

UDC 595.762(571.1/.5)

A NEW SPECIES OF THE GENUS *DIPLOUS*, SUBGENUS *PLATIDIUS* (COLEOPTERA, CARABIDAE) FROM EAST SIBERIA

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Accepted 15 December 2004

A New Species of the Genus *Diplous*, Subgenus *Platidius* (Coleoptera, Carabidae) from East Siberia. Zamotajlov A. S. — *Diplous dolini* Zamotajlov, sp. n., a sibling species of *D. depressus* (Gebler), is described from East Siberia. It is distinguishable mainly by the structure of endophallus and size and shape of ventrite IX. The pathways of diversification of the subgenus *Platidius* in Siberia are briefly discussed.

Key words: Coleoptera, Carabidae, *Diplous*, East Siberia, new species.

Новый вид подрода *Platidius* рода *Diplous* (Coleoptera, Carabidae) из Восточной Сибири. Замотайлов А. С. — Описан *Diplous dolini* Zamotajlov, sp. n. из Восточной Сибири, вид-двойник *D. depressus* (Gebler). Он отличается, прежде всего, по структуре внутреннего мешка пениса, а также размером и формой IX вентрита. Кратко обсуждаются закономерности диверсификации подрода *Platidius* в Сибири.

Ключевые слова: Coleoptera, Carabidae, *Diplous*, Восточная Сибирь, новый вид.

Introduction

Subgenus *Platidius* Chaudoir was hitherto known to include 4 rather widespread species from North America (Darlington, 1938; Bousquet, Laroche, 1993 etc.) and a one species from Asia, *D. depressus* (Gebler) (Zamotajlov, 2002, 2003 a), the latter forming wide boreal range. Recent investigations of patrobines revealed presence of sibling species, possessing actually giant ranges, in such boreal group as *Patrobis* Dejean (Zamotajlov, 2003 b). This fact stimulated us to test some other species with wide ranges for similar cases; *D. depressus* being the first candidate for examination. The survey conducted has displayed existence of 2 almost strictly allopatric forms, reliably distinguishable morphologically only by the structure of male genitalia. Summarizing all available data, we are inclined to treat them as different species, one of them is described below. Some distributional data on *D. depressus* are given below as well. At the same time G. Sh. Lafer (personal communication) is now describing another species from Korea closely related to *D. depressus*. Based on this information, it is possible to assume that *D. depressus* s. l. represents actually a species complex. Not all its members are believed to be recognized yet, but available material is limited and we have not enough evidences for further progress at the moment. The present work does not pretend to be exhaustive both in material studied and taxonomic conclusions and aims mainly to demonstrate the fact of serious diversification within the subgenus *Platidius* in Siberia.

The modern geographic names of some Korean and Russian Far East localities (given below in square brackets), earlier termed by V. L. Komarov in a different way, follow Chang, Chang (2003) or were kindly provided by G. Sh. Lafer.

This study is based on the material deposited in the following institutions and private collections: ZISP — Zoological Institute of Russian Academy of Sciences, St.-Petersburg; MPSU — Moscow Pedagogical State University, Moscow; IZE — Institute of Zoology of Armenian Academy of Sciences, Yerevan; AB — collection of Dr. A. Brinev, Moscow; AC — collection of Prof. Dr. Achille Casale, Torino; AN — collection of A. Napolov, Riga; AZ — collection of the author, Krasnodar; IM — collection of I. Mel'nik, Moscow; MK — collection of Dr. M. Kalashian, Yerevan. The holotype of the new species is deposited in ZISP.

Male genitalia were studied for the representatives from each locality, where available.

Diplous depressus (Gebler, 1829) (fig. 1–20, 41–45)

Gebler, 1829: 49 (*Patrobis*); Dejean, 1831: 705 (*Patrobis*); Dejean & Boisduval, 1834: 267; pl. 106, fig. 3 (*Patrobis*); Chaudoir, 1871: 51 (*Platidius*, partim); Bates, 1883: 289; Schönfeldt, 1887: 50 (*Platidius*); Jakob-

son, 1906: 305; pl. 9, fig. 37 (partim); Csiki, 1928: 342 (partim); Jedlička, 1932: 42; Kühnelt, 1941: 157; Taf. 16, Fig. 3 a, 3 b (partim); Habu, 1951: 70; Ishida, 1958: 18; Nakane, 1978: 20; Shilenkov, 1979: 44 (partim); 1994 (partim); Morita, 1985: 102; pl. 19, fig. 29; 1990: 179; Kwon & Lee, 1986: 24; Lafer, 1989: 129 (partim); fig. 78, I; Kryzhanovskij et al., 1995: 91 (partim); Zamotajlov, 1996: 122 (partim); 123 (larva); 2002: 119; fig. 88, 184; 2003: 284 (partim); Lorenz, 1998: 227.

