



*Promoting
the sustainable use
and conservation of
soil biodiversity*



Vol. 7 – June 2025

Dear NETSOB members,

This is your monthly update from the International Network on Soil Biodiversity - <https://www.fao.org/global-soil-partnership/netsob/en/>. If you know someone interested in soil biodiversity who is not a member yet, they can join the network [here](#).



✦ **Soil Biodiversity Measurements and Capacity-Building**

As part of the Plan of Action (2020-2030) for the International Initiative for the Conservation and Sustainable Use of Soil Biodiversity, adopted at the Fifteenth Session of Conference of the Parties (COP 15) to the United Nations Convention on Biological Diversity (CBD), the Food and Agriculture Organization of the United Nations (FAO) was invited to monitor and forecast the conditions of soil biodiversity and soil health. In response, the Global Soil Partnership (GSP) launched the Global Soil Biodiversity Observatory (GLOSOB) at the CBD COP15. Starting in 2026, Parties to the CBD are *invited* to report on the status of their soil biodiversity regarding their activities and results from the implementation of the Plan of Action, in alignment with the Kunming-Montreal Global Biodiversity Framework.

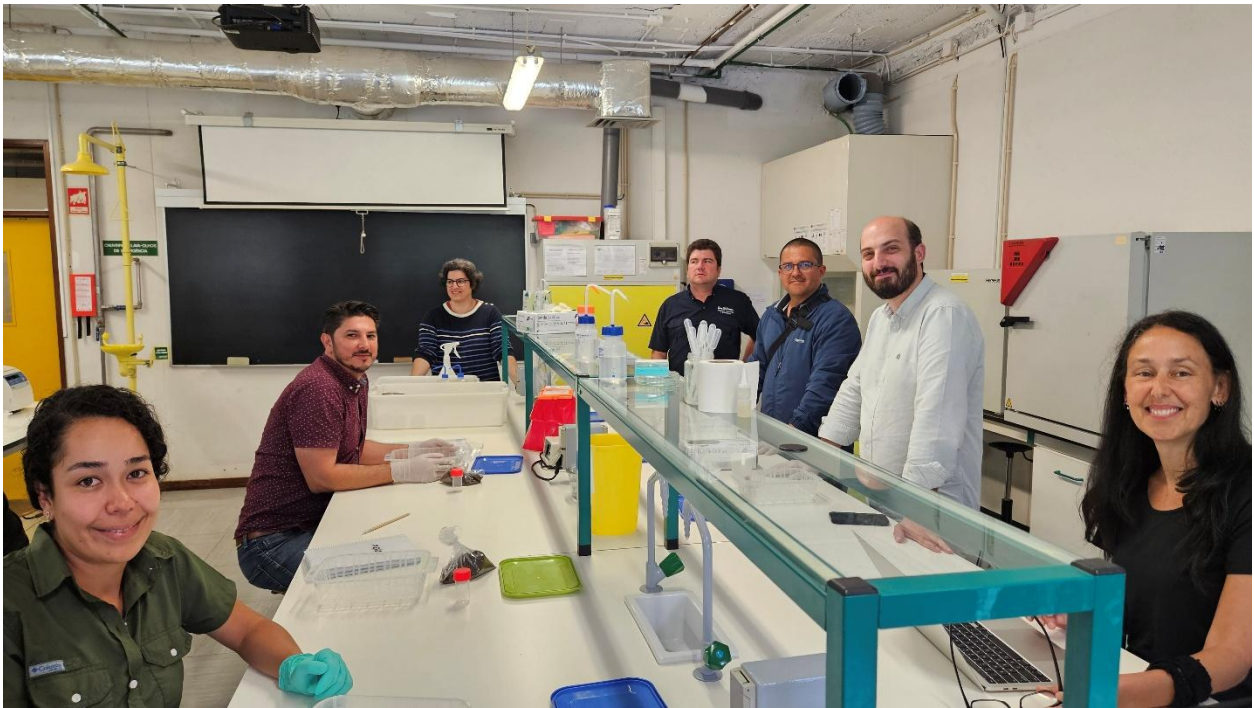
From 23–30 May 2025, a joint training workshop organized by the GLOSOB – a monitoring framework developed by the GSP within the FAO’s International Soil Biodiversity Network (NETSOB) – and the Soil Biodiversity Observation Network (SoilBON) was held in Portugal. The workshop brought together 11 participants (8 men and 3 women) from Central and North America, the Caribbean, and Central Asia to strengthen technical capacity on soil biodiversity assessments and functional indicators in support of national and global monitoring efforts.

