CALL FOR PAPERS

EJP SOIL Special Issue – Climate-smart sustainable agricultural soil management for the future

Guest Editors:

Sophie Zechmeister-Boltenstern (Institute of Soil Research, University of Natural Resources and Life Sciences, Vienna, Austria)

Claire Chenu (French National Research Institute for Agriculture, Food and Environment – INRAE, France) Lars Munkholm (Department of Agroecology, Aarhus University, Denmark)

Rebecca Hood-Nowotny (Institute of Soil Research, University of Natural Resources and Life Sciences, Vienna, Austria)

Rajasekaran Murugan (Institute of Soil Research, University of Natural Resources and Life Sciences, Vienna, Austria)

Context

Soils contain three times the amount of CO_2 currently in the atmosphere and more than two hundred times the current fossil fuel emissions. Therefore, increasing net soil carbon storage in agricultural soils, through sustainable management practices, offers an enormous C sequestration potential at minimal financial cost, and a number of peripheral ecosystem level benefits. Moreover, the EU has the necessary regulatory, policy and incentive mechanisms to implement this novel strategy.

EJP SOIL was initiated to explore this C sequestration potential by i) determining the current status, ii) researching promising sequestration scenarios and their pitfalls, iii) developing road maps and strategies for effective implementation, whilst communicating and disseminating the outcomes (https://eipsoil.eu/). A total of 38 research projects and 10 framework work packages (comprising over 500 researchers) within EJP SOIL are focusing on the development of new insights on climate-smart agricultural soil management, quantification of trade-offs and synergies between sustainable agricultural production, climate change adaptation and mitigation, soil degradation, biodiversity, soil quality and other ecosystem services such as erosion control.

The purpose of the special issue would be to pull together the current state of art of the knowledge and gaps, and to gather opinions from the EJP SOIL participants. Within the remit of EJP SOIL and this special issue we are soliciting papers that comprehensively summarize and synthesize the state-of-the-art science on sustainable climate-smart soil management advancing one or more of the following impact areas:

- 1. Fostering understanding of soil management and its influence on climate mitigation and adaptation, sustainable agricultural production and environment
- 2. Understanding how soil carbon sequestration can contribute to climate change mitigation
- 3. Strengthening scientific capacities and cooperation
- 4. Supporting harmonized European soil information including for international reporting
- 5. Fostering the uptake of climate-smart sustainable soil management
- 6. Develop region and context specific fertilization practices



What to submit?

We are looking for original manuscripts, reviews, short communications, opinion papers, and data articles that collate, summarize and set future potential research priorities for carbon sequestration and soil health across Europe. We seek to develop a comprehensive and wide-ranging assessment of the various strategies and methods for achieving sustainable and climate smart soil management.

Please provide your opinion and possible submission of relevant results on this Special Issue using the dedicated questionnaire <u>https://tinyurl.com/EJPSOILSI</u>

The *European Journal of Soil Science* (EJSS) is an international journal that publishes outstanding papers in soil science that advance the theoretical and mechanistic understanding of physical, chemical and biological processes and their interactions in soils acting from molecular to continental scales in natural and managed environments, as well as descriptions of data sets that contribute to these goals.

How to submit?

We would greatly value your contribution and hope you will be able to respond to our invitation by submitting your manuscript to with the reference *"EJP SOIL special issue"* <u>https://bsssjournals.onlinelibrary.wiley.com/hub/journal/13652389/forauthors.html</u>.

Publication process and open source:

All papers must follow author guidelines of EJSS on article preparation. All articles will go through a standard peer-review process and will stay available open access for at least 50 days after the publication. Full open access articles are promoted through institutional agreement with the publisher. In case none of the authors has such an institutional agreement we will try to cover the publication costs within WP7 "Synthesis and Access to Infrastructure". In this case, please contact the WP leader <u>sophie.zechmeister@boku.ac.at</u>. Accepted articles will be promoted via press releases, social media, EJP SOIL network, EJP SOIL stakeholder meetings and EJP SOIL deliverables.

Submission open date: November 21, 2022

Submission deadline: June 30, 2023

