PhD student in the research education subject Biology

Ref SLU.ua.2020.2.5.1-4084

The Department of Crop Production Ecology is part of the Ecology Centre and together with the Department of Ecology, it offers a stimulating research environment in Uppsala. We provide education and perform research on plants for food, animal feed, and energy. The research and teaching focus strongly on plant production and its interaction with the surrounding environment. The research programmes address how different production methods, cultivation environments, and systems influence harvestable yields and other ecosystem services, as well as the surrounding environment. We teach about plant production, plant ecology, eco-physiology, and plant production systems in an ecological sustainability context.

Climate change mitigation through carbon sequestration in mixed tree plantations

Are you searching for a PhD project in which you, together with colleagues at various research organizations across Europe, will contribute to analyze the synergies and trade-offs between the climate change mitigation and adaptation potential of mixed tree plantations? Do you thrive in a multidisciplinary and international research environment? Then this PhD position in the research education subject biology at the Department of Crop Production Ecology, SLU Uppsala should be of interest to you.

The PhD project will contribute to the recently funded BIODIVERSA project MixForChange, for which the overall objective is to evaluate mixed tree plantations as nature-based solutions to fight the causes and consequences of climate change. Forest landscape restoration and afforestation have recently received much international attention as a crucial opportunity for mitigating climate change. In the face of climate change, adaptation and mitigation by forests are ultimately linked, because the ability of forests to sequester carbon in the long run depends on the ability of trees to cope with multiple stresses. Evidence suggests that mixed tree plantations are more efficient in sequestrating carbon, while better coping with climate change-related stress. These mixed plantations thus represent an opportunity for a nature-based solution for climate change mitigation and adaptation. Using a global network of tree biodiversity experiments (TreeDivNet, [http://www.treedivnet.ugent.be/index.html](http://www.treedivnet.ugent.be/index.html)), MixForChange will provide a mechanistic understanding of how tree diversity, stand components and management (thinning and fertilization) influence both the potential of mixed tree plantations to mitigate (C sequestration) and adapt (drought and herbivory resilience) to CC. In addition, MixForChange will translate this knowledge into guidelines that can be widely adopted by practitioners and policy-makers. As a PhD student within MixForChange, you will have the opportunity to develop your networks within academy,
practioners and policy-makers. Your work will include field sampling in several locations across Europe, as well as data processing and writing.

Qualifications:

The successful candidate should have a background in biology or forest ecology with sound knowledge of plant ecology. Experience of field work is a merit. Good skills in English (both written and oral) is required as well as to communicate (understand and speak), or being willing to learn, Swedish or another Scandinavian language. Particular emphasis will be placed on your personal skills as team player as well as your ability to take initiatives and work independently. You need to have a driving license.

Location:

SLU Uppsala, Department of Crop Production Ecology

Form of employment:

Employment as PhD student 4 years

Application:

Welcome with your application (by clicking on the application button) by 2020-12-15 at the latest.

A person has basic eligibility for third level education if he or she has taken a second level qualification or has completed course requirements of at least 240 higher education credits, including at least 60 higher education credits at second level.

Selection among applicants meeting the requirements is made with reference to written application including curriculum vitae, copies of degrees and transcripts of academic records, one copy of the dissertation for masters or undergraduate degree, a list of at least two references familiar with the applicant’s qualifications, certified knowledge of the English language and an interview.

Please note that the applicant(s) who will be called for an interview will need to submit certified copies of the diploma and register extracts from previous studies at the undergraduate and graduate levels from a university, and that applicant(s) with foreign citizenship must also submit a certified copy of the page in the passport containing the photo and personal information.

Read more about the PhD education at SLU at www.slu.se/utbildning/programkurser/forskarutbildning/

Academic union representatives:

https://internt.slu.se/min-anstallning/facket/kontaktpersoner/
The Swedish University of Agricultural Sciences (SLU) develops the understanding and sustainable use and management of biological natural resources. The university ranks well internationally within its subject areas. SLU is a research-intensive university that also offers unique degree programmes in for example rural development and natural resource management, environmental economics, animal science and landscape architecture.

SLU has just over 3,000 employees, 5,000 students and a turnover of SEK 3 billion. The university has invested heavily in a modern, attractive environment on its campuses in Alnarp, Umeå and Uppsala.

www.slu.se

SLU is an equal opportunity employer.

Contact person

Martin Weih
Professor in Plant Ecology
+46-(0)18 67 25 43
martin.weih@slu.se

URL to this page: https://www.slu.se/en/about-slu/work-at-slu/jobs-vacancies/?rmpage=job&rmjob=4208&rmlang=UK

Apply