

The Research Group of Plant Ecological Genomics (<http://plantgenomics.univie.ac.at>) of the Department for Botany and Biodiversity Research at the University of Vienna, Austria is recruiting a

## MSc student in Plant Evolutionary Biology (m/f)

Whole genome doubling and hybridization profoundly shaped plant genome evolution. However, to be successful, first generations allopolyploids must quickly adjust their genome and function, thereby altering their ecological properties and adaptive success, as a function of their environment. The duplicated nature of polyploids provides genome-wide opportunities for adaptive evolution. Recurrent origins of polyploids are widespread and provide natural replicates to study mechanisms of rapid adaptation to divergent environments.

An MSc project is immediately available in our group, focusing on a fairly young polyploid group, comprising sibling European, terrestrial orchids with divergent ecological preferences. Specifically, to complement ongoing analyses on the nature of extant molecular diversity within *Dactylorhiza* allopolyploids, we will interrogate in detail the ecological divergence between different polyploid and diploid lineages. We will focus on two ecological components: edaphic (soil chemistry) and climatic (temperature data collected with loggers planted within wild populations). Further, the molecular relevance of this divergence will be investigated with qPCRs of selected genes within individuals from natural populations and from reciprocal transplantations. Field work across European areas will be undertaken in May-June. Our multinational team will provide the necessary support with both bioinformatics and wet-lab training.

The candidate should have

- a BSc degree and interest in experimental or computational fields, such as molecular ecology, ecological/functional genetics, bioinformatics, experimental population genetics, or similar;
- high motivation and enthusiasm;
- some computer literacy, ideally R knowledge;
- preferred: experience (e.g., from a course) with qPCRs or other RNA wet-lab protocols;
- excellent organization and communication skills;
- the ability to work in an international team;
- fluency in English (NB German knowledge is not essential);
- preferred: driving license class B (for field work).

You will be integrated in an international, interdisciplinary team with English as the working language. We offer ample opportunities for training/career development. Possibilities for a stipend exist, depending on involvement and output. Your expected weekly input can be flexible, but will average to ca 16 hours a week for up to one year. See also <http://master-program-botany.univie.ac.at/>

To be considered please send your application as a single pdf file to [ovidiu.paun@univie.ac.at](mailto:ovidiu.paun@univie.ac.at), including a motivation letter with a statement of research interests (max. 1 page), your CV and if applicable publication list, university certificates including grades, and the names and contacts of three referees. Please note: Incomplete applications will not be considered.

Screening of applications will begin immediately and will continue until the position is filled.