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New species of the Genus *Oxytelus* Gravenhorst, 1802 from Russia (Coleoptera: Staphylinidae: Oxytelinae)

Новый вид рода *Oxytelus* Gravenhorst, 1802 из России (Coleoptera: Staphylinidae: Oxytelinae)

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KEY WORDS: Coleoptera, Staphylinidae, *Oxytelus*, new species, Russia.
КЛЮЧЕВЫЕ СЛОВА: Coleoptera, Staphylinidae, *Oxytelus*, новый вид, Россия.

ABSTRACT: *Oxytelus* (*Tanycraerus*) *ruthenus* Semionenkov et Gildenkov, **sp.n.** a new species of rove beetle from Russia is described and illustrated. Based on several external and internal morphological features, it is similar to *Oxytelus assingi* Schülke, 2012 and was erroneously recorded as this species for a long time. The new species differs by significantly paler colouration of the antennal base (segments 1–4) and mouthparts, slightly more developed eyes, shorter antennae, and structural details of sternite VIII. It well differs from *O. assingi* by the shape of the aedeagus parameres. Presumably, the new species has a boreal distribution.

РЕЗЮМЕ: Из России описан и проиллюстрирован новый для науки вид *Oxytelus* (*Tanycraerus*) *ruthenus* Semionenkov et Gildenkov, **sp.n.** Новый вид очень близок к *Oxytelus assingi* Schülke, 2012 и долгое время принимался за него. Отличается значительно более светлой окраской основания антенн (1–4 членики) и ротовых органов, немного более развитыми глазами, более короткими антеннами и деталями строения стернита VIII. Хорошо отличается от *O. assingi* формой парамер эдеагуса. Предположительно, новый вид имеет бореальное распространение.

Introduction

In 2012, Michael Schülke, based on material collected by Volker Assing in the Caucasus, Krasnodar Territory of Russia, near Krasnaya Polyana, described [Schülke, 2012] a new species *Oxytelus assingi* Schülke, 2012. As expected, this publication aroused interest of Russian entomologists. In February 2014, Victor Borisovich Semenov gave us material from the genus *Oxytelus*, collected in Murmansk Area (Pasvik Nature Reserve). He suggested that these beetles belong to *O. assingi*. But we had serious doubts about this definition, due to the considerable distance from the type locality of *O. assingi*. In June 2014, second author personally demonstrated and discussed material from the Murmansk Area with Michael Schülke in Bonn, at The 29th International meeting on Systematics and Biology of Staphylinidae. At that time no significant differences between these specimens and the type material of *O. assingi* were revealed. Perhaps this was due to the insufficiency of material for understanding the intraspecific morphological variability. Later, material collected in Smolensk Area of Russia [Semionenkov, Gildenkov, 2017] and Kamchatka [Lobkova et al., 2017; Ryabukhin, Gildenkov, 2018] was defined as *O. assingi*. Material from the Murmansk Area was also published as *O. assingi* [Lobkova et al., 2017; Ryabukhin, Gildenkov, 2018]. Only recently, having a large material from different regions of Russia and the paratype of *O. assingi* for comparison, we came to the conclusion that these are two different, but very close species. Morphological features of the new species are stable within territory from the Smolensk Area to Kamchatka. Taking into account the large material studied in different years (see above), the type series included only specimens with the corresponding labels (see below) and exactly known depositories.

The examined material is deposited in the following collections: cMG — private collection of Mikhail Gildenkov, Smolensk; cMSch — private collection of

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Michael Schülke, Berlin); cOS — private collection of Oleg Semionenkov, Smolensk; ZIN — Zoological Institute, Russian Academy of Science, St.-Petersburg; ZMUM — Zoological Museum, Moscow Lomonosov State University. The labels are given in the original transcription.

Some type specimens (males) were dissected and the standard methods of preparation were used. A plastic plate with the aedeagus and abdominal apical sclerites in euparal and Canada balsam were pinned under the card with the beetle. Specimens were examined using MBS 10 stereomicroscope. A digital camera Canon EOS 5D Mark III camera with a Canon MP-E 65 mm macro lens was used for photographs of the habitus. Zeiss AxioScope.A1 with a Canon EOS 6D camera was used for photographs of aedeagus and abdominal segments. All photographs were modified using Adobe Photoshop software. All measurements are given in millimeters and were made with a stereoscopic microscope equipped with an ocular micrometer.

