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A NEW SPECIES OF THE GENUS *PTEROSTICHUS* BONELLI, 1810 (COLEOPTERA: CARABIDAE) FROM THE RUSSIAN FAR EAST

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Summary. *Pterostichus (Phonias) neglectoides* sp. n. is described from the Jewish Autonomous Region, Russia. New species is similar to *P. neglectus* A. Morawitz, 1862 but differs from latter in the structure of endophallus, and colouration of palps and legs.

Key words: ground beetles, Harpalinae, *Phonias*, taxonomy, new species, Russia.

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Резюме. Из Еврейской Автономной области описан *Pterostichus (Phonias) neglectoides* sp. n. Новый вид близок к *P. neglectus* A. Morawitz, 1862, но отличается от него формой эндофаллусовой сумки, а также окраской пальп и ног.

INTRODUCTION

There are 12 species of the subgenus *Phonias* Gozis, 1886 of the genus *Pterostichus* Bonelli, 1810 in the fauna of the Russian Far East, namely *Pt. datshenkoae* Sundukov, 2013, *Pt. diligens* (Sturm, 1824), *Pt. eobius* (Tschitschérine, 1899), *Pt. jankowskyi* (Tschitschérine, 1897), *Pt. kutensis* Poppius, 1905, *Pt. longinquus* Bates, 1873, *Pt. morawitzianus* (Lutshnik, 1922), *Pt. neglectus* A. Morawitz, 1862, *Pt. ripensis* (Motschulsky, 1866), *Pt. sotkaensis* Jedlička, 1958, *Pt. strenuus* (Panzer, 1796), and *Pt. ussuriensis* (Tschitschérine, 1897) (Löbl & Löbl, 2017). A few papers on variability of the species of *Pterostichus* distributed in the Russian Far East were published recently (Budilov, 2018, 2021). One new species of the subgenus *Phonias* is found in the Middle Amur River basin and described below.

MATERIAL AND METHODS

Studied specimens were collected using Barber pitfall traps and light traps by the author in 2014–2016. The male everted endophallus were prepared for the holotype and a few paratypes, while the male genitalia of other paratypes were just dissected. The holotype and all paratypes of new species are kept in the Federal Scientific Center of East Asia Terrestrial Biodiversity, Vladivostok, Russia [FCBV]; other studied materials are kept in the private collection of the author [PCB].

The abbreviations used for the measurements and indices are as follows: **EL** – the elytra length; **EW** – the maximal elytra width; **HL** – length of the head from fore margin of clypeus to rear edge of temples; **HW** – the greatest width of head at eye level; **Ls**=**HL+PLm+EL** – total body length; **PA** – the width of the pronotal apex; **PB** – the width of the pronotal base; **PLm** – length of pronotum, measured along the median line; **PLt** – greatest length of pronotum; **PW** – greatest width of pronotum; **M** – arithmetic mean.

DESCRIPTION OF NEW SPECIES

Pterostichus (Phonias) neglectoides Budilov, sp. n.

<http://zoobank.org/NomenclaturalActs/B0D14810-BE6D-4862-8784-D6C05161502E>

Figs 1–9

TYPE MATERIAL. Holotype – ♂ (everted endophallus prepared), **Russia:** Jewish Autonomous Region, the protected zone of ‘Bastak’ Reserve, 19.X 2016, leg. P. Budilov [FCBV]. Paratypes: 1♂ (everted endophallus prepared), the same locality as holotype, 19.X 2016, leg. P. Budilov [FCBV]; 1♂, the same locality, 12.IX 2016, leg. P. Budilov [FCBV]; the same locality, 1♂ (everted endophallus prepared), 29.X 2016, leg. P. Budilov [FCBV]; the same locality, 6♂, 29.X 2016, leg. P. Budilov [FCBV]; the same locality, 4♀, 29.X 2016, leg. P. Budilov [FCBV]; the same locality, 1♀, 22.IX 2016, leg. P. Budilov [FCBV].

OTHER MATERIAL EXAMINED. **Russia:** Jewish Autonomous Region, Birobidzhan, light trap, 27.VII 2013, 5♀, leg. P. Budilov [PCB]; Khabarovsky Krai, Khabarovsk District, 5 km N Anastasevka, 16.IX 2014, 8♂, 4♀, leg. P. Budilov [PCB]; Khabarovsky Krai, Nanaisky District, 4 km SE Mayak, 28.VII 2015, 5♂, 6♀, leg. P. Budilov [PCB].