Participants engaged in a combination of classroom discussions, fieldwork, and laboratory exercises hosted by the University of Coimbra and the University of Minho. Topics covered included the structure of national soil biodiversity assessments, nematode-based indicators, soil meso- and macrofauna extraction and sorting methods, and enzymatic activity assays as proxies of soil function. A field excursion to Serra da Estrela enabled hands-on application of standardized protocols for biodiversity sampling, including strategies for minimizing contamination and ensuring sample quality.

The workshop featured expert-led sessions on linking biodiversity metrics to ecosystem functions, designing representative sampling schemes, and implementing quality control measures. This event reflects a growing commitment to harmonizing global soil biodiversity observations under the Kunming-Montreal Global Biodiversity Framework and builds on the GLOSOB tiered approach to essential biodiversity variables (EBVs). It also supports the capacity-building goals of the GSP and will inform national soil monitoring efforts across multiple regions. Future iterations of such workshop are funding-dependent and FAO Members and partners are invited to support the development of GLOSOB.



Participants at the Botanical Garden in Coimbra, Portugal



Nematode extraction at the University of Minho, Portugal



Nematode identification at the University of Minho, Portugal



Soil erosion simulation at Serra da Estrela, Portugal



Mesofauna extraction at the University of Coimbra, Portugal



Soil function analyses at the University of Coimbra, Portugal



Participants of workshop at the University of Coimbra, Portugal

✦ NETSOB New Alternates

NETSOB is happy to welcome new colleagues to our board. The website will be updated to reflect these new changes soon. In addition to the Vice-Chairs determined by election at our last Annual Meeting, we are now joined by:



From left to right:

WG1 - César Marín (Vice-Chair), Zoë Lindo and Xin Sun (Alternates)

WG2 - Jeff Battigelli (Vice-Chair), Tara Dirilgen and Jacob Ulzen (Alternates)

WG3 - Gian Luca Bagnara (Vice-Chair), Claudia Coleine (Alternate)

✦ NETSOB Standard Operating Procedures

Standard Operating Procedures (SOPs) for key soil enzyme activity measurements have been [developed](#) in collaboration with GLOSOLAN. Additional protocols covering nematode sampling, extraction and identification, microarthropod sampling, extraction and sorting, soil aggregates, acid phosphatase, leaf litterbag, and other biological indicators are currently under development.



✦ 2025 Annual Meeting Report

The Report for our last Annual Meeting has been [published](#). The recordings of both days of the meeting can also be found on the link above.

✦ NETSOB presentation at the Plenary Assembly

Dr Jeff Battigelli (Canada), vice-chair of NETSOB's Working Group 2 attended the Global Soil Partnership (GSP) [13th Plenary Assembly](#) at the FAO Headquarters in Rome on 3–5 June to update the GSP on the activities of International Network on Soil Biodiversity (NETSOB). The Plenary Assembly encouraged FAO Members and resource partners to join and support the development of GLOSOB for monitoring soil biodiversity and soil health. More information [here](#).



✦ Scientific excellence in nominations for membership of the Multidisciplinary Experts Panel of IPBES

On 19 May 2025, the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) secretariat issued a notification ([EM/2025/24](#)) inviting members of IPBES to submit to the secretariat nominations of candidates for the Multidisciplinary Expert Panel (MEP) by 30 September 2025.

The IPBES MEP delivers a set of scientific and technical functions that are key to the Platform's functioning. The MEP helps define the scope and methodology for IPBES assessments, is responsible for the selection of experts to deliver on the IPBES work programme, monitors the scientific quality of IPBES assessments and other deliverables, and provides scientific and technical support to the implementation of various IPBES activities.

