

REVIEW OF THE GENUS *PLATYDRACUS* (COLEOPTERA: STAPHYLINIDAE) FROM THE RUSSIAN FAR EAST

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Summary. A review of eight species of the genus *Platydracus* Thomson, 1858 inhabiting the Russian Far East is given. Two species are recorded for the fauna of Russia for the first time: *P. inornatus* (Sharp, 1874) from Primorskiy krai and Khabarovskiy krai and *P. vicarius* (Sharp, 1889) from Jewish Autonomous oblast and Primorskiy krai. *P. mortuorum* (Bernhauer, 1912) is new for the fauna of Khabarovskiy krai and *P. demissus* (Müller, 1925) is new for the fauna of Amurskaya oblast. A key to seven species of the genus *Platydracus* of the Russian Far East fauna is provided.

Key words: Coleoptera, Staphylinidae, rove beetles, fauna, new records, key, Russia.

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Резюме. Дан обзор 8 видов рода *Platydracus* Thomson, 1858, обитающих на Дальнем Востоке России. Впервые для фауны России указываются 2 вида: *P. inornatus* (Sharp, 1874) из Приморского края и Хабаровского края и *P. vicarius* (Sharp, 1889) из Еврейской автономной области и Приморского края. Впервые для Хабаровского края приводится *P. mortuorum* (Bernhauer, 1912), а для Амурской области – *P. demissus* (Müller, 1925). Дана определительная таблица 7 видов рода *Platydracus* фауны Дальнего Востока России.

INTRODUCTION

The genus *Platydracus* Thomson, 1858 contains 179 described species distributed in Neotropical, Nearctic, Palaearctic, Ethiopian, Madagascan, and Oriental regions (Herman, 2001; Smetana, 2005); of them 79 species are known in Palaearctic Region (Schülke & Smetana, 2015). Six species from this genus were recorded for the fauna of the Russian Far East (Kryzhanovsky *et al.*, 1973; Tikhomirova, 1973). Beetles of the genus *Platydracus* are predators found on the surface and in the upper layers of the soil, in decomposing remains and excrement. The study of collections stored in the Federal Scientific Center of the East Asia Terrestrial Biodiversity and the Zoological Institute of the Russian Academy of Sciences made it possible to clarify the species composition of the genus *Platydracus* of the Russian Far East.

MATERIAL AND METHODS

The photographs were taken with an Olympus SZX16 stereomicroscope and an Olympus DP74 digital camera, and then stacked using Helicon Focus software. The final illustrations were post-processed for contrast and brightness using Adobe® Photoshop® software.

The following abbreviations are used to denote institutes housing specimens examined herein: BC – Federal Scientific Center of the East Asia Terrestrial Biodiversity of the Far Eastern Branch of the Russian Academy of Sciences (Vladivostok, Russia); ZIN – Zoological Institute of the Russian Academy of Sciences (St-Petersburg, Russia).

RESULTS

Genus *Platydracus* Thomson, 1858

Type species: *Staphylinus stercorarius* Olivier, 1795, by monotypy.

NOTES. Previously 13 species of this genus were known in Russia (Schülke & Smetana, 2015). Two species are added for the Russian fauna here. A list of species from the Russian Far East is given below.

Platydracus aureofasciatus (Motschulsky, 1861)

Staphylinus aureofasciatus Motschulsky, 1861b [1860]: 40. Type locality: “Amur” [Russian Far East].

Staphylinus aureofasciatus: Scheerpeltz, 1933: 1382.

Platydracus aureofasciatus: Herman, 2001: 3442; Shavrin & Gildenkov, 2009: 127.

Platydracus (Platydracus) aureofasciatus: Smetana & Davies, 2000: 39; Smetana, 2004: 680; Schülke & Smetana, 2015: 1096; Cho, 2016: 398; Cho, 2019: 64.

