNA barcodes for nearly 150 species of white grubs, of which two-thirds are first time deposition in NCBI database. Dr. Kolla Sreedevi has visited international labs on Netherlands NUFFIC and German DFG Fellowships and published around 160 research papers in peer reviewed journals besides 100 symposia abstracts, book chapters, review papers, etc. She is a Fellow of Royal Entomological Society (London), NABS, ESI, SBA, AAPMHE and recipient of several awards like Dr. H. Nagaraja Memorial Award, NABS Best Woman Scientist Award, etc. Dr. Sreedevi has mentored several students and guided 23 post graduate students so far.

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ESI Industry Awardees

Dr. Markandeya Gorantla
Executive Chairman & MD
ATGC Biotech Pvt Ltd
Mahalaxmi Residency, Kompally
Hyderabad 500014, Telengana

Citation

Dr. Markandeya Gorantla is a distinguished scientist, entrepreneur and a global leader in insect chemical ecology and pheromone based pest management, whose pioneering contributions have significantly advanced sustainable and environmentally responsible agriculture. With over 15 years of translational research and innovation, Dr. Gorantla has played a seminal role in developing pheromone and semi chemical based technologies that enable mating disruption, competitive attraction, and behavior-based, currently registering 20 plus products in 30 plus countries towards suppression of major agricultural and forest pests. He is the inventor of multiple patented synthetic biology derived pheromone synthesis, controlled-release delivery platforms, which have transformed the scalability and affordability of pheromone technologies, particularly for smallholder farming systems. As the Chairman and Managing Director of ATGC Biotech Pvt. Ltd., he has successfully translated scientific innovation into large-scale field deployment, with technologies validated across more than 200,000 acres in India and internationally, and adopted by over 100,000 farmers. His work has contributed to substantial reductions in chemical insecticide use, improved crop productivity, and strengthened ecosystem resilience. Dr. Gorantla's contributions are recognized globally through collaborations with ICAR, DBT-BIRAC, USDA, DST, and international agricultural agencies, and through multiple national and international awards. His visionary leadership continues to bridge entomological science, industry, and sustainability.

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Dr. Chakradhar Pal
Head, Product Development
PI Industries Ltd.
Vipul Sq Fl 5, Galleria DLF-IV
Gurgaon 122009, Haryana, India

Citation

Dr. Chakradhar Pal is a global leader in agricultural innovation, renowned for advancing science-driven, sustainable, and stewardship-aligned crop protection across Asia, Europe, and the Americas. As Lead – Global Product Development at PI Industries, he directs multi-country, cross-functional programs spanning scientific validation, regulatory enablement, product lifecycle strategy, and global stewardship deployment. His leadership integrates rigorous evidence-based approaches, sustainability principles, and stakeholder capacity-building to shape resilient and future-ready agricultural systems. Previously, as Head of Product Development & Stewardship at PI Industries and Jivagro and in senior leadership roles at Bayer CropScience and Monsanto—Dr. Pal delivered pioneering chemistries and biologicals, advanced digital agronomy platforms, led hybrid development initiatives, and implemented farmer-centric outreach programs at scale. Dr. Pal serves as Chair of IRAC at CropLife India (CLI) and contributes actively to CII, FRAC, global biological alliances, and the Agronomic Society of America, strengthening global scientific collaboration and industry governance. His scholarly contributions include multiple patents, technical books, and peer-reviewed publications. He holds a Ph.D. in Agriculture, an MBA from IIM Calcutta, Six Sigma Black Belt, Innovation Leadership. Dr. Pal exemplifies scientific excellence, ethical stewardship, strategic vision, and transformative leadership in global agriculture.

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ESI Senior Entomologist Awardees- 2024

Dr. Berin Pathrose
Associate Professor
College of Agriculture, Vellanikkara
Kerala Agricultural University
Thrissur 680656, Kerala

Citation

Dr. Berin Pathrose is an accomplished entomologist whose research has made outstanding contributions to insect toxicology and storage entomology, with particular emphasis on sustainable pest management strategies. His work is distinguished by the innovative exploration of plant-derived bioactive compounds, especially essential oils from agro-waste, for the management of insect pests. Through a series of high-impact publications in internationally reputed journals such as Insects, Molecules, Food Bioscience, Waste Management, Antibiotics, Pest Management Science and Crop Protection, Dr. Pathrose has demonstrated the insecticidal, antioxidant and fumigant properties of botanicals, offering eco-friendly alternatives to conventional insecticides. A major strength of his research lies in integrating chemical characterization with bioassays and mechanistic studies, thereby advancing the scientific understanding of insecticidal action and resistance. His recent publications provide critical insights into insecticide resistance in key pests such as *Cnaphalocrocis medinalis*, including the first global report of fipronil resistance and elucidation of biochemical and molecular resistance mechanisms. Dr. Pathrose has also contributed significantly to storage pest management through studies on resistance, radiation, microwave and radio-frequency-based control methods. With a strong record of highly cited publications, consistent authorship in highly rated journals, and recognition through best paper awards, Dr. Berin Pathrose's research has substantially enriched contemporary entomological science and supports the development of sustainable, science-based pest management practices.

