BLOCK B (11:15-13:00)

Indicators for soil ecosystem services

Involved projects: SERENA, MINOTAUR, ARTEMIS

Conveners: Klaus Jarosch (Agroscope), Costanza Calzolari (CREA), Stefano Mocali

Agricultural soils have the potential to convey ecosystem services (ES) mainly linked to provision of food, regulation of water regime, and climate mitigation by carbon sequestration. Agricultural intensification negatively affected the environment through soil degradation, loss of biodiversity and increased both greenhouse gas (GHG) emissions and nutrient leaching. Concurrently, a high soil quality status is required for ensuring 75% of soils are healthy by 2030 for food, people, nature and climate. In this context, the promotion of agro-ecological practices is crucial to re-design agricultural systems by increasing ecosystem resilience to mitigate climate change effects. This session aims to present and discuss different methodological approaches in collecting soil quality and crop productivity data for monitoring, modelling, and mapping European agro-ecological systems. Particularly, the definition and evaluation of indicators able to catch ES status at all scales and target values for healthy soils and sustainable agroecological systems are particularly welcome.