



# Programm & Abstracts

**Entomologentagung vom 18.-21. März in Göttingen**

**Tagungsleitung und Organisation:**

Rainer Willmann (Präsident der DGaaE)

Sven Bradler

Sebastian Büsse

Christian Fischer

Julia Goldberg

Thomas Hörnschemeyer

Rebecca Klug

Fanny Leubner

Ulrike Schachtebeck

Gert Tröster

## Section 6: Amber workshop - Talk

### **Baltic amber inclusions allow new insights in the larval morphology of Berothidae (Neuroptera)**

S. Wedmann\*, V. Makarkin, T. Weiserschan & T. Hörnschemeyer

We investigated several inclusions of neuropteran larvae from Baltic amber belonging to Berothidae, which is indicated by the structure of their mouthparts, their general appearance etc. The Berothidae, also called beaded or hairy lacewings, are a small neuropteran family with almost 100 species in more than 20 genera. The larvae of only few extant berothid genera are known, and knowledge of the biology is restricted to a few members of the subfamily Berothinae.

Two larvae from Baltic amber possess features, which until now have not been found in extant larvae of Berothidae: (1) antennae and (2) labial palps with numerous, that is, 6 to 7 segments [both have at most four segments in extant Berothinae] (3) antennae lack a terminal seta [present in all extant and other fossil taxa]; (4) the ecdysial-cleavage lines consist of only frontal and coronal sutures, the lateral suture is absent [the lateral suture is present in the extant taxa]; (5) the prothoracic dorsal sclerites are large and are in contact with each other along the midline [clearly separated in extant taxa]. These character conditions (except perhaps (5)) are clearly plesiomorphic.

The taxonomical affinity of these two larvae within Berothidae is entirely unclear. They differ not only from larvae of extant taxa and but from three fossil larvae known from the Cretaceous. However, at least two character states (1, 2) are similar to those found in the earliest Cenomanian berothid larva from Burmese amber. Quite possibly these Baltic amber larvae are representatives of more basal groups of Berothidae.

Investigation of one specimen with synchrotron computer tomography gave new insights into the anatomy.

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