Scientific excellence of members of the MEP in a diversity of natural and social science disciplines related to biodiversity and ecosystem services is therefore crucial for the success of IPBES. The guidance note available [here](#) provides further information on the role of the MEP and selection criteria. The term of office for the current MEP will come to an end at the closure of IPBES 12, scheduled from 3 to 8 February 2026 ([EM/2025/18](#)) and during which their successors will be elected. In accordance with Rule 26 of the rules of procedure, candidates for the MEP are to be proposed by members of IPBES for nomination by the regions and elected by the Plenary.

Your support in disseminating the opportunity for the nomination of well-qualified candidates that would bring scientific excellence to the future MEP membership is welcomed. Potential MEP candidates are encouraged to contact the national focal point of an IPBES member to express their interest in being nominated. The list of national focal points of IPBES can be found on the IPBES website at <https://ipbes.net/national-focal-points>.



Important soil biodiversity events are advertised in this space in chronological order. The events below are **not** organized by FAO or NETSOB.

✦ **International Soil Science Conference (SOILS 2025)**

1st ANNOUNCEMENT



International Soil Science Conference (SOILS 2025)

Organized by:



Soil Health for Sustainable Future:
Bridging Soil, Agriculture, and Environmental Stewardship

The Malaysian Society of Soil Science (MSSS) will host the International Soil Science Conference (SOILS 2025) at Bertam Resort & Water Park, Penang, Malaysia, from **6th to 8th May 2025**. SOILS 2025, themed “Soil Health for Sustainable Future: Bridging Soil, Agriculture, and Environmental Stewardship,” aims to foster discussions on tropical soil sustainability. This annual program is also attended by researchers, agronomists, and planters from the government and the private sector to share information related to soil management. More information at <https://www.msss.com.my/>

✦ Ecology of Soil Microorganisms 2025 – Networking across scales



The organizing committee is pleased to welcome you to the fifth conference on the Ecology of Soil Microorganisms to be held in Helsinki, Finland on **June 15th to 19th, 2025**. The previous meetings attracted participants from all over the world. The ESM conference is an interdisciplinary platform addressing questions related to individual microbes (archaea, bacteria, fungi, oomycetes, protozoa and viruses), microbial communities and their ecological networks. Modern genomic, transcriptomic and proteomic methods are linked with approaches based on soil chemical, biochemical and functional analyses, exploration of soil fauna and plant ecology. They cordially invite experts from all these disciplines to join them in Helsinki to promote state-of-the-art research in the field of soil ecology and enjoy the northern midsummer madness! Check more information at https://www.lyyti.fi/p/Ecology_of_Soil_Mircoorganisms2025_9620/en/conference

✦ Soil Biology Masterclass 2025: July 14th to 15th, 2025

The 2-day **Soil Biology Masterclass** offered by Western Sydney University is designed to provide participants with the core knowledge and principles needed to incorporate soil biology and health into management practices to sustainably increase productivity and profitability. Register to this in-person event [here](#).

By attending, you will:

- Gain an in-depth understanding of the latest research in soil biology and health; the role of microbes in nutrient cycling and plant interactions; roles of soil fauna and the application of soil biologicals.
- Learn about the future directions for research, technologies and practices.
- Have opportunities to network with our guest presenters and expert researchers, undertake a facilities tour and enjoy a networking dinner (included in registration costs).

✦ **Soils For Our Future 2025 Conference: A Gathering of Local Perspectives**

The SOILS FOR OUR FUTURE 2025 Conference brings together three conference events: 5th Global Soil Security Conference, Canadian Society of Soil Science Annual Meeting, and International Union of Soil Sciences Division 1 - Soils In Space and Time Meeting. Hosted by the Soil Conservation Council of Canada and the Manitoba Soil Science Society. With over 700 researchers, industry members, leaders of farmer organizations, graduate students and other attendees, the SOILS FOR OUR FUTURE 2025 Conference provides global perspective to today's research to sustain our future. Spanning five days, the conference provides attendees of the events to meet in plenary/technical sessions with their individual organizations and for all to come together in keynote sessions, tradeshow, posters, workshops and field tours. Check more information at <https://site.pheedloop.com/event/EVEYHOPOMAGWN/home>



✦ **Curso de Posgrado: Enquitreidos: ingenieros ecosistémicos claves en el reciclaje de la materia orgánica del suelo (Course on Enchytraeidae in Spanish)**

This is a face-to-face course that will be held in *Facultad de Agronomía*, Montevideo, Uruguay. It is open to enrollment and has a cost of approximately 150 USD. The program is available [here](#) and more information can be obtained at [here](#) or through the email gjorge@fagro.edu.uy

Una semana de curso teórico-práctico del 26/7 al 1/8.