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Dr. C. M. Senthil Kumar
Principal Scientist
Division of Crop Protection
ICAR-Indian Institute of Spices Research
Kozhikode 673012, Kerala

Citation

Dr. C. M. Senthil Kumar, working as Principal Scientist at ICAR–Indian Institute of Spices Research, Kozhikode, has made outstanding contributions to insect pathology, biological control, host plant resistance and sustainable pest management in spice agroecosystems. Over nearly two decades of research spanning CSIR–North East Institute of Science and Technology and ICAR–Indian Institute of Spices Research, his work has integrated pathogen biodiversity exploration with molecular and applied entomology to deliver field-relevant pest management solutions.

His research on the diversity, ecology, and molecular determinants of virulence and infectivity of entomopathogenic viruses and fungi has significantly advanced understanding of host–pathogen interactions in key insect pests of spices. He has documented several first records and novel species of entomopathogens, elucidated genetic and enzymatic mechanisms underlying infection processes, and translated these findings into effective, ecosystem-compatible pest management strategies. Notably, his contributions have led to the development of biologically based IPM solutions for major insect pests of spice crops, resulting in reduced chemical pesticide dependence and enhanced resilience of spice production systems. His multidisciplinary approach, integrating classical insect pathology, molecular biology, RNA interference, artificial intelligence-based decision support, and host plant resistance, exemplifies innovation-driven, applied entomology with sustained scientific and agroecological impact.

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Dr. M. Kannan
Professor
Department of Agricultural Entomology
Tamil Nadu Agricultural University
Coimbatore 641003, Tamil Nadu

Citation

Dr M. Kannan is a leading entomologist in nanotechnology research in India and globally, with over two decades of expertise in entomological research, innovation, and academic leadership. He has pioneered in the integration of nanoscience with eco-safe pest management. Several of his research outcomes have been recommended as technologies by Tamil Nadu Agricultural University, including TNAU Nano Sci-Lure, a slow-release methyl eugenol & melon fly lures, bio-nanoformulations for the tea mosquito bug & coffee stem borer, and validated IPM modules for FAW, directly benefiting farmers. In 2025, he secured a patent for a nano-parapheromone formulation for the control of melon fly, highlighting his contributions to agricultural innovation.

He has successfully led and contributed to national and international research projects supported by DST, CSIR, UGC, Coffee Board, CDB, MoES, GoTN, IDRC (Canada), and CSIRO (Australia). His research addresses key challenges in the field of crop protection. A prolific author and dedicated mentor, he has published extensively in high-impact journals and authoritative books while guiding postgraduate and doctoral students. His achievements have been recognized through the DST Young Scientist, Scientist of Excellence in Niche area (Nanotechnology in pest management), and Dr S. Sithanantham Award (Biological control). His work continues to advance nano-enabled, eco-safe pest management strategies, setting a benchmark in agricultural research and innovation.

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Dr. T. Ramasubramanian
Principal Scientist
Division of Crop Protection
ICAR-Sugarcane Breeding Institute
Coimbatore 641007, Tamil Nadu

Citation

Dr. T. Ramasubramanian has an exceptional academic record in Agricultural Entomology. He was University Topper in M.Sc. at ANGRAU, Hyderabad, and secured an OGPA of 9.84/10.0 in his Ph.D. at TNAU, Coimbatore. He specialized in Insecticide Toxicology and Insect Molecular Biology. He has been serving the ICAR system for more than nineteen years and published extensively in reputed journals of leading publishers. He has actively mentored students and early career researchers for M.Sc., Ph.D., PDF, and capacity building programs. He organized two ICAR-sponsored Short Courses as Course Director at ICAR-CRIJAF in 2011 and ICAR-SBI in 2016. The Short Course on "Techniques in Insect Molecular Biology and Toxicology" was graded outstanding or excellent by all participants. As a Cane Entomologist for over a decade, he has demonstrated expertise across diverse facets of Agricultural Entomology. He developed chromatographic methods and studied dissipation kinetics of almost all insecticides registered for sugarcane. He generated DNA barcodes for insects and sequenced transcriptomes of two Crambid borers. He also isolated hundreds of native entomopathogenic fungi with variable pathogenicity and thus, contributed to Insect Pathology. He revised the biology of important cane Crambids and works on their chemical ecology. He is a Noël Deerr Gold Medal awardee.

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Dr. Sachin Suresh Suroshe
Project Coordinator
AICRP on Honey Bees & Pollinators
Division of Entomology
ICAR-Indian Agricultural Research Institute
New Delhi 110012

Citation

Dr. Sachin S. Suroshe (FESI) is working as a Project Coordinator of AICRP (HB&P), ICAR-IARI, New Delhi. For the last 23 years, he has been significantly contributing in the field of IPM and Biological control. He has conducted several training and research program on IPM and Apiculture. He has worked out the suitability of cotton mealybug parasitoids for mass production. Predatory potential, functional response and orientation response has been worked out for several coccinellids. Sequential sampling plan with predator effect has been devised for coccinellids. Thermo-tolerance strain of cotton mealybug parasitoid has been developed. Simple rearing technique has been developed for cotton aphid. Ecological engineering and conservation biocontrol strategies have been developed for many crops. The strain of *Beauveria bassiana* for enhanced potency against cotton mealybug and cowpea aphid has been developed. Molecular marker-based assessment of population structure and dispersal potential of six spotted beetle is deciphered. Developed tablet-based formulation for the attraction of coccinellids. He is supervising the research, development and extension activities of 30 AICRP centres. He has published 90 research papers, 4 books, 10 book chapters, 20 conference papers, 10 technical reports, 23 manual chapters, 25 extension folders, and over 60 popular articles. He has guided 7 PhD and 5 MSc students; and guiding 6 PhD and 1 MSc students.

