

THE INDIAN BOTANICAL SOCIETY NEWSLETTER



From President's Desk

AIBC 2024

Leading Lectures

Accolades & Achievements

Feb. 2025 Vol. 1 Issue 1

IBS Official Newsletter: Connecting the Global Botanical Community!



The Executive Council (EC) of the Indian Botanical Society (IBS) has decided to launch a Newsletter, a dedicated platform to keep the entire botanical fraternity informed and engaged with the latest updates about the society and its members. This initiative aims to foster collaboration, share knowledge, and highlight ground-breaking research conducted by IBS members worldwide.

This newsletter caters to updates on recent developments in plant sciences, showcasing breakthrough research and innovations in various scientific sections of plant sciences including Mycology, Microbiology, Plant Pathology; Algae, Bryophytes and Pteridophytes; Seed Plants: Anatomy, Reproductive Biology; Taxonomy, Ethnobotany and Plant Resource Utilization; Cytogenetics, Plant Breeding and Molecular Biology; Ecology and Environmental Biology; Plant Physiology and Biochemistry; Plant Biotechnology. Readers can also look forward to information about upcoming conferences and events, helping them stay informed about important botanical gatherings.

Additionally, the newsletter highlights leading botanical discoveries, bringing attention to significant findings that contribute to scientific advancements. A major focus of the newsletter is to recognize and celebrate the publications and achievements of IBS members, acknowledging their valuable contributions to botanical research across the globe. This initiative is designed to serve as a global platform connecting researchers, students, and professionals working in various domains of botany. By bridging the gap between established experts and emerging scientists, the newsletter will encourage knowledge-sharing, collaboration, and a deeper understanding of plant sciences.

The IBS encourages all members to contribute by sharing their research findings, leading publications, and insights to be featured in future editions. Your participation will play a crucial role in shaping this initiative and strengthening the botanical community.



From President's Desk



Prof. U.C. Lavania

The Indian Botanical Society, founded on 6th December 1920 and formally registered under the Society's Registration Act in 1928, had started the journal named 'Indian Journal of Botany' in 1919, i.e., one year prior to the foundation of the Society, as a preparatory proactive action. Ever since the completion of the centenary year of the Society in 2020, the suggestion to publish a Newsletter integrating the

professional linkages has been under discussion to serve as a medium of connectivity to highlight the scientific activities, professional dispensation, and information about career opportunities amongst the IBS fraternity. It gives me immense pleasure to share this inaugural issue of the Newsletter of the Indian Botanical Society. It is delighting to see this happen now with the efforts of **Prof. G.S. Shekhawat**. I believe that this Newsletter shall become an important forum to connect and share achievements, activities, and exposure to personal news among the members, as well as a guiding resource and motivating force to young members to learn about career prospects and opportunities. It is believed that this Newsletter shall consistently grow and fast develop to blossom into an important means of communication amongst us. I am conscious that the success of such Newsletter rests with the contributors and information providers. Therefore, may I request all of you, senior and young members alike, to join this initiative by contributing / sharing information. I wish the Editorial team all success in this endeavour. I thank Prof. Shekhawat to accept this challenging task and wish his team all success.

Highlights of All India Botanical Conference 2024

The XLVII - AIBC with the focal theme "Biotic curiosities and functional diversity across plant kingdom in climate change Regime" was hosted by the Department of Microbiology, Chaudhary Charan Singh University Meerut (U.P.), from October 16-18, under the President-ship of Prof. U.C. Lavania, and Prof. Jitendra Singh as the Conference Organizing Secretary. The Conference organized in a befitting manner, also commemorated the Birth Centenary of Prof. YS Murty, the architect of the AIBC. The administrative and logistic support extended by the Hon'ble Vice Chancellor Prof. Sangeeta Shukla was exemplary.

