

A contribution to Ptinidae (Coleoptera) from Baltic amber, with descriptions of two new species

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Abstract. Nine species from Baltic amber, Russia: Jantarny Region from collection of Carsten Gröhn are summarized. The following two new species are described: *Xyletinus (Xyletinus) carsteni* sp. nov., *Calymmaderus amhericus* sp. nov.

INTRODUCTION

The family Ptinidae (Coleoptera) from Baltic amber was recently studied by Alekseev 2012, 2013, 2014, Alekseev & Bukejs 2019a, b, Alekseev et al. 2019, Bukejs & Alekseev 2015, Bukejs et al. 2017, 2018, Háva & Zahradník 2019a, b, and Zahradník & Háva 2014, 2017, 2019.

During the determination of Ptinidae from the collection deposited at the Carsten Gröhn, Hamburg, Germany, we found two new species of *Calymmaderus* Solier, 1849 and *Xyletinus* Latreille, 1809, from Baltic amber as described below.

MATERIAL AND METHODS

Material deposited in the following collections:
GPIH collection of Carsten Gröhn, Geolog.-Palaeontolog. Institut of University Hamburg, Germany;
JHAC Private Entomological Laboratory and Collection, Jiří Háva, Únětice u Prahy, Prague west, Czech Republic.

Each specimen of the new species described here is provided with a red, printed label showing the following text: Holotype *Calymmaderus amhericus* sp. nov. or *Xyletinus (Xyletinus) carsteni* sp. nov. J. Háva & P. Zahradník det. 2020.

RESULTS

Subfamily Dorcatominae

***Calymmaderus amhericus* sp. nov.** (Figs. 1-4)

Type material. Holotype (unsexed): Amber inclusion GPIH no. C8477, coll. Gröhn, Baltic amber, Russia: Jantarny region, GPIH.

Description of holotype. Body elongate-oval, shining (Fig. 1), transversally and longitudinally convex, body length 3.1 mm, the greatest width 1.7 mm. Pronotum, head, elytra, abdomen and legs black, antennae dark brown.

Head hypognathous, almost flattened, finely punctuated, punctures almost touched. Frons twice as wide as their diameter. Eyes large, rounded, slightly convex, glabrous. Antennae 11-antennomered, with 3-antennomered club (Fig. 3). Palpi not visible.

Pronotum transverse, finely punctuated, shiny. The greatest width very shortly before base. Posterior angles obtusely rounded (in dorsal view) (Fig. 2).

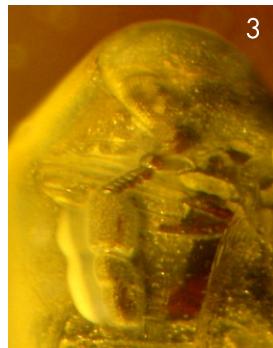
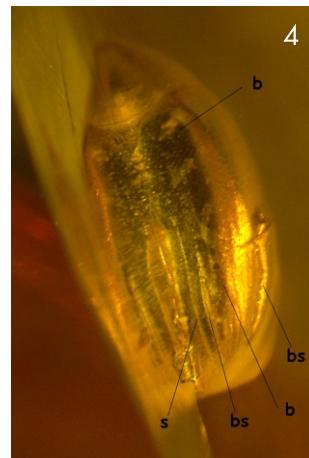
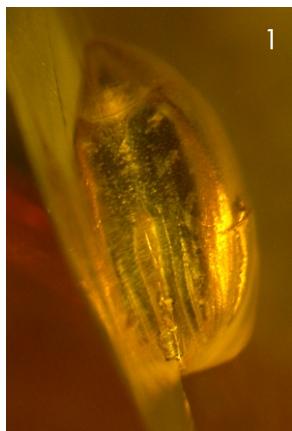
Elytra shortly oval, shining, with distinct shoulders, without setation. Each elytron with 3 striae apically and two bumps (Fig. 4). Striae consisting of very small punctures; the first stria, beside suture, long, other two very broad and short.

Legs robust and short, black, tarsi brown.

All ventrites of the same length, with very small punctures medially (Fig. 2).

Differential diagnosis. The new fossil species differs from other known recent species by the structure of antennae and elytral striation.

Name derivation. Named according to amber.



Figs. 1-4. *Calymmaderus ambergicus* sp. nov.: 1- habitus dorsal aspect; 2- habitus ventral aspect; 3- antenna ; 4- elytron (b-bump; s-stria; bs-broad stria).