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Young Entomologist Awardees 2024

Dr. Bhupendra Kumar
Assistant Professor
Department of Zoology
Institute of Science Banaras Hindu University
Varanasi 221005, Uttar Pradesh

Citation

Dr. Bhupendra Kumar is an Assistant Professor in the Department of Zoology at Banaras Hindu University, Varanasi, specializing in entomology. His research focuses on insect ecology and behavior, particularly insect pest and weed management. Over the past decade, he has extensively studied coccinellid and chrysomelid beetles, highlighting their roles in ecosystem services. He has investigated biological control of insect pests and the sustainable management of invasive weed *Parthenium hysterophorus*, a significant threat to agriculture, biodiversity, and public health in India. His work on native coccinellid beetles has explored prey–predator and predator–predator interactions, providing valuable insights into ecological dynamics. By analyzing the functional response curves of Indian coccinellid beetles, he has contributed to a better understanding of the effective biocontrol strategies. He was the first to study coccinellid responses to well-defended prey, advancing understanding of adaptive foraging, prey-associated learning, and size–preference relationships.
Dr. Kumar also examined the biological control potential of chrysomelid beetle *Zygogramma bicolorata* under changing climatic conditions, assessing feeding efficiency, nutrient assimilation, and body size variation across altitudinal gradients. More recently, he is studying the climate impacts on mulberry silk moth, investigating how temperature, photoperiod, and environmental changes affected growth, reproduction, and silk production, supporting sustainable sericulture.

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Dr. Kiran Gandhi Bapatla
Scientist
Regional Coastal Rice Research Station
ICAR-Central Rice Research Institute
Agriculture College Naira Campus
Naira 532187, Andhra Pradesh

Citation

Dr. Kiran Gandhi Bapatla is a distinguished young entomologist whose research seamlessly integrates classical insect ecology with cutting-edge Artificial Intelligence, Machine Learning and Internet of Things technologies for sustainable pest management. As a Scientist at Regional Coastal Rice Research Station, ICAR–Central Rice Research Institute, he has made outstanding contributions to insect pest monitoring, forecasting and eco-friendly management strategies in major agricultural ecosystems of India. Dr. Gandhi is the inventor of NoctiLens, a patented AI- and IoT-enabled device for automated monitoring of nocturnal insect pests, representing a significant technological advancement in real-time pest surveillance and decision support. His pioneering work on entomotoxic actinobacteria led to the discovery and national deposition of 30 novel microbial isolates, offering promising alternatives to chemical insecticides against key pests such as *Helicoverpa armigera* and *Spodoptera litura*. His research on insecticide resistance, pest population dynamics, geostatistical modelling, and climate change impacts on insect voltinism has been widely published in high-impact national and international journals. Dr. Gandhi has also successfully led and contributed to several externally funded research projects and extension initiatives, translating science into farmer-centric solutions. In recognition of his innovation, scientific excellence and leadership in modern entomological research, Dr. Kiran Gandhi Bapatla is eminently deserving of the ESI Young Entomologist Award - 2024.

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Dr. Shivakumara K.T.
Scientist
Division of Genomic Resources
ICAR-National Bureau of Agricultural
Insect Resources, Bengaluru 560024, Karnataka

Citation

Dr. Shivakumara K. T. has molecularly characterized more than hundred insect pests and natural enemies, generating validated DNA barcodes. He documented, several invasive and emerging pests, including *Phenacoccus solenopsis*, *Paracoccus marginatus*, *Megapulveneria maxima*, *Tetranychus urticae, Pyrausta panopealis*, *Spilarctia obliqua*, *Nephopteryx eugraphella* and *Copamyntis obliquifasciella*. He standardized laboratory rearing protocols for key lepidopteran pests of medicinal plants, developed severity index assessment protocols for major mealybugs. Furthermore, identified eight novel *G. sylvestre* genotypes, of which DGS-18 (INGR25035), DGS-26 (INGR25096), and DGS-28 (INGR25095) were registered with NBPGR, New Delhi, as tolerant germplasm against mealybug species. He evaluated biorational insecticides, including entomopathogenic fungi (EPF) and botanicals, against *P. solenopsis* and *P. marginatus*, identifying EPF as the most effective option. Comparative fitness and population growth of *Aphis nerii* were assessed using an age-stage, two-sex life table, along with the nationwide genetic diversity and haplotype analysis on *G. sylvestre*. He also documented key predators and hymenopteran parasitoids, strengthening biological control strategies. Additionally, he co-developed LAMP and RPA based colorimetric assays for rapid pest detection of *Phenacoccus manihoti* and *Spodoptera frugiperda*. A Fellow of ESI and SBA, he has authored over 60 national and international publications and received multiple young scientist awards, including the Prof. Dr. B. *Vasantharaj* David Young Scientist Award.