Material*. Russia: ♂, "Altai", "*Platidius depressus* Gebl., coll. Tschitscherine" (ZISP); 2 ♂, ♀, Gorno-Altai Autonomous Region, Turochansk Distr., bank of Karasaazkanda River, cordon, 20.06.1986 (Matalin) (MPSU); 2 ♂, ♀, Altai, Ivanovskiy Mt. Range, Belaya Uba River, 21.06.1984 (Shilenkov) (MK); ♂, ♀, C Altai, SW slope of Iolgo Mt. Range, lower reaches of Sergezyu River, 1000 m, pebbles, 04.07.1999 (Matalin) (MPSU); ♂, ♀, C Altai, NE slope of Aygulak Mt. Range, upper reaches of Eskongo River, 2000 m, 06.07.2000 (Matalin, Demidov) (MPSU); 4 ♂, 2 ♀, C Altai, SE slope of Aygulak Mt. Range, Belchebush River, 1500–1700 m, 02.07.2000 (Matalin, Demidov) (MPSU); 2 ♂, 2 ♀, C Altai, Kadrin River, 1000 m, 21.07.2000 (Matalin, Demidov) (MPSU); ♂, Lake Teletskoye, Biysk, 20.06.1908 (Vereshchagin) (ZISP); ♂, S Altai, E ending of Plateau Ukok, bank of Dzhazator River, pebbles on loam, 2100 m, 12.07.1997 (Matalin) (MPSU); 3 ♂, 2 ♀, Krasnojarsk Terr., Oysk Mt. Range, vicinities of Oleniya Rechka, 24.06.1997 (Brinev) (MPSU); 3 ♂, Krasnojarsk Terr., Aradan Distr., 5 km SW Aradan, brook, 52°32'N 93°27'E, 09.–12.07.1998 (Brinev) (MPSU); 2 ♂, ♀, S Kemerovo Prov., Tashtagol, 25.07.1997 (Polevod) (MPSU); ♂, Kemerovo Prov., Tashtagol, 25.07.1997, Kuznetskiy Alatau, 25 km SW Belogorsk, Mt. Bolshaya Tserkovskaya, 500 m, 28.08.1993 (Grachev) (MPSU); ♂, Tomsk Prov., Onguday, 900 m, 08.06.1908 (Jakobson) (ZISP); ♂, ♀, Tuva, Tannu-Ola Mt. Range, pass Cha-Ova-Art, 50°37'N 95°10'E, 1500–1600 m, 16.06.2001 (Vashchenko) (ZISP); ♂, Tuva, Tannu-Ola Mt. Range, pass, mountain steppe, 27.06.1962 (Mordkovich) (ZISP); ♂, Tuva, Erzinsk Distr, S slope of Khorumung-Tayga Mt. Range, Ular-Khem River, 1600–2000 m, 50°31'34"N 95°35'21"E, 23.–30.05.2000 (Vashchenko) (MPSU); ♂, ♀, Tuva, Mugur-Aksy, 31.07.1970 (Korotyaev) (ZISP); ♀, same locality, 11.06.1971 (Korotyaev) (MPSU); ♀, same locality, Kargy River, near water, 10.08.1972 (Sharov) (MPSU); ♂, Irkutsk distr., Baikal, Listvianka River, 15.06.1973 (MK); ♂, "Irkutsk, system of Angara, Sagan Ugun River, 08.06.1873, Gartung" (ZISP); ♂, ♀, Irkutsk distr., Kultuk, Slyudanka River (Chekanovskiy) (ZISP); W Buryatia, Okinsk Distr., middle reaches of Oka River, Arkhabom, 20–24.07.1999 (K. Gongalskiy) (MPSU); ♂, Primorski Terr., Komarovka River, vicinities of Kamenushka, 300 m, 05.1992 (Vošišek) (AC); ♀, same locality, 12.06.1979 (Mikhechev, Nikitskiy) (MK); ♂, Primorski Terr., Khasan distr., vicinities of Zanadvorovka, valley of Kedrovaya River, 43°18'53"N 131°34'43"E, 09.–17.07.2000 (Mel'nik) (MPSU); ♂, ♀, Ussuri terr., Vinogradovka, 14.05–03.06.1929 (D'iakonov) (ZISP); ♂, ♀, "Ussuri terr., Pos't. distr., Narva, 07–13.07.1921, Kardakov" (ZISP); ♂, ♀, S Primorski Terr., Suptinsk nature reserve, 15–17.06.1960 (Kabakov) (ZISP); ♂, same locality, 21.06.1949 (Kurentsov) (ZISP); 2 ♂, 2 ♀, same locality, Ussuri, 04–06.08.1971 (Khnzorian) (MK); ♀, same locality, Komarovo, env. of Turetskiy Kluch (IZE); 2 ♂, 3 ♀, "Beriozoviy Kluch, upper reaches of Izha River, 12.06.1912, Sushk., Redik." (ZISP); ♂, ♀, Primorski Terr., valley of Maykhe River, 22.08.1969 (Kryzhanovskij) (ZISP); 2 ♂, ♀, same locality, "Anikin Kordon", 04.05.1961 (Regel) (ZISP); 2 ♂, Ussuri terr., Suchan distr., station Fanza, 15.06.1928 (Obolenskiy) (ZISP); ♂, ♀, Primorski Terr., Iman, Evseevka, 12–13.05.1910 (Shingarev) (ZISP); ♂, ♀, "Ushakou [= Granitnaya], 30.05.1896, V. L. Komarov" (ZISP); China: ♂, ♀, "Manchuria, Yalu Jiang river basin, from the crossing near Korean village Narani-pu [= Na-won-bo] to Panteze [= Ban-jeol-ja-gu], 10–17.07.1897" (Komarov) (ZISP). Korea: ♀, "from the mouth of Ankubn River [= Nae-gok-ri] – Karami [= Ga-rim-ri] to Pass Peksan, basin of Yalu [Prov. Hye-san-gun], 22.07.1897" (Komarov) (ZISP); ♂, ♀, "Basin of Yalu Jiang, Pass Tsatan Ien [= Baek-deok-ryong] to village Sam Su [= Sam-su-eup], on the bank of Yalu, 29.06.–05.07.1897 (Komarov) (ZISP); Japan: ♂, Oku-tone, Gumma, 27.07.1954 (Hirano) (ZISP).

