

## Contribution to the knowledge of the fauna of the tribe Omaliini McLeay, 1825 (Coleoptera: Staphylinidae: Omaliinae) of the Baikal region and adjacent territories

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A list of 30 species in 9 genera of Omaliini McLeay, 1825 from the Baikal region and adjacent territories is provided. A description of *Pycnoglypta cornuta* Shavrin, sp.n. (Cis- and Transbaikalia) is presented. Forebody and aedeagus of *Omaliium subsolanum* Herman, 2001 and the holotype of *Omaliium longicorne* Luze, 1906 are illustrated. New records of *Dropephylla puella* J. Sahlberg, 1880, *Omaliium caesum* Gravenhorst, 1806, *O. curtipenne* Mäklin, 1878, *O. oxyacanthae* Gravenhorst, 1806, *O. subsolanum* Herman, *Phloeonomus (Phloeonomus) pusillus* (Gravenhorst, 1806), *Phloeostiba lapponica* (Zetterstedt, 1838), *Pycnoglypta campbelli* Gusarov, 1995, *P. heydeni* Eppelsheim, 1886, *P. lurida* (Gyllenhal, 1813) and *P. sibirica* Mäklin, 1878 are given, including new records of *P. campbelli* for the Palaearctic region, *O. caesum* for Siberia, *P. lurida* for Western Siberia and the Krasnoyarsk area of Eastern Siberia, *O. subsolanum* for Irkutsk and the Chita area, *O. curtipenne* for Butyatiya republic, *D. puella*, *O. oxyacanthae*, *Ph. lapponica* and *P. sibirica* for the Chita area, *Ph. pusillus* for the Amur area and *P. heydeni* for the Krasnoyarsk area.

Key words: Coleoptera, Staphylinidae, Omaliinae, Omaliini, Palaearctic, Baikal region, taxonomy, fauna, new species, new records.

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### INTRODUCTION

The world fauna of the tribe Omaliini is represented by 452 species in 40 genera (Herman, 2001a). In the Palaearctic region, there are 210 nominal omaliini species in 18 genera (14 of which are *nomina dubia*) (Smetana, 2004); in Russia there are 66 species in 11 genera (Smetana, 2004), of which 25 species in 8 genera are known from the Baikal region (Shavrin, 2006).

The first records of species of the tribe Omaliini from the Baikal Region were published by Motschulsky (1860) who recorded *Omaliium septentrionum* Thomson from Transbaikalia and described *Pycnoglypta baicalica* (as *Acidota*). Eppelsheim (1893), based on material collected by botanist H. Leder from the valley of Irkut river and around Munku-Sardyk mountain, recorded five species: *Omaliium oxyacanthae* Gr., *O. septentrionum* Thoms., *O. strigicollis* Wank., *Phloeostiba lapponica* (Zt.), *Ph. plana* (Pk.) and

*Pycnoglypta lurida* (Gyll.). Luze (1906) recorded *Phyllodrepa nigra* (Gr.) and described *O. clavatum* from the Tunkinskaya valley. Some species were recorded without specified localities. Bernhauer (1903) described *Phyllodrepa baicalensis* (Bh.) from the collection of Fauvel with the type locality “Baikalsee”; Luze (1906) described from the Fauvel’s collection *Ph. rufipennis* with the type locality “Sibirien, Baikalsee”. Almost all these previous records were included in the catalogue by Jakobson (1910) with additionally new records of *O. curtipenne* Maek. and *Xylodromus depressus* (Grav.) for Irkutskaya ”gubernia”. Later, Scheerpeltz (1929) recorded *O. septentrionum* from lake Baikal. Additional records of the Omaliini can be found in various faunistic papers from south-western Cisbaikalia (Berlov, 1977; Shavrin, 2001, 2006, 2007, 2009; Shavrin & al., 1999; Shilov & Shilenkov, 1977), from Transbaikalia (Ananina & Voincov, 2006; Shavrin, 1998, 2000, 2001, 2006; Voincov, 2006), from north Cisbaikalia (Anishchenko & Shavrin, 1998; Shavrin & al., 2001) and from Tuva republic (Shavrin & Kyzyl-ool, 2007). The diagnostic data of some genera of the Baikal region can be find in taxonomical papers: *Dropephylla* (Jászay & Hlaváč, 2006), and *Pycnoglypta* (Gusarov, 1991, 1995; Shavrin, 2001).

Thus, the fauna of this vast region is relatively well known. Nevertheless, two large genera - *Omalium* Grav. and *Phyllodrepa* Thoms., in east Palaearctic, are in need of taxonomic revision.

This paper presents a list of species from the Baikal Region (within the administrative borders of the Irkutsk and Chita (Transbaikal province) area, and the Buryatia republic), with new records, and with description of a new species of the genus *Pycnoglypta* Thomson. Additional records from the adjacent territories in Siberia are also provided.

## MATERIAL AND METHODS

This paper is based on specimens collected by the author during 1992-2009 in the Baikal Region, as well as on specimens from other institutional and private collections.

The examined material is deposited in the following institutions and private collections (curators are given in parentheses):

CA – private collection of A.V. Anishchenko (Daugavpils, Latvia);  
 CB – private collection of E. Ya. Berlov (Irkutsk, Russia);  
 CR – private collection of A.B. Ryvkin (Moscow, Russia);  
 CS – private collection of A.V. Shavrin (Daugavpils, Latvia);  
 CV – private collection of A.A. Voincov (Zaigraevo, Russia);  
 HNHM - Hungarian Natural History Museum, Budapest, Hungary (G. Makranczy, G. Szél);  
 ISU - Irkutsk State University, Irkutsk, Russia (V.G. Shilenkov);  
 NMW – Naturhistorisches Museum Wien, Vienna, Austria (H. Schillhammer);  
 SIPBP – Siberian Institute of Physiology and Biochemistry of Plants, Irkutsk, Russia (T.A. Agafonova, A.S. Pleshanov);  
 ZIN – Zoological Institute, St.-Petersburg, Russia (†G.S. Medvedev);  
 ZMM – Zoological Museum of Moscow University, Moscow, Russia (N.B. Nikitsky).

The following measurements are used in this paper and are abbreviated as follows:

WH - maximum width of head including eyes;  
 WP - maximal width of pronotum;  
 LA - length of antenna;  
 LE - longitudinal length of eye;  
 LT - length of temple (from posterior margin of eye to neck constriction);  
 LH - length of head (from base of labrum to neck constriction along the head midline);  
 LP - length of pronotum;  
 LES - sutural length of elytra (length of elytra from apex of scutellum to posterior margin of sutural angle);  
 WE - maximal width of elytra;  
 WA - width of segment IV of abdomen;

LAE - length of aedeagus.

The measurements of LA and LAE were made for the holotype only. All measurements of the entire lengths of the beetles are given in millimeters. Measurements of body parts were conducted with a binocular microscope using an ocular micrometer. The length of the body was measured from the base of the labrum to the apex of the abdomen.

