



## PhD position in Plant Ecology

We welcome applications from highly motivated and skilled people for a PhD position in Plant Ecology. The PhD student will work on the project titled '**Land use induced variation in mycorrhizal trait composition of plant communities under different climatic and edaphic conditions**'. The project is for 4 years (01.09.2017-31.08.2021).

### The position

The successful candidate will be a member of the Lab of Plant Ecology, Department of botany, Institute of Ecology and Earth Sciences, University of Tartu and will be co-supervised by Professor Martin Zobel, Senior Researcher Mari Moora and Researcher Guillermo Bueno.

See [http://www.botany.ut.ee/planteco/en/plant\\_ecology\\_laboratory/news.html](http://www.botany.ut.ee/planteco/en/plant_ecology_laboratory/news.html).

We seek a PhD student interested in mycorrhizal ecology from a plant ecological perspective. The candidate will use information on plant mycorrhizal traits (mycorrhizal type and mycorrhizal status of plant species) at different scales as tools to answer the following ecological questions:

- A) How does the distribution of plant mycorrhizal traits vary along major climatic and edaphic gradients within Europe?
- B) How does human land use alter the plant mycorrhizal trait composition in vegetation?
- C) Does the effect of land use on mycorrhizal trait composition vary among vegetation stands under different climatic and edaphic conditions?

Information on mycorrhizal traits will be collected both empirically and through a literature search. In order to address these questions, statistical models accounting for spatial and phylogenetic dependencies will be applied.

The PhD student will collaborate with researchers within Estonia and internationally and will gain experience in quantitative ecology, mycorrhizal ecology and plant community ecology.

### Qualifications

*Required qualifications of the successful applicant:*

A Master's degree (or equivalent). Applicants must have defended their master thesis by June 2017.

Experience in applying quantitative analyses in ecological contexts

Written and verbal communication ability in English

*Desirable qualifications of the successful applicant:*

Ability to conduct statistical analyses in the R-language environment

Experience in and knowledge of statistical analyses (such as GLM, GAM, mixed models, path analyses and structural equation modelling).

Experience in community analyses including multivariate approaches.

Experience using GIS.

## **Evaluation of candidates**

Candidates are invited to submit a motivation letter (up to 2 pages) describing their qualifications (name of the curricula, topic of master thesis), experience (participation in research projects etc), skills (fieldwork, statistics, use of R etc) and motivation for their application.

Motivation letters are asked to be sent to Martin Zobel ([martin.zobel@ut.ee](mailto:martin.zobel@ut.ee); Cc to PhD Teele Jairus: [teele.jairus@ut.ee](mailto:teele.jairus@ut.ee)) by **April 30th 2017**. The evaluation committee will rank the applications, toplisted candidates will be interviewed by Skype. The outcome of the evaluation will be announced by the first week of June 2017. The successful applicant will then further be informed about the formal procedures.

**For more information** do not hesitate to contact Martin Zobel ([martin.zobel@ut.ee](mailto:martin.zobel@ut.ee)) and Mari Moora ([mari.moora@ut.ee](mailto:mari.moora@ut.ee)).