



#### Taxonomy Recognition Day 23 May 2025 WEBINAR REPORT

Organized by Department of Zoology Dr. Harisingh Gour Vishwavidyalaya, (A Central University), Sagar - 470003, M.P., India

> With Zoological Survey of India, Kolkata



PATRON Dr. Dhriti Banerjee Director, Zoological Survey of India, Kolkata



Dr. Anjum N. Rizvi Senior Scientist, Zoological Survey of India, Dr. Harisingh Gour Kolkata



**DHSGVV** Prof. Shweta Yadav Dept. of Zoology Vishwavidyalaya Sagar, M.P.



Prof. Neelima Gupta Hon'ble Vice-Chancellor Dr. Harisingh Gour Vishwavidyalaya Sagar, M.P

#### Preamble

Taxonomy Recognition Day is observed annually on May 23rd to honor the science of taxonomy — the discipline of naming, describing, and classifying organisms. This date marks the birth anniversary of Carl Linnaeus, widely regarded as the "Father of Taxonomy." The day serves as a reminder of taxonomy's indispensable role in understanding and conserving biodiversity and its significance across diverse fields such as agriculture, medicine, environmental science, and sustainable development.

Often referred to as the "language of biodiversity," taxonomy forms the foundation for identifying and distinguishing species. It enables us to understand ecological relationships, monitor species declines, detect invasive species, and implement conservation strategies and environmental policies effectively. Especially in developing nations, taxonomy is vital for documenting biological resources and ensuring equitable sharing of benefits arising from their use.

In the face of accelerating biodiversity loss due to human activities, taxonomy is more critical than ever. It not only supports informed policymaking and conservation planning but also plays a central role in guiding ecological restoration and achieving global biodiversity targets.

On this occasion, we celebrate the dedicated taxonomists — the unsung heroes of biodiversity — whose meticulous work helps us explore, understand, and preserve the intricate web of life on Earth.

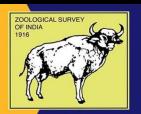
To mark this important day, the Department of Zoology organized a webinar on May 23, 2025, commemorating the birthday of Carl Linnaeus and promoting awareness and interest in the field of taxonomy.



## Objectives of the Webinar

#### **Dr. Kashmeera N. A**Coordinator

- \* Raise Awareness: To highlight the vital role of taxonomy in understanding, documenting, and conserving global biodiversity.
- ❖ Celebrate Taxonomists: To recognize and honor the contributions of taxonomists in the discovery and classification of species, many of which form the basis of ecological and conservation research.
- ❖ Promote Capacity Building: To encourage young researchers and students to take up taxonomy as a career and build expertise in an often-neglected but foundational field of biology.
- Showcase Applications: To demonstrate how taxonomy supports critical areas such as conservation planning, invasive species management, ecosystem services assessment, and sustainable development.
- Strengthen Collaborations: To foster collaboration between taxonomists, ecologists, conservationists, policymakers, and institutions for better integration of taxonomy into decision-making processes.
- ❖ Highlight Technological Advances: To discuss modern tools and techniques (e.g., molecular taxonomy, digital identification keys, databases) that are enhancing taxonomic research.











# Taxonomy Recognition Day 2025

**Celebrating the Science of Naming Nature** 

#### Organized by:

Department of Zoology Dr. Harisingh Gour Vishwavidyalaya (A Central University), Sagar - 470003, M.P., India

With

Zoological Survey of India, Kolkata

23 May 2 0 2 5

11.30AM - 1.00 PM

#### Contact Us:

+ 8921797672

dhsgsueventzoology@gmail.com



Prof. Neelima Gupta
Patron
Hon'ble Vice-Chancellor
Dr. Harisingh Gour
Vishwavidyalaya
Sagar (M.P)

#### Meet Our Speakers



**Prof. Wasim Ahmad**Aligarh Muslim
University



**Dr. Rahul Joshi** Zoological Survey of India



Prof. Fayaz Ahmad University of Kashmir

Google meet link: <a href="https://meet.google.com/its-pwpe-vdu">https://meet.google.com/its-pwpe-vdu</a>



Prof. Versha Sharma Dean, School of Biological Sciences



Prof. Shweta Yadav Convener Head of Department, Dept. of Zoology



Dr. Kashmeera N. A Moderator and Organizer



**Dr. Priyoneel Basu**Moderator

#### Agenda

**Event: Taxonomy Recognition Day 2025** 

Date: 23 May 2025

Time: 11:30 AM - 1:00 PM

Platform: Google Meet (<a href="https://meet.google.com/its-pwpe-vdu">https://meet.google.com/its-pwpe-vdu</a>)
Organized by: Department of Zoology, School of Biological Sciences,
Dr. Harisingh Gour Vishwavidyalaya (A Central University), Sagar
(M.P.)