Staphylinus teter Bondroit, 1913: 90. Type locality: “I’Ussuri” [Russia: Primorskii krai]; synonymized by Müller, 1932: 76.

Staphylinus teter: Kryzhanovsky *et al.*, 1973: 150.

Staphylinus (Platydracus) teter: Tikhomirova, 1973: 187.

MATERIAL. Primorskii krai: Sredny Bay, on mushrooms, 16.VIII 2009, 1 specimen, S.A. Shabalin [BC]; Kedrovaya Pad Reserve, 11.VII 1975, 1 specimen, A.S. Ryabukhin [BC]; same locality, 31.VII 1976, 1 specimen, S.Yu. Storozhenko [BC]; Sedanka [Vladivostok], 19.V 1914, 1 specimen, Rimskij-Korsakov [ZIN]; Vladivostok, 21.VII 1913, 1 specimen, Berger [BC]; Peishula [Ussuriskii Reserve], 15.VII 1972, 1 specimen, G. Sh. Lafer [BC]; Krivoi Kluch [Gornotaezhnoe], 24.VIII 1937, 2 specimens, A. Richter [BC]; Kangauz [Anisimovka], 16.VII 1969, 1 specimen, L.D. Filatova [BC]; same locality, 30.VI 2010, 1 specimen, S.A. Shabalin [BC]; Orlikha River, on carrion, 26.VI 2010, 1 specimen, M.G. Ponamorenko, E.A. Belyaev, [BC]; Gribnoe, 17.V 1974, 1 specimen, P.A. Lehr [BC]; 4 km W Khorol, VI 2022, 2 specimens, I.S. Sheremetev [BC]; 6 km NW Barabash- Levada, 24.V 2022, 1 specimen, M.E. Sergeev [BC]; Zimmiki, 11.VII 2011, 1 specimen, S.A. Shabalin [BC]; same locality, 18.VII 2011, 7 specimens, S.A. Shabalin [BC]; same locality, 22.VII 2011, 2 specimens, S.A. Shabalin [BC]; same locality, 23.VII 2011, 6 specimens, S.A. Shabalin [BC]; Irkutsk, 1 specimen, V. Yakovlev [ZIN].

DISTRIBUTION. Russia: Primorskii krai, Amurskaya oblast, Irkutskaya oblast. – Korea (Gangweon-do).

***Platydracus brevicornis* (Motschulsky, 1861)**

Trichoderma brevicornis Motschulsky, 1861a [1860]: 11. Type locality: “Japon” [Japan].
Platydracus (Platydracus) brevicornis: Smetana & Davies, 2000: 39; Smetana, 2004: 680; Shibata *et al.*, 2013: 173; Schülke & Smetana, 2015: 1097; Cho, 2019: 65.
Platydracus brevicornis: Shibata, 1985: 301; Herman, 2001: 3444; Cho & Ahn, 2001: 81; Cho *et al.*, 2002: 39.
Staphylinus paganus Sharp, 1874: 30. Type locality: “Japan”; synonymized by Gusarov, 1995: 92.
Staphylinus paganus: Scheerpeltz, 1933: 1387; Kryzhanovskiy *et al.*, 1973: 150; Li, 1992: 54; Li, 1993: 38.
Staphylinus (Platydracus) paganus: Tikhomirova, 1973: 187.

MATERIAL. Primorskii krai: Sredny Bay, 10.VIII 2009, 1 specimen, S.A. Shabalin [BC]; Kedrovaya Pad Reserve, in cedar-broad-leaved forest, 26.VI 1968, 1 specimen, Safronova, [BC]; Vladivostok, 23.IX 1986, 1 specimen, P.A. Lehr [BC]; Anisimovka, 11.VII 1978, 1 specimen, L.D. Filatova [BC]; Novolitovsk, 9.IX.2015, 1 specimen, S.Yu. Storozhenko [BC]; Dmitrievka, 30.VI 1984, 1 specimen, V.S. Arefin, L.A. Ivliev [BC]; Evseevka, 17.VII 1976, 1 specimen, A. Plutenko [BC].