Oxytelus (*Tanycraerus*) *ruthenus* Semionenkov et Gildenkov, **sp.n.**

Figs 1–3, 5.

MATERIAL. Holotype, ♂, Russia, Smolensk Area, with labels: "RUSSIA: Smolensk Area, Demidov district, Baklanovo–Kirovka–Boroviki–Gorodistchye road. Car net. 7.V.2016, O. Semionenkov" "Holotypus *Oxytelus ruthenus* Semionenkov & Gildenkov, 2022 [red]" (ZMUM). Paratypes [all specimens with labels: "Paratypus *Oxytelus ruthenus* Semionenkov & Gildenkov, 2022 [red]"]: 1♀ "RUSSIA: Smolensk Area, Demidov district, Przhevalskoye–Anosinki–Podosinki route. Car net. 3.V.2017, O. Semionenkov" "*Oxytelus assingi* Schülke, 2012, O. Semionenkov det." (cOS); 1♂, 1♀ "RUSSIA: Smolensk Area, Demidov district, Baklanovo–Przhevalskoye–Rudnya–Klimyaty route. Car net. 19.V.2017, O. Semionenkov" (cOS); 2♀♀ "RUSSIA: Smolensk Area, Yartsevo district, vicinity of Yartsevo, the Vop´ river valley, edge of a temporary pool, in wet litter, 3–19.X.2019, O. Semionenkov" (ZMUM); 1♂, 2♀♀ "RUSSIA: Smolensk Area, Demidov district, Baklanovo–Przhevalskoye–Guki–Zhelyukhovo–Dukhovstchina distr., Ribshevo route. Car net. 11.V.2019, O. Semionenkov" (ZMUM); 2♂♂ "RUSSIA: Smolensk Area, Smolensk district, Novyie Bateki–Olsha–Kasplya–Babny route. Car net. 23.IV.2019, O. Semionenkov" (1♂ — cMSch; 1♂ — cOS); 1♂ "RUSSIA: Smolensk Area, Dukhovstchina district, Ribshevo–Bol´shoye Beresnevo–Dukhovstchina–Zuevo route. Car net. 28.V.2020, O. Semionenkov" (cMG); 2♂♂ "RUSSIA: Smolensk Area, Demidov district, Przhevalskoye–Zhelyukhovo route. Car net. 28.V.2020, O. Semionenkov" (1♂ — ZMUM; 1♂ — cOS); 1♂ "RUSSIA: Kaluga Area, Kaluga, Olgov´sky lane, window trap, 26.V–29.VI.2009, S. Alekseev, A. Rogulenko" (cOS); 1♂ "RUSSIA: Murmansk Area, Pechengsky district, Pasvik Nature Reserve, meadow, soil trap, 10.IX.2011. O. Trushitsyna leg." "*Oxytelus assingi* Schülke, 2012 V.B. Semenov det. 2014" "prope *Oxytelus assingi* Schulke, 2012 det. M. Gildenkov, 2014" (cMG); 1♂, 2♀♀, 2 ex. "RUSSIA: Murmansk Area, Pechengsky district, Pasvik Nature Reserve, meadow, soil trap, 10.IX.2011. O. Trushitsyna leg." (ZMUM); 1♂ "Russia: Murmansk Area, Pechenga district, Pasvik Nature Reserve, Varlam island, meadow, 10.VII.2011, O. Trushitsyna" (ZIN); 2♂♂ "Russia: Murmansk Area, Pechenga district, Pasvik Nature Reserve, meadow, soil trap, 22.VII.2011, O. Trushitsyna" (ZMUM); 1♂ "Russia: Murmansk Area, Pechenga district, Pasvik Nature Reserve, meadow, soil trap, 29.VI.2012, O. Trushitsyna" (cMSch); 1♂ "Russia: Murmansk Area, Pechenga district, Pasvik Nature Reserve, meadow, soil trap, 20.VI.2012, O. Trushitsyna" "*Oxytelus assingi* Schülke, 2012 V.B. Semenov det. 2014" (ZMUM); 2♂♂, 1♀ "Russia: Murmansk Area, Pechenga district, Pasvik Nature Reserve, meadow, soil trap, 1.VIII.2011, O. Trushitsyna" (cOS); 2♂♂, 2♀♀ "Russia: Kamchatka, Bystrinsky Natural Park. Floodplain of Belaya River, near the stream, meadow, 25.07–3.08.2016, V. Lobanova" "*Oxytelus assingi* Schülke, 2012 V.B. Semenov det. 2017" (1♂– cMSch; 1♂, 2♀♀ — cOS); 1♂ "Russia: Kamchatka, Bystrinsky Natural Park. Floodplain of Ketachan River, near the stream. June 2015, V.I. Lobanova leg." (ZMUM); 1♂, 2♀♀ "Russia: Kamchatka, Bystrinsky Natural Park. Floodplain of Irakan River, Salix/meadow, 22–24.06.2016, V. Lobanova" (ZIN); 3♂♂, 6♀♀ "Russia: Kamchatka, Bystrinsky Natural Park. Surroundings of Mount Alney, near the stream, 26.07–1.08.2016, V. Lobanova" "*Oxytelus assingi* Schülke, 2012 V.B. Semenov det. 2017" (cOS); 1♂ "Russia, Kamchatka, near Kamenskoe, 20.07.2011, A.S. Ryabukhin leg." "*Oxytelus assingi* Schulke, 2012 | det. M. Gildenkov, 2018" (cMG); 1♂, "Russia, Kamchatka, near Ossora, 30.07.2008, A.S. Ryabukhin leg." "*Oxytelus assingi* Schulke, 2012 | det. M. Gildenkov, 2018" (cMG).