Remarks. Described from Altai. Areal of this species covers enormous territories of South Siberia, forming almost continuous range from Altai in the West nearly to Baikal in the East (fig. 51). It is distributed also in North Mongolia, South Primorski Territory, North-East China and Japan (Hokkaido, Honshu and Shikoku, after Morita, 1990 and other authors). General range possesses probably serious disjunction, separating Altai — Baikal south Siberian fragment from the Far East one. Since no material from Hokkaido has been studied by us, it is impossible to exclude that this isle could be actually populated by *D. dolini* sp. n.

Basing on the material studied, *D. depressus* is variable in many characters, including body size and proportions, punctuation of head, pronotum and elytra, chaetotaxy of elytra and tarsomere 5, shape of parameres, so all above mentioned features seem to be

* Besides material mentioned above, several further female specimens were studied, however their specific affiliation is not absolutely clear: ♀, Russia, Primorski Terr., Kedrovaya Pad', 22.08.1963 (Kerzhner) (ZISP); ♀, same locality, 04.08.1973 (Riabukhin) (ZISP); ♀, Russia, River Arkhut, tributary of Kitoy, Angara system, 10.05.1873 (Gartung) (ZISP); ♀, River Kha-Khem, Uriankhai, 08.06.1914 (Tomashinskiy) (ZISP); ♀, "Bezmyanka, 21.06.1897" (Vagner) (ZISP).

