

## Three new Ptinidae (Coleoptera: Bostrichoidea) from Eocene Baltic amber

### Три новых вида Ptinidae (Coleoptera: Bostrichoidea) из эоценового балтийского янтаря

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**Key words:** taxonomy, new species, new records, Coleoptera, Ptinidae, Eocene Baltic amber.

**Ключевые слова:** таксономия, новые виды, новые находки, Coleoptera, Ptinidae, эоценовый балтийский янтарь.

**Abstract.** The following three species, *Stagetus szydlowskiae* Háva et Zahradník, **sp.n.**, *Stagetus michalskii* Háva et Zahradník, **sp.n.** and *Lasioderma michalskii* Háva et Zahradník, **sp.n.**, from Eocene Baltic amber are described, illustrated and compared with similar species.

**Резюме.** В статье описаны *Stagetus szydlowskiae* Háva et Zahradník, **sp.n.**, *Stagetus michalskii* Háva et Zahradník, **sp.n.** and *Lasioderma michalskii* Háva et Zahradník, **sp.n.** из эоценового балтийского янтаря описаны.

## Introduction

The family Ptinidae (Coleoptera) from Baltic amber was recently studied by the following authors: Alekseev [2012, 2013, 2014], Alekseev and Bukejs [2019a, b, 2021], Alekseev et al. [2019], Bukejs and Alekseev [2015], Bukejs et al. [2017, 2018, 2021], Háva [2022], Háva and Zahradník [2019a, b, 2020a, b, c, d], Zahradník and Háva [2014, 2017, 2019].

Two new species described here from Eocene Baltic amber collected in Poland belong to the genus *Stagetus* Wollaston, 1861, which currently contains about 70 species worldwide, 55 species and subspecies are known from the Palaearctic Region and two species from Baltic amber [Háva, Zahradník, 2020d; Háva, 2022]. The genus *Lasioderma* Stephens, 1835 currently contains about 90 species worldwide [Toskina, 2015]. The species described here is the first known species of *Lasioderma* from Baltic amber.

Additional data is provided for known species.

## Material and methods

The habitus photograph was made by Artur Michalski a digital camera using Canon EOS 4000D on stereobinocular microscope Nikon SMZ800 + SMZ1500 + PLAN APO lens.

The mentioned material is deposited in the following collections: **AMPC** — Artur Michalski, private collection, Wrocław, Poland; **JHAC** — Private Entomological Laboratory and Collection, Jiří Háva, Únětice u Prahy, Prague west, Czech Republic; **PZAC** — Petr Zahradník, private collection, Jesenice u Prahy, Czech Republic.

Holotype specimens of the new species described here is provided with a red, printed labels showing the following text: HOLOTYPE *species name* sp.nov. J. Háva et P. Zahradník det. 2021.

## Results

*Microbregma waldwico* Bukejs et Alekseev, 2015

**Material.** Amber inclusion No. 6467, Poland, Gdansk city area, 1 spec., J. Háva det., (JHAC).

*Dryophilus hoffeinsorum* Alekseev, 2014

**Material.** Amber inclusion No. 6066, Poland, Gdansk city area, 1 spec., J. Háva det., (AMPC).

*Ernobius barticus* Alekseev, 2014

**Material.** Amber inclusion No. 6126, Poland, Gdansk city area, 1 spec., J. Háva det., (JHAC).

*Petalium widewuto* Alekseev et Bukejs, 2021

**Material.** Amber inclusion No. PET.2, Poland, Gdansk, wyspa Sobieszewska, 1 spec., J. Háva det., (JHAC).

*Petalium bruteno* Alekseev et Bukejs, 2021

**Material.** Amber inclusion No. 6646, Poland, Gdansk city area, 1 spec., J. Háva det., (PZAC).

*Stagetus szydlowskiae* Háva et Zahradník, **sp.n.**

Figs 1–2.

**Material.** Holotype (unsexed): Amber inclusion No. 6127, Poland, Gdansk city area, (JHAC). The complete beetle is included in a transparent amber piece, with dimensions of 21x16 mm. Syninclusions consist of numerous minute organic particles.

**Description of holotype.** Body oval (Figs 1–2), transversely and longitudinally convex, body length 2.1 mm, the greatest width 0.9 mm (in amber situation). Pronotum, head, elytra, abdomen and legs brown, antennae not visible. Head hypognathous, almost flattened, coarsely punctured, punctures almost contiguous. Eyes large, rounded, slightly convex, glabrous. Antennae and palpi not visible. Pronotum about as long as wide, trapeziform, coarsely punctured, shiny, with very short yellow setation. The greatest width just before base. Posterior angles obtusely rounded (in dorsal view); anterior part of pronotum slightly raised. Scutellum triangular, slightly oval, very small. Elytra short, oval, shining, with distinct humeri, with very short yellow setation. Each elytron with eleven striae consisting of large punctures, first stria near suture is very short; punctures large, defined discally and near apex of elytron, eleventh elytral stria ends at the second half of elytron. Prosternum and metasternum with small individual punctures laterally. Legs robust and short, brown, tarsi short light brown. All abdominal visible ventrites of the same length, with small punctures medially.

