

# PhD student in Ecology and Evolution

at [the Department of Ecology, Environment and Plant Sciences](#). (Closing date: 24 April 2018.)  
**Prolonged application time! New closing date: 25 May 2018.**

At the Department of Ecology, Environment and Plant Sciences at Stockholm University, research and education is conducted in an international environment. The subject areas are Ecology and Evolution, Ecotoxicology, Marine Biology, Plant Physiology and Plant Systematics. Some of the research has direct environmental and societal relevance and the approach is often broad and interdisciplinary. About 140 people are working at the Department, of which ca. 35 are teachers and researchers and 50 are PhD students.

## Project description

The Department of Ecology, Environment and Plant Sciences invites applications for a four-year PhD position as part of a project on 'The relationship between climate, disease and coffee yield: Optimizing management for smallholder farmers'.

High-profile studies have warned for the threat of climate change and fungal disease on world coffee production at a global scale. However, few studies have targeted the opportunities and challenges of smallholder coffee farmers to face such changes. For this we need detailed insights on the link between climate, disease and yield, and how the farmers can improve their livelihood by optimal management. This project focuses on the link between climate, diseases, management and the livelihood of smallholder farmers in southwestern Ethiopia. Within the study area, coffee is grown in the shade of natural trees, and the farmer therefore has the unique opportunity to influence the link between the macroclimate and the microclimate by managing the shade cover.

The overarching aim of the PhD project is to understand the relationship between management, macro- and microclimate, disease levels, and yield, and use these insights to optimize management decisions by smallholder farmers. The project is strongly interdisciplinary, including climate modelling, farmer interviews, field surveys and field experiments. More specifically, we aim to: i) use dataloggers to model the spatial and temporal variation in the macro- and microclimate, and explore future climate scenarios under different carbon-emission levels, ii) use field surveys to link climatic variation and management to disease levels and coffee yield, iii) conduct a questionnaire to understand the decision-making process by the farmer, which may be influenced by observations of past and present yield, disease levels, the macro- and microclimate and perceived ecosystem services, and iv) use a manipulative field experiment using shading and irrigation to validate the effectiveness of adaptive management.

## Qualification requirements

In order to meet *the general entry requirements*, the applicant must have completed a second-cycle degree, completed courses equivalent to at least 240 higher education credits, of which 60 credits must be in the second cycle, or have otherwise acquired equivalent knowledge in Sweden or elsewhere.

In order to meet *the specific entry requirements*, the general syllabus for doctoral studies in the field of Ecology and Evolution stipulates, that applicants must have completed at least 60 higher education credits in the second cycle, of which 15 credits must be from a course in one of the areas ecology or evolution, and 30 credits from a project in one of the areas ecology or evolution, or highly related topics like forestry, agro-ecology, plant pathology and climate modeling. Applicants may also have otherwise acquired equivalent knowledge in Sweden or elsewhere.

The qualification requirements must be met by the deadline for applications.

## Selection

The following criteria will be used to assess this capacity:

Quality of the master degree in a relevant area

Written and oral proficiency in English

Capacity for analytical thinking and quantitative analysis

Ability to work independently, to take initiative and be creative

Ability and willingness to work collaboratively in a team, including with people of different nationality, religion, gender and ethnicity

Desirable but not essential criteria:

Experience with plant pathogens / data collection in the field / questionnaires / climate modelling / climate-related research / knowledge of one or several Ethiopian languages / experience with working in

Ethiopia or other developing countries. Given the interdisciplinary character of the project, we naturally do not expect the applicant to have experience within all these fields.

The assessment will be based on previous experience and grades, the quality of the degree project, references, relevant experience, interviews, and the candidate's written motivation for seeking the position.

Admission Regulations for Doctoral Studies at Stockholm University are available at: [www.regelboken.su.se](http://www.regelboken.su.se).

### **Terms of employment**

Only a person who will be or has already been admitted to a third-cycle programme may be appointed to a doctoral studentship.

The term of the initial contract may not exceed one year. The employment may be extended for a maximum of two years at a time. However, the total period of employment may not exceed the equivalent of four years of full-time study.

Doctoral students should primarily devote themselves to their own education, but may engage in teaching, research, and administration corresponding to a maximum of 20 % of a full-time position.

Please note that admission decisions cannot be appealed.

Stockholm University strives to be a workplace free from discrimination and with equal opportunities for all.

### **Contact**

For more information, please contact project leader Ayco Tack, telephone: +46 8 16 39 59, [ayco.tack@su.se](mailto:ayco.tack@su.se). Further information about the position can be obtained from the Subject Representative Johan Ehrlén, telephone: +46 8 16 12 02, [johan.ehrlen@su.se](mailto:johan.ehrlen@su.se).

### **Union representatives**

Ingrid Lander (Saco-S) and Lisbeth Häggberg (Fackförbundet ST and Lärarförbundet), telephone: +46 8 16 20 00 (operator), [seko@seko.su.se](mailto:seko@seko.su.se) (SEKO), and PhD student representative, [doktorandombud@sus.su.se](mailto:doktorandombud@sus.su.se)

### **Application**

Apply for the position in Stockholm University's recruitment system by clicking the "Apply" button. It is the responsibility of the applicant to ensure that the application is complete and in accordance with the instructions in the job advertisement, and that it is submitted before the deadline. We recommend that you hand in your application, including necessary documents, in English.

Please include the following information with your application

- Your contact details and personal data
- Your highest university degree
- Your language skills
- Contact details for 2–3 reference persons

and, in addition, please include the following documents

- Cover letter (max. 3 pages), containing
  - Your expectations from, and intentions with, the education
  - Your motivation and research interests in general
  - Why you are interested in the specific project
  - What makes you suitable for the specific project
- CV – degrees and other completed courses, work experience and a list of degree projects/theses
- Degree certificates and grades confirming that you meet the general and specific entry requirements (no more than 6 files)

- Degree projects/theses (no more than 6 files).

The instructions for applicants are available at: [Instructions – Applicants](#).

**You are welcome to apply!**