Prof. Sanjay Kumar, Chairman, ASRB and former Director, CSIR-IHBT, Palampur, delivered the inaugural address befitting the conference theme, highlighting the Functional Diversity and Curiosity in high-altitude plants, and pinpointing the discovery of the thermo-stable SOD enzyme, which is functional from sub-zero to 50°C, and can also tolerate autoclaving at 121°C. It is important since for the first time the inaugural address by the Chief Guest was truly scientific in its contents (instead of just a customary VIP type) - a beginning of its own kind. While delivering the Presidential address Prof. UC Lavania presented the curious features attendant during chromosome diversification and differentiation. Full text of the presidential address is available at

<https://doi.org/10.1007/s13237-024-00523-0>

Conference Celebrated Achievements of Distinguished Botanists

The conference was successfully organized to celebrate the outstanding contributions of distinguished scientists in the field of plant sciences. Eminent researchers gathered to share their innovative findings and advancements. The event highlighted ground-breaking research, fostering knowledge exchange and collaboration. Various sessions and discussions enriched the scientific community with new perspectives. The conference served as a platform to recognize excellence and inspire future research.

The event featured a series of award lectures and special recognitions, honouring the invaluable contributions of botanists to research, education, and scientific advancements. Renowned scientists were acknowledged for their pioneering work in plant sciences. The lectures highlighted significant breakthroughs and innovative studies in the field. Special recognitions were given to botanists who have made remarkable impacts on plant biology. The event provided a platform for knowledge exchange and scientific discussions. It inspired young researchers to contribute to the ever-evolving field of botany. The celebration emphasized the importance of plant sciences in addressing global challenges.

Medal and Memorial Award Lectures in Honour of Renowned Indian Botanists

To commemorate the memory of distinguished botanists, the medal award lectures were delivered in honour of: -

Prof. Birbal Sahni - To commemorate his outstanding contributions in the field of Palaeobotany

Prof. Panchanan Maheshwari - To commemorate his outstanding contributions in the field of Embryology- both developmental and experimental

Prof. V. Puri - To commemorate his outstanding contributions in the field of Morphology and Floral Anatomy

Prof. Y.S. Murty - To commemorate his outstanding contributions in the field of Experimental Morphology and Taxonomy

Apart from these medals, the conference also featured two **Memorial Award Lectures** in tribute to eminent scientists.

The **Prof. Uma Kant Sinha Memorial Lecture** in honour of his significant work in cytogenetics and plant breeding.

The **Prof. G. Panigrahi Memorial Lecture** in honour of his extensive research in plant taxonomy and floristic studies.

The award lectures highlighted the ground-breaking research by the Speakers in their respective fields in botanical sciences. The event brought together experts, researchers, and academicians to discuss new advancements in plant sciences. Each lecture provided valuable insights, inspiring young researchers in their scientific journey.



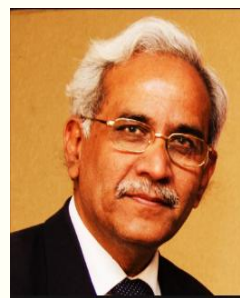
Insightful Lectures by Renowned Botanists at AIBC-2024

Invited Lecture by Prof. Sudhir Kumar Sopory entitled **Glyoxalase Pathway in Plants: Functional diversity under normal and stress conditions**



The research focuses on the Methylglyoxal (MG) Glyoxalase pathway, which detoxifies the toxic compound MG accumulated under stress, threatening plant survival. They identified glyoxalase I and II as key enzymes in this detoxification, along with a glutathione independent glyoxalase III pathway. Their study also revealed that MG acts as a signalling molecule at lower concentrations. Transgenic plants overexpressing GlyI and GlyII show enhanced stress tolerance.

The lecture delivered by Prof. Akhilesh K. Tyagi, entitled Rice genomics: Structure and development related gene function



The study highlights the rice genome was the first crop genome to be fully sequenced, revealing gene content, genetic markers, and genome organization. The pan-genome approach further enhanced this knowledge, uncovering genome diversity. Significant progress has been made in transcriptomics and gene discovery through genetic mapping, transgenic studies, and phenotypic analysis, aiding genomics-assisted molecular breeding. His research focuses on phylogeny, regulatory networks and gene function.

