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Little known species of the Genus *Oxytelus* (Coleoptera, Staphylinidae) from Kamchatka

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Abstract. The article reports on the record of *Oxytelus* (*Tanycraerus*) *jessoensis* Bernhauer, 1907 from Kamchatka. It provides illustrations of its habitus, aedeagus and male sternite VIII. The article also describes and illustrates the differences between *Oxytelus. jessoensis* and the related species, namely, *Oxytelus* (*Tanycraerus*) *laqueatus* Marsham, 1802, *Oxytelus* (*Tanycraerus*) *assingi* Schülke, 2012 and *Oxytelus* (*Tanycraerus*) *ruthenus* Semionenkov & Gildenkov, 2022. *Oxytelus jessoensis* differs from *O. assingi* in the lighter coloration of the antennal base (segments 1–4) and mouthparts. The species is noticeably different from *O. assingi* and *O. ruthenus* in the structure of male abdominal sternite VIII and in the structure of the aedeagus parameres.

Keywords: *Coleoptera, Staphylinidae, Oxytelus jessoensis* Bernhauer, 1907, taxonomy, Russia, Kamchatka

Малоизвестный вид рода *Oxytelus* (Coleoptera, Staphylinidae) с Камчатки

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Аннотация. По материалам с Камчатки указывается *Oxytelus* (*Tanycraerus*) *jessoensis* Bernhauer, 1907. Проиллюстрирован хабитус, эдеагус и VIII стернит самца. Приводятся и проиллюстрированы отличия *O. jessoensis* от близких видов: *Oxytelus* (*Tanycraerus*) *laqueatus* (Marsham, 1802); *Oxytelus* (*Tanycraerus*) *assingi* Schülke, 2012 and *Oxytelus* (*Tanycraerus*) *ruthenus* Semionenkov & Gildenkov, 2022. *Oxytelus jessoensis* отличается от *O. assingi* более светлой окраской основания антенн (1–4 членики) и ротовых органов. Вид хорошо отличается от *O. assingi* и *O. ruthenus* строением VIII стернита брюшка самца и парамер эдеагуса.

Ключевые слова: *Coleoptera, Staphylinidae, Oxytelus jessoensis* Bernhauer, 1907, таксономия, Россия, Камчатка

Introduction

As noted earlier in (Gildenkov, Semionenkov 2023) a group of species with considerable similarity to *Oxytelus* (*Tanycraerus*) *laqueatus* (Marsham, 1802) (Fig. 2) first moved into the focus of research as '*laqueatus*-allied species' during the revision of the genus *Oxytelus* in China (Lü, Zhou 2012). In addition to *O. laqueatus*, the group included five more species: *Oxytelus almorensis* Cameron, 1930 [Pakistan, India], *O. houomontis* Ito, 1994 [Japan], *O. jessoensis* (Fig. 1) [Japan], *O. robustus* Schubert, 1906 [China (Beijing, Gansu, Sichuan), Pakistan, India] and *O. tibetanus* Bernhauer, 1933 [China (Sichuan, Xizang)]. The five species are close to *O. laqueatus* not only in the general habitus, structure of the head, pronotum and elytra, but also in the shape of the posterior margin of male abdominal sternites VII–VIII. In 2012, a new species *Oxytelus assingi* Schülke, 2012 was described from the Caucasus. It is close to *O. laqueatus* and the little-known species *Oxytelus altaicus* Kastcheev, 1999 (Schülke 2012), which, for this reason, was not considered by the Chinese scholars. In 2022, *Oxytelus ruthenus* Semionenkov and Gildenkov was described from the European part of Russia and Kamchatka. It is very close, including in the structure of the aedeagus (Figs 7, 8, 13, 14) (Semionenkov, Gildenkov 2022: 34, 35: Figs 2, 4, 5), to *Oxytelus assingi*. In our opinion, the species group close to *O. laqueatus* (Lü, Zhou 2012) can currently be divided into two groups based on the structure of the aedeagus. Thus, the first group includes species with wide parameres (see Fig. 6): *O. laqueatus* (Fig. 6) (Schülke 2012: 1660: Fig. 7; Gildenkov, Semionenkov 2023: 42: Fig. 4), *O. robustus* (Lü, Zhou 2012: 46: Fig. 17: M, N, O) and *O. altaicus* (Gildenkov, Semionenkov 2023: 42: Fig. 3). The second group includes species with narrow parameres (see Figs 5, 7, 8): *O. tibetanus* (Lü, Zhou 2012: 54: Fig. 21: K, L, M), *O. assingi* (Figs 7, 13) (Schülke 2012: 1660: Fig. 4; Semionenkov, Gildenkov 2022: 35: Fig. 4), *O. ruthenus* (Figs 8, 14) (Semionenkov, Gildenkov 2022: 34, 35: Figs 2, 5), *O. houomontis* (Ito 1994: 43: Fig. 3: D) and *O. jessoensis* (Figs 5, 15). This group most likely includes *O. almorensis*, which was recorded in 2016 from Taiwan (Hayashi 2016). The structure of the aedeagus of a male from Taiwan (narrow parameres) became known to us at the end of 2022 thanks to Yasuhiko Hayashi (Hayashi, personal communication, illustrated with photographs). However, we did not study the type material for *O. almorensis*.