Time	Agenda	Person Responsible
11: 30 am	Welcome Address & Introduction to the Webinar	Dr. Kashmeera N. A Dr. Priyoneel Basu (Moderator)
11.32 am	Opening Remarks	Prof. Shweta Yadav (Convener and Head, Dept. of Zoology)
11.35 am	Address by Dean, School of Biological Sciences	Prof. Versha Sharma
11.40 am	Keynote Talk 1	Prof. Wasim Ahmad
12.00 pm	Keynote Talk 2	Dr. Rahul Joshi
12.20 pm	Keynote Talk 3	Prof. Fayaz Ahmad
12.40 pm	Vote of Thanks	Dr. Rajkumar Koiri

# Summary of the Programme

The Department of Zoology, Dr. Harisingh Gour Vishwavidyalaya, Sagar, Madhya Pradesh has organized a webinar on "Taxonomy Recognition Day 2025" on 23 May 2025 (Friday) between 11:30 AM to 1:30 PM, through the Google meet platform. The event brought together taxonomists, academicians, researchers, and students from across India, with over 50 participants actively engaging in the sessions.

Introduction to the webinar was given by Dr. Kashmeera N. A., and the webinar was moderated by Dr. Priyoneel Basu, Assistant Professors of the Department of Zoology. Prof. Shweta Yadav, Head of the department of Zoology delivered opening address. Prof. Versha Sharma, Dean of School of Biological Sciences extended best wishes for fruitful deliberations.

The lectures in this webinar were given by Prof. Wasim Ahmad, an internationally acclaimed nematologist from Aligarh Muslim University, Dr. Rahul Joshi, a leading moth taxonomist from the Zoological Survey of India, Kolkata; and Prof. Fayaz Ahmad, a renowned parasitologist and academic leader from the University of Kashmir.

#### Opening address

Prof. Shweta Yadav, Convener and Head, Department of Zoology, Dr. Harisingh Gour Vishwavidyalaya, Sagar, Madhya Pradesh



The webinar commenced with an opening address by **Prof. Shweta Yadav**, Head of the Department of Zoology. In her remarks, Prof. Yadav expressed deep concern over the declining prominence and recognition of taxonomy—a foundational yet often overlooked branch of biological sciences. She highlighted how taxonomy, despite being critical to the identification, classification, and conservation of the planet's biodiversity, is gradually losing its rightful place in mainstream scientific discourse and educational curricula.

Prof. Yadav underscored the urgent need to revive interest in taxonomy, particularly among students and early-career researchers. She emphasized that without robust taxonomic knowledge, efforts to conserve endangered species, manage natural resources, and mitigate the effects of climate change would be severely compromised. She also pointed out that taxonomy provides the very basis for ecological research, environmental monitoring, and the implementation of biodiversity-related policies and international treaties.

In an era of rapid biodiversity loss and ecological degradation, Prof. Yadav called for renewed attention, funding, and institutional support for taxonomy. Her address set the tone for the webinar, reaffirming the indispensable role taxonomists play in safeguarding life on Earth and the pressing need to reestablish taxonomy as a scientific priority.

### Address by Dean, School of Biological Sciences

Prof. Versha Sharma, Dean, School of Biological Sciences, Dr. Harisingh Gour Vishwavidyalaya, Sagar, Madhya Pradesh



Prof. Versha Sharma, Dean of the School of Biological Sciences, addressed the participants and emphasized the fundamental importance of taxonomy in all branches of biological research. She noted that taxonomy serves as the cornerstone of biology, providing the essential framework upon which all other biological disciplines are built – be it ecology, genetics, biotechnology, or conservation science. Prof. Sharma pointed out that accurate identification and classification of organisms is the first and most critical step any biological investigation. Without understanding of what species we are studying, it is impossible to draw meaningful conclusions, track changes in ecosystems, or develop effective conservation and management strategies. She further emphasized that taxonomy not only enriches academic research but also has direct applications in agriculture, public health, monitoring, environmental and natural resource management. Appreciating the initiative taken by the Department of Zoology to organize the webinar on Taxonomy Recognition Day, Prof. Sharma expressed her hope that the event would inspire greater appreciation for the field and stimulate meaningful discussions among students, researchers, and faculty members. She extended her best wishes to all participants for a successful and intellectually enriching session, and encouraged continued efforts to integrate taxonomy into mainstream scientific and educational pursuits.

