**Session Proposal**

# Session Title

Soil carbon fluxes for climate and soil health

# Session Organizers

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Prof. Dr. Yuqiao Wang: Henan Agricultural University, China; wangyuqiao@henau.edu.cn

Prof. Dr. Ruikun Gou: Northwest Agricultural and Forestry University, China; ruikungou@nwaufu.edu.cn

# Session Description

Understanding soil carbon dynamics is critical to addressing the challenges of climate change and soil degradation. This session will explore the latest scientific developments in observing, quantifying, and modeling soil carbon fluxes from individual research plots to entire landscapes and global systems.

Key topics include innovative approaches to soil carbon observations, advances in simulating soil carbon dynamics, and assessing soil carbon trends. This session will highlight how improved soil carbon assessment can inform policies and practices aimed at carbon sequestration, greenhouse gas mitigation, and overall improvement of soil health and climate change mitigation.

By bringing together researchers, the session aims to foster interdisciplinary collaboration and stimulate new ideas to address pressing environmental goals. In addition to scientific exchange, this meeting will serve as a valuable networking platform for soil scientists and environmental professionals working on carbon sequestration and emission reduction.

# Format

Oral presentations and posters.

# Proposed Speakers

Dr. Florian Walder, leader of Soil Quality and Soil Use Group at Agroscope, Switzerland; oral presentation (a leading expert in soil functioning and soil quality.)

Prof. Dr. Jens Leifeld, leader of Climate and Agriculture Group at Agroscope, Switzerland; oral presentation (a leading expert in soil ecosystem carbon and nitrogen cycling and soil organic matter modeling.)

Dr. Yafei Li, postdoc at Agroscope, Switzerland; oral presentation (working on soil organic matter modeling.)

Prof. Dr. Ruikun Gou, associate professor at Northwest Agricultural and Forestry University, China; oral presentation (expert in ecosystem carbon fluxes.)

Prof. Dr. Yuqiao Wang, assistant professor at Henan Agricultural University, China; oral presentation (expert in soil carbon fixation and carbon farming)

Prof. Dr. Xin Zhao, associate professor at China Agricultural University, China; oral presentation (a leading young scientist in soil carbon sequestration and greenhouse gas mitigation for conservation agriculture)