Some specimens were dissected, tergite and sternite of the abdominal segment VIII were glued on the same plate, the aedeagus and the apical part of abdomen were put in glycerine. The genital structures were dehydrated in absolute alcohol. When the aedeagus and apical parts of the abdomen were studied, they were put into a drop of Euparal on celluloid microslides pinned under the specimens from which they originated.

The morphological studies were carried out using a *Zeiss Discovery V8* and a *Zeiss Discovery V12* stereomicroscope. All the figures were enhanced using Adobe Photoshop software.

The list of species is based on both literature and new material. The distribution data follow the classification by Bernhauer & Schubert, (1910), Herman (2001a), Horion (1963), Jakobson (1910), Smetana (2004) and Tichomirova (1973). Genera and species are listed in alphabetical order. In the present paper, I used references only for the Baikal Region, other references have been omitted (except *Omalium subsolanum*). Within the provinces, records are listed chronologically. All species expected to occur in the Baikal Region are listed in square brackets [ ]. All specimens were identified by the author.

## RESULTS

### *Acrulia inflata* (Gyllenhal, 1813)

(*corticalis* (Heer), *egregia* (Redt.), *longicollis* (Gredl.))

*Acrulia inflata*: Shavrin, 2001:83;

*Acrulia inflata*: Shavrin, 2006:199.

**Material.** IRKUTSK area: 1 ex., Usolskiy district, valley of Kitoy river opposite Neudachnykh island, 14-16.07.1996, in flight, A. Shavrin (CS).

**Distribution.** Europe, European Russia, Siberia not far from Baikal lake.

### *Dropephylla puella* J. Sahlberg, 1880

*Dropephylla puella*: Jászay, Hlaváč, 2006:59.

**Material.** IRKUTSK area: 26 ex., Katangskiy district, left side of Chona river, near mouth of Miringda [=Meringda] river, 18-25.08.2008, mosses, A. Shavrin, I. Enushchenko (CS); 1 ex., same data, Podvoloshino, 4-9.08.2008, A. Shavrin, I. Enushchenko (CS); 1 ex., Ust-Kutskiy district, valley of Niya river, Irin river, 3-4 km S Niya, 29-30.07.2008, A. Shavrin, I. Enushchenko (CS); CHITA area: 1 ex., Uletovskiy district, Sokhondinskiy nature reserve, mouth of Ashagley river (right tributary of Ingoda river), N 49° 54' 329 E 111° 07' 159, 19-21.07.2009, A. Shavrin, I. Enushchenko (CS); 1 ex., same data, valley of Arshan river (right tributary of Ingoda river), 21.07.2009, A. Shavrin, I. Enushchenko (CS); 1 ex., same data, unnamed stream (right tributary of Ingoda river), 21.07.2009, A. Shavrin, I. Enushchenko (CS).

**Distribution.** Siberia.

**Remark.** The species as *Phyllodrepa* was described by Sahlberg J. (1880:111) from north-western Siberia (type locality: "Polovinka"; in the recent revision of the genus [Jászay, Hlaváč, 2006:59] type locality was erroneously cited as "Russia: "Lena superior" Polovinka). *D. puella* was record for Yenisey taiga in the Krasnoyarsk area [Veselova, Ryvkin, 1991:180]. Based on old material (four specimens deposited at NMW) collected by B. Poppius, the species was recorded for Ust-Kut [Jászay, Hlaváč, 2006:59]. The first record for Chita area.

*Omalium allardii* Fairmaire & Brisout de Barneville, 1859

(*antennarium* (Rt.); *genistarum* (Coq.); *salzmanni* (Saulcy))

*Omalium allardii*: Shavrin, 2001 :83.

**Material.** IRKUTSK area: 2 ex., Olkhonskiy district, Olkhon island, Ibida, 24.08.2005, in fungi, A. Shavrin (CS) ; Shelekhovskiy district, Shelekhov, 09.1992, in rotten mushrooms, A. Shavrin (CS).

**Distribution.** North Africa, Europe, Cyprus, Israel, Syria, Turkey, European Russia, Siberia not far from Baikal lake; introduced in New Zealand.

*Omalium caesum* Gravenhorst, 1806

(*corticinum* Motsch., *flavicorne* Roub., *impressum* Heer, *peloponnesiacum* Scheerp.)

**Additional material. WESTERN SIBERIA:** TYUMEN' area: 1 ex., Khanty-Mansiyskiy autonomous region, Surgutskiy district, near S border of the protected area of the Yuganskiy nature reserve, Kolylnor, 05.09.2009, A.B. Ryvkin (CR); 1 ex., same area, Uvatskiy district, 10 km S Gornoslinkino near Tobol'skiy station RAS, Varpak river near mouth, 12.09.2003, A.B. Ryvkin (CR); **EASTERN SIBERIA:** KRASNOYARSK area: m#, Turukhanskiy district, basin of Podkamennaya Tunguska river, Rybnaya river, 13.04.1990, in fungi, A.B. Ryvkin (CR); 1 m#, same data, Kammenniy Dubches river, 60 km below Teulches river mouth, near hut, 22.09.1992, 150 m a.s.l., lake connected with the river by a rill, with *Carex* tussocks, *Filipendula* sp., *Sphagnum* spp., *Mnium* sp. etc., V.B. Semenov (CR); 1 ex., same data, Centralnosibirskiy nature reserve near Lebed' village, 29.09.1988, litter and mosses in Picea-Pinus forest with *Pleurozium schreberi*, A.B. Ryvkin (CR).

**Distribution.** Previously, the species was known from North Africa, Europe, Turkey, Lebanon, Kazakhstan (Smetana, 2004:262).

**Remarks.** The first record for Siberia.

*Omalium curtipenne* Maeklin, 1878

*Omalium curtipenne*: Jacobson, 1910:455.

**Material.** BURYATIA Republic: 1 ex., Central Sayan, Okinskiy district, environs of Kropotkin volcano, 14-17.07.1998, in flight, A. Shavrin (CS).

**Distribution.** Siberia, Russian Far East.

**Remarks.** The species is known from Yakutia (Poppius, 1909:4). New record for Buryatia republic.

*Omalium longicorne* Luze, 1906 (Fig. 1.)

*Omalium longicorne*: Voincov, 2006:47.

**Type material.** MONGOLIA: m#, TYPUS / Shangai Leder 1892 / *subalpinum* Epp. Nordl. Mongol. / c. Eppelsh. Steind. d. / *longicorne* m. Type det. Luze (NMW).

**Material.** BURYATIA Republic: m#, Zaigraevo, valley of Bryanka river, 20.08.1987, A. Voincov (CV); f#, Werchne-Udinsk [=Ulan-Ude], Transbaikal. Mandl. / ?*longicorne* Luze / ex coll. Scheerpeltz (NMW).

