A new species of Tomoderinae (Coleoptera: Anthicidae) from the Baltic amber

Dmitry Telnov

Stopiņu novads, Dārza iela 10, LV-2130, Dzidriņas, Latvia; e-mail: anthicus@gmail.com

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Abstract: *Tomoderus longelytratus* sp. nov., second species of Tomoderinae (Coleoptera: Anthicidae) from the Baltic amber is described and illustrated.

Key words: Tomoderinae, *Tomoderus*, Anthicidae, Coleoptera, Upper Eocene, Baltic amber, new species.

Introduction

A first and hitherto single review of the tomoderine Anthicidae from the Baltic amber was published very recently (Telnov 2012).

An additional morphologically unusual species is being described in this publication.

Material and methods

The specimen was studied using a Leica S6D stereomicroscope; images were captured with a Canon EOS 450D SLR camera attached to the microscope, and CombineZP software was used for image stacking.

The holotype of the newly described species is deposited in the collection of Latvian Natural History Museum (LDM, Latvijas Dabas muzejs) in Rīga. Labels (when more than one for the same specimen) are separated by slashes (/).

All labels are printed. Author's comments are placed in square brackets [ ].

Systematic part

***Tomoderus longelytratus* sp. nov.** (Figs 1-5)

Holotypus ♀ LDM: TOMODERUS longelytratus sp. nov. det. D.Telnov 2013 / HOLOTYPUS.

Baltic amber, Upper Eocene. Beetle inclusion in a slice of amber with few air bubbles on underside between legs.

Derivatio nominis: This species is named from combination of Latin 'longus' [long, elongate] + Greek 'Ελυτρο' [elytron], referring to the narrow, elongate elytra.

Measurements: Total body length ~2.95 mm, maximum combined width across apical third of elytra 0.48 mm; head 0.45 mm long, across eyes ~0.43 mm broad [head is hardly visible in dorsal view], pronotum 1.0 mm long, maximum width 0.42 mm, minimum width 0.21 mm, elytra 1.5 mm long; combined elytral width 0.48 mm.

Colouration: Dorsum and venter uniformly black, tarsi and palpi dark brown.

Description: Head triangular. Eyes large and prominent, coarsely faceted. Tempora shorter than longitudinal diameter of eye. Head base broadly rounded. Pubescence long but sparse, suberect. Neck broad, approximately 0.5x head width. Antennae stout, reaching over elytral

humeri. Basal antennomere the longest – thickened & elongate, widened distally. Second antennomere shortened, slightly widened distally. Third antennomere longer than preceding. Antennomeres 4-6 widened distally, 8-10 only slightly longer than broad. Terminal antennomere broadly triangular, more than 2x longer than penultimate antennomere. Terminal maxillary palpomere broadly triangular. Pronotum [slightly depressed dorsally, in part covered by air bubble] broadly rounded anteriorly, without basal rim [in dorsal view]. Anterior lobe more than twice as broad as narrow, cylindrical posterior lobe. Lateral transverse depression deep, situated well behind the middle, flat in dorsal view. Punctures circular, large and coarse on anterior lobe. Longitudinal carina, if present, is obscured by air bubble, not visible. Pubescence of sparse, very long and erect to suberect setae. Elytra flattened dorsally, narrow, strongly elongate, slightly widened in apical third. Humeri rounded, omoplates not indicated. Postbasal transverse impression broad but very shallow. Punctures irregular, circular, large, coarse and dense in basal half, intervening spaces smaller than, to slightly larger than, punctures. Punctures becoming smaller toward apex. Pubescence of very long and dense, suberect to erect setae. Epipleura broad, incomplete. Hind wings not visible. Last visible tergite (morphological tergite VII) exposed, rounded apically in the holotype. Legs long and slender, densely setose. Penultimate tarsomeres bilobate. Basal tarsomere of metathoracic legs longer than combined length of remaining metathoracic tarsomeres.