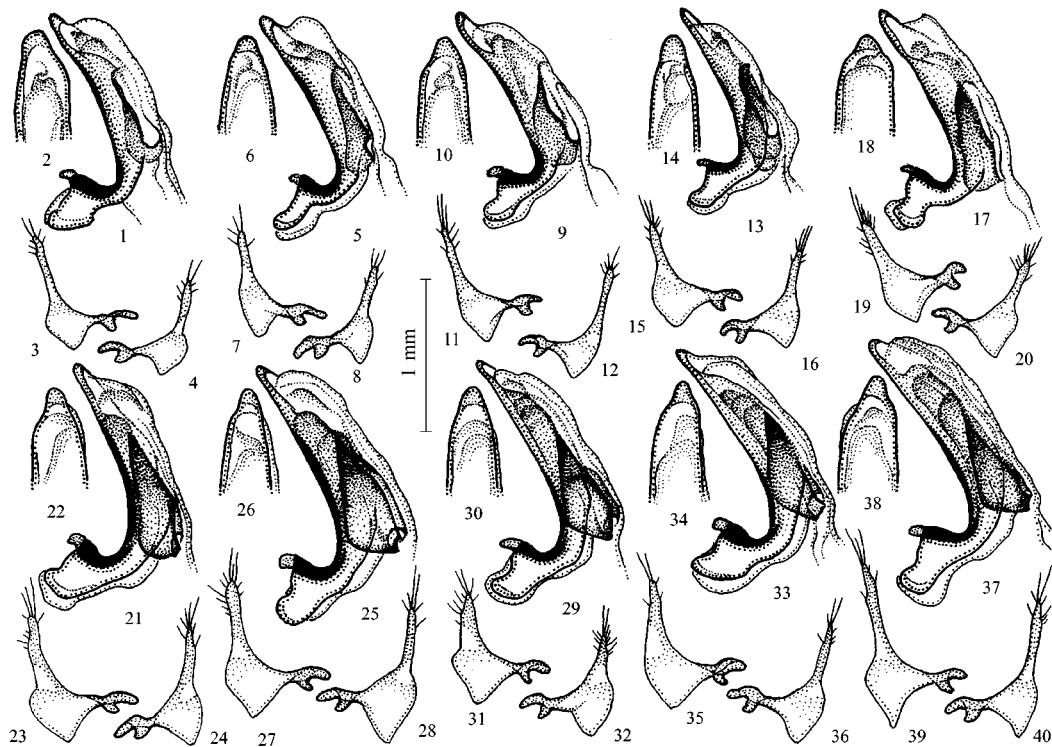


Fig. 1–40. *Diplous*, male genitalia. 1–20 — *D. depressus*: 1–4 — C Altai, Aygulak Mt. Range; 5–8 — Baikal, Kultuk, Slyudanka River; 9–12 — Ussuri terr., Narva; 13–16 — Korea, basin of Yalu Jiang; 17–20 — Japan, Oku-tone, Gumma; 21–40 — *D. dolini*: 21–24 — paratype, “Jablonovoj Gebge”; 25–28 — holotype, S Sakhalin, valley of Ochebukha; 29–32 — paratype, Omsukchan, basin of Kolyma; 33–36 — paratype, Sikhote-Alin Mt. Range, Khor River; 37–40 — paratype, Primorski Terr., Cheremshany; 1, 5, 9, 13, 17, 21, 25, 29, 33, 37 — aedeagus, right lateral view; 2, 6, 10, 14, 18, 22, 26, 30, 34, 38 — apical part of aedeagus, dorsal view; 3, 7, 11, 15, 19, 23, 27, 31, 35, 39 — left paramere, left lateral view; 4, 8, 12, 16, 20, 24, 28, 32, 36, 40 — right paramere, right lateral view.

Рис. 1–40. *Diplous*, гениталии самца. 1–20 — *D. depressus*: 1–4 — Ц. Алтай, Айгулакский хр.; 5–8 — Байкал, Култук, р. Слюдянка; 9–12 — Уссури, Нарва; 13–16 — Корея, бассейн Ялуцзян; 17–20 — Япония, Окутоне, Гумма; 21–40 — *D. dolini*: 21–24 — паратип, “Jablonovoj Gebge”; 25–28 — голотип, Ю. Сахалин, дол. р. Очепуха; 29–32 — паратип, Омсукчан, бассейн р. Колыма; 33–36 — паратип, хр. Сихотэ-Алинь, р. Хор; 37–40 — паратип, Приморский край, Черемшаны; 1, 5, 9, 13, 17, 21, 25, 29, 33, 37 — эдеагус, вид справа сбоку; 2, 6, 10, 14, 18, 22, 26, 30, 34, 38 — апикальная часть эдеагуса, вид сверху; 3, 7, 11, 15, 19, 23, 27, 31, 35, 39 — левая парамера, вид слева сбоку; 4, 8, 12, 16, 20, 24, 28, 32, 36, 40 — правая парамера, вид справа сбоку.

of no principle use for diagnostics. On the contrary, shape of aedeagus and, in particular, structure and armature of endophallus (fig. 1, 2, 5, 6, 9, 10, 13, 14, 17, 18), size and shape of ventrite IX (termed after Deuve, 1993) (fig. 41–45) are very stable within samples of specimens from different localities or populations.

