Ground beetles (Coleoptera: Carabidae) of the Russian Far East: Additions and corrections to the Catalogue of Palaearctic Coleoptera, Volume 1 (2017)

Yu.N. Sundukov¹, K.V. Makarov²

₁ Federal Scientific Center of East Asia Terrestrial Biodiversity, Far East Branch of the Russian Academy of Sciences, 100-letiya Vladivostoka av. 159, Vladivostok, 690022 Russia. E-mail: yun-sundukov@mail.ru
² Zoology and Ecology Department, Moscow Pedagogical State University, Kibalchicha Street 6, Bld. 5, Moscow 129164 Russia. E-mail: kvmac@inbox.ru

ABSTRACT: An analysis of all available information on the ground beetles of the Russian Far East published in the 2nd edition of the first volume of the Catalogue of Palaearctic Coleoptera is presented. A total of 155 Far Eastern taxa of Carabidae is included, for which 178 changes are given: 108 of them concern distribution data, while 70 require taxonomic corrections. Another 8 omitted Far Eastern taxa are added to the catalogue; 31 and 19 taxa are included in or excluded from the fauna of the Far East, respectively; the distribution information is either restricted or expanded for 46 taxa. The total number of species-rank taxa in the fauna of the Far East is increased from 761 to 781.

How to cite this article: Sundukov Yu.N., Makarov K.V. 2019. Ground beetles (Coleoptera: Carabidae) of the Russian Far East: Additions and corrections to the Catalogue of Palaearctic Coleoptera, Volume 1 (2017) // Invert. Zool. Vol.16. No.3. P.283–304. doi: 10.15298/invertzool.16.3.07

KEY WORDS: Taxonomic list; omitted taxa; distribution; added taxa; excluded taxa; taxonomic refinements; regional biodiversity.

Жужелицы (Coleoptera: Carabidae) Дальнего Востока России: Дополнения и исправления к Catalogue of Palaearctic Coleoptera, Volume 1 (2017)

Ю.Н. Сундуков¹, К.В. Макаров²

¹ Федеральный научный центр биоразнообразия наземной биоты Восточной Азии Дальневосточного отделения РАН, просп. 100-летия Владивостока, 159, Владивосток, 690022 Россия. E-mail: yun-sundukov@mail.ru
² Кафедра зоологии и экологии Института биологии и химии, Московский педагогический государственный университет, ул. Кibalchichia 6, стр. 3, Москва 129164 Россия. E-mail: kvmac@inbox.ru

РЕЗЮМЕ: Проанализирована вся доступная информация о жужелицах Дальнего Востока России, приведённых во 2-м издании первого тома Catalogue of Palaearctic Coleoptera. Для 155 дальневосточных таксонов Carabidae дано 178 изменений: 108 из них касаются данных о распределении, а 70 — тaxonомические исправления. В каталог добавлены еще 8 пропущенных дальневосточных таксонов; 31 таксон включён, а 19 таксонов — исключены из фауны Дальнего Востока, соответственно; инфор-
In the autumn of 2017, the second edition of the first volume of the Catalogue of Palaearctic Coleoptera was published (Löbl, Löbl, 2017). It contains 689 species and 72 subspecies of the family Carabidae from Russian Far East. An analysis of the list presented in the catalogue allows for some clarifications to be made concerning the distribution and taxonomy, as well as certain information about the taxa omitted from the catalogue to be added.

Methods

In the Catalogue of Palaearctic Coleoptera, the Russian Far East is one of three subdivisions of the Asian part of Russia, being referred to as “FE” (Löbl, Löbl, 2017). When correcting or refining the data on the distribution of ground beetles, we used that very territorial division of Russia (Fig.).

In the course of the study, we used only published data on the distribution of ground beetles in the Far East of Russia, supported by material from the collections of the Federal Scientific Center of East Asia Terrestrial Biodiversity (Vladivostok), the Federal Pedagogical University (Moscow), and the Zoological Institute of the Russian Academy of Sciences (St. Petersburg).

To verify the taxonomic information, primary literature sources containing the descriptions of the relevant ground beetles taxa were consulted. All taxa included in the present paper are listed with reference to the pages they were published on in the catalogue.

Results

A total of 155 Far Eastern taxa is included in this paper, for which 178 changes are given: 108 of them concern distributions, while 70 are with corrected taxonomic information.

Distributional clarifications contain information on 31 taxa included in the fauna of the Russian Far East, 19 are excluded from the fauna, as well as 9 and 38 taxa for which the distributions within and beyond the territory of the Far East are refined, respectively.

Taxonomic information contains the following data:
- 6 omitted taxa added to the catalogue;
- subspecies added to 3 monotypic species;
- 1 subspecies given as a synonym;
- 3 taxa transferred to another genus;
- the type species corrected for 1 subgenus;
- the original generic combination corrected for 12 taxa;
- literature sources of original descriptions corrected for 9 taxa;
- description pages corrected for 29 taxa;
- misprints corrected for 4 taxa.