Differential diagnosis: A very distinctive species because of long and narrow elytra (3x longer than broad) and broad neck (exceeding 30% of total head width). No similar species are known among both recent and fossil representatives of *Tomoderus* LaFerté-Sénectère, 1849. Due to the strongly elongate elytra, *T. longelytratus* is somewhat similar to *Pseudotomoderus* Pic, 1892.

Discussion

Certain morphological characters of *T. longelytratus* have not been recorded for *Tomoderus* LaFerté-Sénectère previously; particularly the 'broad' neck and strongly elongate elytra.

The comparative width of the neck to the total width of the head was used by some authors (for example, Abdullah 1969) as an important character for treating subfamilies of the Anthicidae. The neck is considered 'broad' if it is more than 30-50% of total head width (Abdullah 1969). Recently, Chandler (2010: 738) pointed to neck being 'broad' in Copobaeninae, Eurygeniinae, Lemodinae, Notoxinae and Steropinae but narrow in Anthicinae, Macratriinae and Tomoderinae. This was entirely correct until the discovery of *T. longelytratus*. Even if this amber specimen is considered to be slightly deformed by the process of molecular polymerization transforming resin to copal and later to amber, and even after correcting possible error in my measurements, neck width is distinctly over 30% of total head width. This exception is unique within the Tomoderinae.

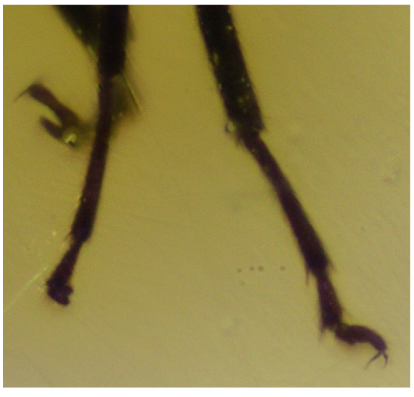
The following fossil taxa of Tomoderinae are presently known, all from Baltic amber:

Tomoderus balticus Telnov, 2012

Tomoderus longelytratus sp. nov. [described in this publication]

Tomoderus sp. [mentioned by earlier authors; previously published material is not available for study, possible destroyed during the WWII; see Telnov, 2012].

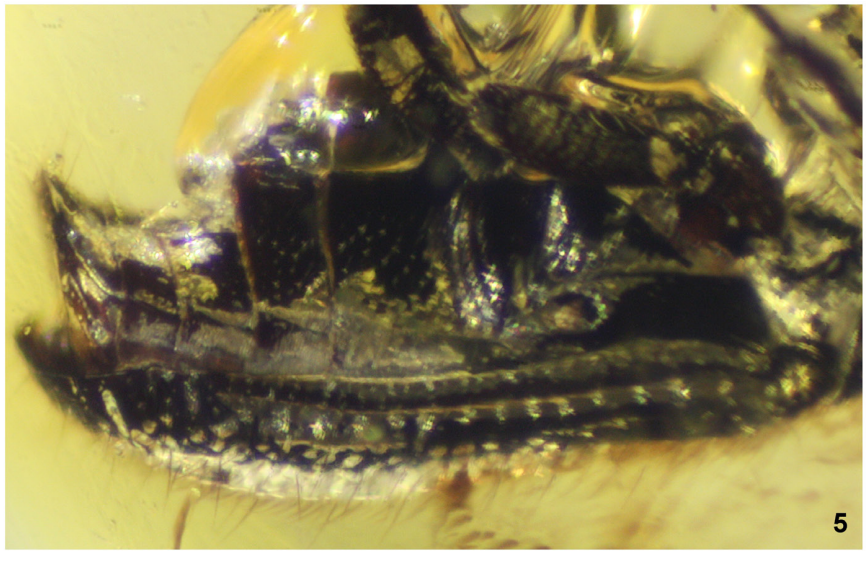
1



2

3

Figures 1-3. *Tomoderus longelytratus* sp. nov. holotype ?♀. 1 – habitus, dorsal view; 2 – pro- and mesotarsus; 3 – metatarsus.



Figures 4-5. *Tomoderus longelytratus* sp. nov. holotype ?♀. 4 – habitus, dorso-lateral view; 5 – elytra and abdomen, lateral view.

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