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Best Ph.D. Thesis Awardees 2024

Dr. Deeksha M. G.
Scientist (Entomology)
ICAR-Directorate of Weed Research
Jabalpur 482004, Madhya Pradesh

Citation

Dr. Deeksha M. G., Scientist at the ICAR-Directorate of Weed Research, Jabalpur, Madhya Pradesh, is recognized for her contributions to elucidating phosphine resistance mechanisms in the red flour beetle, *Tribolium castaneum*. During her doctoral research at the ICAR-Indian Agricultural Research Institute (IARI), New Delhi, she developed a biochemical and molecular framework explaining phosphine resistance through detoxification pathways, metabolic regulation, and mitochondrial energy dynamics. Her work revealed coordinated metabolic reprogramming in resistant populations, marked by suppression of glycolysis through reduced glyceraldehyde-3-phosphate dehydrogenase (GAPDH) activity and expression, alongside upregulation of triose phosphate isomerase (TPI), indicating compensatory metabolic rerouting. Detoxification capacity increased via elevated carboxylesterase, glutathione S-transferase, and cytochrome P450 activities, supported by induction of CE, GSTD (D1-D3), and CYP346 gene families. At the mitochondrial level, enhanced dihydrolipoamide dehydrogenase (DLD) and cytochrome c oxidase (COX) activities sustained ATP production and redox homeostasis under phosphine-induced oxidative stress. Her research provided first kinetic evidence linking mitochondrial enzyme efficiency with field-level resistance and development of diagnostic CAPS markers technology (ICAR-CS-IARI-Technology-2024-060) for rapid resistance detection. She received the IARI Senior Research Fellowship (2019), the DST-INSPIRE Fellowship (2020), and received advanced genomics training at The University of Queensland, Australia, under the NAHEP–CAAST travel grant.

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Dr. M. N. Rudra Gouda
Scientist-B (Pre-Cocoon), Entomology
Central Silk Board, Bengaluru, Karnataka

Citation

Dr. M. N. Rudra Gouda is a distinguished entomologist currently serving as Scientist-B at the Central Silk Board, Ministry of Textiles, Government of India. He obtained his Ph.D. and M.Sc. in Agricultural Entomology from the Indian Agricultural Research Institute (IARI), New Delhi. His academic excellence is reflected in securing All India 1st Rank in the ICAR-AIEEEA-PG (2019) and the AICE-JRF/SRF (Ph.D.) Examination (2024). Dr. Gouda is recognized for his outstanding doctoral research that significantly advanced the molecular understanding of chemosensory and reproductive mechanisms in *Bemisia tabaci*, one of the world's most destructive agricultural pests. His Ph.D. research provided a comprehensive genomic and functional characterization of odorant-binding proteins, chemosensory proteins, and ejaculatory bulb proteins across cryptic species of *B. tabaci*. Using integrated approaches involving phylogenomics, chromosomal mapping, expression profiling, molecular docking, behavioral assays, and RNA interference, he established the roles of key genes in host recognition, insecticide detoxification, and reproduction. His work offers novel molecular targets for sustainable pest management strategies. Dr. Gouda has received several prestigious honors, including the Gurprasad Pradhan Medal (2024), Best Student of the Year Award (2024), and the NABARD–Professor V.L. Chopra Gold Medal (2024), all conferred at the 63rd Convocation of IARI for his doctoral work. He has published extensively in high-impact, contributing significantly to agricultural entomology.

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Dr. Mayank Kumar
Assistant Professor
Department of Entomology
College of Horticulture, VCSG
Uttarakhand University of Horticulture and forestry
Bharsar, Uttarakhand -246123

Citation

This certificate is awarded to Dr. Mayank Kumar, Assistant Professor, Department of Entomology, College of Horticulture, VCSGUUHF, Bharsar, Uttarakhand, in recognition of his outstanding contributions to entomology, particularly the taxonomy of Scarabaeidae beetles of Uttarakhand, and his significant advancement of insect identification, classification, and documentation. During his Ph.D. research in Department of Entomology, College of Agriculture at GBPUAT Pantnagar, he compiled comprehensive literature covering over 400 Scarabaeoidea species from Uttarakhand. Subsequently, his two-year field survey from different crop fields and mountain elevations of 12 districts, documented 92 species under 30 genera and 14 tribes across 5 subfamilies (Melolonthinae, Rutelinae, Sericinae, Dynastinae, and Cetoniinae) from Uttarakhand, including two new species (*Panotrogus jagbiri* and *Pseudopanotrogus nileshi*) from the world, the genus *Bunbunius*, and four species newly recorded from India. Notably, *Leucopholis lepidophora* was reported for the first time from the Western Himalaya, with four additional species newly recorded from Uttarakhand. His analytical studies, redescriptions, egg morphology assessments, and molecular characterization using mtCOI markers have provided critical insights into phylogeny and biodiversity patterns. Dr. Kumar's integration of classical taxonomy with modern techniques has strengthened teaching, research, and extension, benefiting students and the broader scientific community.

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Dr. Rajgopal N. N.
Scientist, Division of Germplasm Collection
and Characterisation
ICAR-National Bureau of Agricultural Insect Resources
Bengaluru 560024, Karnataka

Citation

Dr. Rajgopal N. N. specialized in the "Biosystematic studies of leafhopper tribe Scaphoideini (Hemiptera: Cicadellidae: Deltocephalinae)". Between 2017 and 2022, he conducted extensive field explorations across 65 locations in 17 states and one Union Territory, collecting over 3000 specimens. He also examined collections from the National Pusa Collection, New Delhi, and UAS, Bengaluru. His work resulted in an annotated checklist of 24 genera and 109 species, including four new genera and 28 new species, along with diagnostic keys for generic and species levels for identification. He studied 82 species under 23 genera, established three generic and six species new records for India, along with 50 new distribution records within the country, and generated 73 DNA sequences for 39 species using three genetic markers (mtCOI, Histone H3, and 28S rDNA). He conducted a morphological phylogenetic analysis of 52 representative species under 23 genera of the tribe *Scaphoideini* using 148 morphological characters, and a molecular phylogenetic study of 36 species under 17 genera based on three genetic markers to elucidate the tribe's evolutionary relationships. He has received a Best Oral Presentation Award and has published over 10 research papers in reputed national and international journals in the field of leafhopper taxonomy.