In addition, the list includes 21 Far Eastern taxa for which the description pages are unclear, as well as 21 taxa from other regions of Asia, in which misprints or other inconsistencies are noted.

In order not to increase the list of references, only sources used by us are included in this work, references to which being given in parentheses, ().
Corrections and addition to the Far Eastern taxa of Carabidae

p. 43: *Nebria (Boreonebria) gyllenhali gyllenhali* (Schönherr, 1806), synonym *attenuata* Motschulsky, 1844: 127; change page to: 1844: 128. Page 127 contains the beginning of the paragraph concerning to the section on *Nebria brevicollis*. It tells that there is a specimen from Kamchatka in the Motschulsky collection which is similar to *brevicollis* ... However, the name *attenuata* and its morphological characteristics are given only on page 128 (Motschulsky, 1844).
p. 44: Nebria (Boreonebria) nivalis nivalis (Paykull, 1790), synonym obscuripes Poppius, 1906a: 19; change page to: 1906a: 21 (Poppius, 1906).

p. 45: Nebria (Catonebria) catenulata Fischer von Waldheim, 1820: 6; change page to: 1820: pl. vi (Fischer von Waldheim, 1820).

p. 51: Nebria (Nebria) brevicollis (Fabricius, 1792); delete FE. Not recorded from the Far East of Russia. Confirmed by material, the eastern range limit of which does not reach the Urals.

p. 56: Nebria (Paranebria) livida angulata Bänninger, 1949; add JA. The catalogue erroneously states that the nominative subspecies N. livida livida (Linnaeus, 1758) occurs in Japan, whereas only the subspecies angulata is found to inhabit East Asia (Shilenkov, 1975).

p. 61: Notiophilus fasciatus Mäklin, 1855; add JA. Location: Hokkaido: Shirataki (Barševskis, 2007; Suzuki, 2018).

p. 67: Calosoma (Calosoma) lugens Chaudoir, 1869f: 377; change page to: 1869f: 372 (Chaudoir, 1869).

p. 68: Calosoma (Calosoma) maximoviczi A. Morawitz, 1863: 20 (Calosoma); correct the name to maximoviczi, and change the genus from Calosoma to Carabus. Described as Carabus (Calosoma) Maximoviczi (Morawitz, 1863).

p. 70: Carabus (Acoptolabrus) constricticollis constricticollis Kraatz, 1886, synonym latioricollis Mandl, 1954b: 397 (Carabus); change the genus from Carabus to Acoptolabrus (Mandl, 1954).

p. 72: Carabus (Acoptolabrus) schrenckii schrenckii Motschulsky, 1860c: 99 (Carabus); change the genus from Carabus to Acoptolabrus. Described as Coptolabrus Schrenckii Ménétr. (Motschulsky, 1860).

p. 91: Carabus (Aulonocarabus) canaliculatus canaliculatus M.F. Adams, 1812; delete NC. The nominative subspecies C. canaliculatus does not occur in the Korean Peninsula, being separable by the subspecies careniger Chaudoir, 1863, dacatrai Deuve, 1991, deniskeithi A. Müller, 2002, hailinenesis Deuve et Li, 2000, jankowskiiellus Deuve, 1991, rufinus Beheim et Breuning, 1943, sichtonis Born, 1914 and victorianus Obydov, 1997 (Březina et al., 2017).

p. 91: Carabus (Aulonocarabus) canaliculatus diamesus Semenov et Znojko, 1932; add FE (Lower Amur Region). Type locality: “vic. Rykovsko, in valle fluvii Tym riv. Botshi in jugo Sichota-alin” (= Kirovskoe on Tym River, northern Sakhalin, and Botchi River, northeastern Sikhote-Alin) (Semenov, Znojko, 1932: 218); Khabarovsky Krai: Lake Udyl’ and Lake Chlya (Sundukov, 2013).

p. 91: Carabus (Aulonocarabus) canaliculatus pseudocareniger Deuve, 1991; add FE. Locations: West and south-west of Primorsky Krai (Sundukov, 2013).

p. 92: Carabus (Aulonocarabus) truncaticollis truncaticollis Eschscholtz, 1833; add ES. See: C. (Eucarabus) lenaensis Mandl, 1955 (= C. truncaticollis truncaticollis Eschscholtz, 1833); type locality: “fl. Lena”, Lena River, Yakutia (Mandl, 1955).

p. 95: Carabus (Carabus) arvensis faldermanni Dejean, 1830, synonym bellus Kraatz, 1886c: 266; change page to: 1886c: 265. Both the description of diagnostic features and var. bellus Kraatz are presented on page 265; page 266 contains a key to variations (var.) of C. conciliator Fischer von Waldheim, 1820 (Kraatz, 1886).