Diplous dolini Zamotajlov, sp. n. (fig. 21–40, 46–50)

Platidius depressus: Chaudoir, 1871: 51 (partim); *Diplous depressus*: Jakobson, 1906: 305 (partim); Csiki, 1928: 342 (partim); Kühnelt, 1941: 157 (partim); Shilenkov, 1979: 44 (partim); 1994 (partim); Lafer, 1989: 129 (partim); 78, 2; Kryzhanovskij et al., 1995: 91 (partim); Zamotajlov, 1996: 122 (partim); 2003: 284 (partim); Lafer & Kuznetsov, 1996: 315; Berlov & Berlov, 1997: 54; Lafer et al., 1997: 14 (misidentification).

Material. Holotype ♂, Russia, S Sakhalin, valley of Ochebukha River W of Lesnoye, 20–30.06.2003 (Budilov) [«Россия, Ю. Сахалин, пойма р. Очепуха зап. п. Лесное», 20–30.06.2003 (Будилов)] (ZISP). Paratypes: Russia: 6 ♂, 7 ♀, collected together with holotype (MPSU, AB); 9 ♂, 12 ♀, same locality, 3 km WSW Lesnoye, valley of Ochebukha River, 46°54'45"N 143°02'32"E, 19–20.06.2003 (Mel'nik) (MPSU, IM); 8 ♂, 4 ♀, C Sakhalin, upper reaches of Tym' River, 4.08.2003 (Budilov) (AB); 11 ♂, 6 ♀, same local-

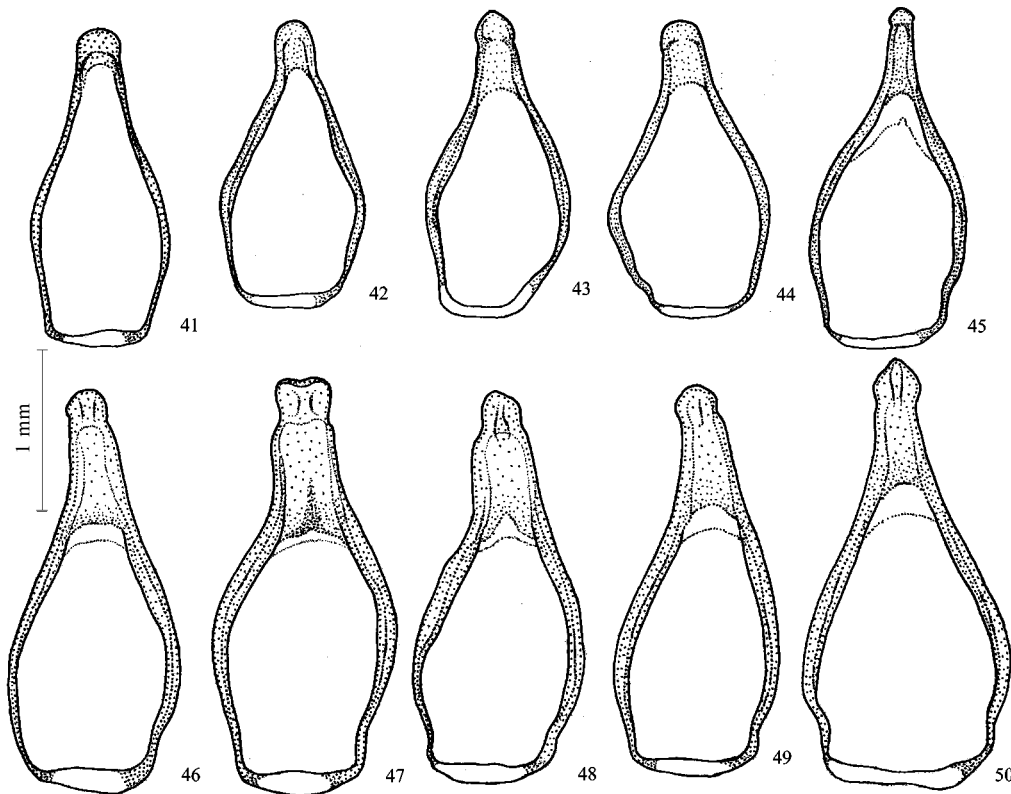


Fig. 41–50. *Diplous*, ventrite IX, dorsal view. 41–45 — *D. depressus*: 41 — С Altai, Aygulak Mt. Range; 42 — Байкал, Култук, Slyudanka River; 43 — Ussuri terr., Narva; 44 — Korea, basin of Yalu Jiang; 45 — Japan, Oku-tone, Gumma; 46–50 — *D. dolini*: 46 — paratype, “Jablonovoj Gebge”; 47 — holotype, S Sakhalin, valley of Ocherukha; 48 — paratype, Omsukchan, basin of Kolyma; 49 — paratype, Sikhote-Alin Mt. Range, Khor River; 50 — paratype, Primorski Terr., Cheremshany.

