

ESDAC: <http://esdac.jrc.ec.europa.eu>
ESDAC Newsletter No **131** (June 2021)

Soil Organic Matter (SOM) fractions

Soil carbon sequestration is seen as an effective means to draw down atmospheric CO₂, but at the same time warming may accelerate the loss of extant soil carbon. By separating soil carbon into particulate and mineral-associated organic matter (POM and MAOM, respectively) aids in the understanding of its vulnerability to climate change and identification of carbon sequestration strategies. Arable and coniferous forest soils contain the largest and most vulnerable carbon stocks when cumulated at the European scale. In a recent [publication](#) in Nature Geoscience, we show a lower carbon loss from mineral topsoils with climate change (2.5 ± 1.2 PgC by 2080) than -previous estimates. Therefore, we urge the implementation of coniferous forest management practices that increase plant inputs to soils to offset POM losses and the adoption of best management practices to avert the loss in arable soils. Data are available in ESDAC:

<https://esdac.jrc.ec.europa.eu/content/soil-organic-matter-som-fractions>

Update of PERSAM tool (new version v3.0.6)

There is a new version v3.0.6 of the PERSAM tool that contains a small bug fix: there were problems with starting the calculation for projects imported using the 'Import project(s)' functionality. This is solved and the issue does not occur anymore. The User Manual remains unchanged, so the one for version v3.0.5 applies. Check it out on the [PERSAM page](#). PERSAM is used by regulatory offices and industry for predicting environmental concentrations of pesticides in top-soil. In support of the EFSA Guidance Document for predicting environmental concentrations of active substances of plant protection products in soil ([EFSA, 2017](#))

European Joint Programme EJP—Open calls

First external call is now open with a deadline **7.9.2021**. The objective of this call is to foster holistic agricultural (forestry soils are not excluded) soil management practices which will assist in making a shift to diversify farming to include a variety of sustainable and environmental practices. Three topics addressed: a) SOC sequestration b) soil biodiversity c) Improve sustainability, resilience, health and productivity of soils. In addition an call is open for [Visiting Scientists support](#): Targeting partnerships and network within the EJP SOIL consortium to advance scientific joint work on climate-smart agricultural soils (**deadline: 31.5.21**)

EUROSOIL 2021 (virtual congress 23-27 August 2021)

The objective of Eurosoil 2021 is to bring together, in a safe online space, leading research scientists working on soil related topics and stakeholders dealing with issues of public concern, such as soil degradation and consequences of climatic changes. The important bridging role of soil practitioners to translate scientific knowledge into practice will be emphasised during the virtual edition of Eurosoil 2021. Early bird registration deadline: **26.5.2021**

<https://eurosoil-congress.com/>

SoilCare Final conference

The SoilCare project will be holding its final conference on **June 24th 10.30-15.00** (CET) with the aim of disseminating the findings of this EU-funded project and inciting discussion surrounding with results and policy recommendations.

Registration: <https://www.crowdcast.io/e/soilcare>