Subfamily Dryophilinae

Dryophilus hoffeinsorum Alekseev, 2014

Material examined: Amber inclusion GPIH no. C4276, coll. Gröhn, Baltic amber, Russia: Jantarny region, 1 spec., GPIH; Amber inclusion GPIH no. C4280, coll. Gröhn, Baltic amber, Russia: Jantarny region, 1 spec., GPIH; Amber inclusion GPIH no. C4333, coll. Gröhn, Baltic amber, Russia: Jantarny region, 1 spec., JHAC; Amber inclusion GPIH no. C8465, coll. Gröhn, Baltic amber, Russia: Jantarny region, 1 spec., GPIH; Amber inclusion GPIH no. C1431, coll. Gröhn, Baltic amber, Russia: Jantarny region, 1 spec., GPIH; Amber inclusion GPIH no. C4010, coll. Gröhn, Baltic amber, Russia: Jantarny region, 1 spec., GPIH; Amber inclusion GPIH no. C4277, coll. Gröhn, Baltic amber, Russia: Jantarny region, 1 spec., GPIH; Amber inclusion GPIH no. C4319, coll. Gröhn, Baltic amber, Russia: Jantarny region, 1 spec., GPIH; Amber inclusion GPIH no. C7922, coll. Gröhn, Baltic amber, Russia: Jantarny region, 1 spec., GPIH.

Homophthalmus kunnegsgarbensis Alekseev, 2014

Material examined: Amber inclusion GPIH no. C1473, coll. Gröhn, Baltic amber, Russia: Jantarny region, 1 spec., GPIH; Amber inclusion GPIH no. C4382, coll. Gröhn, Baltic amber, Russia: Jantarny region, 1 spec., GPIH; Amber inclusion GPIH no. C4588, coll. Gröhn, Baltic amber, Russia: Jantarny region, 1 spec., JHAC.

Subfamily Ernobiinae

Episernus palvenikensis Alekseev, 2014

Material examined: Amber inclusion GPIH no. C4191, coll. Gröhn, Baltic amber, Russia: Jantarny region, 1 spec., GPIH.

Ernobius barticus Alekseev, 2014

Material examined: Amber inclusion GPIH no. C1135, coll. Gröhn, Baltic amber, Russia: Jantarny region, 1 spec., GPIH.

Ernobius notangicus Alekseev, 2014

Material examined: Amber inclusion, Baltic amber, Poland, Gdańsk, wyspa Sobieszewska, 1 spec., JHAC.

Ernobius varmicus Alekseev, 2014

Material examined: Amber inclusion GPIH no. C1413, coll. Gröhn, Baltic amber, Russia: Jantarny region, 1 spec., GPIH.

Subfamily Xyletininae

Xyletinus (Xyletinus) carsteni sp. nov. (Figs. 5-6)

Type material. Holotype (unsexed): Amber inclusion GPIH no. C1067, coll. Gröhn, Baltic amber, Russia: Jantarny region, GPIH.

Description of holotype. Body shortly elongate, shining, transversally and longitudinally convex, body length 3.1 mm (in amber situation), width not measured. Pronotum, head, elytra and abdomen black, antennae and legs brown (Fig. 1).

Head hypognathous, almost flattened, finely punctuated. Frons twice as wide as their diameter. Eyes large, rounded, slightly convex, glabrous. Antennae not visible, only first antennomeres, brown. Palpi not visible.

Pronotum transverse. The greatest width very shortly before base. Posterior angles obtusely rounded (from dorsal view) (Fig. 1-2). Surface of pronotum finely punctuated.

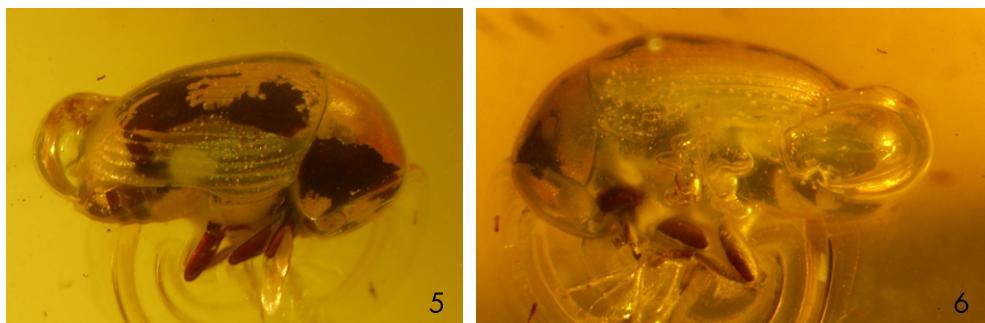
Elytra shortly oval, with distinct shoulders, covered by very short, decumbent setation. Each elytron with 12 striae. Striae consisting of very small punctures, their diameter twice as large as distance between them. Interstriae slightly wider than striae. The first stria, beside suture, very short, extending shortly behind scutellum.

Legs brown, robust and short.

All ventrites of the same length, finely punctuated.

Differential diagnosis. The new fossil species differs from other known fossils of *Xyletinus* by the very shiny body and entirely brown legs.

Name derivation. Patronymic, dedicated to Carsten Gröhn (Germany).



Figs. 5-6. *Xyletinus (Xyletinus) carsteni* sp. nov.: 5-lateral aspect, right; 6-lateral aspect, left.