Рис. 41–50. *Diplous*, IX венитрит, вид сверху. 41–45 — *D. depressus*: 41 — Ц. Алтай, Айгулакский хр.; 42 — Байкал, Култук, р. Слюдянка; 43 — Уссури, Нарва; 44 — Корея, бассейн Ялуцзян; 45 — Япония, Окутоне, Гумма; 46–50 — *D. dolini*: 46 — паратип, “Jablonovoj Gebge”; 47 — голотип, Ю. Сахалин, дол. р. Очепуха; 48 — паратип, Омсукчан, бассейн р. Колыма; 49 — паратип, хр. Сихотэ-Алинь, р. Хор; 50 — паратип, Приморский край, Черемшаны.

ity, valley of Tym’ River, 50°40’08”N 143°05’06”E, 04–05.06.2003 (Mel’nik) (MPSU, IM); 3 ♂, 3 ♀, С Sakhalin, Stlannikovyi Mt. Range, valley of Tym’ River, outfall of brook Troynoy, 50°45’52”N 143°47’17”E, 13–15.06.2003 (Mel’nik) (MPSU, IM); ♂, ♀, Omsukchan, right tributary of Kolyma River, on the bank of a river, 18–20.05.1952 (Kurnakov) (ZISP); ♂, ♀, Khabarovsk Terr., Solnechnyi Distr., vicinities of Dzhamku, 10.05.–20.06.1984 (Cherniakhovsky) (MPSU); ♂, “Sikhota-Alin Mt. Range, Khor River, 02.08.1929, Pravdin” (ZISP); ♂, Primorski Terr., Cheriomukhovaya River, 15 km lower Cheremshany, brook Kedrovaya Pad’, 21.07.1986 (Zherikhin, Grachev) (MPSU); ♂, Primorski Terr., S Sikhote-Alin Mt. Range, vicinities of Sokolchi, 29.05.1982 (Murzin) (AZ); ♀, Primorski Terr., Lazo env., Valentin, 17.07.2003 (Filimonov) (MPSU); 3 ♂, ♀, same locality, 17.07.2003 (Napolov) (AN); ♀, Middle Amur, Pashkovo, 09.06.1978 (Murzin) (AZ); ♂, Jewish Autonomous Region, Obluchensk Distr., Lagar River, 3–5 km upper Radde (Melnik) (MPSU); ♂, ♀, “Jablonovoj (Gebge). Jukutsk[sic!]-Geb. Koshantschikow” (ZISP); ♂, ♀, “Olekmo Aldan, 03.06.1899, Pod’iakonov” (ZISP).

Diagnostic features. The main features (character states) of the new species completely fit those, earlier given by us (Zamotajlov, 2002) for *D. depressus* (the group “*Dipl depressus*”). Habitually resembles *D. depressus*, in the bulk of populations studied (generally except some individuals from the south of Primorski Territory) eyes comparatively smaller, temples longer, pronotum somewhat more transverse than in *D. depressus*, its front angles more distinctly projecting, sharper. Aedeagus usually larger, its apex almost straight (viewed laterally) (in *D. depressus* often bent dorsally). Apical la-

mella of aedeagus often more narrow. Armature of endophallus always of different structure, with large sharply outlined sclerite of particular complicated shape (forming tooth in inverted position), membranous part of endophallus never spiralized apically. Parameres usually larger. Ventrite IX always larger and more robust.

Description. Body uniformly black; elytra completely black, in males rather strongly shiny, in females somewhat mat, appendages black.

Head ovate, 0.74–0.83 times as wide as pronotum, eyes rather large, moderately convex; temples rather long, hardly shorter than eye diameter, oblique to faintly tumid; neck-constriction deep and prominent; frontal furrows long and fairly deep, more or less strongly divergent posteriorly; surface smooth, frontal furrows and neck rather densely and coarsely punctate, sides of vertex sparsely punctate; 2 supraorbital setiferous pores on each side, hind one closer to neck-constriction than to posterior margin of eye. Tooth of mentum bifid, narrow, with rather shallow hollow apically.

