



UNIVERSITÄT  
BAYREUTH



Evolutionary  
Animal  
Ecology

**The Department of Evolutionary Animal Ecology (Dr. Johannes Stökl) at the University of Bayreuth, Germany, offers a 3-year PhD position (65% TV-L E13, DFG-funded)**

for studying multimodal courtship signals. When communicating, animals often combine different signal modalities into a single multimodal signal instead of relying on a single modality. One hypothesis to explain the investment in multiple modalities suggests that these modalities convey different information, such as species identity and signaler's quality, allowing animals to communicate multiple messages simultaneously.

We are looking for a highly motivated PhD-candidate to test this hypothesis. We will use the parasitoid wasp *L. heterotoma* as a model to study the information content of the male courtship display, which consists of vibratory and chemical elements.

Responsibilities:

- Analyzing the vibrational and chemical courtship elements of *Leptopilina heterotoma*
- Designing and performing experiments to manipulate the multimodal signal involved in courtship behavior
- Presenting research findings at conferences and writing scientific papers for publication in reputable journals
- Co-supervising Bachelor and Master students
- Participating in departmental activities and fostering a collaborative and inclusive research environment

Qualifications:

- A Master's degree (or equivalent) in Biology, Ecology, Zoology, or a related field
- Strong background knowledge and interest in evolutionary and chemical ecology of insects
- Experience with experimental design and data analysis
- Proficiency in statistical analysis (preferably in R)
- Excellent written and verbal communication skills in English
- Ability to work independently as well as in a team environment

We offer:

- A vibrant research environment with a focus on evolutionary animal ecology and chemical ecology
- Modern and well-equipped laboratories, including specialized equipment for studying insect behavior and chemical communication
- A supportive and collaborative team of researchers

- The University of Bayreuth Graduate School as a support and service institution for all aspects of doctoral studies
- A beautiful campus located in the charming city of Bayreuth, known for its rich cultural heritage and natural surroundings

To apply: Interested candidates should submit the following documents as a single PDF file:

1. A ca. 1-page cover letter outlining research interests, relevant experience, and motivation for applying
2. Curriculum vitae (CV) including a list of publications (if any)
3. A max. 300 word abstract of a previous research project (typically your MSc project)
4. Contact information for two academic references

Please submit your application to [johannes.stoekl@uni-bayreuth.de](mailto:johannes.stoekl@uni-bayreuth.de) with the subject line "PhD Application - Multimodal Signals in Insects" no later than June 11, 2023. The University of Bayreuth values the diversity of its employees as an enrichment and expressly commits to the goal of gender equality. Female scientists are strongly encouraged to apply. Persons with severe disabilities will be given preferential consideration if they are equally qualified.

For further information about the position, please contact Dr. Johannes Stökl ([johannes.stoekl@uni-bayreuth.de](mailto:johannes.stoekl@uni-bayreuth.de)). Additional details about the Department of Evolutionary Animal Ecology can be found at [www.eae.uni-bayreuth.de](http://www.eae.uni-bayreuth.de).

We look forward to welcoming a dedicated and enthusiastic researcher to our team to explore the fascinating world of multimodal signals in insects and contribute to the vibrant academic community at the University of Bayreuth.