UNIVERSITY OF HOHENHEIM

PhD position 210b-2019-2 – Phylogeography of Mediterranean orchids

A PhD position is open for a highly motivated student with a keen interest in evolutionary and ecological questions, and a solid knowledge of plant biology, genomics and bioinformatics/statistics.

The successful candidate will be part of a team investigating the ecological, molecular and genomic basis of pollinator-mediated reproductive isolation and ecological speciation between sexually deceptive orchids of the genus *Ophrys*. The project will investigate phylogeography and demography of the *Ophrys iricolor* lineage in the Aegean. To do so, ecological and evolutionary genomic approaches will be employed using state-of the-art NGS platforms. This will involve the integration of genomic with various phenotypic and Omics data sources. Data collection will also involve field work in natural populations. For background information on the study system, please see e.g. Schlüter & Schiestl (2008, *Trends Plant Sci.*), Schlüter & al. (2011, PNAS) and Sedeek & al. (2013, *PLoS One*; and 2014, *Mol. Ecol.*) and Breitkopf & al. (2015, *New Phytol.*).

The ideal candidate should be highly motivated and able to articulate her/his motivation for this project clearly. S/he should be well organised, with a thorough understanding of evolutionary biology, population genomics and molecular biology, and would ideally have an interest in speciation and plant-pollinator interactions. The candidate is expected to be proficient in statistical data analysis, with a good working knowledge of R and proven experience in bioinformatics, ideally with an ecological genomics or population genetics background. Programming/scripting skills in other languages are an advantage. Prior NGS experience, exposure to phylogenetic and phytogeographic approaches, familiarity with demographic inference and ecological niche modelling would be a ideal. Since the student will have to prepare libraries for Illumina sequencing, laboratory skills (working with DNA) are necessary; previous field experience is a plus. Proficiency in English and good communication skills are essential, as is a valid driving licence, a completed MSc degree (or equivalent) in biology, biochemistry or a related discipline, and the proven ability to carry out research independently. German language skills are a plus.

We offer a 3-year position as a PhD student at the University of Hohenheim, Germany (salary level 50% TVL-E13), an innovative and international research university in the south of Stuttgart. The pleasant campus is close to the airport and hosts a well equipped research infrastructure, a baroque palace, and rambling parks. The successful candidate will be a member of the Institute of Botany (future Institute of Biology) and will work in a young, active and interdisciplinary environment and will have access to state-of-the-art tools and techniques. The University of Hohenheim seeks to increase the proportion of women in research and teaching and strongly encourages qualified female scientists to apply. With equal qualifications, preference will be given to candidates with disabilities.

Your application should consist of a letter of motivation (1-2 pages), your CV and (if applicable) publication list, and the names and e-mail adresses of three academic referees. The letter of motivation should detail why you are personally interested in the project, why you find it relevant and why you think you are well-suited to undertake it. Please send your application (or any requests for further information) electronically to Prof. Philipp Schlüter (sekretariat-210@uni-hohenheim.de) as a single PDF file. Screening of applications will begin on 1 April 2019 and continue until the position is filled. The position is available thereafter, but the start date is negotiable.