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Description of *Eurymetopum wachteli* sp.n. from the Baltic amber

(Coleoptera, Cleridae, Hydnocerinae)

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Abstract

The new fossil species of Cleridae (Hydnocerinae), *Eurymetopum wachteli* sp.n., is described from the Baltic amber and its classification within the genus *Eurymetopum* Blanchard is discussed.

Introduction

The order Coleoptera is represented with by least 76 families in the Baltic amber inclusions (Hieke & Pietrzeniuk 1984, Keilbach 1982, Spahr 1981a, 1981b, Wichard & Weitschat 1996, Wunderlich 1986). 15 species of Cleridae have been described so far, as listed in Kolibáč (1997).

The new fossil species described below is classified within the genus *Eurymetopum* Blanchard, 1844, which belongs to the subfamily Hydnocerinae. The taxonomy of the genus, as well as its phylogeny, biogeography, and bionomy has been treated by Solervicens (1986, 1987, 1992a, b) and Solervicens & Rodriguez (1995), who classified 26 extant species within it (formerly 83 species were included in Corporaal's catalogue [1950]). Species of the genus are widespread chiefly in the mountain areas of Chile and Argentina.

Eurymetopum wachteli sp.n.

(Fig. 1)

Material examined: An unique specimen (holotype), in a piece of the Baltic amber; deposited as permanent loan (from Zoological collections of Technical University Munich, Weihenstephan) in R. Gerstmeier's collection.

Description. Holotype, sex unknown. Length ca. 5 mm, width ca. 1.8 mm (in humeral portion). Small, elongated, dark, probably unicolorous species in the Baltic amber.

Head. Eyes extremely elevated, finely facetted, without emargination. Head including eyes exceeds contour of pronotum (Fig. 2). Labrum relatively deeply emarginate. The last joint of maxillary palps conical, the last joint of labial ones distinctly securiform. Antennae 11-segmented with weak and loose 3-segmented club (Fig. 3). Segments 1 to 5 not dilated towards their apices, 6 to 11 more or less triangular. Antennae do not reach backwards base of prothorax but reach its basal third. Sculpture of head scarcely visible, dorsal surface with sparse pubescence, probably finely and sparsely punctured.

Thorax. Prothorax approximately as long as wide, pronotum with two dorsolateral bulges, pronotal base weakly constricted (Fig. 2). Front coxae coniform and distinctly projecting, middle ones small and slightly projecting. Metasternum convex. Legs long, slender. 1st tarsomeres small, hidden, covered from above by 2nd tarsomere. Front and middle tarsomeres 2 to 4 widened, compact, these in hind tarsi elongated (Fig. 4). Claws without denticles. Tibial spurs impossible to observe, one spur seen in hind tibiae; presence of two spurs is probable. Elytral apices even, without little denticles. Elytra with sparse erect pubescence, probably with regular punctation at least in basal half.

Abdomen indistinct.

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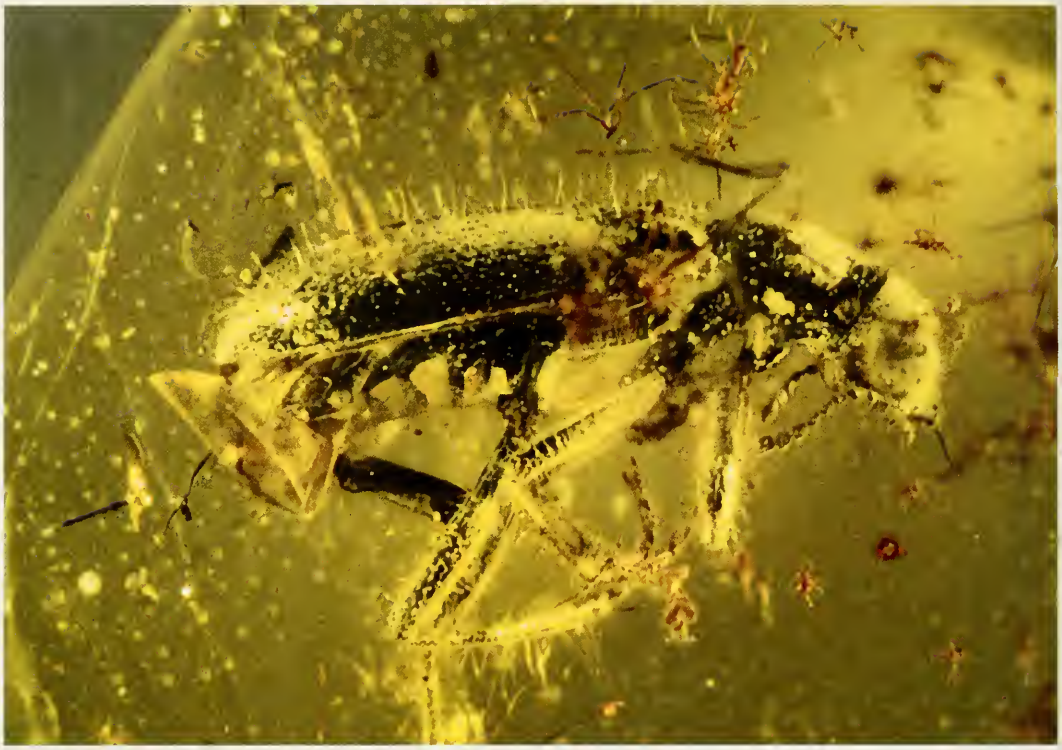

Fig. 1: *Eurymetopum wachteli* sp.n., photography by Wilfried WICHARD.