**Distribution.** South Buryatia, north Mongolia.

**Remarks.** A photograph of the holotype is presented in Fig. 1.



Fig. 1. *Omalium longicorne* Luze, 1906. Holotype

***Omalium oxyacanthae*** Gravenhorst, 1806

(*piceum* St., *subdepressum* Muls. & Rey)

*Omalium oxyacanthae*: Eppelsheim, 1893:66;  
*Omalium oxyacanthae*: Shavrin & al., 1999:28.

**Material.** BURYATIA Republic: #, Ost. Sibirien / c. Eppelsh. Steind. d. / *clavigerum* det. Luze / CO-TYPUS [non type!] (NMW); m#, *oxyacanthae* Gr. / Ost. Sibirien Quellgebiet des Irkut Leder 1891 / c. Eppelsh. Steind. d. / *clavigerum* m. Luze / CO-TYPUS [non type!] (NMW); CHITA area: 1 ex., Kalarskiy district, Novaya Chara, *Larix*-forest, in fungi, 22.08.2009, A. Boiko (CS); 1 ex., same data but 11.08.2009 (CS).

**Distribution.** Transpalearctic species.

**Remarks.** The species is reported from the Chita area for the first time.

***Omalium septentrionis*** Thomson, 1857

(*clavatum* Fauv., *clavicornae* Motsch., *languidum* Mäkl.)

*Ochthexenus clavicornae*: Motchulsky, 1860:546 (type locality: “sur les bords à Tourkinsk dans les parties septentrionales du lac Baical du Sibérie orientale”);

*Omalium septentrionis*: Hochhuth, 1862:104;  
*Omalium septentrionis*: Eppelsheim, 1893:66;  
*Omalium septentrionis*: Luze, 1906:486, 491, 519;  
*Omalium septentrionis*: Jacobson, 1910:455;  
*Omalium septentrionis*: Scheerpeltz, 1929:115;  
*Omalium septentrionis*: Horion, 1963:77;  
*Omalium septentrionis*: Berlov, 1977:72;  
*Omalium septentrionis*: Shavrin & al., 1999:28;  
*Omalium septentrionis*: Shavrin, 2001:83;  
*Omalium septentrionis*: Shavrin, 2000:77;  
*Omalium septentrionis*: Shavrin, 2006:199;  
*Omalium septentrionis*: Shavrin, 2007:135;  
*Omalium septentrionis*: Shavrin, 2009:42.

**Material.** IRKUTSK area: 84 ex., Katangskiy district, Erbogachyon, right side of Nizhnyaya

Tunguska river, 18,26-27.08.2008, in rotten mushrooms, A. Shavrin, I. Enushchenko (CS); 14 ex., Nizhneudinskiy district, 12 km W Nizhneudinsk, 30.06.1979, A. Voincov (CV); 4 ex., Irkutskiy district, Bolshie Koty, 25-27.07.1993, in dung, A. Shavrin (CS); 1 ex., same district, Irkutsk, valley of Ushakovka river, 18.04.1932, Levchuk (SIFBP); 3 ex., same district, Irkutsk, 29.05.1973, E. Berlov (CB); 1 ex., same district, 17<sup>th</sup> km on Baikal's highway, 25.04.1995, A. Shavrin (CS); 1 ex., same data but 2.05.1991, A. Anishchenko (CA); 2 ex., Shelekhovskiy district, Shelekhov, 1.05.1994, in old cow dung, A. Shavrin (CS); 4 ex., same data, 18.09.1993, in rotten mushrooms, A. Shavrin (CS); 20 ex., same data, 09.1992, in mushrooms, A. Shavrin (CS); 17 ex., same data, 17.08.1993, A. Shavrin (CS); 6 ex., same data, 18.08.1993, A. Shavrin (CS); 3 ex., same data, 12.08.1991, A. Shavrin (CS); 1 ex., same data, 29.07.1992, in dung, A. Shavrin (CS); 2 ex., same data, 15.04.1993, in flight, A. Shavrin (CS); 1 ex., same data, 10.08.1991, in mushrooms, V. Vladimirov (CS); 1 ex., same district, Moty, 10.06.1993, in hothouse, A. Shavrin (CS); 1 ex., same district, Podkamennaya, 3.10.1999, V. Shilenkov (ISU); 1 ex., CHITA area, Kalarskiy district, Novaya Chara, 22.08.2009, *Larix*-forest, in fungi, A. Boiko (CS); Mogochinskiy district, Malie Kovali, valley of Chichatka river, 20-28.06.1999, A. Shavrin (CS).

**Distribution.** Transpalearctic species.

***Omalium strigicollae*** Wankowicz, 1869

(*brevicollae* C. Thoms., *foraminosum* Mäkl.)  
*Omalium foraminosum*: Eppelsheim, 1893:66;  
*Omalium brevicollae*: Luze, 1906:524 (“Baikal-see, Quellgebiet des Irkut”);  
*Omalium strigicollae*: Jacobson, 1910:455;  
*Omalium strigicollae*: Shilov & Shilenkov, 1977:64;  
*Hapalaraea sp.*: Anishchenko & Shavrin, 1998:31;  
*Omalium strigicollae*: Ananina & Voincov, 2006:43.

**Material.** IRKUTSK area: 1 m#, [Irkutskiy district], Irkutsk, 1917, coll. Dr. J. Fodor (HNHM).

**Distribution.** Holarctic species.

**Remarks.** The species is also known from Yakutia republic, valley of Lena river (Poppius, 1909:4).

***Omalium subsolanum* Herman, 2001 (Figs. 2-5)**

(*clavatum* Luze)

*Omalium clavatum*: Luze, 1906:522 (“Ostsibirien (Quellgebiet des Irkut)”);

*Omalium clavatum*: Jacobson, 1910:455;

*Omalium clavatum*: Bernhauer & Schubert, 1910:52;

*Omalium clavatum*: Tichomirova, 1973:138;

*Omalium clavatum*: Smetana, 1975:155 (“Central aimak: 126 km N Ulan-Baator...”, “Ulan-Baator...”);

*Omalium subsolanum*: Herman, 2001:38;

*Omalium subsolanum*: Herman, 2001a:535;

*Omalium subsolanum*: Smetana, 2004:264

**Type material.** ♀, TYPUS *Omalium clavatum* Luze / ♀/ ex coll. Luze / Ost-Sibir. Irkut. (NMW).

**Material.** IRKUTSK area: 37 ex., Katangskiy district, Erbogachyon, valley of Nizhnyaya Tunguska river, 18,26-27.08.2008, in rotten mushrooms, A. Shavrin, I. Enushchenko (CS); 1 ex., Irkutskiy district, Angarsk, Elovskoe water