Xyletinus arturi Háva & Zahradník, 2019

Material examined: Amber inclusion GPIH no. C8484, coll. Gröhn, Baltic amber, Russia: Jantarny region, 1 spec., GPIH; Amber inclusion GPIH no. C725, coll. Gröhn, Baltic amber, Russia: Jantarny region, 1 spec., GPIH; Amber inclusion GPIH no. C4559, coll. Gröhn, Baltic amber, Russia: Jantarny region, 1 spec., GPIH; Amber inclusion GPIH no. C2367, coll. Gröhn, Baltic amber, Russia: Jantarny region, 1 spec., GPIH; Amber inclusion GPIH no. C8032, coll. Gröhn, Baltic amber, Russia: Jantarny region, 1 spec., GPIH; Amber inclusion GPIH no. C8480, coll. Gröhn, Baltic amber, Russia: Jantarny region, 1 spec., GPIH.

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REFERENCES

- ALEKSEEV V. I. 2012: *Suinoptinus bukejsi* sp. nov. (Coleoptera: Ptinidae: Ptinini), the second species of the Tertiary genus from the Baltic amber. *Baltic Journal of Coleopterology* 12: 145-148.
- ALEKSEEV V. I. 2013: The beetles (Insecta: Coleoptera) of Baltic amber: the checklist of described species and preliminary analysis of biodiversity. *Zoology and Ecology* 23: 5-12.
- ALEKSEEV V. I. 2014: New fossil species of Ptinidae (Insecta: Coleoptera) in Baltic Amber (Tertiary, Eocene). *Zoology and Ecology* 24(3):239-255.
- ALEKSEEV V. I. & BUKEJS A. 2019a: Two new species of *Xyletinus* Latreille (Ptinidae: Xyletininae) in Eocene Baltic amber. *Zootaxa* 4668(4): 525-534.
- ALEKSEEV V. I. & BUKEJS A. 2019b: *Xyletinus* (s. str.) *thienemannii* sp. nov., a new species of Xyletininae (Coleoptera: Ptinidae) from Eocene baltic amber. *Acta Biologica Universitatis Daugavpiliensis* 19(1): 31-35.

- ALEKSEEV V. I., BUKEJS A. & BELLÉS X. 2019: *Dignoptinus*, a new genus for fossil *Dignomus regiomontanus* Alekseev from Eocene Baltic amber, and new status for *Bruchoptinus* Reitter and *Pseudoptinus* Reitter (Coleoptera: Ptinidae). *Fossil Record* 22: 65-72.
- BUKEJS A. & ALEKSEEV V. I. 2015: A second Eocene species of death-watch beetle belonging to the genus *Microbregma* Seidlitz (Coleoptera: Bostrichoidea) with a check list of fossil Ptinidae. *Zootaxa* 3947(4): 553-562.
- BUKEJS A., ALEKSEEV V. I., COOPER D. M. L., KING G. A. & MCKELLAR R. C. 2017: Contributions to the palaeofauna of Ptinidae (Coleoptera) known from Baltic Amber. *Zootaxa* 4344(1): 181-188.
- BUKEJS A., BELLÉS X. & ALEKSEEV V. I. 2018: A new species of *Dignomus Wollaston* (Coleoptera: Ptinidae) from Eocene Baltic amber. *Zootaxa* 4486(2): 195-200.
- BUKEJS A., HÁVA J. & ALEKSEEV V. I. 2018: New fossil species of *Trichodesma* LeConte, 1861 (Coleoptera: Ptinidae) from Eocene Baltic amber collected in the Kaliningrad region, Russia. *Paleontologia Electronica* 21(2): 1-7.
- HÁVA J. & ZAHRADNÍK P. 2019a: A new *Falsogastrallus* Pic, 1914 species (Coleoptera: Ptinidae) from Eocene Baltic amber. *Studies and Reports, Taxonomical Series* 15(1): 59-62.
- HÁVA J. & ZAHRADNÍK P. 2019b: Two new species of the genus *Xyletinus* Latreille, 1809 in Eocene Baltic Amber (Coleoptera: Bostrichoidea: Ptinidae). *Folia Heyrovskiana, Series A* 27(2): 13-16.
- ZAHRADNÍK P. & HÁVA J. 2014: New Ptinidae (Coleoptera: Bostrichoidea) from Baltic amber with a list of known fossil species. *Studies and Reports, Taxonomical Series* 10(2): 629-646.
- ZAHRADNÍK P. & HÁVA J. 2017: Three new species of *Trichodesma* LeConte, 1861 from Baltic Amber (Coleoptera: Ptinidae: Anobiinae). *Folia Heyrovskiana, Series A* 25(1): 89-92.
- ZAHRADNÍK P. & HÁVA J. 2019: *Gastrallus michalskii* sp. nov., a new species of tribe Gastrallini (Coleoptera: Ptinidae) from Eocene Baltic amber. *Acta Biologica Universitatis Daugavpiliensis* 19(2): 231-233.

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