Distribution: Eocene of Central Europe.

Discussion

A classification of the described new species within Hydnocerinae is based on the following apomorphies: (1) antennae not reach backwards base of pronotum, (2) contour of head including eyes exceeds pronotum contour, (3) front coxae strongly projecting, (4) metasternum convex:

However, more detailed study of morphology is often needed for decision if a taxon should be classified within Clerinae or Hydnocerinae (KOLIBÁČ 1997). Especially an observation of labrum with its tormal processes, mentum, mandible, tegmen, and the last abdominal segment is necessary when such primitive hydnocerine taxa as e.g. *Blaesiophthalmus* SCHENKLING,1903, or some species of *Lemidia* SPINOLA, 1841 and *Eurymetopum* BLANCHARD, 1844 are classified. Nevertheless, we believe that the cited apomorphies of the new species allow classification within the subfamily Hydnocerinae (No clerine apomorphy was observed in the studied specimen).

All observed characters of the species *Eurymetopum wachteli* sp.n. are in plesiomorphic states regarding the "in-group" Hydnocerinae. That is why its classification within a genus is somewhat tentative. Theoretically, the new fossil species could be included in whatever recent genus of Hydnocerinae as its ancestral representative. The reasons for a classification within *Eurymetopum* are explained below.

Some biogeographic relations of the Baltic amber clerids are shown in KOLIBÁČ (1997): some genera recognized in the amber are recently distributed in North America, southern Africa, Madagascar, and southeastern Asia. No recent relatives of the amber clerid fauna have been known from Europe, South America and Australia so far. Combination of the both morphological and biogeographic characters shows that the species could be considered an ancestor of *Phyllobaenus* DEJEAN, 1837 or *Cephaloclerus* KUWERT, 1893 (these genera are treated as synonyms in KOLIBÁČ, in prep.). However, *Phyllobaenus thingol* KOLIBÁČ descri-

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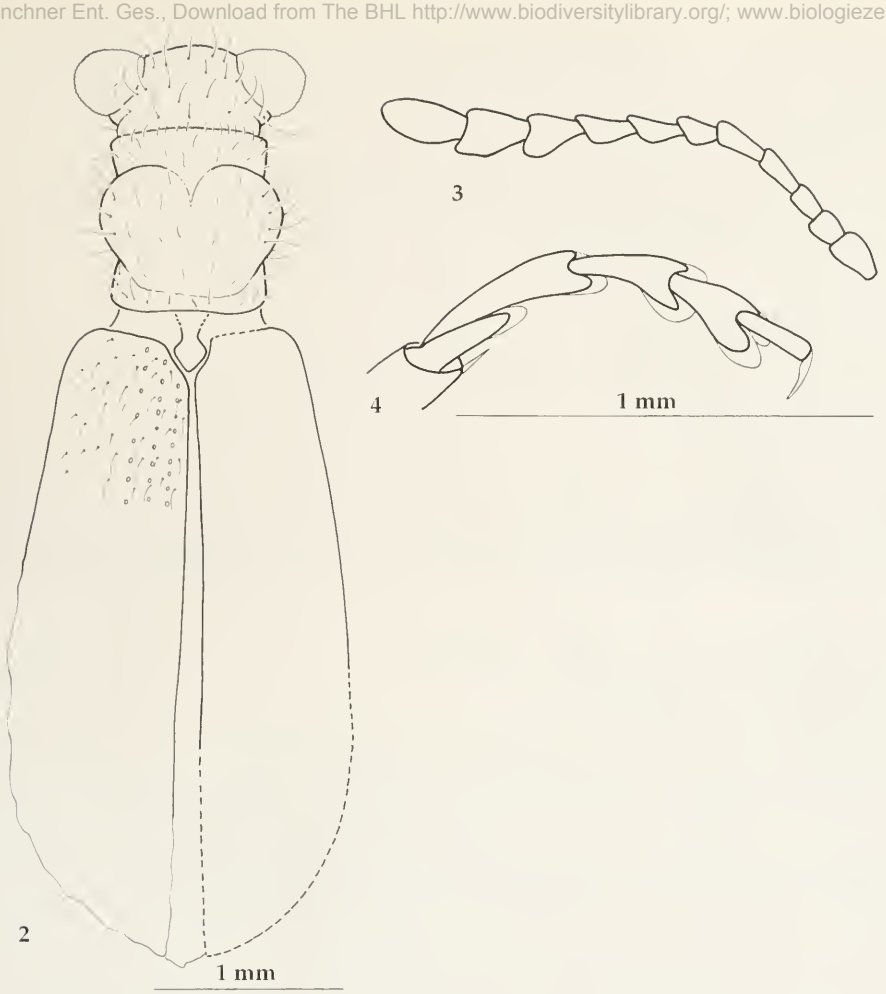

Fig. 2: *Eurymetopum wachteli* sp.n.
Fig. 3: Antenna of *Eurymetopum wachteli* sp.n.
Fig. 4: Hind tarsus of *Eurymetopum wachteli* sp.n.

bed also from the Baltic amber (Kolibáč 1997) shows advanced character states which are identical with those in recent representatives of the genus *Phyllobaenus* (body size, claws with denticles, etc.). That is why we classify the described species rather within the primitive recent genus *Eurymetopum* with which it shares all studied, although plesiomorphic, character states. There is also biogeographic logic in this decision because an ancestral area of Hydnocerinae could be situated in the western part of Laurasia from where the primitive hydnocerins dispersed to South America and then to Australia via Antarctica. The same distribution pattern is often supposed in the marsupials (Mammalia) during the late Cretaceous.

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