



### COMMENTARY

This paper is responding to an article published in the European Journal of Soil Science by Berthelin et al. (2022)



### NEW FINDINGS...

Berthelin et al. (2022) claim that, for the first time, they closely examine the short-term breakdown process of fresh organic materials added to soil, which they believe has been mentioned in past literature but not studied extensively



### ...OR OLD NEWS?

Angers and colleagues disagree and argue that we've already known for nearly a century that when organic carbon is added to the soil, most of it doesn't stay there forever. A significant part is lost to the atmosphere in form of greenhouse gases



### AUTHORS

Angers Denis, Dominique Arrouays, ...  
Johan Six (2022)

## **A WELL-ESTABLISHED FACT: CARBON TURNOVER IN SOIL IS NOT A ONE-WAY STREET**



### **Part of the carbon cycle**

When organic matter is introduced to soils, a part of its carbon is stored whereas another part is respired by microbes and lost to the atmosphere.

# EJP SOIL INNOVATION HIGHLIGHTS



## TOWARDS CLIMATE-SMART SUSTAINABLE MANAGEMENT OF AGRICULTURAL SOILS

EJP SOIL is a European Joint Programme on Agricultural Soil Management addressing key societal challenges including climate change and future food supply. <https://ejpsoil.eu/>

The goal is to improve the understanding of agricultural soil management by finding synergies in research, strengthening research communities and raising public awareness.

1100+ experts, 24 countries, addressing multiple aspects of soil management across different European agroecosystems.

## EJP SOIL FRAMEWORK PROGRAMME

*This project has received funding by EU H2020 European Joint programme EJP SOIL (grant agreement no. 869625).*

### PROGRAMME COORDINATOR:

Claire Chenu

[ejpsoilcoord@inrae.fr](mailto:ejpsoilcoord@inrae.fr)

## TARGET EJP SOIL EXPECTED IMPACT AND EU MISSION SOIL OBJECTIVES

Understanding how soil-carbon sequestration can contribute to **climate change mitigation** at the regional level and **accounting for carbon**.

**Mission SOIL:** conserve soil organic carbon stocks

### HIGHLIGHT FACTS FROM:

EJP SOIL  
framework programme



Applicability:  
all climatic zones according to  
Metzger et al. (2005)  
<https://doi.org/10.1111/j.1466-822X.2005.00190.x>

EJP SOIL has received  
funding from the European  
Union's Horizon 2020  
research and innovation  
programme: Grant  
agreement No 862695