Pronotum rather small, cordate, transverse (more transverse in females), faintly convex to almost flat, 1.24–1.43 times as wide as long, widest nearly in the middle; front margin faintly and widely emarginate; sides widely rounded in front, faintly sinuated before hind angles, almost parallel at base, prominently bordered; basal margin nearly straight in the middle, beveled at sides; front angles faintly projecting, angulately rounded; hind angles usually obtuse, pointed, in some populations nearly rectangular, sometimes very finely, almost indistinctly carinate; anterior transverse impression rather shallow, coarsely punctate; basal foveae deep, coarsely rugose-punctate, usually of 1 inner foveole on each side only, seldom with hardly visible, indistinct outer one as well; disc in the middle faintly rugose to almost smooth, shiny, sides rugose-punctate, base coarsely punctate; median line rather broad, more or less deeply impressed, obliterated at both extremities; lateral margins with 1 seta in apical one-third and 1 seta in hind angles.

Legs rather stout. Meso- and metatarsomere 5 ventrally with 1–3 setae on each side, sometimes they are minute, almost invisible.

Elytra oblong-ovate, faintly convex, nearly parallel-side, 1.64–1.80 times as long as wide and 1.37–1.56 times as wide as pronotum; shoulders broad, somewhat roundly angulate, humeral teeth indistinct; interspaces flat to faintly convex; all striae distinct, moderately impressed, distinctly (usually rather finely) punctate basally; interspace 3 with 3 rather fine setiferous pores adjoining stria 3, seldom base of interspace 5 with 1 additional seta on one elytron only; scutellar stria and scutellar pore distinct; marginal series composed of 16–23 fine setae, sparser in the middle; elytral microreticulation forming isodiametric meshes, more prominent in females. Wings fully developed.

Underside of thorax rather coarsely punctate laterally, abdomen almost smooth. Anal sternite with 2 setae in males and 4 setae in females.

Ventrite IX (= genital ring or ringed sclerite) (fig. 46–50) large and robust, fairly sclerotized.

Aedeagus (fig. 21, 25, 29, 33, 37) strongly bent at base, its tube almost plane ventrally (viewed laterally); apical lamella rather short and narrow (fig. 22, 26, 30, 34, 38), flattened dorso-ventrally; apex rounded (viewed dorsally); armature of endophallus consisting of large subtriangular (viewed laterally) rather strongly sclerotized proximal copulatory piece with characteristic engraving basally. Parameres fairly variable in shape, apical projections long to rather short, strongly to faintly separated, membranous depigmented field of different shape and size, left paramere (fig. 23, 27, 31, 35, 39) nearly subequal in size to right one (fig. 24, 28, 32, 36, 40), both projections bearing 2–3 long apical and 3–10 usually much shorter subapical setae.

Female reproductive tract as in *D. depressus*, spermatheca with distinct ovate sclerotized ring (thin to rather thick) ventrally; apical segments of stylus with 1 minute seta subapically.

Total length 8.8–11.5 mm (females larger in average).

Remarks. As mentioned above, some populations of *D. depressus* s. l. from S Primorski Territory (Kamenushka, Maykhe, etc.) are the most difficult for diagnostics,

