Postdoc in Plant-Insect Interactions

A two-year postdoctoral position is currently available within the unit for Plant-Insect Interactions at the Department of Ecology.

Research questions and study system

Ecological and evolutionary interactions can be so closely related as to be entangled. A general question to investigate is how evolution and genetic variation in plants shape their interactions with insects, and how the insects in turn impose natural selection on the plants.

Our study system is based on the host plant *Fragaria vesca* (woodland strawberry), the herbivore*Galerucella tenella* (the strawberry leaf beetle), a specialist parasitoid, and pollinators. The insects show diffuse interactions with the host plant as herbivory repels pollinators leading to low pollination success of herbivore-damaged plants.

The degree of resistance to herbivores varies widely between strawberry individuals. The postdoc will have access to a large common garden with 100 wild strawberry clones with known resistance to herbivores (ranging from very susceptible to resistant). Key questions to answer include how resource allocation to other plant traits shift in parallel with increased resistance, and if the herbivore imposes natural selection on resistance and flower production. The postdoc will also have some freedom to explore other similar questions, depending on his/her research interests.

About the Department of Ecology

The Department of Ecology at SLU conducts empirical and theoretical research for sustainable forest and agricultural production and efficient biological conservation. Our research on populations, communities, and ecosystems forms the foundation for studying the influence of land use and climate on animals, plants, soils nutrient status and greenhouse gas balances. Solutions are sought that will mitigate climate change, preserve threatened species, benefit biological diversity and ecosystem services, and control pests in forest and agricultural landscapes as well as in urban areas.

Duties: The postdoc will analyze an existing data set as well as perform new empirical research to address the key questions mentioned above. Other tasks may include supervision of PhD and Master's students.

Qualifications: Applicants should hold a PhD degree Ecology, Biology, or similar subject. Scientific qualifications within the area are necessary. Earlier experience of working with large data sets is meriting. Good collaborative ability is necessary.

Competence: We are looking for a highly motivated person with a doctoral degree in Ecology, Biology, or similar subject, where the research has been focused on evolutionary aspects of plant-insect interactions. The ranking of candidates will be made based on proven scientific competence within the subject of the position. Priority will be given to applicants who have been awarded their PhD degree at most three years before the application deadline.

Place of work: Uppsala

Form of employment: Post doc, two years.

Extent: 100%

Starting date: As soon as possible, but negotiable.

Application:

We welcome your application marked with Ref no. SLU ua 551/2014.

Please submit your application to the Registrar of SLU, P.O. Box 7070, SE-750 07 Uppsala, Sweden or <u>registrator@slu.se</u> no later than **March 7, 2014**.

Specific documents attached: CV including list of publications, max. five publications, description of previous research and current research interest (max. two pages), contact details to at least two reference persons.

SLU is an equal opportunity employer.

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, Skara, Umeå and Uppsala.

Campus Ultuna is located in the southern part of Uppsala, next to the river Fyris. It is SLU's largest campus, and one of several in Uppsala. Campus Ultuna is home to the Faculty of Natural Resources and Agricultural Science as well as the Faculty of Veterinary Medicine and Animal Science and most of the university's management and administrative departments. The campus itself is currently undergoing substantial modernisation and renewal, and one of the most recent additions is the new university animal hospital – the only one of its kind in the country, combining advanced veterinary care with frontline research.

Further information:	Academic union representatives:
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Specific documents attached: CV including list of publications, max. five publications, description of previous research and current research interest (max. two pages), contact details to at least two reference persons.