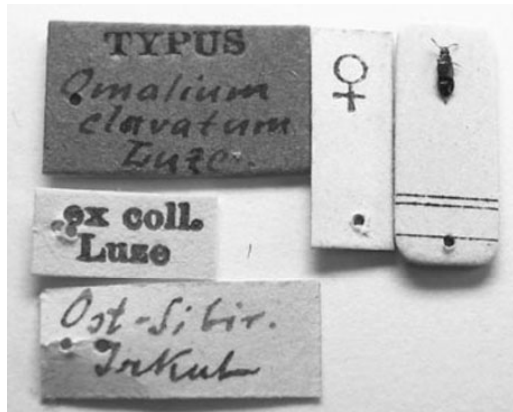


Fig. 2. *Omalium subsolanum* Herman, 2001. Holotype

reservoir, 21.06.2008, I. Enushchenko (CS); 4 ex., Slyudyanskiy district, Khमार-Daban Mts., Podkomarnaya river (tributary of Slyudyanka river, 10-14.06.1996, wet mosses near mountain stream, A. Shavrin (CS); CHITA area: 19 ex., Kalarskiy district, Novaya Chara, 22.08.2009, in fungi, A. Boiko (CS); same data but 11.08.2009 (CS); 1 ex., Mogochinskiy district, Malie Kovali, valley of Chichatka river, 20-28.07.1999, in litter, A. Shavrin (CS).

**Distribution.** Baikal region, north Mongolia.

**Remarks.** A photograph of the holotype (*O. clavatum*) is presented in Fig. 2. Aedeagus as in Figs. 3-4. Apex of aedeagus laterally as in Fig. 5. New records for Irkutsk and Chita area.

***Phloeonomus (Phloeonomus) punctipennis* Thomson, 1867**

*Phloeonomus punctipennis*: Shavrin, 2001:83;

*Phloeonomus punctipennis*: Shavrin, 2006:199;

*Phloeonomus punctipennis*: Shavrin, 2007:135

**Material.** IRKUTSK area: m#, Irkutskiy district, Bolshie Koty, 8.08.1979, V. Shilenkov (ISU).

**Distribution.** Azores, Madeira, Europe, European Russia, south Cisbaikalia.

***Phloeonomus (Phloeonomus) pusillus* (Gravenhorst, 1806)**

(*abietinus* Thoms., *foveolatus* St., *granulatus* Woll.)

*Phloeonomus pusillus*: Shavrin & al., 1999:28;

*Phloeonomus pusillus*: Shavrin, 2001:83;

*Phloeonomus pusillus*: Shavrin, 2006:199

**Material.** IRKUTSK area: 1 ex., Bratskiy district, N 55° 18.572' E 100° 18.642', 14.06.2009, h=1880 F., A. Shavrin (CS); 1 ex., Shelekhovskiy district, Shelekhov, 30.04.1993, under bark of *Pinus sylvestris*, A. Shavrin (CS); 7 ex., Slyudyanskiy district, Khमार-Daban Mts., valley of Snezhnaya river, 19-25.05.1997, in flight, A. Shavrin (CS).

**Additional material.** AMUR area: 1 ex., Scovorodinskiy district, Skovorodino, 19.07.1997, E. Berlov (CB).

**Distribution.** Holarctic species.

**Remarks.** The species is reported from the Amur area for the first time.

*Phloeostiba lapponica* (Zetterstedt, 1838)

(*argus* LeConte, *conformis* Kr., *planipennis* Mäkl., *pineti* Thoms., *subtilis* Kr.)

*Phloeostiba lapponica*: Eppelsheim, 1893:66;  
*Phloeostiba lapponica*: Luze, 1906:598;  
*Phloeostiba lapponica*: Jacobson, 1910:457;  
*Phloeostiba lapponica*: Shavrin, 1998:82;  
*Phloeostiba lapponica*: Shavrin & al., 1999:28;  
*Phloeostiba lapponica*: Shavrin, 2001:83;  
*Phloeostiba lapponica*: Shavrin & al., 2001:102;  
*Phloeostiba lapponica*: Shavrin, 2006:199;  
*Phloeostiba lapponica*: Shavrin, 2007:135

**Material.** IRKUTSK area: 1 ex., Katangskiy district, left side of Chona river near mouth of Miringda [= Meringda] river, 18-25.08.2008, A. Shavrin (CS); 1 ex., Cheremkhovskiy district, Sredniy Bulay, 13.07.2007, A. Shavrin (CS); 1 ex., Kachugskiy district, Baikalo-Lenskiy nature reserve, Pokoiniki bay, 23-30.06.1995, A. Shavrin (CS); 1 ex., Irkutskiy district, 17<sup>th</sup> km on Baical's highway, 17.04.1994, A. Shavrin (CS); 2 ex., same data, 21.04.1994, A. Anishchenko (CA); 1 ex., same data, 18.04.1997, under bark of *Pinus sylvestris*, A. Shavrin (CS); 3 ex., same district, Bolshie Koty, Zhilishche cape, 8.07.1979, V. Shilenkov (ISU); 1 ex., same district, Khomutovo, valley of Urik river, 25.05.2001, under bark of *Salix* sp., A. Shavrin (CS); 1 ex., same district, Irkutsk, 15.07.1912, Zankevich (ZIN); 6 ex., Shelekhovskiy district, Shelekhov, 30.04.1993, under bark of *Pinus sylvestris*, A. Shavrin (CS); 1 ex., same district, Orlyonok, 30.04.1999, under bark of *Pinus sylvestris*, A. Shavrin (CS); 2 ex., Slyudyanskiy district, Khamar-Daban Mts., valley of Slyudyanka river, 14.06.1996, A. Shavrin (CS); 11 ex., same district and Mts., Podkomarnaya river