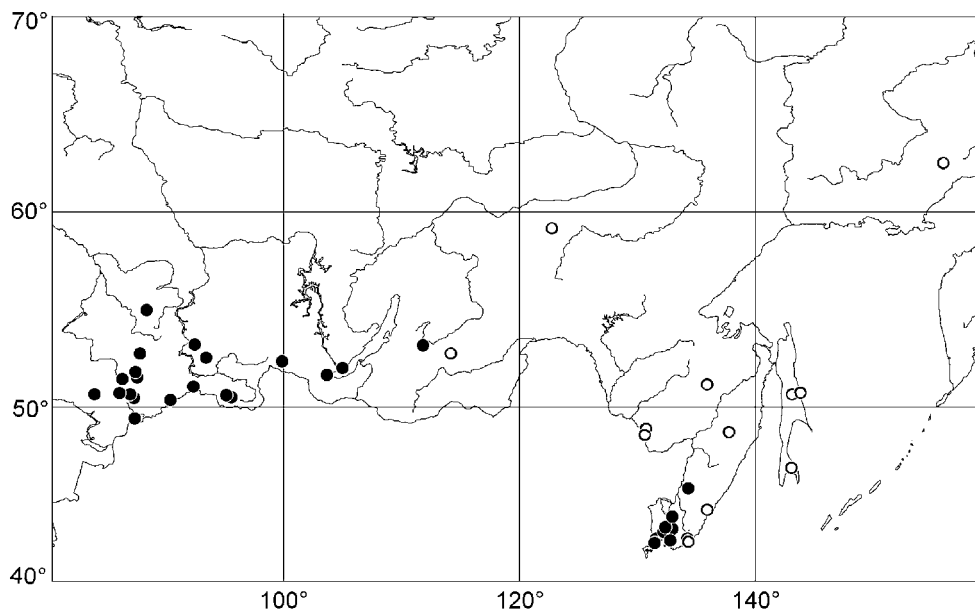


Fig. 51. Distribution of the subgenus *Platidius* in Russian Federation: black circles — *Diplous depressus*; white circles — *D. dolini*.

Рис. 51. Распространение подрода *Platidius* в Российской Федерации: черные кружки — *Diplous depressus*; белые кружки — *D. dolini*.

since they possess some transitional features both in general aspect and male genitalia, but in each case basing on the complex of characters we succeeded in their attribution either to *D. depressus* or *D. dolini* sp. n. Thus it is possible to assume, that this region lies close to the hypothetic center of diversification of *Platidius* in East Asia. Apparently, both main lineages (forms) expanded separately in several directions forming morphologically the most different populations at extreme points. Nowadays *D. dolini* sp. n. seems to be distributed at least at maritime slopes of Sikhotealin Mt. Range, Sakhalin, Khabarovsk Territory, Jewish Autonomous Region, Magadan Province, Aldan, and Yablonovyi Mt. Range (all localities lying in East Siberia eastwards from Baikal) (fig. 51). Taking into account a possibility of existence of the third species of the same subgenus in Korea (quite close to S Primorski Territory), this territory could perhaps be also included into the probable region of initial radiation of *Platidius* in the Palaearctic. Thus, the main directions of its expansions from this center in Continental Asia could be probably supposed as western, along mountain systems of South Siberia, and north-eastern. The first one is typical for several groups of animals (so called "South Siberian faunistic corridor"). American species seem to have Beringian roots. Graduate transition in some characters in the row *D. depressus* s. l. — *D. rugicollis* (Randall) — *D. filicornis* (Casey) — *D. aterrimus* (Dejean) — *D. californicus* (Motschulsky) (Zamotajlov, 2002) testifies probably to their common origin from the Asian *depressus*-like forms. So the modern distribution of the *Platidius* species could be interpreted as evidence of local diversification center lying in Korea — Japan — South of Russian Far East and its close connections with the Beringian center. Some features of Asian *Platidius* species resemble those of the *sibiricus*-group (*Diplous* s. str.), the most probably *sibiricus*-like forms must be considered as their possible ancestors (it agrees with our earlier assumptions, based on the cladistic analysis of the entire subfamily Patrobinae, see Zamotajlov, 2002).

Habitat. According to the data, given by Sundukov (2001) for the Lazo State Reserve, "*D. depressus*" inhabits wide range of the forest types, namely valley forests, pine-

deciduous, pine-fir-deciduous, and fir forests. It occurs also in some types of high altitude forests. Unfortunately, we were unable to study material derived exactly from the pointed locality, however at least partly this information could be apparently attributed to *D. dolini* sp. n. In any case, the forest communities themselves hardly affect distributional pattern of such strongly hygrophilous group as *Diplous*, which is tightly associated with pebbly banks of streams and rivers. Altitudinal distribution seems to be also very widely ranging from about 300 m above sea level to 2000 m or even more.

Etymology. I dedicate the specific epithet to the memory of late Prof. Dr. Vladimir G. Dolin, my elder friend, colleague, and teacher, in commemoration of his enormous contribution to the study of the beetles, in particular carabids.

I wish to express my sincere thanks to all colleagues for entrusting me *Platidius* specimens for study, in particular to B. M. Kataev (ZISP) and Prof. Dr. K.V. Makarov (MPSU), their contribution being the most serious. I am grateful also to G. Sh. Lafer (Vladivostok) for his permanent help and cooperation in solving numerous problems during preparation of the present paper and communicating other useful information.

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