



SOILS ARE SOUR

40–50% of the arable soils worldwide are acidic, having a pH of below 5.5. Liming can increase soil pH and improve plant productivity



REDUCTIONS

The study found that liming reduced nitrous oxide emission, as it promotes microbial reduction from N₂O to N₂ in denitrification and stimulates N uptake by plants



INCREASED CO₂

Increased CO₂ emissions under liming may be linked to improved plant and microbial growth and thus respiration



AUTHORS

Hui-Min Zhang, Zhi Liang, ...
Diego Abalos (2022)

LIMING'S IMPACT ON SOIL GREENHOUSE GAS FLUXES: A META-ANALYSIS OF BIOLOGICAL DRIVERS



Climate impact

Liming exerts a strong impact on microbial communities involved in the production and consumption of GHG emissions. This strong relationship processes can be used to identify strategies to reduce the emissions.

EJP SOIL INNOVATION HIGHLIGHTS



EJP SOIL CARBOSEQ

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 CARBOSEQ

The aim of project CarboSeq is to estimate the feasible SOCsequestration potential taking into account technical and socio-economic constraints. The project is aligned with the current FAO activity for a “global SOC-sequestration potential map” (GSOCseq).

PROJECT COORDINATOR:

Axel Don

axel.don@thuenen.de

TARGET EJP SOIL EXPECTED IMPACT AND SOIL MISSION 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 funded project:
CarboSeq



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