COMPARATIVE MATERIAL. Paratype of *Oxytelus assingi* Schülke, 2012: 1♂, Russia, Krasnodar Territory, Krasnaya Polyana, with labels: "RU [10] — W-Caucasus, 16 km ENE Krasnaya Polyana, 2040 m, 43°43´04´´N, 40°23´41´´E, 17.VII.2011, V. Assing" "PARATYPUS *Oxytelus assingi* spec. nov. det. M. Schülke 2011/2012 [gelb]" (cMSch). Paratypes *Oxytelus altaicus* Kastcheev, 1999: 1♂, 3 ex., Russia, Altai, environs of the village of Rakhmanovskie Klyuchi, with labels: "Altai, Rakhman. Klyuchi, 14–16.6.1980. V. Kastch. [Kastcheev]" "Paratypus *Oxytelus altaicus* Kastcheev, 1999/ rev. M. Gildenkov, 2011" "*altaicus* [red]" (ZIN).

DESCRIPTION (holotype). Measurements: head width with eyes — 0.772; head width at temples — 0.772; head length from front margin of clypeus to the beginning of neck — 0.572; length of antenna — 0.915; ocular length (longitudinal) — 0.186; length of temple — 0.215; length of pronotum — 0.658; maximum width of pronotum — 0.930; sutural length of elytra (length of elytra from apex of scutellum to posterior margin of sutural angle) — 0.658; maximum width of elytra — 1.073; maximum width of abdomen — 1.044; length of aedeagus (from base of median lobe to apex of parameres) — 0.701; length of forebody (from anterior margin of clypeus to apex of elytra) — 2.159; total length (from anterior margin of clypeus to apex of abdomen) — 4.4.

Body black-brown, shining. Head, pronotum and abdomen black-brown; elytra red-brown; legs, base of antennae (1–4 antennomeres), mouthparts (labrum, mandibulae and labial palpi) light brown; apical antennomeres (5–11) dark brown.