Prof. Wasim Ahmad,
Dean, Faculty of Life Sciences and
Director, Academic Programmes Committee,
Aligarh Muslim University



The webinar featured a thought-provoking and impactful address by Prof. Wasim Ahmad, a distinguished expert in the field of taxonomy. His lecture focused on the current status and future of taxonomy, with particular emphasis on the challenges faced by taxonomists in India and across the globe. Prof. Ahmad began by highlighting a long-standing imbalance in taxonomic research: while vertebrate species—such as mammals, birds, and fish—receive substantial attention and funding, invertebrate taxa, which comprise the vast majority of Earth's biodiversity, remain critically under-studied scientific literature underrepresented in conservation efforts. He lamented that this disparity not only skews our understanding of ecosystems but also impedes effective biodiversity conservation, as many invertebrate groups serve as bioindicators and play essential ecological roles. He drew attention to the alarming reality that a significant proportion of Earth's species – especially among invertebrates – are yet to be discovered, named, and described. At the same time, he warned that we are not just losing biodiversity due to anthropogenic pressures but are also witnessing the "silent extinction" of expert taxonomists.

As senior taxonomists retire, few are being replaced due to lack of institutional support, diminishing academic interest, and systemic undervaluation of taxonomic expertise. Prof. Ahmad identified several critical challenges plaguing the field today: Lack of dedicated funding for taxonomic projects, especially for fieldwork and monographic studies. Scarcity of up-to-date literature and taxonomic revisions, making identification and classification increasingly difficult for new researchers. Prejudiced attitudes within the scientific and funding communities, where taxonomy is often seen as an outdated or purely descriptive science, rather than a dynamic and essential discipline. In his lecture, Prof. Ahmad also acknowledged the rise of molecular taxonomy and the integration of DNA-based tools into species identification and classification. While welcoming the advances these tools offer, he urged caution against over-reliance on molecular data at the expense of traditional morphological approaches. He stressed that molecular techniques should complement - not replace - classical taxonomy, which remains indispensable for field identification, ecological studies, and the development of diagnostic keys. The lecture also included a discussion on ongoing global and national initiatives aimed at revitalizing taxonomy. Prof. Ahmad referenced programs such as the Global Taxonomy Initiative (GTI) under the Convention on Biological Diversity (CBD), and emphasized the need for India to further strengthen its national support for taxonomic training, digitization of collections, and collaborative research. Prof. Ahmad concluded his address with a powerful message, urging the scientific community, academic institutions, and policymakers to recognize taxonomy as a cornerstone of biological sciences. He stressed the urgency of nurturing the next generation of taxonomists and sustaining the institutional memory held by current experts. With a sense of urgency and clarity, he remarked: "If we do not act now, we will not only lose biodiversity but also the very people who know how to recognize and preserve it. We must save the endangered breed of taxonomists. "His address set a reflective tone for the rest of the webinar and resonated strongly with both students and professionals in attendance, sparking thoughtful discussion and a renewed appreciation for the field of taxonomy.

Dr. Rahul Joshi, Scientist D, Lepidoptera Section, Zoological Survey of India, Kolkata



Dr. Rahul Joshi, Scientist at the Zoological Survey of India, delivered an inspiring address aimed particularly at budding taxonomists and young researchers. Drawing on his experience in the field, Dr. Joshi emphasized the importance of staying committed to taxonomy as a core scientific discipline, especially in an era where interdisciplinary approaches often lead researchers to prioritize ecological, molecular, or biochemical studies over traditional taxonomic work.

He acknowledged the value of integrative research but cautioned against abandoning the foundational principles of taxonomy in pursuit of trend-driven or funding-attractive topics. "Taxonomy is not just a stepping stone," he remarked, "it is a full and vital science in its own right—one that forms the base of all biological understanding." He stressed that without accurate species identification and classification, even the most advanced ecological or molecular studies could be flawed or incomplete.

Addressing the younger generation of scientists, Dr. Joshi offered a strong message of encouragement. He urged them to work hard, remain dedicated, and take pride in their contributions to biodiversity science. He acknowledged the challenges—such as limited funding, institutional support, and recognition—but reassured students and early-career researchers that perseverance and excellence would eventually earn them their due place in the scientific community.

"There is room for everyone in science," he said, "but excellence is key." He encouraged students to sharpen their taxonomic skills, seek mentorship, and continue publishing high-quality work, stressing that true passion and discipline will set them apart in any scientific arena.

Dr. Joshi's address was both motivational and pragmatic, reinforcing the idea that despite the hurdles, taxonomy remains a noble and rewarding pursuit. His words resonated deeply with the participants, particularly students and young researchers, many of whom expressed a renewed sense of purpose and commitment to the field following his address.

