



PhD position in ecology

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Department of Ecology

Are you looking for an exciting PhD position working with the ecology of farming systems and efficiency of agroecological practices? Would you like to work with a broad network of researchers, farmers and actors in the food chain to develop sustainable cropping systems with a focus on Sweden? Are you highly motivated to undertake PhD training and to actively pursue an academic career?

The Department of Ecology at the Swedish University of Agricultural Sciences (SLU) invites applications for a PhD student position, linked to a research project focusing on agriculture's transition towards sustainable food production.

Duties:

The production of agricultural crops needs to be transformed to achieve several of the UN's goals for sustainable development and to mitigate and adapt to climate change. There is a growing interest in more resilient and sustainable crop production relying more on the ecosystem services that cultivated and wild biodiversity contribute. However, the uptake of crop production based on such agroecological practices is low. This is partly due to a lack of knowledge about the ecological and economic resource use efficiencies and trade-offs. This doctoral project is part of an interdisciplinary research project where we investigate these efficiencies and trade-offs together with farmers and actors in the entire food chain. We will investigate how resource use efficiencies change across farms implementing practices such as diverse crop rotations, cover crops, reduced tillage and reduced nitrogen and pesticide use. The successful candidate will track ecological resource use efficiencies and how ecological processes, such as biological pest and weed regulation and nutrient cycling, drive input-output relations across farms with contrasting practices. The candidate will work closely with a PhD-student in economics placed at the Department of Economics (SLU), who in parallel tracks economic efficiencies on the same farms. This project provides the opportunity to work with actors in the entire food value chain from farmer to consumer, including process industry and retail in the effort to extract added value from sustainable farming and assess capacity for upscaling.

As a PhD student in biology with specialisation in ecology, the student will carry out supervised research leading to a PhD thesis as well as taking PhD courses to the equivalent of 30 credits.

The position is based at the SLU Department of Ecology in Uppsala, Sweden. The project is a close interdisciplinary collaboration including the Departments of Ecology, Crop Production Ecology, and Economics. Within the Ecology department, the student will join the Agricultural Entomology team comprising about 25 staff-members including several PhD students, post-doctoral researchers, research assistants, senior researchers, three senior lecturers and a professor. The successful candidate will be part of a stimulating and dynamic research environment and an extensive national and international network with colleagues who focus on multiple aspects of sustainable agriculture. Topics of interest include the ecology of primary production and ecosystem functions driven by communities above and below ground. Solutions are sought to produce enough food, preserve threatened species, support biological diversity and ecosystem services in changing climate and land use. Active collaborations with and outreach to farmers and other stakeholders in the food sector are key activities.

Qualifications:

To qualify, it is necessary to have at least 240 higher education credits in ecology, agronomy, biology, environmental sciences, agricultural engineering, or equivalent fields. Written and oral skills in English is required, corresponding to Swedish upper secondary school English 6 or equivalent level from an internationally recognised language test (TOEFL, IELTS or Cambridge ESOL). Skills in experimental ecology are meriting, as is experience with database handling and statistical analysis. The successful applicant should be strongly motivated to work with tasks outlined above. The candidate is expected to be capable and willing to take initiative to work independently to move the project forward and work well in a team. Driver's license is a merit.

The selection among the eligible applicants will be based on their capacity to benefit from the training, their ability to collaborate, as well as their creativity, initiative, and independence. Particular emphasis will be placed on their written motivation, which should outline their research interests and expectations for the project. It should describe what makes the applicant a motivated and suitable candidate for pursuing a PhD program in general and for this position in particular. Personal merits will play a significant role in the recruitment process.

Place of work:

Uppsala, Sweden.

Form of employment:

Fixed term employment of 4 years.

Extent:

100%

Starting date:

According to agreement.

Application:

We welcome your application no later than 2022-05-06, use the button below. Applications sent via email will not be considered.

The application must be written in English and must contain: i) a statement of your scientific interests and motivation for applying to this position (max 8000 characters including spaces); ii) Curriculum Vitae including a complete publication list; iii) contact information to at least two reference persons; iv) certified copies of previous university degrees and transcripts of completed courses.

Academic union representatives:

<https://internt.slu.se/en/my-employment/employee-associations/kontaktpersoner-vid-rekrytering/>

The Swedish University of Agricultural Sciences (SLU) is a world-class international university with research, education and environmental assessment within the sciences for sustainable life. Its principal sites are in Alnarp, Umeå and Uppsala, but activities are also conducted at research stations, experimental parks and educational establishments throughout Sweden. We bring together people who have different perspectives, but they all have one and the same goal: to create the best conditions for a sustainable, thriving and better world.

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.

www.slu.se

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