Material and methods

The examined material is deposited in the following collections:

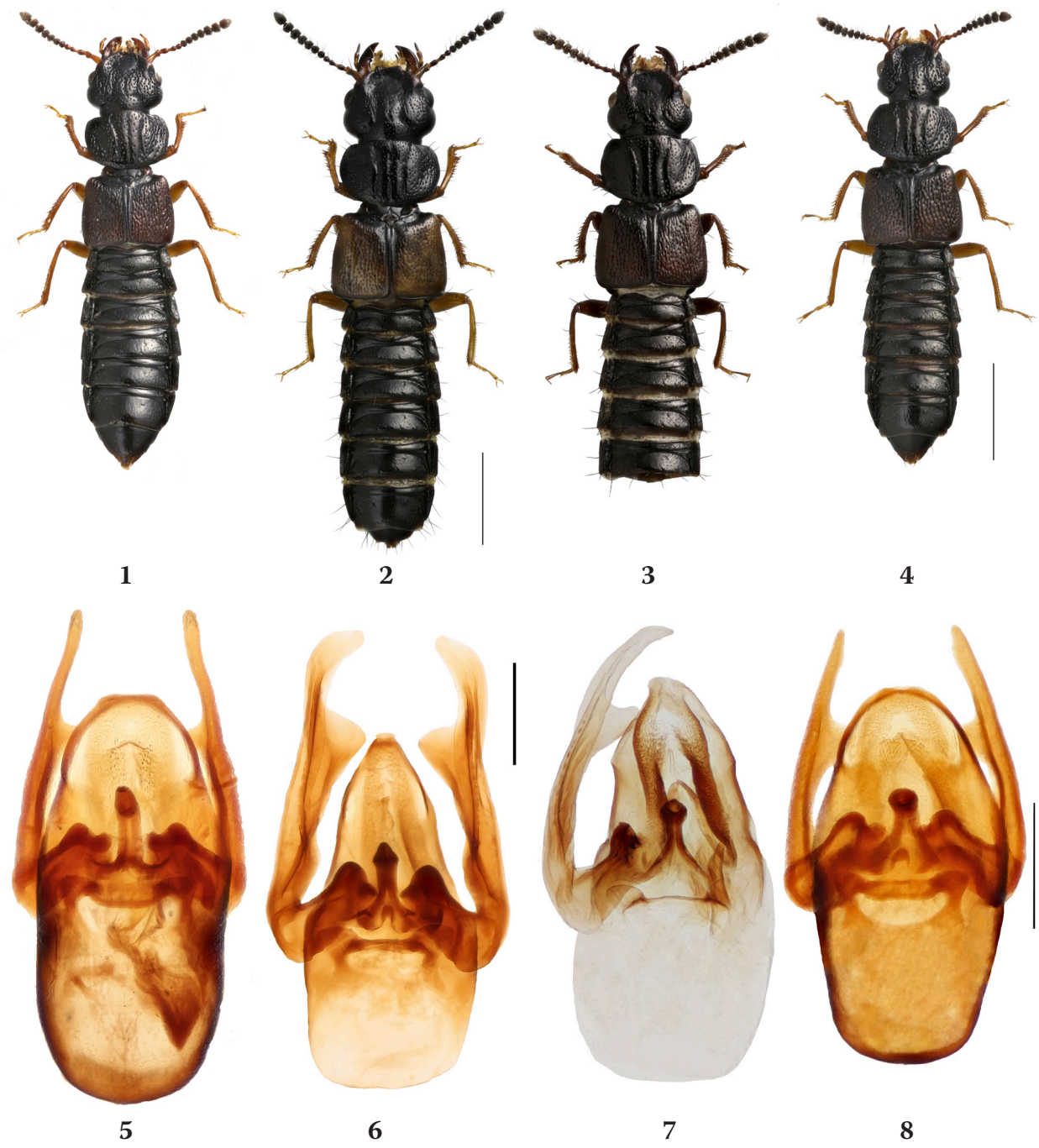
cMG — Mikhail Gildenkov's private collection, Smolensk;

cOS — Oleg Semionenkov's private collection, Smolensk.