p. 95: Carabus (Carabus) arvensis faldermanni Dejean, 1830, synonym nigerrimus Kraatz, 1886c: 266; change page to: 1886c: 265. Both the description of diagnostic features and var. nigerrimus Kraatz are presented on
Additions and corrections to the list of Carabidae of the Russian Far East

287Ground beetles of the Russian Far East: Additions and corrections

page 265; page 266 contains a key to variations (var.) of C. conciliator Fischer von Waldheim, 1820 (Kraatz, 1886).

p. 98: Carabus (Carabus) granulatus yezoensis Bates, 1883; add FE (Kurile Islands). Locations: Iturup, Kunashir and Shikotan islands (Kuwayama, 1967; Krivolutskaja, 1973; Kryzhanovskij et al., 1975; Mordkovich, 2003; Lafer, 2006; Sundukov, Makarov, 2013).

p. 104: Carabus (Chaetomelas) morawitzi koltzei Roeschke, 1907a: 231 (Carabus); change to: Cychrus (Cychrus) morawitzi koltzei Roeschke, 1907 (Roeschke, 1907). The remaining taxa listed on this page as “Carabus (Chaeotomelas) morawitzi...” should also be assigned to the genus Cychrus.

p. 114: Carabus (Damaster) blaptoides simuschirensis Obydov, 2008: 25; a junior synonym of Carabus (Damaster) blaptoides rugipennis (Motschulsky, 1861) (Makarov, Sundukov, 2016: 48).

p. 122: Carabus (Hemicarabus) macleayi macleayi Dejean, 1826, synonym coreensis Breuning, 1933b: 856; change page to: 1933b: 857 (Breuning, 1933).

p. 123: Carabus (Homoeocarabus) maeander maeander Fischer von Waldheim, 1820: 10; change page to: 1820: pl. x (Fischer von Waldheim, 1820).

p. 124: Carabus (Homoeocarabus) maeander paludis Géhin, 1885; add FE (Kamchatka). Type locality: “Sibirie”, Kamtschatka (Breuning, 1932: 103).

p. 142: Carabus (Megodontus) vietinghoffii fulgidus Fischer von Waldheim, 1828; add ES. Type locality: “Dahuria”, Zabaykalsky Krai (Fischer von Waldheim, 1828: 229); lectotype in the Zoological Museum of Moscow University (Obydov, 1999).

p. 197: Carabus (Tomocarabus) fraterculus fraterculus Reitter, 1895; delete ES. In Russia, it occurs only in the extreme southwest of Primorsky Krai (FE).

p. 199: Carabus (Trachycarabus) latreillei latreiller Fischer von Waldheim, 1820: 4; change page to: 1820: pl. iv (Fischer von Waldheim, 1820).

p. 250: genus Diacheila Motschulsky, 1844: 360 (Blethisa); correct: polita Faldermann, 1835b: 360 [Faldermann, 1835a: 3, 23]. Described in two editions of the same work (Faldermann, 1835a, b).

p. 252: Elaphrus (Neoelaphrus) uliginosus Fabricius, 1792; delete FE. No published data from the Far East of Russia.

p. 256: Clivina (Clivina) westwoodi Putzeys, 1867; add FE. Location: southern Sikhote-Alin (Lafer, 1996; Sundukov, 2009a, 2013).

p. 263: Dyschirius (Chiridysus) rufimanus A. Fleischer, 1898; delete FE. No published data from the Far East of Russia.

p. 266: Dyschirius (Dyschiriodes) fassatii Kult, 1949; add the subspecies fassatii fassatii Kult, 1949. For a polytypic species, you must add the name of the nominative subspecies (Fedorenko, 2003).

p. 266: Add the following: Dyschirius (Dyschiriodes) fassatii koreanus Fedorenko, 2003: 372 A: SC. Type locality: “Korea, Chungkong-bukdo Prov., Dang-jin City, Suk-moon seamall” (Fedorenko, 2003).

p. 268: Dyschirius (Dyschiriodes) yezoensis yezoensis Bates, 1883: 223; change page to: 1883: 232 (Bates, 1883).
p. 268: **Dyschirius**, subgenus *Dyschirius* Bonelli, 1810, synonym *Dyschiridius* Jeannel, 1941a: 263; change page to: 1941a: 260. To be correct, the beginning of the description is on page 260, where Jeannel introduced the name and the type species “*Dyschiridius* nov.; type: *arenosus* Stephens”; on page 262 the characteristic features of the genitalia of the new subgenus were given (that is, the diagnosis); page 263 contains a key to the subgenera (Jeannel, 1941).