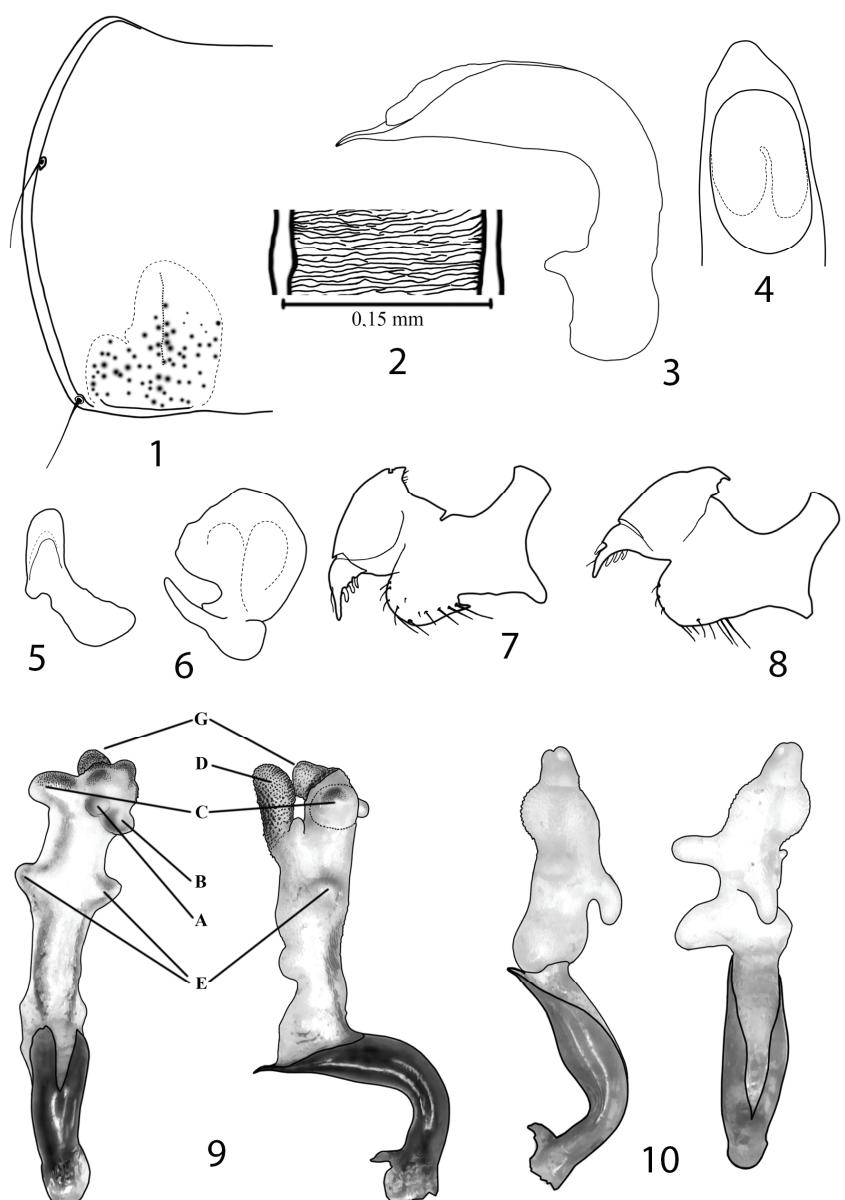
DESCRIPTION. Body length from fore margin of clypeus to elytral apex: male 4.96–5.6 mm ($M = 5.31$ mm); female 5.2–5.64 mm ($M = 5.43$ mm).

Head. Fore margin of clypeus straight. Fore margin of labrum straight or with slightly marginated apex. Eyes convex.

Pronotum. Somewhat wider than length, $M \text{ PLt}/\text{PW} = 0.85$ in males and 0.86 in females. Anterior angles obtuse, protruding. Lateral sides evenly rounded to the base. Hind angles of pronotum obtuse. Disc evenly and moderately convex, side edges are narrow, with two roughly but sparsely punctuated main depressions, which are situated almost parallel to each other; inner depression occupies about 1/3 of the pronotum length, outer depression two times shorter. Base edging runs from angles, reaching the bottom of inner depression (Fig. 1).