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Dr. Suresh R. Jambagi
Research Associate
Division of Genomic Resources
ICAR- National Bureau of Agricultural Insect Resources
Bengaluru 560024, Karnataka

Citation

Dr. Suresh R. Jambagi is awarded the *Best PhD Thesis Award* in recognition of his exceptional doctoral research on the management of resistance in the cotton pink bollworm, *Pectinophora gossypiella*, a key pest threatening the sustainability of *Bt* cotton in India. His thesis presents a comprehensive and integrative investigation combining insect genetics, life-history traits, and molecular biology to unravel the mechanisms governing Cry toxin resistance. Through systematic field surveys and controlled experiments, Dr. Jambagi quantified resistance allele frequencies, established the autosomal recessive inheritance of resistance, and demonstrated fitness costs associated with resistant populations. A major highlight of his work is the successful field-level validation of sequential mass release of susceptible moths as a practical strategy to dilute resistance alleles, significantly reducing boll damage and larval incidence under natural conditions. Further, his molecular analyses revealed differential regulation of key *Bt* resistance-associated genes and their restoration following susceptible male infusion, providing novel insights into resistance reversal mechanisms. By effectively linking fundamental genetic understanding with applied resistance management, this thesis delivers a scientifically robust and practically deployable solution for prolonging the efficacy of *Bt* cotton. Dr. Jambagi's doctoral work is distinguished by its originality, methodological rigor, and direct relevance to Indian agriculture, meriting its selection for the Best PhD Thesis Award.

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Previous Awardees 2024

Lifetime Achievement Award

Dr. T. M. Manjunath
Consultant, Biocontrol & IPM
Bangalore

Dr. G. P. Shetty
Multiplex Group, Bangalore

Honorary Fellow

Dr. Renee M. Borges
IISc, Bangalore

Dr. J. P. Singh
PPA, GoI, Faridabad

Dr. A. K. Karnatak
VC, MPUAT, Udaipur

Dr. Rajeshwar S. Chandel
VC, YSPUH&F, Nauni

Lifetime Achievement Awardees 2023

Dr. B.V. David

Dr. C.A. Viraktamath

Dr. G.P. Gupta

Dr. Krishan Singh Khokhar

Dr. Mohammad Hayat

Dr. N. Ramakrishnan

Lifetime Achievement Awardees 2023

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Dr. S.N. Puri

Dr. Samiran Chakrabarti

Dr. Swaraj Ghai

Sri Rajnikant Shroff

Sri Ram Gopal Agarwal

Honorary Fellows 2023

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Dr. B. Subrahmanyam

Dr. H.C. Sharma

Dr. J.R. Faleiro

Dr. Jagadish Sanmallappa Bentur

Dr. Jagbir Singh Kirti

Honorary Fellows 2023

Dr. Lakshmi Kanta Hazarika

Dr. N.K. Krishna Kumar

Dr. R.K. Seth

Dr. T.P. Rajendran

ESI Competitive Awardees-2023

ESI Best PhD Thesis Award-2023

Dr. Keerthi MC
ICAR-IARI, New Delhi

Dr. Mogili Ramaiah
ICAR-IARI, New Delhi

Dr. Muthukatturaja M
MKU, Tamil Nadu

Dr. Neenu Augustine
UAS, Bengaluru

ESI Young Entomologist Award-2023

Dr. Fazil Hasan
NIU, Greater Noida

Dr. Prasannakumar NR
ICAR-IIHR, Bengaluru

Dr. Richa Varshney
ICAR-NBAIR, Bengaluru

Dr. Sagar, D.
ICAR-NBAIR, Bengaluru

ESI Senior Entomologist Award-2023

Dr. Gandhi Gracy R
ICAR-NBAIR, Bengalore

Dr. Rajashekar Y
CSIR-CFTRI, Karnataka

Dr. Satnam Singh
PAU, Punjab

ESI Best Teacher Award-2023

Dr. Badal Bhattacharyya
AAU, Assam

Dr. S. Subramanian
ICAR- IARI, New Delhi

ESI Industry Award-2023

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Reckitt Benckiser

Mr. K Sriram
Ocean Agro

Mr. Ujjwal Kumar
E&G Pathway

Certificate of Appreciation 2025

Dr. Subhash Rajpurohit
Ahmedabad University

Dr. K. Suresh
ACRI, Madurai, TNAU

The ESI Awards Committee is grateful to all the nominees, reviewers and members of the Judging Committee for their support in this Endeavour of the Society