¿Por qué es interesante aprender a identificar los enquitreidos?

Los enquitreidos son una parte integral del ecosistema del suelo, su funcionamiento y su biodiversidad. Las especies se distinguen no solo morfológicamente sino también en sus preferencias ecológicas y sus estrategias de reproducción. En Europa, las comunidades de especies indican el estado del suelo, su historia, su desarrollo, su degradación o contaminación. En América Latina, este conocimiento es sólo incipiente por el escaso conocimiento de las especies, pero ya se pueden usar las comunidades a nivel de género para distinguir entre fauna invasora y fauna autóctona. Y se pueden usar en estudios experimentales donde se comparan manejos distintos. Aprender a distinguir las especies no es más difícil que en otros grupos de invertebrados, además vas a adquirir conocimientos poco habituales pero muy requeridos. Lo que necesitas es un poco de paciencia porque vas a trabajar con animales vivos bajo el microscopio, y además cierta curiosidad por la vida, la anatomía y la belleza escondida de estos animales tan ubicuos como remotísimos.

Curso de Posgrado Enquitreidos: ingenieros ecosistémicos claves en el reciclaje de la materia orgánica del suelo



Docente responsable
Dra. Gabriella Jorge

Docente invitado
PhD. Rüdiger M. Schmelz

**Del 28 de Julio al
1 de Agosto de 2025**

Lunes a Viernes de 9 a 17 hs

Modalidad Presencial

Objetivo general

Introducir a los estudiantes en técnicas de muestreo, sistemática e identificación de taxones de enquitreidos

Unidades temáticas

- 1) Biología general de los enquitreidos: diferencias ecológicas entre las especies y su uso para evaluar la "comunidad de los descomponedores"
- 2) Caracteres microscópicos para distinguir géneros y especies
- 3) Evaluación del estado y de la calidad del suelo

Programa del curso

Salón: Botánica

Contacto

gjorge@fagro.edu.uy

Inscripciones

Estudiantes POSGRADOS: [aquí](#)

Estudiantes EDUPER: [aquí](#)





VII EUROSIL 2025 & X Congreso Ibérico de la Ciencia del Suelo

SEVILLE-SPAIN 8-12 SEP

The EUROSIL is the official meeting of the European Confederation of Soil Science Societies (ECSSS), it is among Europe's most important Soil Sciences events and offers a fantastic opportunity for knowledge transfer among the Soil Sciences community. The EUROSIL is held every four years and attracts a large audience of over 2500 participants who present their findings through oral and poster presentations across up to 10 parallel sessions. The event also features workshops, and an exhibition of products and services aimed at raising awareness in society, facilitating the exchange of ideas and information and creating business opportunities. Additionally, the Iberian Congress of Soil Sciences (CICS) will also be held during this edition of EUROSIL. More information at <https://eurosoil2025.eu/EUROSIL2025>

✦ Biological Sciences and Environmental Solutions for the Achievement of Sustainable Development Goals (SDGs) International Conference



Invitation to Attend the International Conference on "Biological Sciences and Environmental Solutions for Achieving the Sustainable Development Goals (SDGs)" September 24–26, 2025 | Yerevan, Armenia

