# Distribution of earthworms in agricultural soils across Europe: Diverse patterns and associated ecosystem functions

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## BACKGROUND

Little is known about the diversity, abundance, and distribution of earthworms in Europe due to lack of harmonized, interactive and continental scale earthworm's data in agriculture soils.

To assess the role of earthworms in agricultural soils, appropriate functional indicators with their patterns and biomass are needed.



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Identifying the knowledge gaps of central databases for earthworms and their driving factors in agricultural soils across Europe.

Investigating the earthworm ecosystem function relationships to address the lack of harmonized, interactive, and continental-scale data in agroecosystems.



Establishment of an inventory of harmonized data for successful integration of the available spatiotemporal earthworm data for modelling and decision-making purposes.

### METHODOLOGY

Identification and collection of earthworm data from soil databases and other EJP Soil projects.



Data association with standardized metadata and data harmonization with project partners (e.g., EUdaphobase, EUSO).

An interactive inventory with pre-existing earthworm database for validating, mapping and policy-making.







#### PERSPECTIVES

Integration of harmonized earthworm data in an interactive platform (eg. EUdaphobase, EUSO) to reach researchers for long-term (>10 years).

A comprehensive database on earthworm biodiversity, species and ecosystem function relationships across pedoclimatic conditions will support policy makers in their efforts to halt a further loss of soil earthworm data across Europe.



European scale earthworm data maps will help researchers to understand diverse patterns with associated ecosystem functions.

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### **For Contribution!**

L'INSTITUT

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You can provide earthworm or soil biodiversity (macro & meso fauna) data by contacting us:

EJP SOIL

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