Fractionating soils to characterise their mineral-organic composition

Soil organic carbon is important for soil health and biodiversity and can also help to mitigate climate change. Understanding its composition is important. Fractionation of soil is conducted to elucidate the fate of organic matter in the soil. This can have several purposes, such as understanding processes of soil organic carbon (SOC) stabilisation, quantification of potentially labile SOC or short-term plant available macro-nutrients, quantification of environmental changes on long-term SOC sequestration or calibration and initialization of carbon turnover models.

This project will develop a method to fractionate soils to derive and compare the organic-mineral properties of the different fractions.

Activities: intensive mostly laboratory-based research with some statistical data analysis.
Suited to: students who are interested in laboratory method development.
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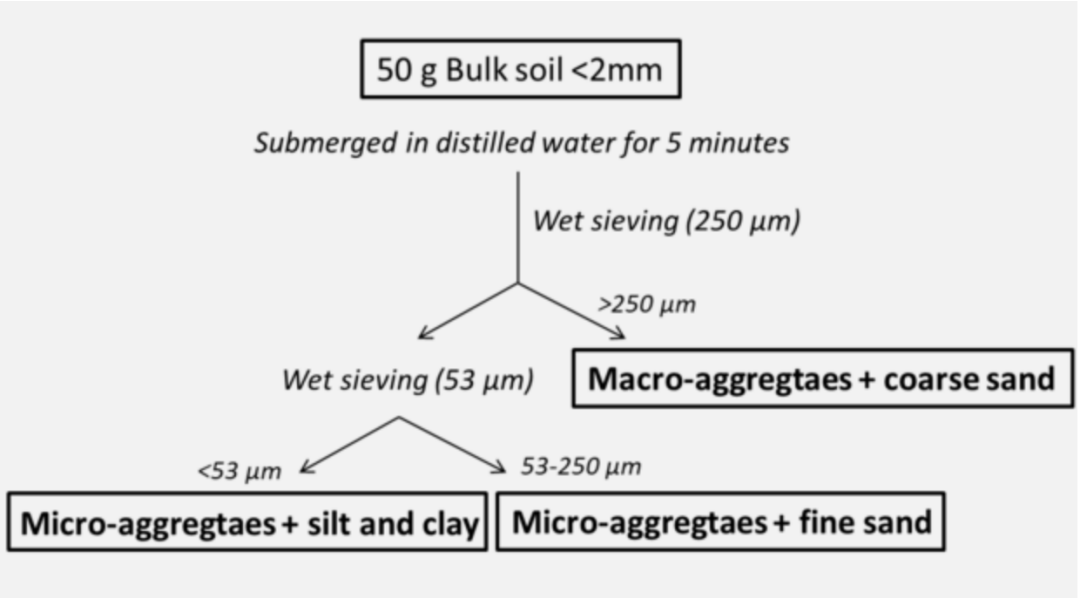

A sol fractionation method might involve several steps to isolate the different SOC fractions.