ESI Competitive Awards-2022

ESI Young Entomologist Award-2022

Dr. U Amala
ICAR-NBAIR, Bengaluru

Dr. Basana Gowda G.
ICAR-NRRI, Cuttack

Dr. Suresh M Nebapure
ICAR-IARI, New Delhi

ESI Senior Entomologist Award-2022

Dr. Poonam Jasrotia
ICAR-IIWBR, Karnal

Dr. Sanjay Kumar Sahoo
RPCAU, Pusa, Bihar

ESI Best Teacher Award-2022

Dr. Prabhuraj A, UAS Raichur

ESI Best PhD Thesis Award-2022

Dr. M. Saranya
TNAU, Coimbatore

Dr. Anamika Kar
BCKV, West Bengal

Dr. Ranjith M.
KSNUAHS, Shivamogga

Dr. M. Rashmi Manohar
BHU, Varanasi

The ESI Awards Committee is grateful to all the nominees, reviewers and members of the Judging Committee for their support in this Endeavour of the Society

ESI Competitive Awards-2021

ESI Senior Entomologist Award-2021

Dr. Ankita Gupta
ICAR-NBAIR, Bangalore

Dr. Mukesh Kumar Dhillon
ICAR-IARI, New Delhi

ESI Young Entomologist Award-2021

Dr Amalendu Ghosh
ICAR-IARI, New Delhi

Guru Pirasanna Pandi
ICAR-NRRI, Cuttack

Dr. K Selvaraj
ICAR-NBAIR, Bangalore

Dr. PR Shashank
ICAR-IARI, New Delhi

ESI Best Ph.D. Thesis Award-2021

Kariyanna B
UAS Raichur, Karnataka

ESI Competitive Awards-2020

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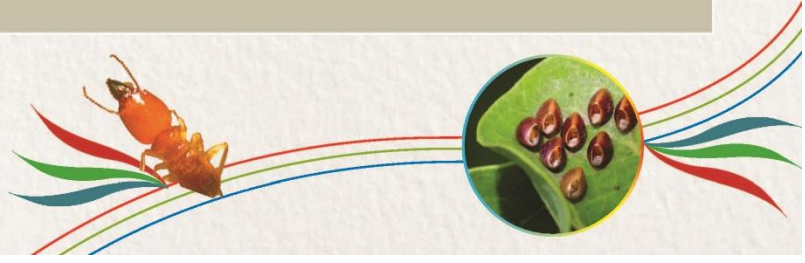

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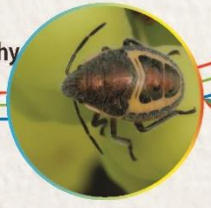

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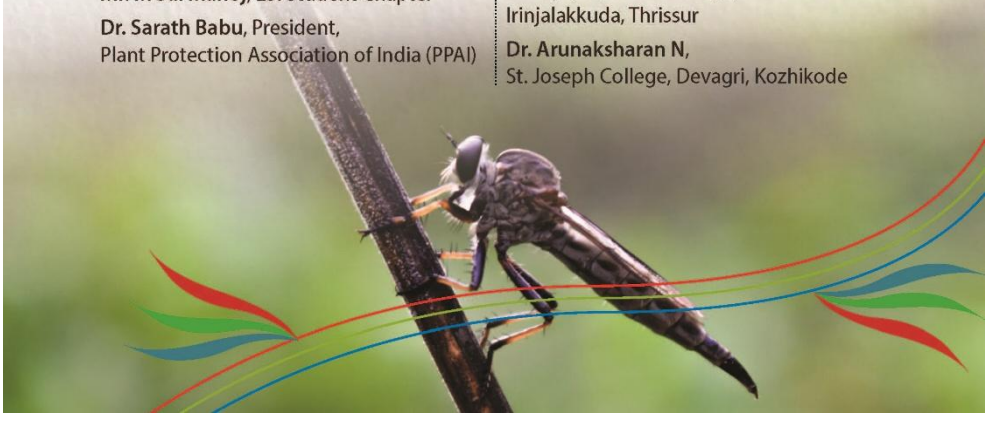

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The Entomological Society of India (ESI) was founded in 1938 as a registered society under the Societies Registration Act 1957 as extended to the Union territory of Delhi under Registration No. S. 2434 of 1963-64 dt 12.3.1964. It is registered with NITI Aayog under unique ID of VO/NGO-DL/2016/0104219. It is one of the largest professional societies in India serving entomologists and researchers in related disciplines.

The main objective of the Society is to encourage and promote the dissemination of entomological knowledge. It arranges interactions of entomologists at the headquarters and at various places where the branches/chapters of the Society are getting initiated. The annual general body meetings are held regularly and whenever necessary. These interactions provide opportunities to the members and others interested in the subject to keep in touch with the entomological activities, both in India and abroad. The Society has chapters, each with a minimum of 25 members and these conduct events for the promotion of Entomology.

The membership of the Society is open to all persons, above 18 years of age, who are interested in Entomology. Ordinary members have to pay an admission fee of Rs. 100/- and an annual subscription (pdf only) of Rs. 1000/-. From 2019, on payment of Rs. 15100/- one can have the option of straightaway becoming Life Member. Life membership had been restricted earlier to only those who have completed five years as ordinary members, but this condition has been waived off now, for some fixed duration. These payments are required to be made by NEFT transaction or in the form of DD or multicity cheque payable at New Delhi in

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For more details see website- www.entosocindia.org.

