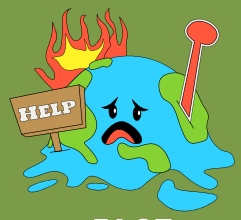
EJP SOIL
European Joint Programme

**TARGET STAKEHOLDERS**

# SOIL COMPACTION BOOSTS GREENHOUSE GAS N2O




**FACT**

N2O is the strongest greenhouse gas and it comes mainly from agricultural soils

**EFFECT**

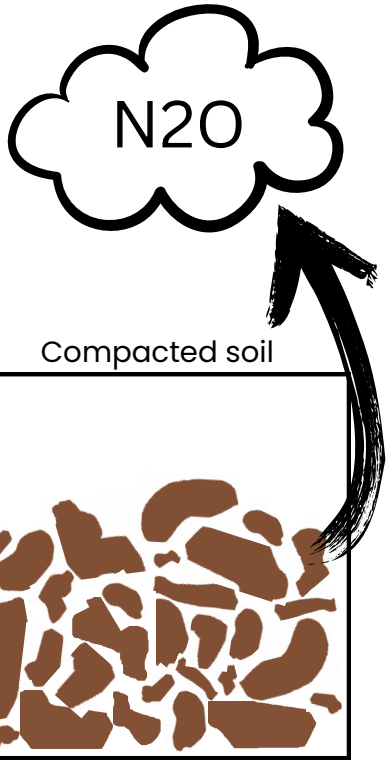
Topsoil compaction increases N2O emissions by up to 42 times

**HELP**

Mitigation strategies aim to loosen the soil and recover pore system funtionality

**AUTHORS**

Mansonia Pulido-Moncada, Søren O. Petersen, Lars J. Munkholm (2022)




## Oxygen needed


Traffic and animal-induced compaction can lead to an increased N2O emissions by decreasing soil oxygen supply. How this happens is discussed in this review.

# EJP SOIL INNOVATION HIGHLIGHTS


Foto: M. Gerzabek

## 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 FUNDED PROJECT
## TRACE SOIL

The project aim is to identify the mechanisms underpinning trade-offs and synergies of soil carbon sequestration, greenhouse gas emissions and nutrient losses in agricultural soils across Europe, and propose climate-zone specific indicators and measures to mitigate trade-offs.

**PROGRAMME COORDINATOR:**
Marta Goberna
marta.goberna@inia.es

## TARGET EJP SOIL EXPECTED IMPACT AND SOIL MISSION OBJECTIVES

Understanding of soil management for climate change mitigation, adaptation, sust production & sustainable environment

Mission SOIL: Improve soil structure to enhance soil biodiversity

**HIGHLIGHT FACTS FROM:**
EJP SOIL project
TRACE SOIL

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