Prof. Fayaz Ahmad,
Professor Zoology &
Director MMTTC,
University of Kashmir, Srinagar



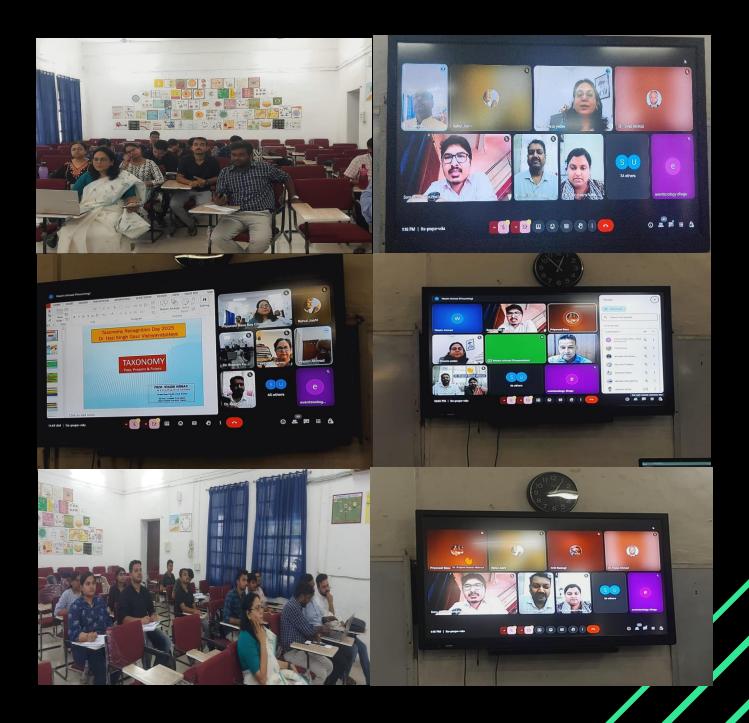
Prof. Fayaz Ahmed, an experienced taxonomist and academician, delivered an insightful presentation that bridged the gap between classical taxonomy and emerging molecular approaches. Drawing from his own field and laboratory experiences, Prof. Ahmed shared compelling examples where molecular taxonomy played a crucial role in preventing species misidentification. In several cases, he noted, organisms that were initially thought to be the same species based on morphological traits were later revealed—through DNA analysis—to be entirely distinct. These real-world instances underscored the value of integrating molecular tools into traditional taxonomic workflows.

Prof. Ahmed made a strong case for integrated taxonomy, which harmonizes classical morphological techniques with molecular and genetic data to achieve more accurate and comprehensive species identification. He stressed that rather than viewing molecular methods as a replacement for traditional taxonomy, they should be seen as powerful complementary tools. "Morphology tells us what we see; molecules tell us what we cannot," he remarked, emphasizing the need for both to work in tandem.

Prof. Ahmed concluded his talk by reiterating that taxonomy is not a peripheral discipline but a central pillar upon which many other branches of biology stand—ranging from ecology and evolution to agriculture, biotechnology, and conservation policy. He urged institutions, educators, and research bodies to recognize taxonomy's value and invest in its growth, both through infrastructure and capacity-building initiatives for students and researchers.

His lecture served as a timely reminder that in a world increasingly reliant on rapid data and molecular shortcuts, the depth and precision of classical taxonomy remain irreplaceable. The message was clear: to truly understand life's diversity, we must embrace both tradition and innovation.

### Photographs of the event



### Conclusion and way forward

The Taxonomy Recognition Day Webinar, held on 23rd May 2025, brought together leading experts, educators, and young researchers to reflect on the current status of taxonomy, its indispensable role in biological sciences, and the urgent need to revitalize and invest in this foundational discipline. The webinar highlighted both progress made in the field and the significant challenges that remain—particularly in terms of recognition, training, funding, and infrastructure. Key areas for action include:

- ❖ Strengthening the Taxonomic Workforce: The consistent concern expressed across sessions was the dwindling number of trained taxonomists. There is an urgent need to attract and mentor young researchers through fellowships, career opportunities, and institutional support.
- ❖ Reviving Classical Taxonomy While Embracing Innovation: Participants emphasized the importance of integrated taxonomy, which combines classical morphological methods with molecular tools. The way forward must include the parallel development of both skill sets.
- \* Building Taxonomic Literacy: Incorporating taxonomy more prominently into school and university curricula will foster early interest and awareness. Awareness campaigns can help the broader public, policymakers, and allied disciplines understand the relevance of taxonomy.

