



Graduate position, bark beetle life-cycle regulation, BOKU Vienna

The University of Natural Resources and Life Sciences, Vienna, BOKU (Department of Forest and Soil Sciences; Institute of Forest Entomology, Forest Pathology and Forest Protection) is offering a 3-year PhD position to study life-cycle regulation and host plant adaptation of the ecologically and economically important pine bark beetle, *Ips acuminatus*, a species of increasing importance.

One aim of the project is to study the effects of environmental conditions, particularly temperature and photoperiod, on the development of *I. acuminatus*. Under lab and field conditions, we will evaluate the influence of different abiotic conditions on the beetle's developmental time, to infer various thermal parameters. The findings will increase our understanding of the effects elicited by environmental parameters on the life history of this widespread insect. The data will subsequently help to predict the beetle's phenology under current and future climatic conditions.

Furthermore, *I. acuminatus* colonizes different conifer species, mostly pines but also Douglas fir. Under lab conditions, we will assess its preference for certain tree species and evaluate its breeding performance, i.e. reproductive success, in different host species, with the aim to understand patterns of host plant adaptations and its effects on forest ecosystems.

We are looking for a candidate who has strong interest in hands-on experimental work with insects, in statistical analysis of data, and is passionate in writing. A MSc degree in Biology, Ecology, Zoology, Entomology, Forestry or related fields is desired. Furthermore, interest in molecular work, knowledge in statistics (e.g. using R) and excellent writing and communication skills would be an advantage.

The 3-year project will be conducted in Vienna, one of the most-livable cities worldwide. BOKU Vienna has about 12,000 students with focus on life sciences. The institute deals with various entomological and mycological topics in forest ecosystems, with numerous PhDs, Postdocs and research staff. Gross salary is 2,294 EUR (14 times per year, plus inflation adjustment each year).

The project starts in March 2022, applications will be accepted until the position is filled. Please send a CV, if available a list of publications, a letter of motivation, and contacts of two references to the project PI Martin Schebeck, martin.schebeck@boku.ac.at. In case you have any questions don't hesitate to send an e-mail.

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