Head depressed, trapezoid, lateral margins of clypeus from infraocular tubercles to anterior margin narrowing at approximately 45°. Anterior margin of clypeus rounded inside. Head length from front margin of clypeus to the beginning of neck is related to maximum width (head width with eyes equal to head width at temples) approximately as 20:27. Temples well developed, rounded. Eyes of medium size, slightly convex, with small facets; their diameter related to length of temple approximately as 13:15. Head with distinct, moderately large, and dense punctation; diameter of punctures approximately equal to 3 diameters of eye facet. Punctation sparse, distances between punctures in temples, frons and eyes area less than their diameter, intervals smooth, shining. Punctation on infraocular tubercles, clypeus, vertex, and anterior part of neck constriction sparse; distances between punctures noticeably greater than their diameter. Lateral margins of neck constriction densely, granularly shagreen.

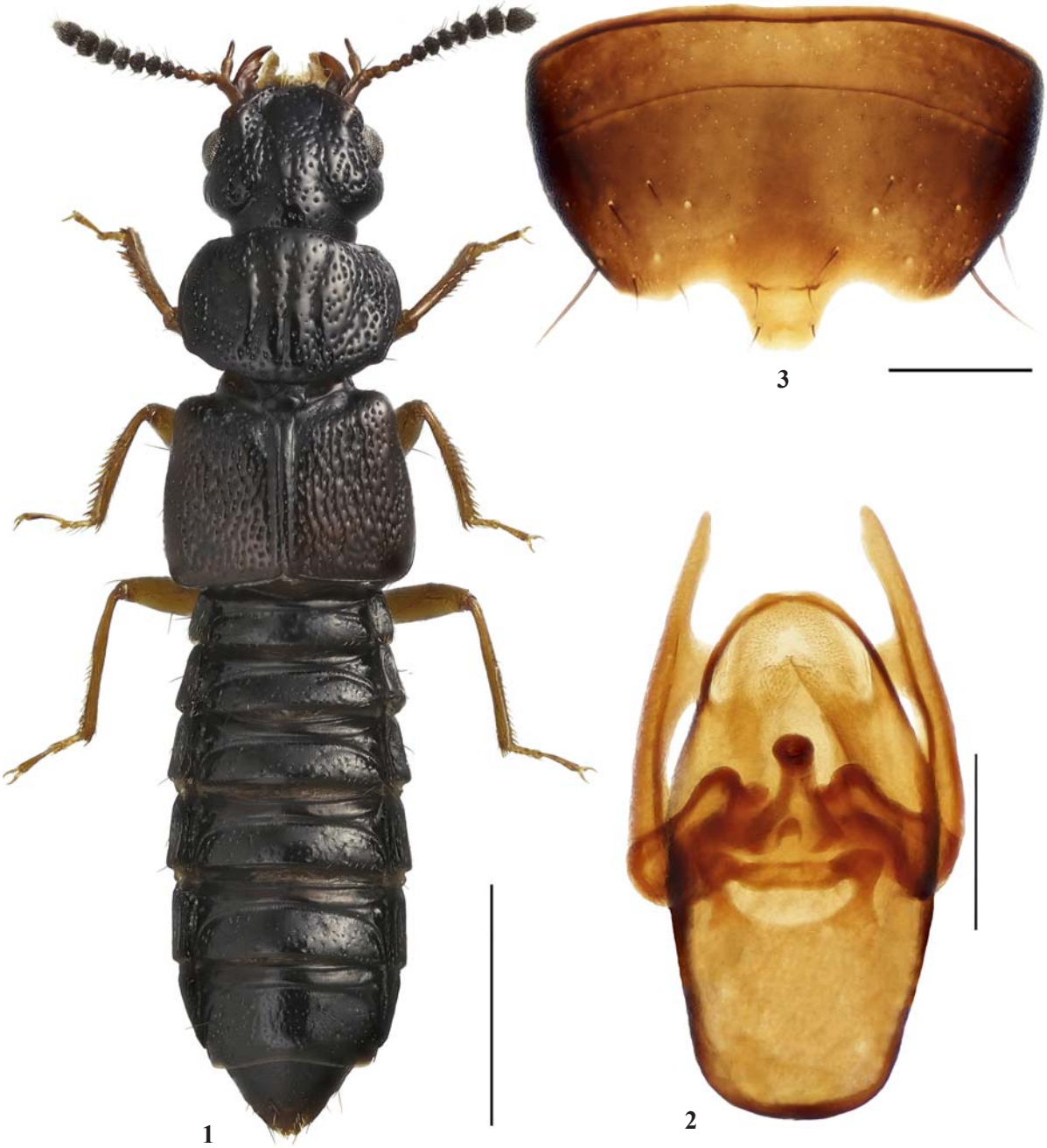
Antennae moderately short. First four antennomeres smooth, antennomeres 5–11 covered with dense setae. Basal antennomere cylindrical, slightly curved, about 4 times as long as broad; antennomere 2 cone-shaped, about 1.5 times as long as broad; 3 cone-shaped, about 1.5 times as long as broad, much narrower and slightly shorter than 2; 4 cup-shaped, approximately as long as broad; 5–6 transverse; 7–10 strongly transverse; 11 slightly shorter than 10, elongate, narrowing to apex, slightly longer than broad; 9–11 antenno-