(tributary of Slyudyanka river), 10-14.06.1996, h=1600 m, in flight and under bark of *Pinus sylvestris*, A. Shavrin (CS); 1 ex., same district and Mts., valley of Babkha river, 8.05.1999, in flight, A. Shavrin (CS); 1 ex., same data, 28.06.2008, E. Vedernikova (CS); 1 ex., same district and Mts., Utulik, 25.06.2006, in flight, A. Shavrin (CS); 1 ex., same district and Mts., 13.06.1978, V. Shilenkov (ISU); 1 ex., valley of Snezhnaya river, 19-25.05.1997, A. Shavrin (CS); 1 ex., same data, 5-8.06.2007, A. Shavrin (CS); 1 ex., same district and Mts., upper reaches of Talzi river (tributary of Snezhnaya river), 19-25.05.1997, h=1600 m, A. Shavrin (CS); BURYATIA Republic: 1 ex., Kabanskiy district, Baikalskiy nature reserve, Tankhoy, valley of Osinovka (Mishikhinskaya) river, 24.07.1995, A. Shavrin (CS); 1 ex., same data, middle reaches of Pereemnaya river, "Shum" winterhut, 25-28.07.2009, Yu. Sundukov, L. Sundukova (CS); 15 ex., Tunkinskiy district, W Khamar-Daban Mts., upper reaches of Maliy Zanginsan river, 22-25.05.1999, under bark of *Pinus sibiricus*, A. Shavrin (CS); 1 ex., same data, Moygoty, 21.08.2006, under bark of *Pinus sylvestris*, A. Shavrin (CS); 1 ex., same district, Eastern Sayan, upper reaches of Kyngarga river, 27-29.06.1996, h=2000 m, A. Shavrin (CS); 9 ex., Eravninskiy district, 10 km NE Sosnovo-Ozyorsk, Maloe Eravninskoe lake, N52°39'58 E111°41'34, 26-28.06.2009, h=972 m, I. Enushchenko (CS); 2 ex., Dzhidinskiy district, Verkhniy Dyrestuy, 6-9.07.1997, under bark of *Salix*, A. Shavrin (CS); 1 ex., same district, left side of Chikoy river, 6 km S of the ferry boat to Zingan-Debe, 1-3.06.2002, in flight, A. Shavrin (CS); CHITA area: 1 ex., Mogochinskiy district, Malie Kovali, valley of Chichatka river, 20-28.06.1999, in flight, A. Shavrin (CS); 1 ex., Uletovskiy district, Sokhondinskiy nature reserve, upper reaches of Barun-Zanginanduy river (right tributary of Ingoda river), N49°50.207' E111°10.825', 23-24.07.2009, h=1700 m, A. Shavrin, I. Enushchenko (CS); 1 ex., same data, Kyrenskiy district, upper reaches of Zolotoy Klyuch stream (right tributary of Aguca river), N49°45'383 E111°11'670, 25.07.2009, h=1580 m, A. Shavrin, I. Enushchenko (CS); 2 ex., same data, valley of Kyra river, Kyra, 16.07.2009, A. Shavrin, I. Enushchenko (CS).

**Distribution.** Holarctic species.

**Remarks.** The species is known from Yakutia, valley of Lena river (Poppius, 1909:4). The species is reported from the Chita area for the first time.

***Phloeostiba plana* (Paykull, 1792)**

(*bipunctata* Motsch., *flavipes* L.)

*Phloeonomus plana*: Eppelsheim, 1893:66;  
*Phloeonomus plana*: Luze, 1906:596;  
*Phloeostiba plana*: Shavrin, 2001:83;  
*Phloeostiba plana*: Shavrin, 2006:199

**Material.** IRKUTSK area: 1 ex., Nukutskiy district, Zarechniy, 53° 40.511' E 102° 39.885', 11.06.2009, h=1607 F, A. Shavrin (CS); Ziminskiy district, valley of Oka river, 3 km SE Pereezd, 20-21.06.1998, on flowing resin of *Pinus sylvestris*, A. Shavrin (CS); 1 ex., Irkutskiy district, Irkutsk, Ushakovka river, 15.05.1997, A. Anishchenko (CA); 2 ex., same district, 17<sup>th</sup> km on the Baical highway, 15.04.1995, A. Anishchenko (CA); 1 ex., same data but 7.05.1997 (CS); 2 ex., Shelekhovskiy district, Shelekhov, 6.05.1997, under bark of *Pinus sylvestris*, A. Shavrin (CS).

**Distribution.** Transpalaeartic species.

[*Phyllodrepa* (*Phyllodrepa*) *angustata* (Maeklin, 1878)]

(*obscuricornis* J. Sahlb., *obscurata* Luze)

**Distribution.** Novaya Zemlya, arctic Siberia, north-western Russia.

**Remarks.** The species was described as *Homalium* by Mäklin (1878:28) from Eastern Siberia ("Mesenkin, lat. bor. 71° 20'"). As *Ph. obscuricornis* it is known (J. Sahlberg, 1897:365) from Novaya Zemlya ("Novaja Semlia ad Maly Karmakuli"). The species was recorded by Poppius (1909:4) from the valley of Lena river. The species can be discovered in the Baikal region.

***Phyllodrepa baicalensis* (Bernhauer, 1903)**

*Phloeonomus baicalensis*: Bernhauer, 1903:591 (type locality: «Baikalsee»);  
*Phyllodrepa baicalensis*: Luze, 1906:485, 562;  
*Phyllodrepa nigra*: Shavrin, 2001:83 [misidentification]

**Material.** IRKUTSK area: 1 ex., Katangskiy district, left side of Chona river near mouth of Miringda [=Meringda] river, 18-25.08.2008, A. Shavrin, I. Enushchenko (CS); 1 ex., same data, valley of Nizhnyaya Tunguska river, Podvoloshino, 4-9.08.2008, A. Shavrin, I. Enushchenko (CS); BURYATIA republic: 1 ex., Zaigraevskiy district, Zaigraevo, valley of Bryanka river, 22.07.1997, A. Voincev (CV); 3 ex., same data but 15.08.1996 (CS); REGION NOT LOCATED: 2 ♀, ZF Exp.: Munster Alten. VI.24. (NMW); ♀, same data but additional label – "*Phyllodrepa baicalensis* Bernh." (NMW); ♀, same data but with four additional labels: "A. Strand donavit. 22.X.1956" / "*baicalensis* Bernh." [handwritten] / "TYPUS *Phyllodrepa strandi* O. Scheerpeltz [non type!]" / "MS name det. M.K. Thayer 1989" (NMW).

**Distribution.** North-western Cisbaikalia, Transbaikalia.

**Remarks.** The species is for certain reported from Irkutsk area for the first time.

***Phyllodrepa nigra* (Gravenhorst, 1806)**

(*salicina* Gyll., *luteicornis* Roub.)

*Phyllodrepa nigra*: Luze, 1906:558

**Material.** IRKUTSK area: 1 ex., Shelekhovskiy district, Shelekhov, in old dung, A. Shavrin (CS).

**Distribution.** The species is known from Europe, European Russia. From Western and Eastern Siberia not far from the lake Baikal.

**Remarks.** The species is reported from the Irkutsk area for the first time.



[*Phyllodrepa rufipennis* Luze, 1906]

*Phyllodrepa rufipennis*: Luze, 1906:554 (type locality: “Sibirien, Baikalsee”)

**Distribution.** Baikal region.

**Remarks.** After Luze’s description (based on material from the collection of Fauvel) there were no new records, except for records in catalogues and check-lists (Jacobson, 1910:456; Bernhauer & Schubert, 1910:47; Tichomirova, 1973:138; Herman, 2001:575; Smetana, 2004:266). The records of this species from Russian Far East by Tichomirova (1973:138), and from Western Siberia and Russian Far East by Smetana (2004:266) are erroneous. They are not confirmed by the new material.

*Phyllodrepa* sp.

**Material.** BURYATIA republic: 4 ex., Okinskiy district, Eastern Sayan, Il’chir lake, 21-23.08.2007, A. Shavrin (CS).

*Phyllodrepa* sp. 1.

**Material.** CHITA area: f#, Piestschanka 8 km öst. Tschita Transbaikalia / TYPE [non type!] *Phyllodrepa friebi* O. Scheerpeltz (NMW).

*Phyllodrepa* sp. 2.