p. 272: *Dyschirius* (*Eudyschirius*) *ussurianesis* Fedorenko, 1991: 149 (*Dyschiridius*); change the genus from *Dyschiriodes* to *Dyschirius* (Fedorenko, 1991).

p. 276: *Scarites* (*Parallelomorphus*) *terricola pacificus* Bates, 1873; add FE. Locations: south of Primorsky Krai (Lafer, 1989), Jewish Autonomous Region (Rogatnykh, Koshkin, 2011).

p. 283: *Miscodera arctica* (Paykull, 1798), synonym *erythropus* Motschulsky, 1844: 75; change page to: 1844: 76 (Motschulsky, 1844).

p. 302: *Bembidion* (*Blepharophlataphus*) *hastii* C.R. Sahlberg, 1827, synonym *ventricosus* Motschulsky, 1850a: 11; change the reference to: 1860a: 89. See: *Peryphus ventricosus* Motschulsky, 1850: 11, nomen nudum, type locality “Ins. Kuril. Urupa”; described as *Peryphus ventricosus* Motschulsky, 1860: 89, type locality: “Kamtschatka, rivages du fl. Kogorek” (Motschulsky, 1850, 1860).

p. 304: *Bembidion*, subgenus *Chlorodium* Motschulsky, 1864, type species *Bembidium splendidum* Sturm, 1825; change the type species to: *Bembidium colchicum* Chaudoir, 1850. See: *Chlorodium* Motschulsky, 1864, the type species: *Bembidium colchicum* Chaudoir, 1850 (= *Bembidium splendidum* Sturm, 1825), designated by Jeannel (1941).

p. 304: *Bembidion* (*Chlorodium*) *diforme* (Motschulsky, 1844), synonym *posterium* Gemminger et Harold, 1868 (*Bembidion*); change the genus from *Bembidion* to *Bembicidium* (Gemminger, Harold, 1868).

p. 308: *Bembidion* (*Eupetedromus*) *sibiricum* Dejean, 1831; add JA. See: *Bembidion* (*Eupetedromus*) *inouyei* nom. nov. sensu Neoltitzky, *Bembidion* (*Eupetedromus*) *sibiricum* Motschulsky (= *B. sibiricum*) from Hokkaido, Japan (Habu, 1972: 17).

p. 309: *Bembidion* (*Hydrium*) *pogonoides* Bates, 1883; add FE (Sikhote-Alin). Locations: Sikhote-Alinsky Nature Reserve (Sundukov, 2003), Lazovsky Nature Reserve (Sundukov, 2009a).

p. 310: *Bembidion* (*Melomalus*) *altaicum* Gebler, 1833: 272 (*Bembidion*); change the genus of description from *Bembidion* to *Anchomenus* (Gebler, 1833).

p. 310: *Bembidion*, subgenus *Metallina* Motschulsky, 1850a: 12; change page to: 1850a: 13 (Motschulsky, 1850).

p. 312: *Bembidion* (*Neoemphanes*) *shimoyamai* Habu, 1978; add FE. Locations: Primorsky Krai: Murav’eva-Amurskogo Peninsula (Lafer, 2005), Sikhote-Alinsky Nature Reserve (Sundukov, 2003), Lazovsky Nature Reserve (Sundukov, 2009a).

p. 314: *Bembidion* (*Notaphocampa*) *niloticum batesi* (Putzeys, 1875); add synonym *niloticum* Bates, 1873: 301 (*Bembidion*). Bates provided the morphological characteristics for *Bembidium niloticum* (Dejean, 1831) (Bates, 1873), which was subsequently distinguished as a separate species, *Notaphus batesi* nom. nov. (Putzeys, 1875). Therefore, *Bembidion* (*Notaphus*) *niloticum* Bates, 1873: 301, type locality: “Nagasaki”, is a junior synonym of *Bembidion* (*Notaphocampa*) *niloticum batesi*.

p. 316: *Bembidion* (*Ocydromus*) *echigonum* Habu et Baba, 1957; delete FE. No published data from the Far East of Russia.

p. 317: *Bembidion* (*Ocydromus*) *scopulinum* (Kirby, 1837), synonym *mongolicum*
Jedlička, 1967c: 105; change reference to: 1965e: 127. Described as *Bembidion thermarum mongolicum* ssp. nov.; type: Mongolei, Zum Chara, im Mus. Praha (Jedlička, 1965).

p. 318: *Bembidion (Ocydromus) uneayi* Habu, 1959; add FE. Location: southeastern Sikhote-Alin (Sundukov, 2013).

