



## PhD Program in Plant Sciences - Genetic Diversity: Techniques

**Lecturers:** Dr. Aria Minder, Genetic Diversity Center, ETH Zürich  
**Location:** Genetic Diversity Center, Universitätstrasse 16, CHN E 55.1  
**Dates:** Nov 6 & 27, 2024  
**Time:** 13:15 – 17:00  
**Credit Points:** 2 ECTS

### Course Description:

This course provides laboratory training for advanced students (master, doctoral or post-doctoral level) in how to measure and collect genetic diversity data. Various DNA/RNA extraction methods, quality control measurements, SNP genotyping and gene expression techniques will be addressed.

After an introduction (one afternoon), students will have three weeks to work in groups of two on different protocols according to their timetable. At the end, the whole group meets for another afternoon to present the techniques/results and to discuss the advantages and disadvantages of the different techniques.

Examples: RNA/DNA extraction, SNP genotyping, real-time qPCR.

**Prior Knowledge:** No prior knowledge about the techniques presented is required. However, we expect that people have some lab experience.

**Number of Participants:** A maximum of 4 students will be able to enrol in this course via the PSC.

### Individual Performance and Assessment:

Students have to attend on the two afternoons (8 hours) and do the individual work in between (around 52 hours). At the end they have to present their technique and their results in a talk.

**For more information, please check:** <http://www.vvz.ethz.ch>