meres much more massive than 5–8, but not forming a distinct club.

Pronotum slightly convex with a rounded base, maximum broad after about 2/3 of length measured from the base. Length of pronotum related to its maximum broad approximately as 46:65. Pronotal disc distinctly with rather large and densely punctation. Punctation of pronotal disc and head in eyes and temples area is very similar. Three paramedian impressions distinct, rather wide and long. Central impression located on medial line, two other slightly curving impressions — on both sides of central (Fig. 1).

Elytra rather wide, their length from humeral to posterior margins related to maximum width approximately as 58:75. Punctation of elytra distinct, rather large and densely, with approximately more equal distances between punctures than on head and pronotum. Diameter of punctures approximately equal to 3 diameters of eye facet, distances between punctures slightly less than their diameter, intervals smooth, shining. Scutellum rhomboid, fine and smooth shagreen (Fig. 1).

Abdominal tergites with fine smooth shagreenity and fine, sparse punctures at posterior margin. Sternite VIII of characteristic structure (Fig. 3), with wide, rounded incisions on



Figs 1–2. *Oxytelus* (*Tanycraerus*) *ruthenus* **sp.n.**: 1 — holotype, male, dorsal view; 2 — aedeagus, holotype, ventral view; 3 — Sternit VIII. Scale bars: 1 — 1 mm; 2–3 — 0.2 mm.

Рис. 1–2. *Oxytelus* (*Tanycraerus*) *ruthenus* **sp.n.**: 1 — голотип, самец, сверху; 2 — эдеагус, голотип, снизу; 3 — VIII стернит. Масштаб: 1 — 1 мм; 2–3 — 0,2 мм.

posterior margin, passing into the lateral margins of median process, gradually narrowing to flatly rounded apex. At the level of posterior angles of sternite VIII, there is a transverse ridge with weakly rounded posterior margin and two setae.

Aedeagus (Fig. 2) of characteristic structure, with wide median lobe rounded at the apex and relatively narrow parameres. Aedeagus structure is invariable in different parts of the distribution area.

Female (paratypes). In coloration and body proportions similar to male, sexual dimorphism present, males, as a rule, but not always, have a more massive head.

Variability. Variation in color, body size and proportions not significant. Specimens from Kamchatka often have slightly denser punctation of head. Most males have a more massive head than females, however, some males and females similar in body proportions.