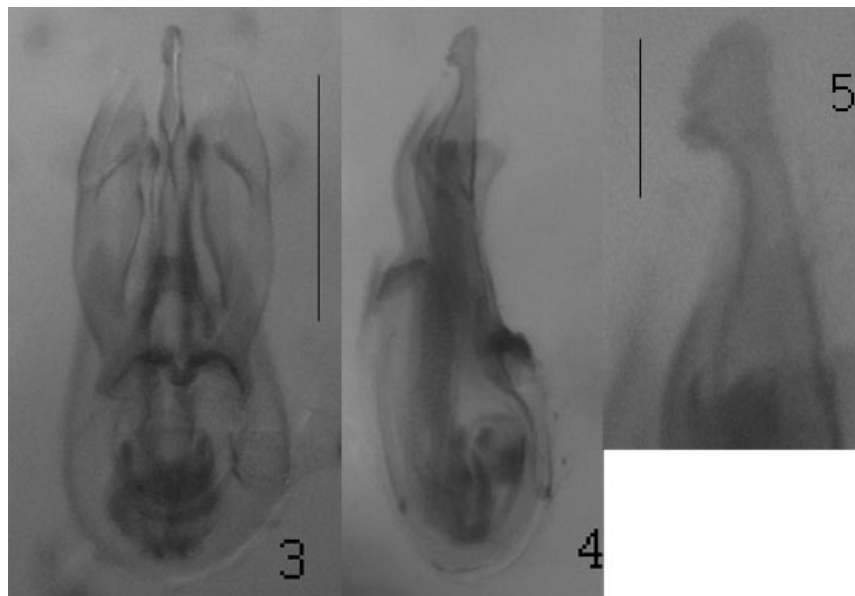
**Material.** CHITA area: m#, Uletovskiy distr., Sokhoninskiy nature reserve, valley of Arshan river (right tributary of Ingoda river), 21.07.2009, A.V. Shavrin, I.V. Enushchenko (CS); 2 f#, same data, stream without name (right tributary of Ingoda river), 2 km NE Ashagley, winterhut, N54°36'7 E111°07'962, h=1350 m, A. Shavrin, I. Enushchenko (CS).

*Pycnoglypta baicalica* (Motschulsky, 1860)

(*baicalensis* Motsch.)

*Acidota baicalensis*: Motschulsky, 1860:549 (type locality: “environs du lac Baical en Sibérie orientale”);

*Omaliium baicalensis*: Hochhuth, 1862:107;



Figs. 3-5. *Omaliium subsolanum* Herman, 2001. 3-5 – aedeagus (3 - ventral view; 4 – lateral view; 5 – apex of aedeagus laterally). Scale bar 0.1 mm (Figs. 3-4), 0.05 mm (Fig. 5).

*Homalium striatum*: Fauvel, 1871:86;  
*Pycnoglypta baicalensis*: Luze, 1906:588;  
*Acidota baicalensis*: Scheerpeltz, 1947:269;  
*Pycnoglypta baicalica*: Gusarov, 1991:3;  
*Pycnoglypta baicalica*: Gusarov, 1995:240;  
*Pycnoglypta baicalica*: Shavrin, 1998:82;  
*Pycnoglypta baicalica*: Shavrin & al., 199:28;  
*Pycnoglypta baicalica*: Shavrin, 2001:190

**Material.** BURYATIA republic: 1 ex., Khamar-Daban Mts., Kabanskiy district, 25 km S Babushkin, 14.08.2006, in litter of *Betula-Pinus* forest, A. Shavrin (CS); 4 ex., Zaigraevskiy district, valley of Bryanka river, 18.09.2001, A. Voincov (CV); 1 ex., Eastern Sayan, Okinskiy district, Il'chir lake, 21-23.08.2007, A. Shavrin (CS).

**Distribution.** Baikal Region.

#### *Pycnoglypta campbelli* Gusarov, 1995

**Additional material.** KRASNOYARSK area: m#, Turukhanskiy district, Centralnosibirskiy nature reserve, basin of Bolshaya Varlamovka river, middle reaches of Bolshaya Raskosaya river, 22.05.1992, V.B. Semenov (CR).

**Distribution.** Eastern Siberia, Alaska, Yukon and Northwest Territories.

**Remarks.** The species was first recorded from North America as *P. lurida* (Gyll.) (Campbell 1983:364). Gusarov (1995:232) recorded it from USA (Alaska, Massachusetts) and Canada (Yukon territory, Saskatchewan, Manitoba, Quebec, Ontario, Alberta, New Brunswick). According to Gusarov (1995:234): "all available specimens from North America, previously identified as *P. lurida* (Gyll.), represented *P. campbelli*." I provide here the first record of *P. campbelli* for the Palaearctic region.

#### *Pycnoglypta cornuta* Shavrin, sp.n. (Fig. 6-12)

*Pycnoglypta maritima*: Shavrin, 1998:82;  
*Pycnoglypta maritima*: Shavrin, 2000:75;

*Pycnoglypta maritima*: Shavrin, 2001:83

**Type material. Holotype:** IRKUTSK area: m#, Irkutskiy district, 17<sup>th</sup> km on the Baikal highway, 11.08.1995, A. Anishchenko (ZMM).

**Paratypes:** IRKUTSK area: m#, Usol'skiy district, vallet of Kitoi river opposite Neudachnykh island, 14-16.07.1996, A. Shavrin (CS); BURYATIA republic: m#, Dzhidinskiy district, 6 km SE Dzhida river, 27.07.2006, A. Shavrin (CS); 2 f#, same district, Verkhniy Dyrestuy, 5.07.1997, swamp, A. Shavrin (CS).

**Description.** Measurements (min-max; n=5): WH: 0.42–0.48; LH: 0.31–0.35; LA: 0.66; LE: 0.13–0.14; LT: 0.05; LP: 0.38–0.46; WP: 0.59–0.62; LES: 0.6–0.73; WE: 0.72–0.79; WA: 0.74–0.84; LAE: 0.3. Body length: 2.36–2.8 (holotype - 2.36).

Body yellowish-brown to dark brown; antennae, mouthparts yellowish brown, apical three antennomeres slightly darkened.

Head distinctly smaller than pronotum, 1.3 times wider than long. Eyes 2.6–2.8 times longer than temples. Head dorsally without microsculpture, with several fine punctures in its lateral portions, with band of moderately coarse, dense punctures along midline from clypeus basis to nuchal furrow, the band bordered on each side by impunctate zone. Surface along internal border of eyes and behind them with longitudinal striae. Ocelli very small, visible under strong magnification at light coloured specimens as dark pigmented spots, or obsolete. Antennae with three apical antennomeres forming a loose club. Length / width of antennomeres are: I: 0.11 × 0.05; II: 0.07 × 0.04; III: 0.06 × 0.04; IV–V: 0.04 × 0.03; VI: 0.05 × 0.03; VII: 0.05 × 0.04; VIII: 0.04 × 0.05; IX–X: 0.05 × 0.07; XI: 0.1 × 0.07.

