PhD position in Ecology - ecosystem functioning in insect-plant-soil food webs Uppsala

Ref SLU ua 2019.2.5.1-2064

Apply

Department of Ecology

The position is based at the Ecology Centre at the Swedish University of Agricultural Sciences (SLU), in Uppsala, Sweden. The centre includes the Department of Ecology where we perform research on populations, communities and ecosystems. We generate knowledge on how land use and climate affects animals, plants, nutrient cycling and greenhouse gas balance. Solutions are sought to mitigate climate change, preserve threatened species, benefit biological diversity and ecosystem services in managed landscapes. Active outreach and frequent dialogue with stakeholders are key activities. We build on extensive national and international research collaborations to generate cutting-edge research and outreach to further ecology as science and promote sustainable natural resource management.

Ecosystem functioning in insect-plant-soil food webs

Description:

Global land-use determines the abundance and species composition of diverse organism communities above and below ground, and thereby the level and stability of ecosystem functions such as primary production, decomposition, herbivory, and predation. Understanding how shifts in biodiversity affect ecosystem functioning requires much more research. The resultant knowledge forms the basis for the sustainable management of ecosystem services (e.g. crop yield, pest control, nutrient cycling) in agriculture.

The PhD-student will explore how diversifying crop production (e.g. through crop rotation, organic fertilization) affects communities of arthropods, plants and soil biota and their functions. The project includes a strong element of large scale field experiments. The research is expected to provide fundamental ecological insights into the links between environment, biodiversity and ecosystem functioning in coupled below- and aboveground communities. In addition, the research will have strong applied relevance as the findings provide base for sustainable biodiversity-based agriculture.

The successful candidate will enter a world leading research team led by Prof Riccardo Bommarco and Prof Tomas Roslin, with extensive empirical, theoretical and technical in-house expertise and support (www.slu.se/bommarco-lab, @BommarcoLab, www.slu.se/en/cv/tomas-roslin), working with multiple aspects of ecology and agronomy.

Qualifications:

We are looking for a highly motivated candidate actively pursuing an academic career in ecology with an interest in functional and community ecology. To qualify you need at least 240 higher education credits in ecology, biology, environmental sciences, agronomy, agricultural engineering or equivalent fields. Written and oral proficiency in English is required. Skills in community and experimental ecology are meriting, as is experience with database handling and statistical analysis. The candidate is expected to be capable and willing to take initiative and work independently as well as in a team.

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 your written
motivation, which should outline your research interests and expectations for the project, and describe what makes you a motivated and suitable candidate for pursuing a PhD program in general and for this position in particular.

Place of work:

Uppsala, Sweden

Forms for funding or employment:

Limited time employment (4 years) full time (100 %)

Starting date:

According to agreement.

Application:

We welcome your application no later than 14 June 2019. Use the button above/below.

Applications must be written in English and contain (i) a statement of 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, and (iv) certified copies of previous university degrees and transcripts of completed courses.

A person has basic eligibility for third cycle education if he or she has taken a second cycle qualification or has completed course requirements of at least 240 higher education credits, including at least 60 higher education credits at second cycle education. Upper secondary school grades equivalent to English B/English 6 are a basic requirement.

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 observe that applicant/s chosen to participate in an interview shall hand in certified true copies of certificates, diplomas and transcripts from previous studies at an internationally recognized higher education institution (university or university college) and transcripts in connection to the interview. If the applicant is a foreign citizen we require a certified copy of the page in your passport with your personal data and photograph.

Read about the PhD education at SLU at www.slu.se/en/education/postgraduate-studies/

Academic union representatives:


**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.
SLU is an equal opportunity employer.

**Contact person**

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