

PhD position on microclimate ecology and adaptive potential of forest herbs

The Honnay lab of KU Leuven (Belgium) is seeking a highly motivated PhD student to work on the MICROMICS project: *“microclimate- and genomics-informed distribution modelling to improve predictions of species’ range dynamics and extinction risk under environmental change”*.

About the Honnay lab

The lab is part of the division Ecology, Evolution and Biodiversity Conservation of the Biology Department at KU Leuven. We aim to improve our understanding of the eco-evolutionary dynamics of natural and cultivated plant populations in relation to their local environment. We combine fieldwork with genetic data analysis and state-of-the-art modelling techniques to answer eco-evolutionary questions such as “how does climate change impact genetic diversity and evolutionary potential?”. More information? See <https://bio.kuleuven.be/eeb/oh>

About MICROMICS

Climate change has been identified as one of the most important human-induced global drivers of biodiversity loss. Understanding and forecasting the effects of climate change on biodiversity are among the major challenges of our time. Microclimate conditions and eco-evolutionary processes manifesting at fine spatial scales are key to understanding how organisms respond to changing environmental conditions, yet, they are frequently neglected when studying biotic responses to global change. The MICROMICS project aims to study the importance of microclimate as a driver of fine-scale adaptive evolution, dispersal, climate change exposure and sensitivity, and, ultimately, range-wide species dynamics.

Position

We will hire two PhD students for the MICROMICS projects. The successful candidate will closely collaborate with the second PhD student at the Division Forest, Nature and Landscape. They will use remote sensing and geodatabases to develop high-resolution microclimate temperature maps and to assess the effect of microclimate on forest plant species. **This position, under the supervision of Hanne De Kort, Koenraad Van Meerbeek and Olivier Honnay**, will focus on the role of microclimate in shaping adaptive evolution (adaptability) and plant dispersal dynamics using field and genetic data. This information will then be used to map hot spots of high adaptability and dispersal corridors, which are key to the persistence of conservation networks and range-wide population dynamics. Fieldwork is planned along a latitudinal gradient across Europe (from France to Norway) and will be in collaboration with the international [FLEUR network](#).

General profile of the candidate

- You hold an MSc degree in a relevant field (Biology, Bioscience Engineering, Environmental Sciences or related fields) or you will have obtained it by the time you start working
- You can demonstrate excellent study results

- You have a passion for nature and biodiversity
- You have a background in terrestrial ecology
- You have knowledge of evolutionary biology and/or genetics
- You are enthusiastic to carry out fieldwork across Europe
- You have knowledge of programming languages such as R or python
- You are fluent in English, both written and oral
- Having a driving license is a plus
- You are willing to collaborate and be a team player with good communication skills

Our offer

- A full-time PhD fellowship (4 years) following a positive evaluation after one year
- Tentative starting date: January 2023
- The successful candidate will be based at the division Ecology, Evolution and Biodiversity Conservation in Leuven (Belgium) in Leuven (Belgium)
- Your monthly scholarship amount is calculated according to the scholarship amounts for doctoral scholarship holders on the [pay scales for assistants](#)
- You will receive ecocheques, a bicycle and a bicycle allowance or a full reimbursement of public transport costs for commuting. See [here](#) for full benefits including holidays and bonuses
- Collaboration in a young and dynamic international scientific team. Life-work balance is important for us

How to apply?

Send your application (CV and application letter) to hanne.dekort@kuleuven.be | Application deadline: 15th September 2022 | Notification of selection for interview: end of September 2022 | Interviews (online): October 2022