

Department of Forest Genetics and Forest Plant Breeding Georg- August- Universität Göttingen Büsgenweg 2 37077 Göttingen Göttingen.

Bachelor's Thesis Announcement

Title:

Divergent Paths to Survival: Analysis of Drought and Frost Adaptation in Two Subspecies of Quercus robur.

Thesis Overview:

This project aims to investigate how two subspecies of *Quercus robur* differ in their adaptation to drought and frost stress. These populations span a wide ecological range, providing an ideal study panel to study environmental adaptation mechanisms. Key traits to be evaluated include mortality, growth response, stomatal density, water use efficiency, and chlorophyll fluorescence (for drought tolerance), as well as bud burst, bud initiation, and leaf discoloration (for frost tolerance).

Tasks:

The student will work with data from over 2,000 plants, analysing a range of physiological and phenological traits associated with drought and frost adaptation.

Your Profile:

Some experience with R (or strong motivation to learn) is desirable for data analysis. You should also be willing to participate in hands-on phenotyping as part of an ongoing experiment.

Contact:

Prof. Dr. Oliver Gailing: ogailin@gwdg.de;L. Victor Aiyesa: lekevictor.aiyesa@uni-goettingen.de

Department of Forest Genetics and Forest Tree Breeding