Pronotum moderately convex, transverse, 1.3–1.4 times broader than head, 1.3–1.5 wider than long; without microsculpture, with coarse and dense punctation, distance between punctures 1–1.5 times as diameter of punctures; punctures coarser than those on the head; with short

median longitudinal band along midline posteriorly.

Scutellum triangular, without punctation and microsculpture.

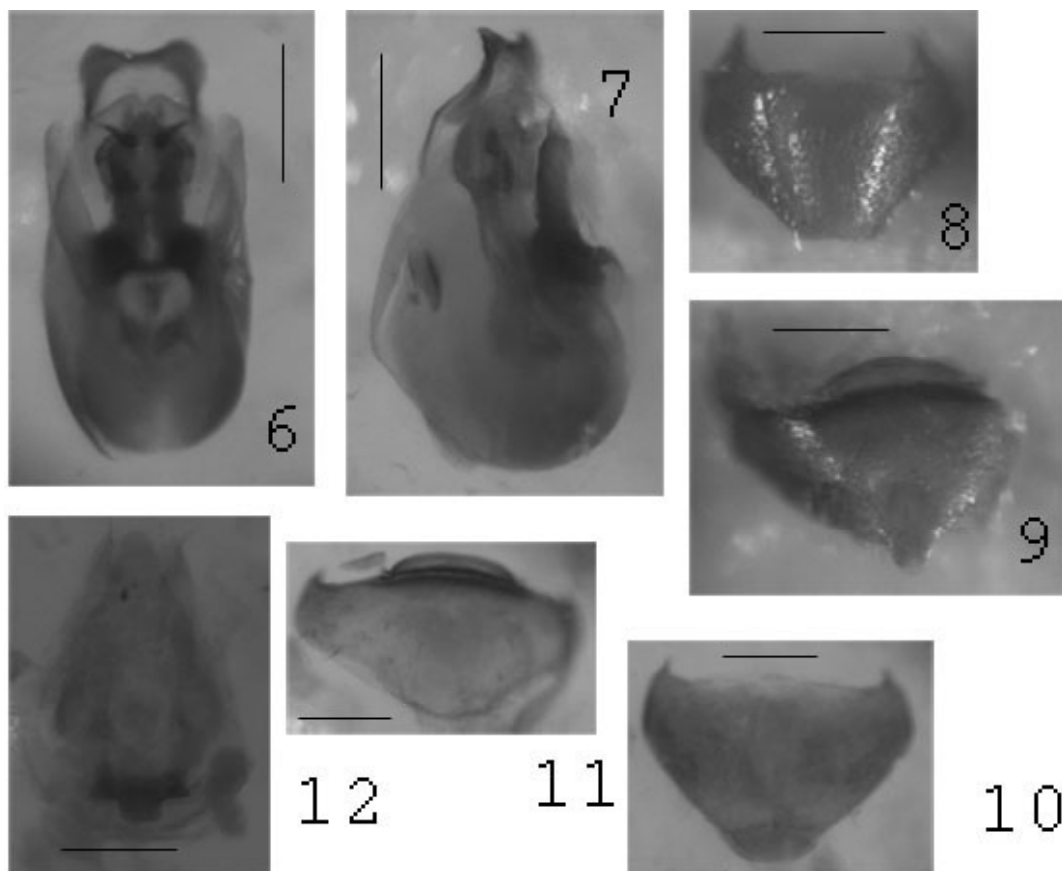
Elytrae slightly convex, 1.5–1.6 times longer than pronotum; punctation denser than on pronotum but not coarser; distances between punctures 1.5 times as diameter of punctures; without microsculpture, glossy. Wings reduced to very small vestiges.

Abdomen convex, approximately as wide as elytrae, with very fine and sparse puncturation

and dense microsculpture. Tergite IV with small circular patches of wing folding spicules.

**Male:** Protarsi with dilated tarsomeres. Apical margins of sternites VI–VIII each with distinct median lobe; lobe of sternite VI large, triangular; lobe of sternite VIII flat, elongate, rounded apically. Aedeagus as in Fig. 6–7. Tergite VIII as in Fig. 8. Sternite VIII as in Fig. 9.

**Female:** Protarsi with less dilated tarsomeres. Tergite VIII (Fig. 10) with deep round impression in median portion. Sternite VIII as in Fig. 11. Female accessory sclerite as in Fig. 12.



Figs. 6–12. *Pycnoglypta cornuta* Shavrin, sp.n. 6–9 – male (6 – aedeagus, ventral view; 7 – aedeagus, lateral view, 8 – tergite VIII, 9 – sternite VIII), 10–12 – female (10 – tergite VIII, 11 – sternite VIII, 12 – female accessory sclerite). Scale bar 0.1 mm.

**Comparative notes.** Based on the primary and secondary sexual characters, *P. cornuta* is most closely related and most similar to *P. maritima*, described by Gusarov (1995:236) from the Maritime province (type locality: "Russia: Primorsk Terr., Dalnegorsk Reg., Rudnaya Pristan', Smychka"). The new species differs from *P. maritima* by significant larger body, coarser puncturation of pronotum and elytrae, as well as by the distinct shape of the aedeagus (aedeagus of *P. cornuta* is wider, paramerae shorter, median lobe lancet-shaped apically, and apex of aedeagus sclerotized, with wider emargination) and by the other structure of endophallus.

**Remarks.** Based on the morphology of apical tergites and sternites, as well as the shape of the aedeagus, *P. cornuta* belongs to the *lurida* species group, which was defined by Gusarov (1995:230).

**Etymology.** The name derives from Latin adjective, and alludes to the horn-shape apex of the aedeagus in lateral view.

***Pycnoglypta heydeni* Eppelsheim, 1886**

(*arctica* Luze)

*Pycnoglypta heydeni*: Shavrin, 2000:77

**Material.** CHITA area: 6 ex., Kalarskiy district, Novaya Chara, *Larix*-forest, mosses, 16.06.2009, A. Boiko (CS); 2 ex., Mogochinskiy district, right side of Chichatka river, 20-28.06.1999, h=1000 m, *Betula*-forest, in mosses, A. Shavrin (CS); 16 ex., Uletovskiy district, Sokhondinskiy nature reserve, valley of Arshan river (right tributary of Ingoda river), 21.07.2009, A. Shavrin, I. Enushchenko (CS); same data, upper reaches of Barun-Canginanduy river (right tributary of Ingoda river), N49°50'207 E111°10'825, 23-24.07.2009, h=1700 m, *Pinus sibiricus*-*Larix* forest with *Betula*, mosses and litter near stream, A. Shavrin, I. Enushchenko (CS); same data, mouth of Ashagley river (right tributary of Ingoda river), N49°54'329 E111°07'159, 19-21.07.2009, A. Shavrin, I. Enushchenko (CS); same data,

Kyrenskiy district, valley of Zolotoy Klyuch river (right tributary of Aguca river), N49°54'353 E111°11'670, h=1580 m, 25.07.2009, A. Shavrin, I. Enushchenko (CS).