p. 324: *Bembidion (Peryphus) amurensis* Motschulsky, 1859d: 488 (*Peryphus*); change reference to: 1860a: 90. See: *Peryphus amurensis* Motschulsky, 1860: 90, type locality: “fl. Amour aux environs de Nikolaïevsk” (Motschulsky, 1859, 1860). In addition, as regards *B. amurense*, the catalogue contains an incorrect reference to Motschulsky, 1859d; that work is actually referred to in the catalogue’s bibliography as Motschulsky, 1859b.

p. 324: *Bembidion (Peryphus) amurense* amurense (Motschulsky, 1860); delete JA. Another subspecies inhabits all Japanese islands: *B. amurense trajectum* Netolitzky, 1939 (Ne- tolitzky, 1939, 1943; Yoshitake et al., 2011).

p. 325: *Bembidion (Peryphus) captivorum* Netolitzky, 1943; delete JA. This species does not occur in Japan, the taxon bearing that name in Japan is known as *B. (Peryphus) poppii pohlai* Kirschchenhofer, 1984; type locality: “Japan: Kamikochi” (Kirschchenhofer, 1984: 73).

p. 328: *Bembidion (Peryphus) poppii pohlai* Kirschchenhofer, 1984; add FE. Locations: Sakhalin, South Kuriles (Lafer, 2002, 2006; Sundukov, Makarov, 2013; Sundukov, 2017).

p. 330: *Bembidion (Philochthus) baicalicum* (Motschulsky, 1844); add FE. Locations: Khabarovsk (Berlov, Berlov, 1997a), Primorsky Krai (Sundukov, 2013).

p. 332: *Bembidion (Plataphus) coelestinum* (Motschulsky, 1844); add FE. Locations: Primorsky Krai: Murav’eva-Amurskogo Peninsula (Lafer, 2005), southern Sikhote-Alin (Shilenkov, 1979), Sikhote-Alinsky Nature Reserve (Sundukov, 2003).

p. 333: *Bembidion (Plataphus) gebleri nakanei* Jedlička, 1965; delete FE. In the Far East of Russia, it was erroneously recorded only from the Kuril Islands (Kryzhanovskij et al., 1975). A restudy of this material from the Zoological Institute, Russian Academy of Sciences (St. Petersburg, Russia) showed it to represent *Bembidion pseudolucillum* Netolitzky, 1938 common in the southern Kurile Islands (Sundukov, Makarov, 2013, 2016).

p. 338: *Bembidion (Trichoplatus) parconaturavis* Toledano et Schmidt, 2010; add FE NC, delete ES. Type locality: “Holotype: Primorski Kraj, Novocugujevka; Distribution: Ussuri Region, North Korea” (Toledano, Schmidt, 2010).

p. 339: *Bembidion (incertae sedis) sanatum* Bates, 1883; add FE. Location: Kurile Islands: Kunashir (Sundukov, Makarov, 2016).

p. 342: genus *Elaphropus* Motschulsky, 1839, synonym *Barytachys* Chaudoir, 1868d: 213; change page to: 1868d: 212 (Chaudoir, 1868).

p. 343: *Elaphropus latissimus latissimus* (Motschulsky, 1851), synonym *unistriatus* Reitter, 1887g: 494; change page to: 1887g: 497 (Reitter, 1887).

p. 345: *Tachys (Paratachys) bistriatus bistriatus* (Duftschmid, 1812); delete FE. This western Palaearctic species is unknown from the Russian Far East.

p. 352: *Tachyura (Tachyura) gradata* Bates, 1873b: 331 (*Tachyura*); change the genus from *Tachyura* to *Tachys*. Described as *Tachys gradatus* (Bates, 1873).

p. 356: *Pogonus (Pogonus) iridipennis* Nicolai, 1822: 16 (*Pogonus*); change the genus from *Pogonus* to *Carabus*. Described as *Carabus (Pogonus) iridipennis* (Nicolai, 1822).
p. 358: *Perileptus japonicus* Bates, 1873; add NC. Location: “Kaesong city, Kaesong; S. Hwanghae, Haeju, Mt. Suyoung-san” (Park, Széll, 2004).

p. 420: *Trechus (Epaphius)* densicornis (Fischhuber, 1977); add the subspecies *densicornis densicornis* (Fischhuber, 1977). For a polytypic species, the name of the nominative subspecies must be added (Sundukov, 2013).

p. 420: Add the following: *Trechus (Trechus) densicornis khuntami* Sundukov, 2013: 24 A: FE (Sikhote-Alin). Type locality: “headwaters of the Dzhigitovka River”, Sikhote-Alin, Primorsky Krai (Sundukov, 2013).

p. 420: Add the following: *Trechus (Trechus) densicornis sinegorensis* Sundukov, 2013: 25 A: FE (Sikhote-Alin). Type locality: “Levaya Sinegorka River”, Siniy Ridge, Primorsky Krai (Sundukov, 2013).