**Differential diagnosis.** The new species is similar to *Stagetus michalskii* sp.n. but differs from it by the punctuation on the pronotum, elytra, prosternum and metasternum; it differs, from *S. arturi* Háva et Zahradník, 2020 by the broad form of body and punctuation on the pronotum, elytra, prosternum and metasternum, the next species *S. zahradniki* Háva, 2022 differs from other the mentioned species by the very long setation on dorsal surfaces.

**Etymology.** Patronymic, dedicated to mother and the family from the mother's side of Artur Michalski — Anna Michalska (Anna Szydłowska).

*Stagetus michalskii* Háva et Zahradník, sp.n.

Fig. 3.

**Material.** Holotype (unsexed): Amber inclusion No. 5847, Poland, Gdansk city area, (JHAC). The complete beetle is included in a transparent amber piece, with dimensions of 20x15mm. Syninclusions consist of numerous minute organic particles and one specimen of Diptera (Nematocera).

**Description of holotype.** Body oval (Fig. 3), transversely and longitudinally convex, body length 1.3 mm, the greatest width 0.5 mm (in amber situation). Pronotum, head, elytra, abdomen and legs brown, antennae not visible. Head hypognathous, almost flattened, coarsely punctured, punctures almost contiguous. Eyes large, rounded, slightly convex, glabrous. Antennae and palpi not visible. Pronotum about as long as wide, trapeziform, coarsely punctured on lateral parts, shiny, with very short yellow setation. The greatest width just before base. Posterior angles obtusely rounded (in dorsal view); anterior part of pronotum slightly raised. Scutellum triangular, slightly oval, very small. Elytra short oval, shining, with distinct humeri, with very short yellow setation. Each elytron with eleven striae consisting of small punctures, first stria near suture is very short; punctures large, defined discally and near apex of elytron, eleventh elytral stria ends at the second half of elytron. Prosternum and metasternum with large individual punctures laterally.



Figs 1–4. New Ptinidae from Eocene Baltic amber. 1–2. *Stagetus szydlowskiae* sp.n., holotype: 1 — habitus, dorsal; 2 — habitus, ventral. 3 — *Stagetus michalskii* sp.n., holotype, habitus, antero-lateral. 4 — *Lasioderma michalskii* sp.n., holotype, habitus, ventral.

Рис. 1–4. Новые виды Ptinidae из эоценового балтийского янтаря. 1–2. *Stagetus szydlowskiae* sp.n., голотип: 1 — общий вид, дорсально; 2 — общий вид, вентрально. 3 — *Stagetus michalskii* sp.n., голотип, общий вид, антеролатерально. 4 — *Lasioderma michalskii* sp.n., голотип, общий вид, вентрально.

Legs robust and short, brown, tarsi short light brown. All abdominal visible ventrites of the same length, with small punctures medially.

**Differential diagnosis.** The new species similar to *Stagetus szydlovskae* sp.n. but differs from it by the punctation on the lateral parts of pronotum, and large punctures on prosternum and metasternum

**Etymology.** Patronymic, dedicated to amber specialist Artur Michalski (Wrocław, Poland).

*Lasioderma michalskii* Háva et Zahradník, sp.n.

Fig. 4.

**Material.** Holotype (unsexed): Amber inclusion No. 5713, Poland, Gdansk city area, (JHAC).

The complete beetle is included in a transparent amber piece, with dimensions of 22x13 mm. Syninclusions consist of numerous minute organic particles.

**Description of holotype.** Body oval (Fig. 4), transversely and longitudinally convex, body length 2.0 mm, the greatest width 0.9 mm (in amber situation). Pronotum, head, elytra, scutellum, abdomen and legs black, antennae not visible. Head hypognathous, almost flattened, finely punctured, punctures almost contiguous. Eyes large, rounded, slightly convex, glabrous. Antennae and palpi not visible. Pronotum about as long as wide, trapeziform, finely punctured, shiny, with very short yellow setation. The greatest width just before base. Posterior angles obtusely rounded (in dorsal view); anterior part of pronotum slightly raised. Scutellum triangular, very small. Elytra short oval, shining, with distinct humeri, with very short yellow setation. Elytra without striae consisting of punctures. Prosternum and metasternum finely punctured. Legs robust and short, black, tarsi short light dark brown. All abdominal visible ventrites of the same length, finely punctured.

**Differential diagnosis.** The new species belongs to genus *Lasioderma* Stephens, 1835 and it is the first known amber species. The new species differs from the similar dark species *L. atterimum* Roubal, 1916, *L. obscurum* (Solsky, 1868) and *L. haemorhodiae* (Illiger, 1807) by the punctation of the pro-meta sternum and abdominal ventrites.

**Etymology.** Patronymic, dedicated to amber specialist Artur Michalski (Wrocław, Poland).

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