**Session Proposal**

# Session Title

Soil Biodiversity and Soil Health: Interactions, Indicators, and Innovative Approaches

# Session Organizers

Qi Li, Institute of Applied Ecology, Chinese Academy of Sciences, liq@iae.ac.cn (the primary contact person)

Haiyan Chu, Institute of Soil Sciences, Chinese Academy of Sciences, hychu@issas.ac.cn

T. Martijn Bezemer, Leiden University, Netherlands.

# Session Description

This session is designed to foster a comprehensive dialogue on the intricate and multifaceted interactions between soil biodiversity and soil health, highlighting the critical role of soil biodiversity as a driver of soil health. By bringing together leading researchers, practitioners, and early-career scientists from both domestic and international communities, this session will explore the complex dynamics that underpin these relationships, with a particular focus on biological networks, soil trophic interactions, and the latest advancements in assessment methodologies of soil health. Participants will have the opportunity to delve into cutting-edge research that elucidates how soil biodiversity contributes to soil health and the broader ecosystem services. Discussions will emphasize the importance of understanding and leveraging biological networks and trophic interactions within the soil ecosystem to enhance soil functionality and resilience. Additionally, the symposium will highlight innovative methodologies for assessing soil biological health, offering practical insights into the application of these tools in diverse environmental contexts. This session will also explore sustainable management practices that can effectively conserve soil biodiversity and improve soil health in both agricultural and natural ecosystems. By sharing case studies and practical strategies, participants will gain valuable insights into the implementation of these practices, helping to bridge the gap between research and application. It will serve as a pivotal forum for scientists, practitioners, and policymakers to come together, share their expertise, and collectively work towards sustainable soil management and conservation.

# Format

The session will be structured as a combination of keynote presentations, invited talks, and interactive panel discussions, followed by a poster session. The format is designed to encourage active participation and knowledge exchange among attendees.

# Proposed Speakers

Yong-Guan Zhu, Research Center of Eco-Environmental Science, Chinese Academy of Sciences, China.

Haiyan Chu, Institute of Soil Sciences, Chinese Academy of Sciences, China.

Qi Li, Institute of Applied Ecology, Chinese Academy of Sciences, China.

Zhong Wei, Nanjing Agricultural University, China.

T. Martijn Bezemer, Leiden University, Netherlands.

Noah Firerer, University of Colorado, USA.

Manuel Delgado-Baquerizo, Universidad de Cádiz, Spain.