DISTRIBUTION. Russia: Primorskii krai. – Japan (Hokkaido, Honshu, Shikoku, Kyushu, Sado, Oki, Goto), China (Liaoning, Heilongjiang), Korea (Pyeongannam-do, Gyeonggi-do, Gangweon-do, Chungcheongbuk-do, Chungcheongnam-do, Jeollabuk-do, Jeollanam-do, Gyeongsangbuk-do, Gyeongsangnam-do, Jeju-do).

***Platydracus ussuriensis* (Solsky, 1871)**

Staphylinus ussuriensis Solsky, 1871 [1870]: 347. Type locality: “Khk.” [Russia: Primorskii Krai, Khanka].
Staphylinus ussuriensis: Scheerpeltz, 1933: 1389; Kryzhanovskiy *et al.*, 1973: 150.
Staphylinus (Platydracus) ussuriensis: Tikhomirova, 1973: 187.
Platydracus (Platydracus) ussuriensis: Smetana & Davies, 2000: 41; Smetana, 2004: 682; Schülke & Smetana, 2015: 1099.
Platydracus ussuriensis: Herman, 2001: 3471.

MATERIAL. Primorskii krai: Sredny Bay, 10.VIII 2009, 3 specimens, S.A. Shabalin [BC]; Rayzanovka, in cows excrements, 7–8.X 2017, 2 specimens, S.A. Shabalin [BC]; Vladivostok, 26.VI 1973, 1 specimen, G.Sh. Lafer [BC]; same locality, 22.VII 1976, 1 specimen, L.D. Filatova [BC]; Artem, 5.VI 1970, 1 specimen, A. Plutenko [BC]; Razdolnoye, 21.VI 2023, 1 specimen, M.E. Sergeev [BC]; Baranovskii, in excrement, 22.V 2010, 1 specimen, S.A. Shabalin, [BC]; Suputinskii DOK [Kaimanovka], 5.VI 1961, 1 specimen, 7.VI 1960, 1 specimen, 22.VI 1961, and 2 specimens, O.N. Kabakov [ZIN]; Suputinskii [Ussuriiskii] Reserve, 22.VI 1967, 1 specimen, A.L. Tichomirova [BC]; Kaymanovka, V 1998, 1 specimen, P.B. Klimov [BC]; Novolitovsk, cones for shrews, 30.VII 2015, 1 specimen, K. Maslovskii, E. Loktionova [BC]; same locality, 09.IX 2015, 1 specimen, S.Yu. Storozhenko; Evseevka, 23.VI 1975, 1 specimen, L.D. Filatova [BC]; Ugodintsy [Zakharovka], 9.VI 1954, 1 specimen, D.G. Kononov [BC]; Lazorevka, 13.V.2023, 3 specimens, S. Veriga [BC]; 4 km W Khorol, VI 2022, 1 specimen, I.S. Sheremetev [BC]; Molchanovka, 22.V 1976, 1 specimen, E.L. Gureva [BC]; Lazovsky Reserve, Ta-Chingouza, in tiger excrements, 16–17.IX 2009, 2 specimens, S.A. Shabalin [BC]; Dersu, 1–7.VI 2023, 1 specimen, M.E. Sergeev [BC]; Zimmiki, 5.VII 2011, 4 specimens, S.A. Shabalin [BC]; same locality, 10.VII 2011, 7 specimens, S.A. Shabalin [BC]; same locality, 11.VII 2011, 3 specimens, S.A. Shabalin [BC]; same locality, 12.VII 2011, 7 specimens, Shabalin [BC]; same locality, 13.VII

2011, 3 specimens, S.A. Shabalin [BC]; same locality, 23.VII 2011, 3 specimens, S.A. Shabalin [BC]; Ignatievka, pitfall traps, 29.VI–2.VII 2009, 8 specimens, S.A. Shabalin [BC]; same locality, 1–2.VII.2009, 2 specimens, S.A. Shabalin [BC].