p. 421: *Trechus (Epaphius) plutenkoi kushironis* Uéno, 1992; add FE. Location: South Kuriles: Yurii Island (Sundukov, 2017).

p. 423: *Trechus (Trechus) apicalis* Motschulsky, 1845; correct: JA (Rishiri-to Island). Known only from Rishiri-to Island, Japan, but absent from Hokkaido (Uéno, 1984; Uéno, Lafer, 1994).

p. 424: *Trechus (Trechus) basarukini* P. Moravec et Wrase, 1997; add the subspecies *basarukini basarukini* P. Moravec et Wrase, 1997. For a polytypic species, the name of the nominative subspecies must be added (Sundukov, 2013).

p. 424: Add the following: *Trechus (Trechus) basarukini shokhrini* Sundukov, 2013: 23 A: FE (Sikhote-Alin). Type locality: “Snezhnaya Mountain”, southern Sikhote-Alin, Primorsky Krai (Sundukov, 2013).

p. 439: *Trechus (Trechus) nakaguroi* Uéno, 1960; limited FE (Kurile Islands). In Russia, known only from Kunashir Island, southern Kuriles (Sundukov, 2001a).

p. 445: *Trechus (Trechus) rubens* (Fabricius, 1792); delete FE. There are no records of this species from the Russian Far East. The eastern range limit in Russia is Lake Baikal (Khobrakova et al., 2014).

p. 464: *Patrobus assimilis* Chaudoir, 1844; add FE. Location: southern Sikhote-Alin, Sestra Mountain, Sestrinsky Stream, 1500 m elevation (Sundukov, 2013).

p. 479: *Mastax thermarum egorovi* Lafer, 1973: 852; change page to: 1973: 853 (Lafer, 1973).

p. 484: *Chlaenius (Achlaenius) variicornis* A. Morawitz, 1863; add FE, delete ES. Locations: Primorsky Krai (Kryzhanovskij, 1976; Lafer, 1989; Sundukov, 2009a, 2013), Kurile Islands (Kryzhanovskij et al., 1975; Lafer, 1989). No records from eastern Siberia (ES).

p. 484: *Chlaenius (Agostenus) sulcicollis* (Paykull, 1798); add FE. Location: south of Primorsky Krai (Kryzhanovskij, 1976; Sundukov, 2013).

p. 489: *Chlaenius (Chlaenites) spoliatus spoliatus* (P. Rossi, 1792); delete FE. The Far East supports only the East Asian subspecies *Ch. spoliatus mottschulskyi* Andrewes, 1928 (Kryzhanovskij, 1976; Lafer, 1989).

p. 490: *Chlaenius (Chlaenius) pallipes* Gebler, 1823: 127 (Epomis); change page to: 1823: 128 (Gebler, 1823).

p. 491: *Chlaenius (Eochlaenius) suvorovii* (Semenov, 1912); add FE JA, delete ES. Type locality: “fluvii Ussuri, 20 km infra Nikolsk; ejusdem fluvii littora, 60 km infra Iman” (= Ussuri River, 20 km downstream Ussurisysk and 60 km below Iman River) (Semenov, 1912: 602–603); south of Primorsky Krai (Kryzhanovskij, 1976; Lafer, 1989; Sundukov, 2013); Honshu, Japan (Habu, 1987). No records from eastern Siberia (ES).
Ground beetles of the Russian Far East: Additions and corrections

p. 491: *Chlaenius* (Haplochlaenius) *insularis* Uéno, 1964; delete FE. No records from Russia. Sakhalin supports *Ch. (Chlaeniellus) insularis* Kryzhanovskij, 1973 (= *Ch. circumductus* A. Morawitz, 1862) (Kryzhanovskij, 1973).

p. 564: *Acupalpus* (Acupalpus) *ussuriensis* Lafer, 1989: 198; change page to: 1989: 199. Described in a key, the thesis beginning on page 198, but the name of the species, the type material and the type locality appearing only on page 199 (Lafer, 1989).

p. 583: *Cymindis*, subgenus *Cymindis* Latreille, 1805, synonym *Anomoeus* Fischer von Waldheim, 1820: 12; change page to: 1820: 125 (Fischer von Waldheim, 1820).

p. 584: *Apristus striatus* (Motschulsky, 1844); add FE. Location: southern Sikhote-Alin (Sundukov, 2011).

p. 597: *Dromius* (Dromius) *angusticollis* J.R. Sahlberg, 1880, synonym *flavipes* Motschulsky, 1859d: 488; change reference to: 1864: 228. See: *Dromius flavipes* Motschulsky, 1859: 488, nomen nudum, type locality: “du fl. Amour, depuis la Schilka jusqu’à Nikolaëvsk”; described as *Dromius ater* Motschulsky, 1864: 228, type locality: “Des bords du fl. Amour.” (Motschulsky, 1859, 1864).