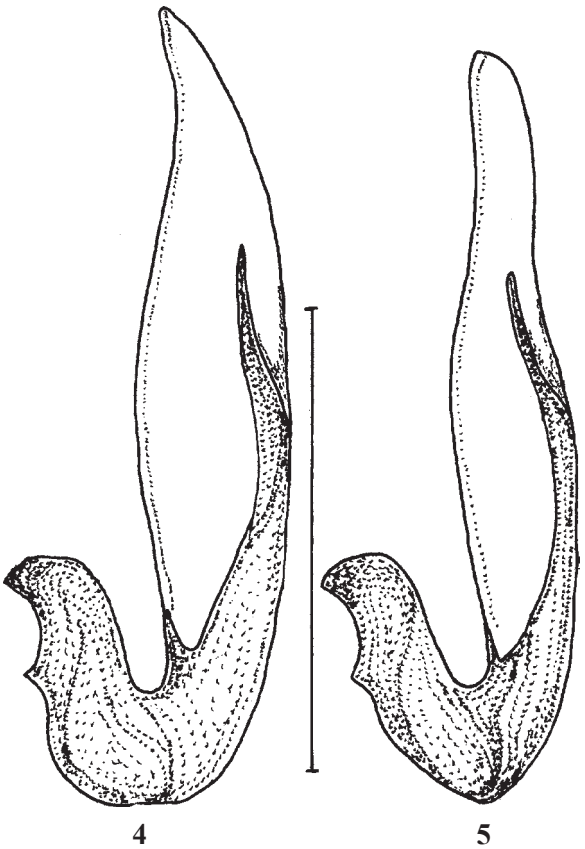
COMPARATIVE NOTES. To clarify the diagnosis of the new species, the type material of *O. assingi* and *O. altaicus* was studied.

The new species is very close to *O. assingi* and was misidentified as it for a long time [Semionenkov, Gildenkov, 2017; Lobkova et al., 2017; Ryabukhin, Gildenkov, 2018]. Differs by significantly paler coloration of antennal base (1–4 antennomeres) and mouthparts: in *O. ruthenus* **sp.n.** (all studied specimens), they are light brown, while in *O. assingi* (the paratype studied and [Schülke, 2012: 1660, Fig. 2]) — dark brown; slightly more developed eyes, ratio of temple length to ocular length in *O. ruthenus* **sp.n.** (holotype) = 1.156, in *O. assingi* (paratype studied) = 1.285 (Fig. 1 and [Schülke, 2012: 1660, Fig. 2]); shorter antennae (7–10 antennomeres of *O. ruthenus* sp.n. are significantly more transverse) (Fig. 1 and [Schülke, 2012: 1660, Fig. 2]). Transverse ridge on median process of abdominal sternite VIII of the new species, compared to *O. assingi*, has not so clear angles at posterior margin (Fig. 3 and [Schülke, 2012: 1660, Fig. 3]). The new species reliably differs by the structure of the aedeagus parameres (Figs 4–5). Comparison of *Oxytelus ruthenus* **sp.n.** with *O. laqueatus* (Marsham, 1802) and *O. altaicus* shows that the latter two species are much closer to each other than to *O. ruthenus* and *O. assingi*, have similar structure of the aedeagus and sternite VIII [Schülke , 2012: 1660, Figs 6–7; Kastcheev, 1999: 147, Figs 6–7, 13–14]. At the same time, *O. laqueatus* and *O. altaicus* are well distinguished from *O. ruthenus* **sp.n.** and *O. assingi* by significantly more developed parameres (Fig. 2 and [Schülke, 2012: 1660, Figs 4, 7; Kastcheev, 1999: 147, Fig. 6]).

DISTRIBUTION. According to available data, the new species reliably lives in the Northern and Central part of European Russia and in Kamchatka.

ETYMOLOGY. From the Latin "Ruthenia" — one of the names of ancient Russia.

HABITAT. Most of the material in the climatic conditions of Central Russia was collected by car net in spring. Two specimens from Smolensk Area were taking by sifting wet litter together with *Oxytelus fulvipes* Erichson, 1839. Specimens from the Northern Russia and Kamchatka were collected from spring to autumn mainly by soil traps in wet biotopes.



Figs 4–5. *Oxytelus* (*Tanycraerus*) spp.: 4 — *O. assingi*, paratype, right paramera, lateral view; 5 — *O. ruthenus* **sp.n.**, holotype, right paramera, lateral view. Scale bar: 0.25 mm.

Рис. 4–5. *Oxytelus* (*Tanycraerus*) spp.: 4 — *O. assingi*, паратип, правая парамера, сбоку; 5 — *O. ruthenus* **sp.n.**, голотип, правая парамера, сбоку. Масштаб: 0,25 мм .

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