

Call for Session Submission

Track:

Submission identifier: EUROSIL2020-1088

Presentation Title: SOIL ORGANISMS: ALLIES FOR ENHANCING SUSTAINABLE USE OF SOILS AND CLIMATE CHANGE ADAPTATION

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Conference Theme: Climate Action

Secondary Conference Themes (2 max): Life on Land

Preferred session format selection: Communication Session

Preferred session format explanation: We believe that a classical format session would suffice to deliver the message.

Three reasons for selecting this session: This session benefits from previous work developed in COST Action ES1406 (KEYSOM) that was coordinated by the Session proposer. It enlarges scientific cooperation and networking across Europe.

Please specify the email address of the lead convener: jjimenez@ipe.csic.es

Session Description: Soil organic matter (SOM) plays a crucial role in climate change mitigation and adaptation. The joint effort among soil ecologists, modellers and biogeochemists within COST Action ES1406 has pointed out the key role of soil fauna in carbon storage capacity, nutrient cycling and hydrology. The importance of soil organisms to ecosystem services is often overlooked, and must be taken into account in future land management strategies. Nature-based solutions are required to facilitate sustainable use and conservation of soils, including adaptation and resilience to climate change. Scientific synthesis of the current understanding of soil organisms-SOM interactions is needed, and guidelines for future experimentation and best regenerative practices to exploit soil multifunctionality have to be developed, tested and validated.

Through an innovative multidisciplinary approach, region-specific land management practices should be proposed. The session would be of interest to soil scientists, policy makers and related end users in the domain of SOM management and climate change. A cost-effective sustainable land use and SOM restoration strategies are needed.