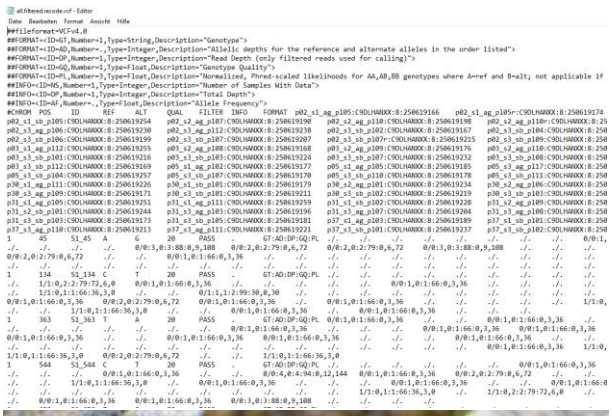
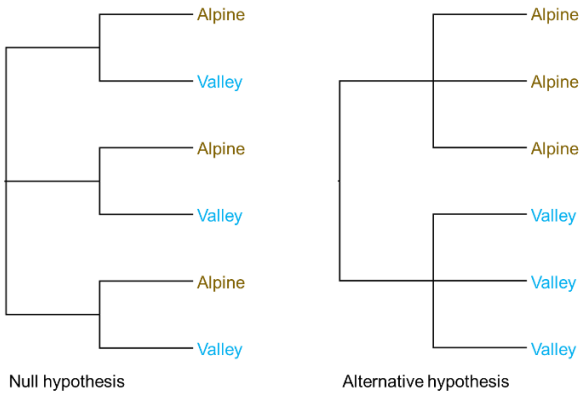
Master's theses offered at the **Institute of Botany**

Genetic diversity analysis for biological conservation





Photos: *Chara vulgaris* (source: "Charophytes of Europe"), *Linaria alpina* (Karin Tremetsberger)

Aim

At our institute, we have assembled genomic data of various plant taxa. The aim of the master's theses is to analyse the data to answer questions about population genetic structure, migration and genetic relatedness relevant for conservation. The thesis work can be started any time. Students may choose from the following topics:

- Differentiation between seasonal cohorts of an annual weed (*Diplotaxis erucoides*)
- Dispersal patterns in alpine plants (*Arabis alpina*, *Linaria alpina*)
- Comparison of microsatellite (SSR) and genotyping-by-sequencing (GBS) data for assessment of population structure (*Cyperus fuscus*)
- Phylogenetic analysis using whole chloroplast sequences in charophytes

Please contact us for further information!

Requirements

Basic knowledge of genetics

Computer skills: Linux, R, motivation to learn new software

Interest in population genetics and phylogenetics

Language

English or German

Information and supervision

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