

# MSc thesis opportunity

## Effects of summer drought on phenology and leaf reflectance in beech tree saplings

**Background:** Global change exerts pressure on forests worldwide. In Europe, forested areas are rapidly changing in response to human land use and to the changing severity and frequency of climactic events such as drought. The standing genetic diversity of forest tree species encodes their current potential to respond and adapt to these stressful events. This project aims to understand how genetic diversity in the form of different provenances and seed families affects traits of European beech trees in a common environment.

**Experiment:** We will use a tree common garden experiment with over two hundred beech saplings from all over Europe to find out how drought affects their phenology and other traits, with a focus on traits that can be remotely sensed – and thus surveyed directly in their parents' forests. Will a tree's provenance determine how it fares under summer drought? You can find out!

For this project, I'm looking for a student who enjoys working with trees, has an interest in both fieldwork and lab work, and is keen to work at the interface of genetics and remote sensing. Contact me if you want to know more. Also, I'd be happy to chat about different possibilities and ideas. Looking forward to meeting you!

When: 2022/2023 (starting date negotiable, ideally May or July 2022)

Location: Irchel Campus, UZH

**Contact/Supervision:** Sofia van Moorsel (Postdoc, Department of Geography)

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