p. 597: *Dromius* (Klepterus) *proximus* Bates, 1883: 207; change page to: 1883: 282 (Bates, 1883).

p. 602: *Microlestes fissurus*alis (Reitter, 1901); add FE. Location: Amurskaya oblast’ (Rogatnykh, 2007).

p. 603: *Microlestes schroederi* Holdhaus, 1912: 514; correct: 1912: 38 [514]. As the page numbers in that work are duplicated: 1–64 [477–540], it is more correct to quote both options (Holdhaus, 1912).

p. 605: *Paradromius* (Manodromius) *ruficollis* (Motschulsky, 1844); add NC. Location: “Prov. Ryanggang, Mt. Pektusan, 1900 m” (Park, Széll, 2004).

p. 607: *Philorhizus sigma* (P. Rossi, 1790), synonym *fasciatus* Paykull, 1790: 226; change page to: 1790: 97 (Paykull, 1790).

p. 618: *Setolebia caligata* Bates, 1889c: 219 (Lebia); change both the reference and genus to *Setolebia caligata* Bates, 1888b: 382 (Lebia). Originally described as *Lebia caligata* (Bates, 1888). That work of 1889 discussed the following: “*Lebia prattiana. — L. fuscae* (Morawitz) ... description *L. fuscae* ... This species connects the Asiatic group of *Lebia*, in which the thorax is wholly rounded anteriorly (without anterior angles) and the outer angle of the elytral truncature dentiform, with the numerous group iv. à of Chaudoir’s Monograph of the Lebiides, in which the elytral interstices are similarly convex, but the outer angle of the truncature rounded etc. *L. Prattiana*, in fact, resembles much a large *L. caligata* (Bates)” (Bates, 1889). Thus, *L. caligata* was originally described earlier and in a different genus. In addition, the quoted piece is on page 218, not 219, as falsely indicated in the catalogue.
p. 618: *Parena cavipennis* (Bates, 1873); add NC. Location: “Kaesong, Kaesong city, Hotel Janamsan” (Park, Széll, 2004).

p. 619: *Parena monostigma* (Bates, 1873); add NC. Location: “Prov. Gang-von, district On-dzong, Kumgang-san, near Hotel, Go-song, 250 m” (Park, Széll, 2004).

p. 627: *Badister* (*Badister*) *pictus* Bates, 1873; delete FE. There is one mention for the Far East of Russia: “finding this species is possible in Kunashir and southern Sakhalin” (Komarov, 1991). No actual records are known.

p. 628: *Badister* (*Baudia*) *marginellus* Bates, 1873; add FE (Kurile Islands). Locations: Kunashir, Shikotan and Yurii islands (Mordkovich, 2003; Sundukov, 2008, 2017; Sundukov, Makarov, 2013).

p. 628: *Badister* (*Baudia*) *ussuriensis* Jedlička, 1937; add NC. Location: North Korea: Savoron (Jedlička, 1960).

p. 640: *Peronomerus fumatus* Schaum, 1854; delete FE. No records from the Russian Far East.

p. 640: *Pentagonica daimiella* Bates, 1892; add FE NC. Locations: Jewish Autonomous Region (Kataev, 2006), southern Sikhote-Alin (Sundukov, Smirnov, 2010); “North Pyongan Prov., Mt. Myohyang-san” (Park, Széll, 2004).

p. 642: *Perigona* (*Trechicus*) *nigriceps* (Dejean, 1831); add ES. Location: Buryatia (Shilenkov, Anichtchenko, 1998; Sundukov, 2009b; Khobrakova et al., 2014).

p. 644: *Agonum* (*Agonum*) *gracilipes* (Duftschmid, 1812), synonym *elongatum* Fischer von Walheim, 1823: 19; change page to: 1823: 126. The descriptions of this taxon are given on pages 126–127, while the beetle’s drawing in Tab. XIX, fig. 3 (Fischer von Waldheim, 1823).

p. 646: *Agonum* (*Europhilus*) *exaratum* (Mannerheim, 1853); add FE. Locations: Chukotka, Magadanskaya oblast’, Kamchatka (Lafer, 1992a).

p. 646: Add the following: *Agonum* (*Europhilus*) *gratiosum* *gratiosum* Mannerheim, 1853: 142 A; FE. Location: Chukotka (Lafer, 1992a).

p. 654: *Colpodes komarovi* (Lafer, 1976); change to *Xestagonum komarovi* (Lafer, 1976) (Sundukov, 2013).

p. 657: *Eucolpodes japonicum chinadense* (Jedlička, 1940); delete FE. In the Far East of Russia, *E. japonicum* (Motschulsky, 1861) is known to occur only on islands (South Kuriles and Sakhalin), being represented by the nominate subspecies *E. japonicum japonicum* (Motschulsky, 1861). This species is unknown from the mainland Far East of Russia.