The reported study is based on the standard methods of taxonomic research of insects. The preparations were made on an MBS-10 binocular microscope. The genital preparations were processed using 10% KOH and then fixed in Euparal. Photographs were taken with a Canon EOS 5D Mark III camera and a Canon MP-E 65 mm objective using the extended focus technology.

Oxytelus (*Tanycraerus*) *jessoensis* Bernhauer, 1907

Material. 2♂, 6 exs. 'Russia: Kamchatka, Bystrinsky Natural Park. Floodplain of the Kozyrevka River (*Populus*, fern, horsetail), 21.08.2015, leg. V. I. Lobanova' '*Oxytelus assingi* Schülke, 2012 V. B. Semenov det. 2015' '*Oxytelus jessoensis* Bernhauer, 1907, det. M. Gildenkov, 2021' (cMG); 1♂, 1♀ 'Russia: Kamchatka, Bystrinsky Natural Park. Floodplain of Belaya River, near the stream (*Alnus*, *Salix*), 07.2015, leg. V. I. Lobanova' '*Oxytelus jessoensis* Bernhauer, 1907, det. O. Semionenkov, 2021' (cOS); 1♂, 3 exs. 'Russia: Kamchatka, Bystrinsky Natural Park. Floodplain of the Kozyrevka River (*Alnus*, *Salix*), 21.08.2015, leg. V. I. Lobanova' '*Oxytelus jessoensis* Bernhauer, 1907, det. M. Gildenkov, 2021' (cMG); 5 exs. 'Russia: Kamchatka, Bystrinsky Natural Park. Floodplain of the Kozyrevka River, hilltop (*Picea*, *Betula*), 07.2015, leg. V. I. Lobanova' '*Oxytelus assingi* Schülke, 2012 V. B. Semenov det. 201' '*Oxytelus jessoensis* Bernhauer, 1907, det. M. Gildenkov, 2021' (cOS); 1♂, 2♀ 'Russia: Kamchatka, Bystrinsky Natural Park. Floodplain of Bolshaya Romanovka River (*Picea*, fern, horsetail), 07.2015, leg. V. I. Lobanova' '*Oxytelus jessoensis* Bernhauer, 1907, det. O. Semionenkov, 2021' (cOS).



Figs 1–8. *Oxytelus* (*Tanycraerus*) spp.: *1* — *Oxytelus jessoensis* Bernhauer, 1907, Kamchatka, male, dorsal view; *2* — *Oxytelus laqueatus* (Marsham, 1802), Smolensk Area, male, dorsal view; *3* — *Oxytelus assingi* Schülke, 2012, paratype, male, dorsal view; *4* — *Oxytelus ruthenus* Semionenkov & Gildenkov, 2022, holotype, male, dorsal view Scale bar: 1 mm. Aedeagus, ventral view: *5* — *O. jessoensis*, Kamchatka; *6* — *O. laqueatus*, Smolensk Area; *7* — *O. assingi*, paratype; *8* — *O. ruthenus* Semionenkov & Gildenkov, 2022, holotype. Scale bar: 0.25 mm

Рис. 1–8. *Oxytelus* (*Tanycraerus*) spp.: *1* — *Oxytelus jessoensis* Bernhauer, 1907, Камчатка, самец, сверху; *2* — *Oxytelus laqueatus* (Marsham, 1802), Смоленская область, самец, сверху; *3* — *Oxytelus assingi* Schülke, 2012, паратип, самец, сверху; *4* — *Oxytelus laqueatus* (Marsham, 1802), голотип, самец, сверху. Масштаб: 1 мм. Эдеагус снизу: *5* — *O. jessoensis*, Камчатка; *6* — *O. laqueatus*, Смоленская область; *7* — *O. assingi*, паратип; *8* — *O. ruthenus*, голотип. Масштаб: 0,25 мм