Prof. Akhilesh Tyagi also delivered IBS Foundation Lecture at CSIR-NBRI Lucknow on 21st Jan 2025. This lecture was streamed live and is available at You Tube Channel. (Link: www.youtube.com/@csimbriofficial)

Medal Awardees for Excellence in Scientific Achievement during AIBC-2024

Lifetime Achievement Award



Prof. P.K. Gupta
Hon. Emeritus Professor, Department of
Genetics and Plant Breeding Ch. Charan
Singh University, Meerut

Prof. Birbal Sahni Medal



Dr. D.K. Upreti
Chief Scientist, CSIR-National Botanical
Research Institute, Lucknow

Prof. Panchanan Maheshwari Medal



Prof. S.R. Reddy
Professor Emeritus, Department of
Microbiology, Kakatiya University,
Warangal

Prof. V. Puri Medal



Prof. K.S. Rajput
Associate Professor, Department of
Botany, Maharaja Sayajirao University,
Vadodara

Prof. Y.S. Murthi Medal



Abhishek Kumar Dwivedy
Assistant Professor, Department
of Botany, Banaras Hindu
University, Varanasi

Prof. HY Mohan Ram Memorial Medal for Excellence in Teaching and Advancement of Plant Sciences



Prof. Naresh Chandra
Former Professor & Head, Department of
Botany, University of Rajasthan, Jaipur

Prof. P.C. Trivedi Medal for Editorial Excellence



Prof. D.K. Maheshwari
Professor, Department of Botany and
Microbiology, Gurukul Kangri
Vishwavidyalaya, Haridwar

IBS-AIBC Champion Award



Prof. A.K. Pandey
Former Professor of Botany, University of
Delhi, Vice Chancellor, Mansarovar Global
University, Bhopal

Woman Scientist Medal



Dr. Supriya Tiwari
Assistant Professor, Department of
Botany Banaras Hindu University,
Varanasi

Prof. Y.S. Murty Memorial Gold Medal



Dr. V.S. Hareesh
Junior Scientist, Malabar Botanical Garden
and Institute for Plant Science, Kerala

Awardees for Excellence in Scientific Achievement during AIBC-2024



Accolades and Achievements

The Botanical Fraternity extends best wishes and congratulations to esteemed life members of the society for their remarkable achievements. Your dedication, hard work, and contributions to the field of botany are truly commendable. May you continue to inspire and excel in your respective roles, bringing further glory to Botany fraternity! The esteemed members of the society who have attained such positions are truly worthy of recognition and celebration are:

Prof. P.C. Trivedi



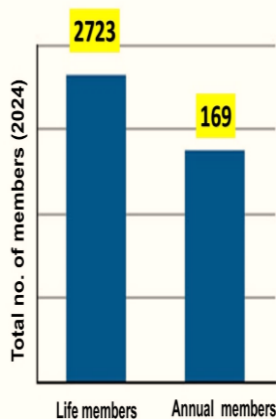
Prof. P.C. Trivedi has been honoured with the Lifetime Achievement Award by the Environment and **Social Welfare Society, Khajuraho**. He has also been honoured with the Lifetime Microbiology Devotion Award by the **Microbiologist Society of India**. He has registered a world record certificate in his name for the largest attendance in a virtual meditation class on World Meditation Day. Apart from this, his 241st book entitled “*Environmental Impact Assessment*” (Published by Agroacademics, Jodhpur) has been released during the inaugural function of international seminar held in Ajmer.

Prof. C. Manoharachary



Prof. C. Manoharachary is a prominent mycologist in India, with an etymology term named in his honour. In February 2024, he received the **Prof. Roy Memorial Lecture Award** at the BHU International Conference on Fungal Biology. He also delivered lectures at the Indian Mycological Society conference in Kolkata (Nov 6-8, 2024) and the Mycological Society of India conference in Jodhpur (Nov 27-29, 2024). His research and contributions have made a lasting impact on the mycological community.

IBS Continues to Grow : Latest Membership Update



The Indian Botanical Society continues to expand its network, bringing together leading scientists, researchers, educators, and students from the field of plant sciences. With an increasing number of members each year, IBS remains a strong and vibrant community dedicated to botanical research, education, and conservation. As of 2024, the society proudly comprises:

Total Life Members: **2723**

Annual Members: **169**

Prof. Y. Vimala



The renowned Botanist **Prof. Y. Vimala** has been appointed as the **Vice-Chancellor of Maa Shakambhari University, Saharanpur**. Her leadership and experience will undoubtedly contribute to the university's growth and progress. **Prof. Y. Vimala** previously served as Pro-Vice Chancellor, Dean of Science, and Head of Botany at CCS University, Meerut. She was also the Director of the School of Biotechnology and Dean of Engineering, Applied Science and Technology at Shobhit Deemed University. Additionally, she is the Chief Editor of the *Journal of the Indian Botanical Society*.

