



## **Graduate position: bark beetle diapause and 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 diapause regulation in the European spruce bark beetle, *Ips typographus*.

Diapause is an important part of the *I. typographus* life cycle, as it affects survival, life-cycle duration, reproduction, voltinism, stress resistance and phenology. Diapause induction is mainly regulated by short-day length in late summer, but high temperatures are assumed to postpone the onset of this developmental pathway. Climate change-related warmer fall conditions could, thus, extend the favorable season for this insect. In this project, we aim to elucidate the effects of fall conditions on diapause induction of *I. typographus*.

In laboratory and field experiments, the PhD candidate will study the effects of photoperiod and temperature on diapause induction of *I. typographus* from various European populations. These results will provide crucial details for a more comprehensive picture of the beetle's life cycle and phenology under changing environmental conditions.

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](mailto:martin.schebeck@boku.ac.at). In case you have any questions don't hesitate to send an e-mail.

Dr. Martin Schebeck  
Institute of Forest Entomology, Forest Pathology and Forest Protection  
Department of Forest and Soil Sciences  
University of Natural Resources and Life Sciences Vienna, BOKU  
E-Mail: [martin.schebeck@boku.ac.at](mailto:martin.schebeck@boku.ac.at)  
Phone: 0043 1 47654-91617