DISTRIBUTION. Russia: Primorskii krai.

***Platydracus sachalinensis* (Matsumura, 1911)**

Staphylinus sachalinensis Matsumura, 1911: 112. Type locality: “Naipchi” [Russia: south of Sakhalin].

Staphylinus sachalinensis: Scheerpeltz, 1933: 1388.

Staphylinus (Platydracus) sachalinensis: Tikhomirova, 1973: 187.

Platydracus sachalinensis: Herman, 2001: 3465.

Platydracus (Platydracus) sachalinensis: Smetana & Davies, 2000: 40; Smetana, 2004: 682; Schülke & Smetana, 2015: 1098.

DISTRIBUTION. Russia: Sakhalin.

NOTES. This poorly studied species is only known by holotype.

***Platydracus mortuorum* (Bernhauer, 1912)**

Staphylinus (Platydracus) mortuorum Bernhauer, 1912: 22. Type locality: “Suczan” [Russia: Primorskii krai, Partizansk].

Staphylinus mortuorum: Scheerpeltz, 1933: 1386.

Staphylinus (Platydracus) mortuorum: Tikhomirova, 1973: 187.

Platydracus mortuorum: Herman, 2001: 3461; Shavrin & Gildenkov, 2009: 127.

Platydracus (Platydracus) mortuorum: Smetana & Davies, 2000: 40; Smetana, 2004: 681; Schülke & Smetana, 2015: 1098.

MATERIAL. Primorskii krai: Sredny Bay, 16.VIII 2009, 1 specimen, S.A. Shabalin [BC]; Sidemi [Bezverhovo], 2 specimens, Yankovskii [ZIN]; Kedrovaya Pad Reserve, 3.IX 1972, 1 specimen, O.N. Kabakov [ZIN]; Maiche [Artemovka] River, 25.VIII 1983, 1 specimen, G.Sh. Lafer [ZIN]; Suchan [Partizansk], 25.VII 1914, 1 specimen, Berger [ZIN]; Vinogradovka, 23–24.VII 1929, 2 specimens, Dyakonov, Filipev [ZIN, BC]; Anuchino, 26–27.VII 1929, 3 specimens, Dyakonov, Filipev [ZIN]; Yakovlevka, 1927, 1 specimen, Kvashuk [ZIN]; Kamen-Rybolov, 22.VIII 1908, 1 specimen, Cherskii [ZIN]; Zimmiki, 10.VII 2011, 2 specimens, S.A. Shabalin [BC]; same locality, 12.VII 2011, 2 specimens, S.A. Shabalin [BC]; same locality, 14.VII 2011, 2 specimens, S.A. Shabalin [BC]; same locality, 18.VII 2011, 5 specimens, S.A. Shabalin [BC]; same locality, 19.VII 2011, 1 specimen, S.A. Shabalin [BC]; same locality, 22.VII 2011, 9 specimens, S.A. Shabalin [BC]; same locality, 23.VII 2011, 16 specimens, S.A. Shabalin [BC]; Khabarovskii krai: Avan River, south of Vayzemskaia, 10.VIII 1981, 1 specimen, O.N. Kabakov [ZIN].

DISTRIBUTION. Russia: Primorskii krai, Khabarovskii krai (first record).

***Platydracus demissus* (Müller, 1925)**

Staphylinus (Platydracus) demissus Müller, 1925: 42. Type locality: “Siberia orientale (Sotka Gora)” [Russia (probably Jewish autonomous region, vicinity of Radde)].

Staphylinus (Platydracus) demissus: Smetana, 1967: 209; Tikhomirova, 1973: 187.

Staphylinus demissus: Scheerpeltz, 1933: 1384; Kryzhanovsky *et al.*, 1973: 150.

