



The Evolutionary Biology of Invertebrates group at the University of Tübingen (Germany) is searching for a

**PhD student / Doctoral candidate in insect morphology and evolution:  
Evolutionary morphology of the hyperdiverse Pselaphinae (Coleoptera: Staphylinidae)  
and possible reasons for their ecomorphological radiation (m/f/d; 65% E13 TV-L)**

The position is limited to three years.

With ca. 10,000 described species Pselaphinae (Staphylinidae) represent a highly successful and ecomorphologically diverse subgroup of rove beetles. This project is aimed to trace the extreme ecomorphological radiation in Pselaphinae that has produced an enormous variety of lifestyles, such as for instance cave-dwelling, specialized predation, and associations with ants. Since the phylogenetic relationships within the group remain mostly unresolved, a phylogenetic reconstruction with a representative taxon sampling (extant species and fossils), based on both molecular and morphological data, will be performed. The obtained trees will be used as a backbone for further macroevolutionary analyses with the following objectives: (1) reconstruct major structural transformations that have occurred along the lineages towards extant pselaphine subgroups, and evolutionary links between various feeding types and head morphology; (2) identify of characters likely associated with increased diversification rates; (3) compare the morphological diversity between various clades and ecological groups and an evaluation of this disparity in a robust phylogenetic context.

**We offer** a DFG-funded PhD position (E13 / 65%) for three years. The successful candidate will gain experience with a wide spectrum of morphological techniques (e.g., 3D-reconstructions, SEM, macro-photography), molecular sequencing (target enrichment of UCEs), phylogenetic tree inference with morphological and molecular data and phylogenetic comparative methods. A one-month stay at the Centre for Integrative Biodiversity Discovery in Berlin (collaboration with Dr. Bonnie Blaimer) is planned, with the aim to extract genetic information from insect specimens (wet laboratory work and sequence data processing).

**We are looking for** a highly motivated student with a MSc or equivalent degree in biology, bioinformatics or related field and strong interest in arthropod evolution. A background in insect morphology and systematics and/or experience with phylogenetic comparative methods and/or with lab work and molecular sequencing is advantageous but is not a strict requirement. Programming experience with R or Python is beneficial, as it is expected that the student will independently develop automated and reproducible data analysis pipelines in the course of their research. The successful candidate should show a self-employed way of working and has to be able to communicate fluently in an English-speaking work environment. Apart from the written communication of research findings in form of peer-reviewed publications, it is also expected that the candidate will present their findings at international conferences.

The position is scheduled for 3 years with an anticipated start in October or November 2024. The salary is based on the German public tariff E13 TV-L (65%) and includes social benefits. The University of Tübingen is committed to equal opportunities and diversity. The University is committed to increasing the percentage of women in research and teaching and thus encourages women with adequate qualifications to apply. Disabled persons with equal aptitude will be given preferential consideration. The employment process will be carried out by the central administration of the university.

Please send your application as a single PDF file (CV, copies of certificates, letter of motivation, two names of potential referees) **by July 31** to Dr. Margarita Yavorskaya ([sekretariat.invertebraten@biologie.uni-tuebingen.de](mailto:sekretariat.invertebraten@biologie.uni-tuebingen.de)). For details on our working group and other ongoing projects see: <https://uni-tuebingen.de/de/147780>

**Dr. Margarita Yavorskaya**

Assistant Professor

Evolutionsbiologie der Invertebraten

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