

## ***Globicornis rakovici* n.sp., a new fossil species (Coleoptera: Dermestidae: Megatomini) from Baltic amber**

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### ABSTRACT

*Globicornis rakovici* sp. nov. is described, illustrated and compared with the *G. ambericus* Háva, Prokop & Herrmann, 2000 from Late Eocene to Early Oligocene inclusions from the Baltic amber. The description of the species presented here considerably extends our knowledge of the diversity of this group in Paleogene.

**KEY WORDS:** Taxonomy, description, fossil, Coleoptera, Dermestidae, new species, Tertiary, Eocene, Oligocene, Baltic amber.

### INTRODUCTION

Family Dermestidae is a large group known from all zoogeographic regions comprising about 1300 recent species (Háva 2003, 2006). Fossil records of dermestid beetles are well known especially from Cenozoic era of Baltic and Dominican ambers, but also from lacustrine deposits of Europe and North America (Carpenter 1992, Wappler 2003). Attributions of the Late Triassic genera *Reeveana* Dunstan, 1923 and *Tryoniopsis* Dunstan, 1923 from Queensland (Australia) to the family Dermestidae based on the elytra structure are considered as uncertain family assignments (Carpenter 1992).

The present study follows the preceding papers about fossil Dermestidae from Dominican amber (Háva & Prokop 2004) and Baltic amber (Háva & Prokop 2006, Háva, Prokop & Herrmann 2006, Háva, Prokop & Kadej 2006, Zhantiev 2006). Baltic amber is the world most well-known source of amber dated from Late Eocene to Early Oligocene between 35 to 45 Ma.

### MATERIAL AND METHODS

Insect inclusion preserved in rather transparent amber was polished and embedded in of rather transparent amber having protection against weathering and damage by embedding in the synthetic resin (GTS / 2-component resin) or at least covered with lacquer. Standard techniques of observation by stereomicroscope (Olympus SZX 9) and digital photography (Olympus 5060) were used.

Because the size of beetles or their body parts can be useful in species recognition, the following measurements were made:

total length (TL) - linear distance from anterior margin of head to apex of elytra.

elytral width (EW) - maximal linear transverse distance.

Photographs of the species described are also available on the web sites: Dermestidae World (Coleoptera), permanent World Wide Web electronic publication.

The holotype missing both anterior and left middle legs.

### SYSTEMATIC PALAEOLOGY

Family: Dermestidae Latreille, 1807  
Subfamily: Megatominae Leach, 1815

GENUS: *Globicornis* Latreille, 1829

*Globicornis rakovici* n.sp.  
(Figs 1-2)

**Diagnosis.** The new species belongs to the genus *Globicornis* Latreille, 1829 based on its 10- segmented antennae and 3- segmented antennal club. The new species is similar to *G. ambericus* Háva, Prokop & Herrmann, 2006 but the two species differ in the following characters:

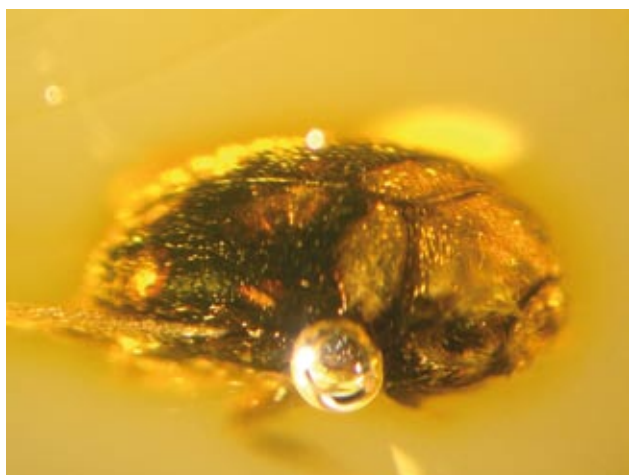


Fig. 1. *Globicornis rakovici* sp. nov. habitus dorsal aspect.



Fig. 2. *Globicornis rakovici* sp. nov. habitus ventral aspect.

pronotum and elytra unicolorous; terminal antennal segment flat, long and triangular .....  
*G. ambericus* Háva, Prokop & Herrmann, 2006

pronotum and elytra bicolorous, with orange-red patterns; terminal antennal segment short and circular .....  
*G. rakovici* n.sp.

**Description.** Measurements (mm): TL 2.5 EW 1.6. Body black, with orange-red patterns, covered with black, long, erected pubescence (Fig. 1). Head black, finely punctate, with distinct erected setation. Palpi invisible. Frontal median ocellus presented. Antennae 10- segmented, black, antennal club 3- segmented, terminal segment short and circular. Antennal cavity closed (Fig. 2). Pronotum finely punctate like head with long, black, erected pubescence; black, with orange-red patterns (one large discally, two in lateral parts). Scutellum very small, triangular, finely punctate as pronotum, with very short, black pubescence. Elytra coarsely punctate near scutellum, finely punctate on other parts; cuticle black, with orange-red patterns (one large near scutellum, one near suture and one small near epipleuron, two small in apical part), with black, erected, long pubescence. Apex of each elytron with long pubescence. Epipleuron black, with long, black pubescence. Ventral surfaces as in (Fig. 2). Prosternum forming a „collar” under which mouthparts fit when head is retracted, with coarse punctures. Epipleuron reaching anterior ½ of episternum. Mesosternum and metasternum covered with black, very short, recumbent pubescence. Metasternum lateral part near epipleuron with foveate-reticulate punctures. Abdominal sternites finely punctate, covered with black, very short recumbent pubescence. Legs black, with short, black setation. Genitalia not visible.

**Holotype.** Amber inclusions of Baltic amber, Jantarnyj, Kaliningrad district, No. 85/2001. Holotype deposited in (Geologisch-Paläontologisches Institut der Universität Hamburg, Germany). Holotype specimen is provided with

a red, printed label with text as follows: „HOLOTYPE, *Globicornis rakovici* sp. n., Jiří Háva det. 2006”.

**Etymology.** Patronymic, dedicated to my friend and colleague Miloslav Rakovič (Prague, Czech Republic).

**Comments.** The new species presently described from Baltic amber differs from all known recent species belonged to the genus *Globicornis* Latreille, 1829 by the characteristic bicolorous orange-red patterns on elytra.

***Megatoma electra* Zhantiev, 2006**

**Material examined.** Amber inclusions of Baltic amber, Jantarnyj, Kaliningrad district, No. 56/2000, No. 55/1998, 2 females, J. Háva det., both in coll. F. Kernegger (Hamburg, Germany).

**Remarks.** The species recently described according to the holotype, other known specimen from Baltic amber.

**ACKNOWLEDGEMENTS**

Author are indebted to Friedrich and Barbara Kernegger (Hamburg, Germany), who kindly loaned him interesting amber material of Dermestidae.

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*Received: 4<sup>th</sup> March 2007*

*Accepted: 13<sup>th</sup> February 2007*