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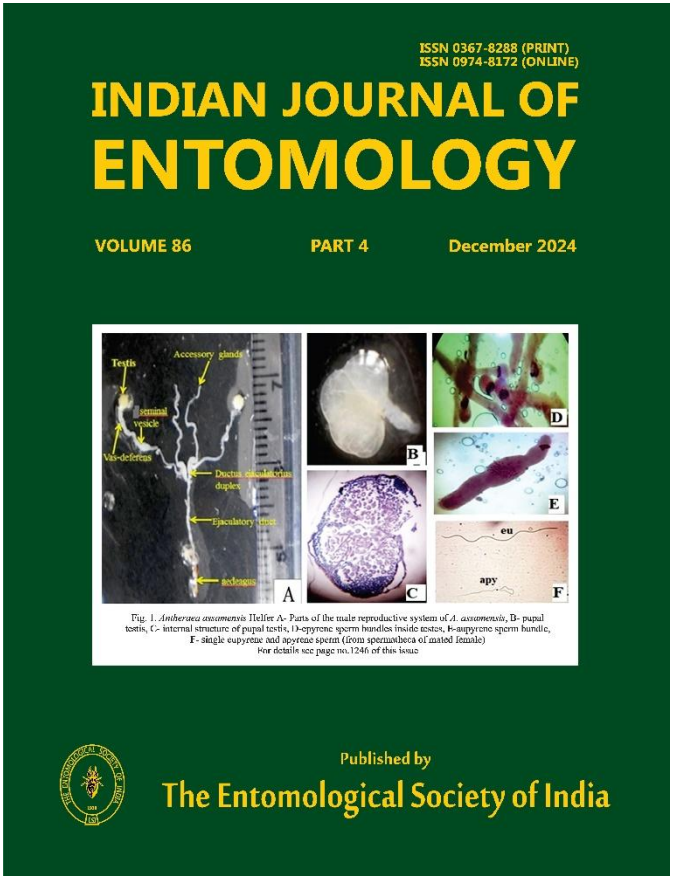

Fig. 1. *Anthereaea assamensis* Helfer A- Parts of the male reproductive system of *A. assamensis*, B- pupal testis, C- internal structure of pupal testis, D-eupyrene sperm bundles inside testes, E-apyrene sperm bundle, F- single eupyrene and apyrene sperm (from spermatheca of mated female)
For details see page no.1246 of this issue

Indian Journal of Entomology (ISSN 0367-8288 for print and ISSN 0974-8172 for online) originated in 1939, is a leading journal in entomological science published quarterly by The Entomological Society of India. Since 1956, it is being published as a quarterly Journal and the four parts are published each in March, June, September and December. Indian Journal of Entomology publishes high-quality original articles and reviews on various aspects of entomology – both basic and applied, covering taxonomy, toxicology, ecology, biodiversity, pest management and pesticides, biopesticides and botanicals, biotechnological approaches in entomology, inclusive of latest trends in frontier technologies like application of remote sensing and crop-pest modelling. The Journal covers mites, ticks, spiders and other arthropods (also birds sometimes if relevant) as components of Entomology. The journal publishes research articles, research communications and reviews (including invited reviews)

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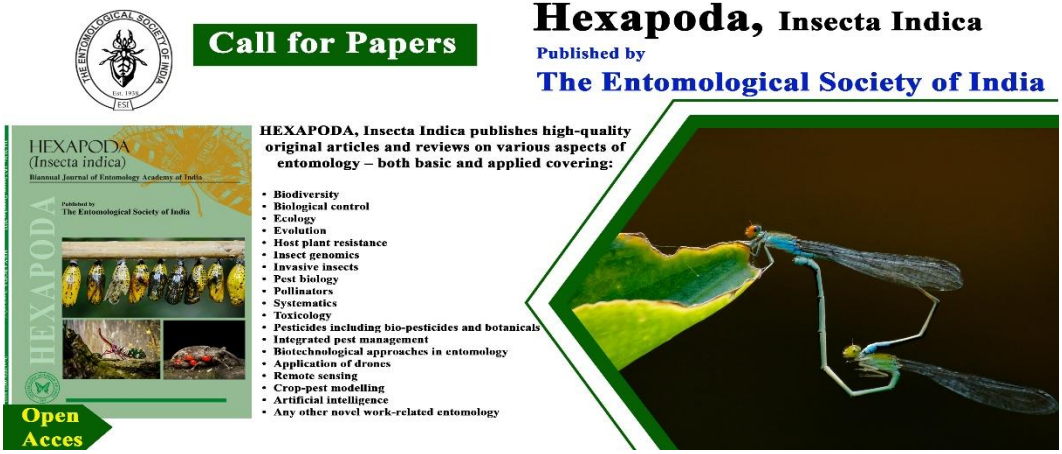

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Online Magazine to Promote Insect Science and Technology

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National Dialogue on Insects in Agriculture, Health and Environment held at NBAIR, Bengaluru on 15-16 December 2025

National Symposium on Technological Advancements: Emerging Trends in Entomology (ESI-2025), held on 8th–9th October 2025 at Sher-e-Kashmir University of Agricultural Sciences & Technology of Kashmir, Shalimar Campus, Srinagar – 190025, UT of J&K

National Symposium on "Frontiers in Entomology-2025" The Entomological Society of India, New Delhi, and Division of Entomology, ICAR-IARI, New Delhi, on 7th January 2025 at ICAR-IARI, New Delhi

Entomology Students Conclave (ESC2025) March 15 to 17, 2025 at Assam Agricultural University, Jorhat, Assam