**Additional material.** KRASNOYARSK area: m#, Turukhanskiy district, Eloguyskiy wildlife reserve, Eloguy river, 6 km below mouth of Tyna river, 27.07.1992, dried bed of stream with *Alnus* sp., *Betula* sp., in litter, V.B. Semenov (CR).

**Distribution.** Siberia: Arctic West Siberia (Luze, 1906:585; Gusarov, 1995:240), Yamal (Gusarov, 1995:240), Chita area (Shavrin, 2000:77), Yakutia republic (Gusarov, 1995:240; Shavrin & al., 2008:83), Khabarovsk area (Eppelsheim, 1886:45), Magadan area (Ryabukhin, 1999:15); USA (Alaska), Canada (Northwest Territories, Yukon Territory) (Gusarov, 1995:238).

**Remarks.** This is the first record of this species from the Krasnoyarsk area.

***Pycnoglypta lurida* (Gyllenhal, 1813)**

(*alpina* Zett.).

*Pycnoglypta lurida*: Eppelsheim, 1893:66

**Material.** IRKUTSK area: 9 ex., Ust'-Kutskiy district, valley of Bochakta river, 10-11.08.2008, A. Shavrin, I. Enushchenko (CS); 1 ex., same data, 50 km SE Shumilovo, 24-25.06.2008, A. Shavrin, I. Enushchenko (CS).

**Additional material. WESTERN SIBERIA:** TYUMEN area: 7 ex., Khanty-Mansiyskiy autonomous region, Surgutskiy district, Bolshoy Yugan river, 6-7 km below mouth of Sugmutenyakh river, 22.08.2001, sifting of scales of *Picea* and *Pinus sibiricus*, A.B. Ryvkin (CR); **EASTERN SIBERIA:** KRASNOYARSK area: m#, Turukhanskiy district, Vorogovka river near mouth of Bolotnaya river, 26.06.1991, litter and mosses under *Picea*, *Betula*, *Larix* with *Pleurozium*, *Hylocomium orientalis* etc. among swampy *Betula*-forest with *Carex* sp.-grasses, *Allium ursinum* etc., A.B. Ryvkin (CR); same data,

Turukhanskiy district, Centralnosibirskiy nature reserve, basin of Bolshaya Varlamovka river, middle reaches of Bolshaya Raskosaya river, 23.05.1992, V.B. Semenov (CR).

**Distribution.** Europe, European Russia, Siberia.

**Remarks.** The species was recorded by Eppelsheim (1893:66) from Tunkinskaya valley, by Poppius (1909:3) from the valley of Lena river, and by Ryabukhin (1999:15) from north-eastern Russia. It is likely that these records are based on misidentifications, because the aedeagus was not examined. The material confirms the presence of this species in Siberia, and constitutes the first record for Western Siberia and for Krasnoyarsk area of Eastern Siberia.

#### ***Pycnoglypta sibirica* Mäklin, 1878**

**Material.** IRKUTSK area: 2 m#, f#, Kachugskiy district, Baikalo-Lenskiy nature reserve, Pokoiniki bay, 23-30.06.1995, wet litter near mountain stream, A. Shavrin (CS); CHITA area: 10 ex., Uletovskiy district, Sokhondinskiy nature reserve, mouth of Ashagley river (right tributary of Ingoda river), N 49° 54' 329 E 111° 07' 159, 19-21.07.2009, A. Shavrin, I. Enushchenko (CS).

**Additional material.** KRASNOYARSK area: 8 ex., Evenkia, Baykitskiy distr., Centralnosibirskiy nature reserve, basin of Stolbovaya river, Birapchana, 3-5 km lower connection of Levaya Birapchana river and Pravaya Birapchana river, 06.07.1986, h=480 m, *Betula* forest with *Polytrichium*, *Pleurozium* etc., A.B. Ryvkin (CR).

**Distribution.** Arctic Siberia, north-eastern Russia, north Mongolia.

**Remarks.** The species was recorded for the valley of Lena river by Poppius (1909:4). It is the first record of this species from Chita area.

#### ***Xylodromus depressus* (Gravenhorst, 1802)**

(*aterrimus* Tott., *deplanatus* Gyll., *oblongus* Lac.)

*Xylodromus depressus*: Jacobson, 1910:358;  
*Xylodromus depressus*: Shavrin, Kyzyl-ool, 2007:403

**Material.** TUVA republic: 4 ex., Mangun-Taigiyskiy district, Khindigtig-Khol' lake, 2.09.1984, in nest of *Alticola strelzowi*, Ustyukhina (CS).

**Distribution.** Holarctic species.

#### ***Xylodromus transversiceps* Smetana, 1968**

*Xylodromus transversiceps*: Shavrin, Kyzyl-ool, 2007:403

**Material.** TUVA republic: 3 ex., Mangun-Taigiyskiy district, Khindigtig-Khol' lake, 2.09.1984, in nest of *Alticola strelzowi*, without collector's name (CS); 1 ex., same data but 28.07.1972, Ustyukhina (CS).

**Distribution.** Tuva republic of Russia (Shavrin, Kyzyl-ool, 2007:403) and north Mongolia (Smetana, 1968:227).

#### ***Xylostiba monilicornis* (Gyllenhal, 1810)**

*Xylostiba monilicornis*: Shavrin, 2006:199

**Material.** BURYATIA republic: 1 ex., Tunkinskiy district, valley of Maliy Zanginsan river, 20-29.05.1999, in flight, A. Shavrin (CS).

**Distribution.** The species is known from Europe, European Russia, Buryatia republic (Shavrin, 2006:199), south-western Yakutia (Shavrin & al., 2008:83).

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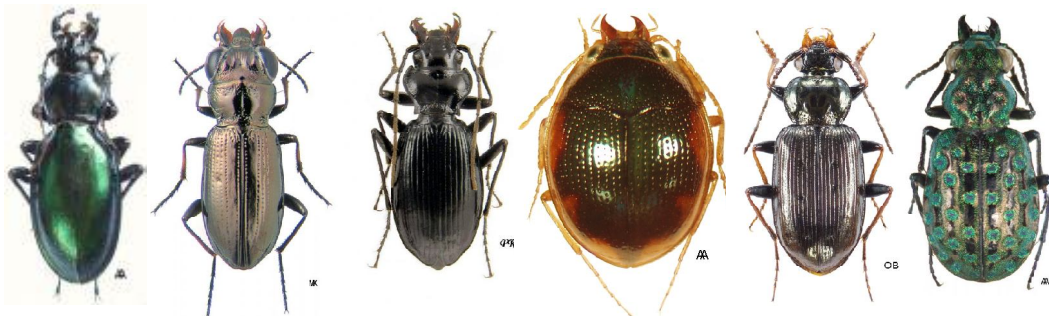
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