Elytra elongated, widest in posterior 1/2, moderately long ($\text{EL}/\text{EW} = 1.55–1.68$, $M = 1.62$; $\text{EL}/\text{PLt} = 2.24–2.42$, $M = 2.34$; $\text{EW}/\text{PW} = 1.2–1.27$, $M = 1.23$). Shoulders rounded; the basal part with small but notable tooth; external apical angle rounded. Subapical sinuation practically absent. Scutellar striole placed in the second interval between first and second striae, starting from the scutellar setiferous pore and resembles an oblique stroke that does not reach first stria by half/one third of its length. Interval 3 with two discal pores lying next to stria 3 (the first in the middle, the second in the apical quarter). In most cases, series umbilicata in both sexes can be described by the formula 5–1–7. All striae shallow, finely but notably punctate. Intervals flat, with a very delicate, highly transverse microsculpture (Fig. 2), which is visible at the magnification over x50. Hindwings present; it is a flying species.

Abdominal sternites simple. Anal sternite at apex with two setae in male, four setae in female, strongly granulated surface, and with isodiametric microsculpture between them.



Figs 1–10. *Pterostichus* spp. 1–9 – *Pt. (Phonias) neglectoides* sp. n.: 1 – pronotum; 2 – microsculpture of elytra; 3 – aedeagus; 4 – lamella and preputial field of aedeagus; 5 – ♂ right paramere; 6 – ♂ left paramere; 7 – ♀ left vaginalpalpe, ventral view; 8 – ♀ right vaginalpalpe, dorsal view; 9 – everted endophallus; 10 – *Pt. (Phonias) neglectus*, everted endophallus. Abbreviations: A–G – see in text; G gonopore.

Legs. Metacoxae with two setae. Trochanters with one seta. Metafemora with two setae on ventral side. Claw metatarsomere with two ventral setae.

Male genitalia. Aedeagus symmetrical, with a short, almost triangle obtuse apex (Figs 3, 4). Parameres as in Figs 5, 6. Everted endophallus longer than aedeagus, everted at the right angle to the plane of preputial field. Gonopore is situated at the top, being surrounded by a ring of microspines G (Fig. 9) and with three bulges of different sizes below it (A and B – membranous, C – with an apical field of microtrichia). At the ventral-apical part of endophallus there is a large blind bubble D, being situated parallel to the main body of endophallus and covered entirely with microspines. In the central part of endophallus, there are two lateral symmetrical membranous bubble E. Female genitalia: left and right vaginalpalpes as in Figs 7, 8.

Colouration. Body dorsally and ventrally dark brown. Pronotal lateral sides translucent-brown along their entire length (lighter at the base). Elytral epipleuron brown, lighter at apex. Legs bicoloured: tibia and tarsi red-brown, femora darker. Palps brown, tips of their apical segments lightened, basal segments lighter. Antennae: first segment red-brown; 2nd and 3rd segments with darkened tips; 4th segment with red-brown base; 5–11th segments dark red.

DIAGNOSIS. The new species is most similar to *P. neglectus* in general habitus; the differences of both species are given in a key below. From other known from the Russian Far East species of the subgenus *Phonias* the new species is easily distinguishable by the shape of pronotum, the position of scutellar striole, the number and arrangement of discal pores on elytra, and the shape of endophallus sac.

- 1(2) Palps and legs unicolourous, tibia and femora do not contrast with each other, yellow or sometimes yellow-brown. Scutellar striole reduced, resembling a short oblique stroke near basal pore, usually not reaching first stria by 2/3 of its length. Everted endophallus as in Fig. 10 *P. neglectus* A. Morawitz, 1862
- 2(1) Palps brown, tips of their apical segments lightened, basal segments lighter. Legs bicoloured. Tibia and tarsi red-brown, femora darker. Scutellar striole resembles a short oblique stroke not reaching first stria by 1/2-1/3 of its length. Everted endophallus as in Fig. 9 *P. neglectoides* sp. n.

DISTRIBUTION. Russia: Jewish Autonomous Region and south part of Khabarovskiy Krai.

HABITAT. The new species was found in secondary mixed forests together with *P. neglectus* in all collecting localities.

ETYMOLOGY. The specific epithet points to the strong morphological similarity of the new species with *P. neglectus*.

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