About the Conference

The first "Biological Sciences and Environmental Solutions for the Achievement of Sustainable Development Goals (SDGs)" conference serves as a global platform to address the urgent need for sustainable solutions to the world's most pressing environmental and developmental challenges. The "BSES-SDGs" International Conference is dedicated to the 90th anniversary of the Faculty of Biology similarly the 10th anniversary of Research Institute of Biology at Yerevan State University. Established in 1935, the Faculty of Biology traces its origins to the founding of the university. It serves as an Armenia leading scientific and educational center, training highly qualified specialists in various fields of biology. Alumni of the faculty are working in leading educational and research institutions all over the world. Biological and environmental sciences play a transformative role in tackling critical issues such as climate change, biodiversity loss, food insecurity, water scarcity, and public health crises, all of which are central to the United Nations Sustainable Development Goals (SDGs). This conference will collect together leading scientists, educators, policymakers, and practitioners from diverse disciplines to explore the intersection of biological processes, environmental management, and technological innovation. Through insightful discussions, groundbreaking research presentations, and collaborative sessions with main focus on practical applications and policy implications that align with the achievement of specific SDGs.

Topics of Conference

Key themes of BSES-SDGs conference include all aspects of biological research: *Cell Biology, Genomics, Proteomics, Metabolomics, Systems Biology, Plant and Fungi Secondary Metabolites, Immunology, Neuroscience, Structural Biology, Animal and Plant Physiology, Bioengineering, Biotechnology, Evolutionary Biology, Bioethics, Plant Science, Microbiology, Zoology, Mycology, Molecular Biology, Biomedicine, Developmental Biology, Biostatistics, Biochemistry, Biophysics and Bioinformatics*. The key themes related to environmental solutions are: *Climate Science, Environmental Policy and Governance, Ecological Restoration, Ecological and Conservation Biology, Sustainable Land Management, Environmental Economics, Renewable Energy and Sustainability, Geospatial Science and Remote Sensing, Hydrology and Watershed Management, Environmental Toxicology, Energy Systems and Sustainability, Environmental Law, Waste Management and Resource Recovery, Eco-innovation and Green Technologies, Environmental Impact Assessment (EIA), Carbon Management and Climate Finance, Air and Water Quality Management, Sustainable Fisheries and Marine Conservation, Agricultural and Crop Science, Environmental Health Science, Ecotourism and Sustainable Development for achieving the Sustainable Development Goals (SDGs)*.

Publication Opportunities

High-quality short papers, follow rigorous peer review, will be published in esteemed outlets, including books by *IGI Global (USA), De Gruyter Germany, AAP-CRC Taylor and Francis (USA), Wiley-Scrivener (USA)*. Selected papers will also be included for publication in prestigious journals such as *with impact factor in Q1, Q2 and Q3*. All publications will be indexed in world-renowned databases, including *Scopus, Web of Science, Google Scholar, and ORCID*.



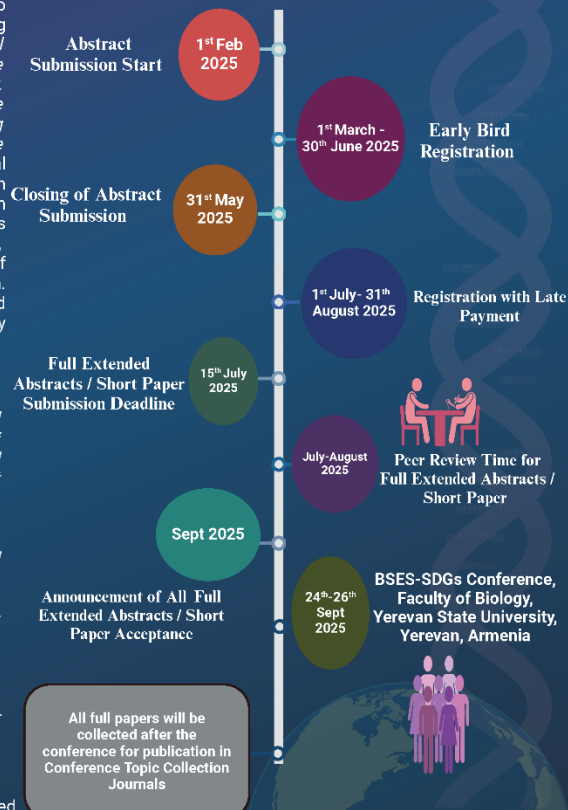
For more information, follow the conference link:

<http://bioenv-sdg.ysu.am>



bioenv_sdg@ysu.am

Timeline of Conference



"Join us in the vibrant city of Yerevan from September to 24-26, 2025, as we honour the extraordinary 90 year legacy of the Faculty of Biology and 10 year Research Institute of Biology at Yerevan State University Armenia—a legacy of excellence, innovation, and impact. Together, let us explore the transformative power of biological and environmental sciences in shaping a sustainable future for our planet and generations to come"

✦ **10th International Oligochaeta Taxonomy Meeting (IOTM 2025)**



The IOTM 2025 Organizing Committee is pleased to invite you to the 10th International Oligochaeta Taxonomy Meeting (IOTM 2025), which will take place from November 3rd to 7th, 2025, in Osijek, Croatia.

IOTM 2025 will bring together researchers focusing on the taxonomy, phylogeny, ecology, and biogeography of oligochaetes. The meeting will feature scientific presentations, a taxonomy workshop, and a field excursion. Sessions will be held in Tvrđa, the historic old town of Osijek, with laboratory work at the Department of Biology, University of Osijek.

Guidelines regarding travel to Osijek have been added to the event website.

To participate, please register via website: <https://iotm2025.earthworms.eu/>. Early bird registration (until July 1st, 2025) is 300 EUR, and regular registration is 400 EUR. The abstract submission deadline is August 1st, 2025.

For more details, visit <https://iotm2025.earthworms.eu/> or contact them at iotm2025@earthworms.eu.



The Local Organizing Committee is excited to welcome the world to Victoria, BC in 2026, and is preparing an exciting scientific program for the 4th Global Soil Biodiversity Conference (<https://globalsoilbiodiversity2026.org/>), which will serve as a pivotal platform for international collaboration and knowledge exchange. As Co-Chairs of the GSB 2026 Local Organizing Committee, Dr Zoë Lindo and Dr Carlos Barreto hope you can join them for this exciting scientific and social event. The keynote speakers have been [announced](#). Check out the [Program-at-a-Glance](#) to learn more about the format of the conference. For those traveling from outside of Canada, [check out the Travel and Visa tab](#) with important information on **visa** requirements.

Abstract Submission is now open

The conference organizers are accepting abstract submissions for a variety of session themes:

1. Soil Biodiversity Under Threat

- 1.1 Agricultural Intensification
- 1.2 Urbanization and Land Degradation
- 1.3 Pollution
- 1.4 Climate Change
- 1.5 Deforestation and Habitat Loss
- 1.6 Cumulative and Interactive Stressors

2. Soil Biodiversity as Nature-Based Solutions

- 2.1 Sustainable Agriculture and Food Security
- 2.2 Sustainable Forest Management
- 2.3 Restoration and Climate Resilience

3. Soil Biodiversity Science: From Theory to Practice

- 3.1 Conservation and Protection of Soil Biodiversity
- 3.2 Soil Biodiversity and Ecosystem Functioning
- 3.3 Evolutionary Perspectives

4. Innovations in Soil Biodiversity Research

- 4.1 Advances in Monitoring and Standardization
- 4.2 Technological, Methodological, and Omics Advances

4.3 Data Infrastructure, Open Science and Big Data

5. Patterns in Soil Biodiversity: Space and Time

- 5.1 Global Distribution and Drivers
- 5.2 Latitudinal, Altitudinal and Depth Gradients in Soil Biodiversity
- 5.3 Temporal Dynamics and Long-Term Trends
- 5.4 Historical Legacies and Palaeoecological Perspectives in Soil Biodiversity

6. Soil Biodiversity Across Systems and Taxa

- 6.1 Mycorrhizae and Fungal Networks
- 6.2 Rhizosphere and Plant-Soil Interactions
- 6.3 Soil Food Webs and Multi-Taxa Interactions
- 6.4 Systematics and Taxonomy

7. From Research to Action: Policy, Health & Society

- 7.1 Policy, Governance and Education
- 7.2 Soil Biodiversity, One Health & Human Well-Being
- 7.3 Economics of Soil Biodiversity: Valuation and Natural Capital
- 7.4 Citizen Science and Public Engagement in Soil Biodiversity