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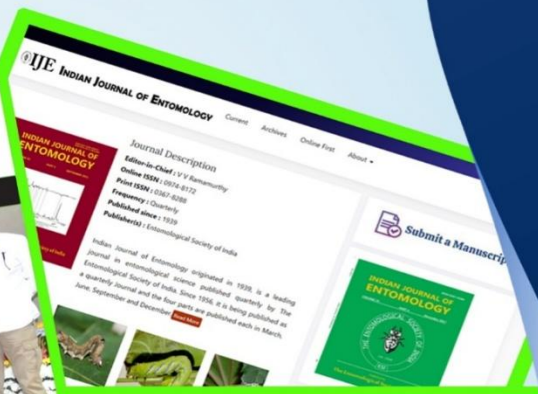
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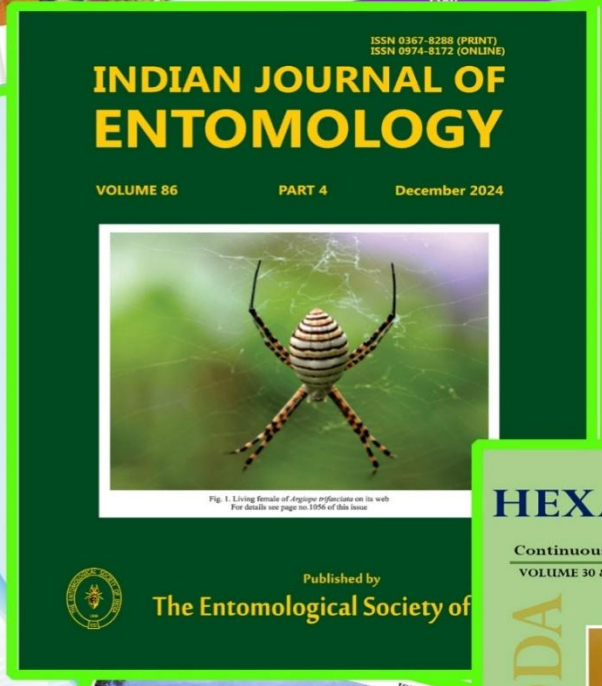
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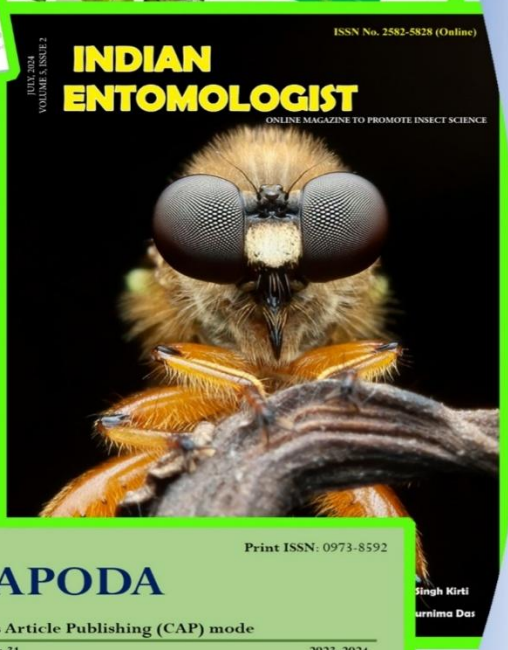
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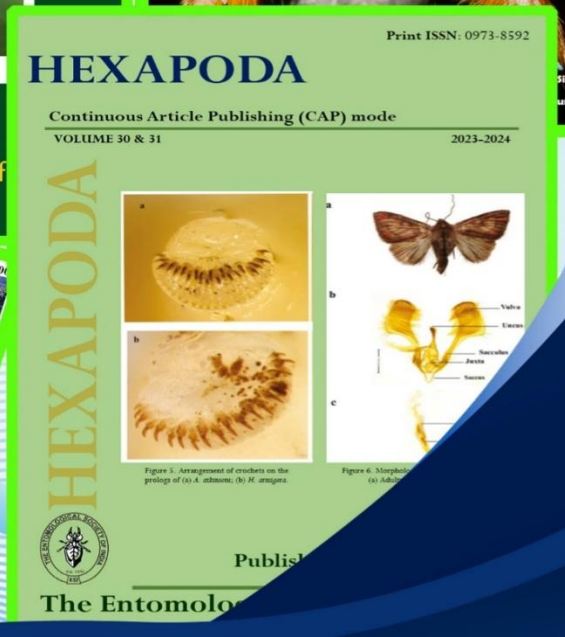
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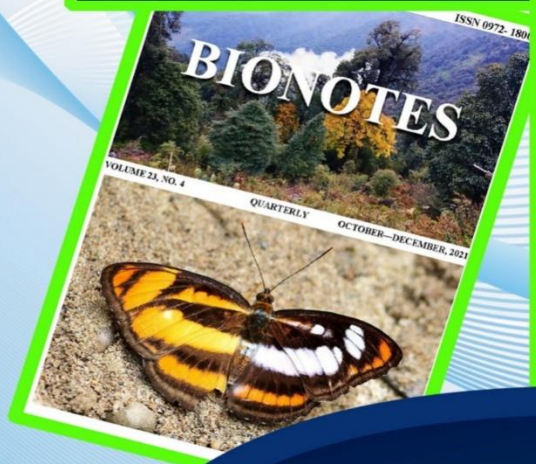
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