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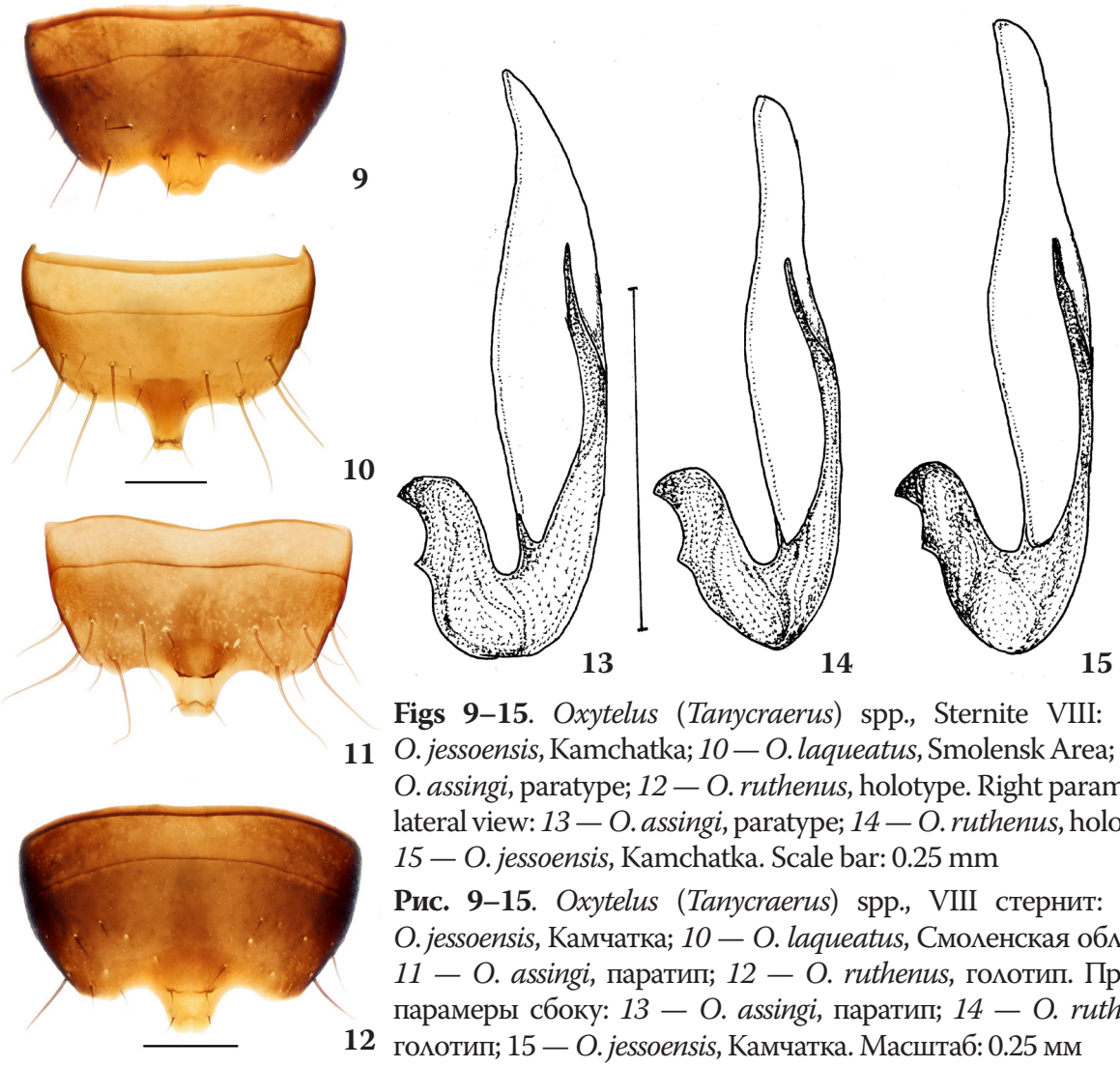

Figs 9–15. *Oxytelus* (*Tanycraerus*) spp., Sternite VIII: *9* — *O. jessoensis*, Kamchatka; *10* — *O. laqueatus*, Smolensk Area; *11* — *O. assingi*, paratype; *12* — *O. ruthenus*, holotype. Right parameres, lateral view: *13* — *O. assingi*, paratype; *14* — *O. ruthenus*, holotype; *15* — *O. jessoensis*, Kamchatka. Scale bar: 0.25 mm

Рис. 9–15. *Oxytelus* (*Tanycraerus*) spp., VIII стернит: *9* — *O. jessoensis*, Камчатка; *10* — *O. laqueatus*, Смоленская область; *11* — *O. assingi*, паратип; *12* — *O. ruthenus*, голотип. Правые парамеры сбоку: *13* — *O. assingi*, паратип; *14* — *O. ruthenus*, голотип; 15 — *O. jessoensis*, Камчатка. Масштаб: 0.25 мм

Diagnosis. Like *O. ruthenus, Oxytelus jessoensis* differs from *O. assingi* in the lighter coloration of the antennal base (segments 1–4) and mouthparts (Schülke 2012; Semionenkov, Gildenkov 2022). *O. jessoensis* is noticeably different from them in the structure of abdominal sternite VIII (Figs 9, 11, 12); the differences between *O. assingi* and *O. ruthenus* are limited only to the structure of abdominal sternite VIII (Figs 11, 12). The width of the abdomen in *O. assingi* and *O. ruthenus* (Figs 3, 4) (Schülke 2012: 1660: Fig. 1) is slightly narrower than the width of the elytra, in contrast to *O. jessoensis* (Fig. 1), whosewidth of the abdomen noticeably exceeds the width of the elytra, both in males and females. However, the three species differ most reliably in the details of their parameres structure (Figs 13–15).