Journal of the Indian Botanical Society Now Digitized and Indexed in Web of Science

The Journal of the Indian Botanical Society (JIBS) has achieved a significant milestone with the digitization of all its volumes. The complete collection is now available in digital format as scanned versions on the Society's official website. In a major development, JIBS has also been indexed in Web of Science, enhancing its visibility and credibility in the scientific community.

Furthermore, to ensure long-term accessibility, the hard copies of all issues have been made available at the CSIR-NBRI Library, Lucknow. To sustain this initiative, the Society has signed a Memorandum of Understanding (MoU) with CSIR-NBRI, Lucknow, under which the institute will receive any missing or future issues, officially designating it as the Nodal Library for JIBS. This initiative marks a significant step in preserving and promoting botanical research across India and beyond. This significant initiative not only ensures the preservation of India's botanical research heritage but also enhances its visibility and accessibility to the global research community.

By combining digitization, prestigious indexing, and long-term preservation efforts through the CSIR-NBRI partnership, JIBS is setting a new standard for botanical research publications. This step further reinforces the journal's role in promoting and disseminating cutting-edge research in plant sciences across India and beyond, marking a transformative moment in the history of Indian botanical research.

Education is the most powerful weapon which you can use to change the world: Nelson Mandela

The Year 2024 happens to be the Birth Centenary Year of Padma Bhushan Prof. Arun Kumar Sharma

Arun Kumar Sharma an Honorary Fellow and Lifetime Awardee of IBS, the doyen of Cytotaxonomy, Cytogenetics and Cytochemistry, and the most celebrated Plant Scientist of our country. The University of Calcutta, organized several scientific activities round the year, including a Mini Symposium, "Cytogenetics to Genomics and Beyond (24th May 2024), an Oration Lecture (27th August 2024) delivered by **Prof. Ingo Schubert**, IPK, Gatersleben, Germany, and an International Symposium, "Plant Sciences - Today and Tomorrow (19-21 Dec. 2024), and published a commemoration issue - Prof. Arun Kumar Sharma Birth Centenary issue of the journal *Nucleus* Vol 67 (3) 2024. More information about this doyen of Indian botany could be seen at (<https://doi.org/10.1007/s13237-017-0226-3>)(<http://www.currentscience.ac.in/Volumes/107/03/0522.pdf>)

From Lab to Land

Development of a synthetic interspecific hybrid of *Ocimum* for commercial cultivation for high value 'Linalool' by the IBS Fellows

CIM-Saraswati- a perennial, cold-tolerant, Linalool-rich variety of Basil (a seed fertile synthetic amphidiploid of *Ocimum basilicum* X *kilimandscharicum*) developed by a team of Profs. U.C. Lavania, Y. Vimala and Seshu Lavania, in collaboration with scientists from CSIR-CIMAP and CSIR-NBRI, Lucknow, was released for commercial cultivation during the annual Kisan Mela held at the CSIR-Central Institute of Medicinal and Aromatic Plants (CIMAP), Lucknow on 31st Jan. 2025, in the presence of the

Environmentalist Padma Bhushan Dr. Anil Prakash Joshi. This variety promises high remunerative return to the growers and industries alike for its amenability for cultivation in plains and offers a profitable alternative to Lavender that could be grown primarily under temperate conditions only. Further details and seed material could be obtained either from CIMAP, Lucknow, or through the inventors listed above.

Condolences:

Heartfelt condolences on the demise of Prof. T.N. Bhardwaj and Prof. K.S. Manilal. Their immense contributions in the field of botany, academia and society will always be remembered. May their soul rest in eternal peace.

Forthcoming IBS conference

Venue Announcement for XLVIII (2025) Annual Conference of IBS

The Department of Botany, NEHU, Shillong, will be organize the 48th All India Botanical Conference in the president-ship of **Prof. S.K. Barik**. Tentative dates suggested are 29-31 October 2025.

About the Cover Page

The Cover page Photograph is of *Prosopis cineraria* (Fabaceae). Popularly known as khejri, **KALP VRIKSH** of Indian thar Desert. The inflorescence of *P. cineraria* is a racemose spike, with small, yellow-green flowers. The plant plays a crucial role in preventing desertification by stabilizing sand dunes and improving soil fertility. The tree provides nutritious fodder for livestock, especially during dry seasons when other food sources are scarce.

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