Platydracus (Platydracus) demissus: Smetana & Davies, 2000: 39; Smetana, 2004: 681; Schülke & Smetana, 2015: 1097.

Platydracus demissus: Herman, 2001: 3449.

MATERIAL. Primorskii krai: Vladivostok, 14.VII 1971, 1 specimen, L.D. Filatova [BC]; Novolitonovsk, 19–21.VIII 2015, 4 specimens, S.A. Shabalin, E. Poletkov [BC]; same locality, 21–24.VIII 2015, 5 specimens, S.A. Shabalin, pitfall traps [BC]; same locality, 22–24.VIII 2015, 1 specimens, S.A. Shabalin, pitfall traps [BC]; Amurskaya oblast: Khinganskii Reserve, 4.IX 2003, 1 specimen, E. Ignatenko [BC].

DISTRIBUTION. Russia: Primorskii krai, Jewish Autonomous oblast, Amurskaya oblast (first record). – Mongolia.

***Platydracus inornatus* (Sharp, 1874)**

Fig. 1

Staphylinus inornatus Sharp, 1874: 31. Type locality: “Simabara” [Japan, Kyushu].

Staphylinus inornatus: Scheerpeltz, 1933: 1386; Li, 1993: 38.

Staphylinus (Platydracus) inornatus: Tikhomirova, 1973: 187.

Platydracus inornatus: Shibata, 1985: 301; Cho & Ahn, 2001: 82; Herman, 2001: 3456.

Platydracus (Platydracus) inornatus: Smetana & Davies, 2000: 40; Smetana, 2004: 681; Schülke & Smetana, 2015: 1098; Shibata *et al.*, 2013: 173; Cho, 2019: 69.

MATERIAL. Primorskii krai: Furugelm Is., 18.VII 2012, 1 specimen, S.A. Shabalin [BC]; Kedrovaya Pad Rreserve, 8.VI 1997, 1 specimen, P.B. Klimov [BC]; Vladivostok, 19.VI 2023, 4 specimens, S. Veriga [BC]; Artem, 5.VI 1970, 1 specimen, A. Plutenko [BC]; Suputinskii [Ussuriskii] Reserve, 5.VI 1987, 1 specimen, P.A. Lehr [BC]; same locality, 21.VI.1966, 1 specimen, D.G. Kononov [BC]; same locality, 9.VIII 1940, 1 specimen, A. Ivanov [BC]; Peishula [Ussuriskii Reserve], 14–15.VII 1972, 2 specimens, G.Sh. Lafer [BC]; Kamenushka, pitfall trap, 27.VIII 2000, 1 specimen, S.Yu. Storozhenko, [BC]; Kangauz [Anisimovka], 6.IX 1972, 1 specimen, G.Sh. Lafer [BC]; Brovnichi, 25.VII 1983, 1 specimen, G.Sh. Lafer [BC]; Suchan [Partizansk], 2.VI 1928, 1 specimen, A.I. Kurentsov [ZIN]; 4 km W Khorol, IX 2022, 1 specimen, I. Sheremetev [BC]; 6 km NW Barabash-Levada, 24.V 2022, 7 specimens, M.E. Sergeev [BC]; Margaritovka River, 20.VIII 1992, 1 specimen, G.Sh. Lafer [BC]; Khabarovskii krai: Komsomolsk on Amur, Silinsky Park, 3.VII 1985, 1 specimen, G. Solodkova [BC]; same locality, 10.VII 1985, 1 specimen, G. Solodkova [BC]; same locality, 21.VI 1985, 1 specimen, G. Solodkova [BC].

DISTRIBUTION. Russia (first record): Primorskii krai, Khabarovskii krai. – Japan (Tasio, Hakaïdo, Honshu, Shikoku, Kyushu), China (Liaoning), Korea (Jeollanam-do).

***Platydracus vicarius* (Sharp, 1889)**

Fig. 2

Staphylinus vicarius Sharp, 1889: 117. Type locality: “Nikko” [Japan: Honshu].

