Holocene plant community changes in the Western Alps, as inferred from sedaDNA

Aims
➢ To reconstruct the plant community composition during the Holocene by using sedaDNA.
➢ To investigate the cause of past environmental changes in alpine ecosystems along the Holocene.

Preliminary findings
- The count of genera recovered from each lake range from 100 to 350, and includes trees, shrubs, herbs, ferns, and algae. A large proportion of the sequences can be identified to species level.
- In some lakes, human-related impacts are detected ( ), whereas other are mainly climate driven.

Materials & Methods
- DNA extraction: DNeasy powersoil kit
- Metabarcoding PCR: trnL P6 loop, 8 replicates
- Library preparation & sequencing
- Bioinformatics: OBITools, Ecotag, PhyloAlps, GenBank