Some of the material we studied and presented in this article (see above), with the labels '*Oxytelus assingi* Schülke, 2012 V. B. Semenov det. 2015', was previously incorrectly identified and published (Lobkova, Lobanova, Semenov 2017) as *O. assingi*. Another part of the material from the same work (Lobkova, Lobanova, Semenov 2017) was identified by us (Semionenkov, Gildenkov 2022) as *O. ruthenus*. This indicates that the species *O. jessoensis*, *O. assingi* and *O. ruthenus* are very difficult to distinguish, and given the cohabitation of *O. jessoensis* and *O. ruthenus* in Kamchatka, a detailed diagnosis of the species *O. jessoensis* may be relevant.

Discussion. *Oxytelus* (*Tanycraerus*) *jessoensis* Bernhauer, 1907 was described from Japan, from the island of Hokkaido (Jesso), vicinity of the Nemoro city, near Tokyo (Bernhauer 1907). For a long time it could only be found in catalogs. Koch (Koch 1932) gives the

characters of *O. jessoensis* in the identification key, comparing it with the widespread and well-known species *Oxytelus* (*Tanycraerus*) *laqueatus* (Marsham, 1802). According to Koch, the abdomen of *O. jessoensis* at its widest part is noticeably broader than the elytra, while it is noticeably narrower than the elytra in *O. laqueatus* (Figs 1, 2). Koch also notes significantly coarser punctation of the elytra and head in *O. jessoensis* (Koch 1932: 655). A fairly detailed redescription of the species *O. jessoensis* was published in 1994 (Ito 1994). In addition to the description, Tateo Ito provides photographs of the holotype and original labels and a drawing of abdominal sternite VIII with characteristic features (Ito 1994: 42: Figs 1, 2). At the same time, the author notes that the species is known to him from a single specimen (male, holotype), with no data available for the female (Ito 1994: 42). The last mention of *O. jessoensis* is found in V. Kastcheev's identification key (Kastcheev 1999: 154). He compares *O. jessoensis* with *O. laqueatus* and *Oxytelus* (*Tanycraerus*) *altaicus* noting a much coarser and denser punctation of the head, pronotum and elytra in *O. jessoensis*.

The material from Kamchatka (see above) was identified as *O. jessoensis* (Figs 1, 5, 9, 15) based on the descriptions in (Bernhauer 1907; Ito 1994) and characteristic features in the structure of male abdominal sternite VIII (Ito 1994: 42: Fig. 2). Indeed, *O. jessoensis* (Fig. 1) has significantly coarser and denser punctation of the head, pronotum and elytra compared to the very similar body microsculpture of *O. laqueatus* (Fig. 2) and *O. altaicus* (Gildenkov, Semionenkov 2023: 42: Figs 1, 2). It is also confirmed that the width of the abdomen of *O. jessoensis* actually exceeds the width of the elytra (Fig. 1), in contrast to *O. laqueatus* (Fig. 2). The aedeagus of *O. jessoensis* was studied for the first time (Fig. 5). It should be noted that its structure is noticeably different from the structure of the aedeagus of *O. laqueatus* and *O. altaicus* (Fig. 6) (Gildenkov, Semionenkov 2023: 42: Figs 3, 4), with significantly more developed parameres (Fig. 6) (Gildenkov, Semionenkov 2023: 42: Figs 3, 4, 5, 6). At the same time, *O. laqueatus* and *O. altaicus* are very close species not only in the structure of the aedeagus, but also in the structure of male abdominal sternites VII (Gildenkov, Semionenkov 2023: 42: Figs 7, 8) and VIII (Fig. 10), which makes them different from *O. jessoensis* (Fig. 9). In coloration, coarse punctation of the head, pronotum and elytra, and structure of the aedeagus, *O. jessoensis* is most similar to the recently described (Schülke 2012; Semionenkov, Gildenkov 2022) *Oxytelus* (*Tanycraerus*) *assingi* Schülke, 2012 (Figs 3, 7, 11, 13) and *Oxytelus* (*Tanycraerus*) *ruthenus* Semionenkov & Gildenkov, 2022 (Figs 4, 8, 12, 14).

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