Staphylinus vicarius: Scheerpeltz, 1933: 1389; Wang *et al.*, 2012: 90.

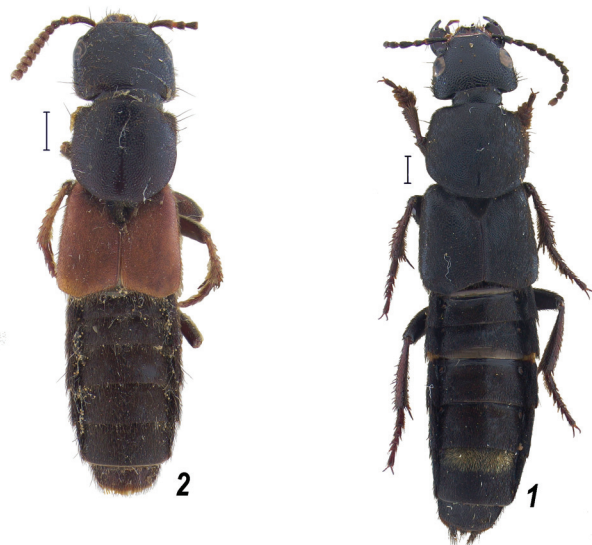
Staphylinus (Platydracus) vicarius: Tikhomirova, 1973: 187.

Platydracus vicarius: Shibata, 1985: 301; Herman, 2001: 3471; Cho & Ahn, 2009: 266.

Platydracus (Platydracus) vicarius: Smetana & Davies, 2000: 41; Smetana, 2004: 682; Shibata *et al.*, 2013: 173; Schülke & Smetana, 2015: 1099; Cho, 2019: 71.

MATERIAL. Primorskii krai: Vladivostok, 4.VIII 1974, 1 specimen, L.D. Filatova [BC]; same locality, 14.VIII 1974, 1 specimen, L.D. Filatova [BC]; Dmitrievka, 22.IX.1983, 1 specimen, V.S. Arefin, L.A. Ivliev [BC]; Anuchinsky district, LZIP-3 settlement, 11–15.IX 1978, Bakurov [BC]; Jewish Autonomous oblast: Obluchye, 26.VII 1974, O.N. Kabakov [BC].

DISTRIBUTION. Russia (first record): Primorskii Krai, Khabarovskii krai. – Japan (Honshu), China (Liaoning), Korea (Ganhwon-do, Chungcheongbuk-do, Jeollabuk-do, Jeollanam-do, Gyeongsangbuk-do, Jeju-do).



Figs 1, 2. Habitus of *Platydracus* spp., dorsal view. 1 – *P. inornatus*; 2 – *P. vicarius*. Scale bars = 1 mm.

Key to Far Eastern species of the genus *Platydracus*
(the poorly studied species *P. sachalinensis* is not included in the key)

1. Elytra brown-orange 4
- Elytra black 2
2. 6 visible sternite rounded without clipping *P. aureofasciatus*
- 6 visible sternite with a distinct clipping 3
3. The head is almost square; its length is not less than the width. Tergites 6-7 of abdomen with dense white pubescence in basal portion *P. inornatus*
- The head is trapezoidal, wide (its length from the plat band to the back of the head is less than the width behind the eyes). Tergites 6-7 of abdomen without white pubescence, completely black bristles *P. mortuorum*
4. The front femur is a monochrome, dark 5
- The front femur if a bicolored, their basal part is darker than the apical 6
5. Basal part of 6 abdominal tergite with a transverse site of light bristles *P. demissus*
- Basal part of 6 abdominal tergite with evenly covered with dark bristles (fig. 2) *P. vicarius*
6. The temple is a same length as the eyes. The first segment of the antennae is shorter than the second and third combined *P. ussuriensis*
- The temple is a longer than the eyes. The first segment of the antennae is the same length as 2 and 3 combined *P. breviornis*

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