#### Conclusion and way forward

- ❖ Investing in Infrastructure and Literature: There is a pressing need to digitize collections, publish updated taxonomic monographs, and make accessible identification keys and databases. Supporting national repositories and museums is critical.
- ❖ Policy Advocacy and Funding: Sustained advocacy is needed to secure long-term funding from government and private sectors. Taxonomy must be acknowledged in biodiversity, health, agriculture, and climate action policies to ensure cross-sectoral investment.
- ❖ Fostering Collaboration and Inclusivity: Crossinstitutional and international collaboration must be enhanced to share knowledge, technologies, and training resources. Importantly, taxonomy should also ensure inclusivity—engaging women, local communities, and underrepresented groups in biological documentation and research.

As biodiversity loss accelerates and ecological restoration becomes central to sustainable development goals, taxonomy must reclaim its rightful position at the heart of conservation and biological research. The webinar reaffirmed that the future of taxonomy depends not just on scientific rigor but also on collective action—by educators, researchers, institutions, and policymakers.

#### MEDIA COVERAGE

#### विवि में एक दिवसीय ऑनलाइन संगोष्टी का आयोजन

#### आचरण संवाददाता

सागर। डॉक्टर हरीसिंह गौर विश्वविद्यालय सागर के प्राणीशास्त्र विभाग में जंतु वैज्ञानिक वर्गीकरण पर एक दिवसीय ऑनलाइन संगोष्ठी का आयोजन किया गया. यह आयोजन भारतीय प्राणी सर्वेक्षण के सहयोग से वर्गीकरण मान्यता दिवस के अवसर पर किया गया। संयोजन सहायक प्राध्यापक डॉ. एन. ए. कश्मीरा ने किया।

कार्यक्रम में प्रो. श्वेता यादव, विभागाध्यक्ष ने विषय प्रवर्तन करते हुए कार्यक्रम की रूपरेखा पर चर्चा की. प्रो वर्षा शर्मा, डीन, स्कूल ऑफ बायोलॉजिकल साइंसेस ने जीवविज्ञान में टैक्सोनॉमी के महत्व पर अपने विचार व्यक्त किए। कार्यक्रम के मुख्य वक्ता प्रमुख टैक्सोनॉमिस्ट और अलीगढ़ मुस्लिम विश्वविद्यालय के जीवन विज्ञान संकाय के डीन प्रो. वसीम अहमद थे।

उन्होंने कहा कि टैक्सोनॉमी जीवविज्ञान का एक अविभाज्य हिस्सा है। संपूर्ण जीववैज्ञानिक वर्गीकरण, नामकरण बुनियादी टैक्सोनॉमी के ज्ञान पर आधारित है। उन्होंने भारतीय उपमहाद्वीप में टैक्सोनॉमिक अध्ययन के महत्व पर चर्चा की। उन्होंने आधुनिक टैक्सोनॉमी के दृष्टिकोण में उन्नत तकनीकों को शामिल करने और युवाओं को संरक्षित टैक्सोनॉमी की रक्षा की ओर प्रेरित करने पर जोर दिया।

उन्होंने कहा कि ऐसे कार्यक्रमों का आयोजन युवा मनों को संरक्षण, पारिस्थितिकी और स्थिरता की दिशा में बढ़ावा देने के लिए एक अच्छा कदम है। सहयोगी संस्थान की ओर से डॉ. राहुल जोशी, भारतीय जीववैज्ञानिक सर्वेक्षण (कोलकाता) ने बताया कि एक टैक्सोनॉमिस्ट क्या काम करता है। उन्होंने स्पष्ट रूप से टैक्सोनॉमी को प्रणालीगत दृष्टिकोण से सैद्धांतिक और संचालनात्मक दृष्टि से अलग किया। प्रो. फयाज अहमद, कश्मीर विश्वविद्यालय ने नेमाटोड्स के वर्गीकरण पर अपने शोध कार्य को साझा किया और शोधार्थियों से वर्गीकरण अध्ययन पर अधिक ध्यान देने की अपील करते हुए कहा कि यह प्रयास युवाओं के लिए भारतीय उपमहाद्वीप जैसे जीव-जंतु विविधता वाले क्षेत्र में नवीन शोध आइडिया प्राप्त करने में सहायक सिद्ध होगा। विभाग के डॉ. राजकुमार कोइरी द्वारा औपचारिक धन्यवाद ज्ञापन दिया गया। कार्यक्रम में प्राणी शास्त्र विभाग के सभी शिक्षक, शोध छात्र और विद्यार्थी शामिल हुए।