

FUNGI FOUNDATION RECOMMENDATIONS FOR SBSTTA 27 – CONVENTION ON BIOLOGICAL DIVERSITY (CBD)

Twenty-seventh meeting of the Subsidiary Body on Scientific, Technical & Technological Advice (SBSTTA27) Panama City, Panama 20-24 October 2025.

Fungi play a fundamental role in the functioning of natural ecosystems and in human well-being. They maintain soil fertility through the decomposition of organic matter and facilitate the absorption of water and nutrients via mycorrhizal associations with plant roots, which improves carbon sequestration. Additionally, the collection, use, and trade of wild fungi are essential economic and cultural activities, contributing to livelihoods and providing food and medicinal ingredients for people.

Since the launch of the initiative **“Pledge for Fungal Conservation”** at the last COP 16 of the Convention on Biological Diversity –lead by Chile and the United Kingdom of Great Britain and Northern Ireland, Parties of the CBD have raised their concerns about the lack of consideration for the fungi kingdom in the CBD Framework, taking into account the needs to fill the knowledge gaps and the opportunities to support the implementation of the Kunming-Montreal Global Biodiversity Framework through the multiple ecosystem services that fungal biodiversity provide for restoration, climate mitigation and sustainable development.

As the Parties of the CBD meet for the first time since COP16, the Fungi Foundation proposes the following general recommendations:

GENERAL RECOMMENDATIONS

- **Recognize Fungal Biodiversity as a Critical Component of Soil Biodiversity by addressing current knowledge gaps** and developing harmonized soil biodiversity methodologies, as well as by identifying their potential to strengthen and scale restoration efforts.
- **Promote the evidence based sustainable use of fungal biodiversity into the update to the expanded programme of work on forest biodiversity** to complement the scientific and technical needs to support the implementation of the Kunming–Montreal Global Biodiversity Framework.

SBSTTA27 Agenda Item 9. Biodiversity and Agriculture

The Secretariat has prepared a note to inform the work of SBSTTA on biodiversity and agriculture in the lead-up to COP 17, with a focus on the Plan of Action (2020–2030) for the International Initiative on the Conservation and Sustainable Use of Soil Biodiversity. Established under decision VI/5 and aligned with the Kunming–Montreal Global Biodiversity Framework, the Initiative seeks to raise awareness, strengthen knowledge-sharing and capacity-building, mainstream soil biodiversity into agricultural practices, and foster research, monitoring and assessment. The Plan of Action structured around four key elements –policy coherence, sustainable soil management, awareness and capacity-building, and scientific research– provides a voluntary framework for Parties to advance national priorities. To support this process, Parties have been invited to report on progress, policies, and linkages with national biodiversity strategies, with the submissions analyzed alongside partner reports to inform recommendations for SBSTTA’s consideration.

The analysis of Party submissions revealed that fungal biodiversity remains largely absent from national policies and strategies, with only a few examples of targeted actions, such as the protection of rare species, inclusion in catalogues and monitoring systems, or sustainable use through agricultural bio inputs. Limited expertise and knowledge were repeatedly identified as barriers, yet Parties also recognized the ecological importance of fungi and the need for specialized studies and policy integration. These findings highlight both the gap and the opportunity to strengthen the role of fungal biodiversity within soil and agricultural biodiversity frameworks.

In light of these findings, it is essential that forthcoming recommendations on biodiversity and agriculture explicitly address fungal biodiversity, ensuring its integration into soil biodiversity strategies and recognizing its critical role in restoration for the effective implementation of the Kunming–Montreal Global Biodiversity Framework.

The Fungi Foundation suggests that this Biodiversity and Agriculture recommendation should:

1. Invites Parties, other Governments and relevant organizations **to address knowledge gaps in soil biodiversity, including the knowledge gaps in fungal biodiversity.**
2. Requests the Executive Secretary, subject to the availability of resources, to cooperate with relevant organizations on the development of tools and guidance to reduce the impacts of pollution on soil biodiversity, **including measures to assess and mitigate the effects of pollution on fungi.**
3. Further requests the Executive Secretary, and invites FAO, the Global Soil Partnership, the Global Soil Biodiversity Initiative, **IUCN** and other relevant organizations, to ensure that the development of harmonized methodologies and indicators for soil biodiversity explicitly includes **fungal-specific measures**, and to provide related capacity-building support to Parties.

4. Encourages Parties to integrate fungal biodiversity into National Biodiversity Strategies and Action Plans (NBSAPs), soil biodiversity monitoring systems, and restoration programmes, recognizing fungi as an essential component of soil biodiversity and a key contributor to the Kunming–Montreal Global Biodiversity Framework.

SBSTTA27 Agenda Item 6. Scientific and Technical Needs to Support the Implementation of the Kunming–Montreal Global Biodiversity Framework

The Conference of the Parties at its sixteenth meeting requested the Executive Secretary to review and update the Convention’s programmes of work in line with the Kunming–Montreal Global Biodiversity Framework, and to identify areas for potential further work. This mandate has been addressed through three addenda documents:

- CBD/SBSTTA/27/5/Add.1: Strategic review and analysis of the programmes of work under the Convention;
- CBD/SBSTTA/27/5/Add.2: Strategic review of and updates to the expanded programme of work on forest biodiversity;
- CBD/SBSTTA/27/5/Add.3: Areas of potential further work.

Key Findings from the Reviews

The proposed approach (Add.1) notes that some areas of work are already strongly aligned with the Framework and should be maintained, while others could benefit from closer integration to ensure efficiency and coherence. It suggests adopting a rolling schedule for updating thematic areas such as agriculture, forests, invasive species, and synthetic biology, to better reflect evolving scientific and technical needs.

The strategic review of the expanded programme of work on forest biodiversity (Add.2) confirmed strong overall alignment with the Framework, but highlighted gaps in areas such as ecological integrity, nature-based solutions, urban forests, among others. Parties emphasized priorities including:

- a) Conservation of primary and high-integrity forests;
- b) Addressing climate change impacts, including wildfire management;
- c) Promoting innovative and sustainable value chains;
- d) Strengthening equitable governance and capacity-building.

The analysis also found that sustainable forest management must be closely aligned with Target 10 through 2030, while additional attention is needed for related targets on livelihoods, food security, and resilience.

The areas of potential further work (Add.3) introduce key themes that could advance the implementation of the Framework, notably biodiversity-inclusive spatial planning, equity and human rights, and biodiversity and pollution.

Implications for Fungal Biodiversity

The combined findings underscore that fungi remain underrepresented within the existing programmes of work, despite their critical role in forest ecosystems, soil health, restoration, and sustainable livelihoods.

However, by integrating fungal biodiversity into forest biodiversity updates, Parties can strengthen the alignment among Biodiversity and Agriculture and Forest Biodiversity programmes while addressing pressing knowledge gaps. This approach would ensure fungi are recognized both as a key component of biodiversity and as an opportunity for achieving the 2030 targets.

The Fungi Foundation therefore suggests that the SBSTTA adopts the following amendments into the recommendation:

1. Update the programme of work on forest biodiversity by **promoting the evidence based sustainable use of fungal biodiversity** to reduce soil loss and to strengthen alignment with Target 7.