p. 657: *Eucolpodes japonicum japonicum* (Motschulsky, 1861); add FE. Locations: Sakhalin and South Kuriles (Iturup, Kunashir, Shikotan) (Kryzhanovskij et al., 1975; Berlov, Berlov, 1997b; Lafer, 1992a, 2002; Mordkovich, 2003; Sundukov, Makarov, 2013; Vertyankin, Shabalin, 2013).

p. 658: *Euplynes batesi* Harold, 1877; add FE. Location: south of Primorsky Krai (Makarov, Sundukov, 2011).

p. 658: *Gyrochaetostylus atricomes* (Bates, 1873), synonym *piceonigrum* Jedlička, 1936d: 50; change *piceonigrum* to *piceoniger* (Jedlička, 1936b).

p. 661: *Lissagonum lampros* (Bates, 1873); add FE. Location: Kurile Islands: Kunashir (Makarov, Sundukov, 2011).

p. 667: *Platynus mannerheimii* (Dejean, 1828), synonym *octofoveolatus* Mäklin, 1857: 338; change reference to: 1855: 34. The 1857 publication is a translation from Swedish to German, dated 1855 (Mäklin, 1855, 1857).

p. 674: *Xestagonum shokrini* Sundukov, 2013: 154; change *shokrini* to *shokhrini*, and change page to: 2013: 46 (Sundukov, 2013).
Ground beetles of the Russian Far East: Additions and corrections

p. 697: *Poecilus (Poecilus) samurai* (Lutshnik, 1916); add FE (Sakhalin). Location: southern Sakhalin (Lafer, 1989).

p. 698: *Poecilus (Poecilus) versicolor* (Sturm, 1824); add JA. A junior synonym, *Poecilus planicollis* Motschulsky, 1861, was described from Japan (Motschulsky, 1861: 5).

p. 701: *Pterostichus (Badistrinus) haptoderoides japonensis* (Lutshnik, 1922); add FE. Locations: Kurile Islands (Iturup, Kunashir, Shikotan) and Sakhalin (Krivolutskaja, 1973; Kryzhanovskij et al., 1975; Lafer, 2002; Sundukov, Makarov, 2013; Vertyankin, Shabalin, 2013).

p. 701: *Pterostichus (Bothriopterus) adstrictus* Eschscholtz, 1823; add JA. Locations: Abashiri, Hokkaido (Sasakawa, Kubota, 2007), Obihiro, Hokkaido (Kaizuka, Iwasa, 2014), etc.

p. 705: *Pterostichus (Cryobius) kaninensis kurnakovi* G.E. Ball, 1966; add FE. Location: Chukotka: Wrangel Island (Khruleva, 1987).

p. 706: *Pterostichus (Cryobius) korgei* Jedlička, 1964; delete FE. No records from the Russian Far East.

p. 708: *Pterostichus (Cryobius) kurosawai* Tanaka, 1958; add JA. Location: Hokkaido: Daisetsu Mts, Rishiri Island (Morita, 2002).

p. 708: *Pterostichus (Cryobius) nivalis* (R.F. Sahlberg, 1844); add FE. Type locality: “In monte Morikan sub lapidibus, nin...adhue tectis, capta”, Ayan, Khabarovsky Krai (Sahlberg, 1844: 37–39); Kamchatka (Ball, 1966), Chukotka (Erjiomin, 1998).

p. 711: *Pterostichus (Eosteropus) coruscus* (Tschitschérine, 1895); add FE. Location: south of Primorsky Krai: Furugelma Island (Lafer, 2004).

p. 712: Add the following: *Pterostichus (Eosteropus) orientalis nigromontanus* Lafer et Budilov, 2015: 102 A: FE. Type locality: Primorsky Krai, Khasansky distr., Kedrovaya Pad’ Nature Reserve (Lafer, Budilov, 2015).

p. 714: *Pterostichus (Feroperis) sungariensis* Lafer, 1979; add HEI. Type locality: “the mouth of Sungari River”, Heilongjiang, China (Lafer, 1979: 26–27). The subsequent discovery of this species in the Amur region of Russia did not exclude its occurrence in China, but only raised the question of its taxonomic relationship with *Pterostichus melanoedes* (Chaudoir, 1878) (Lafer, 1992b).

p. 717: *Pterostichus*, subgenus *Koreonialoe* Park et Kwon, 1996, synonym *Natalianoe* O. Berlov et Plutenko, 1997: 4; change page to: 1997: 50 (Berlov, Plutenko, 1997).

p. 717: *Pterostichus*, subgenus *Lenapterus* O. Berlov, 1996, synonym *Galapterus* O. Berlov et Plutenko, 1997: 3; change page to: 1997: 47 (Berlov, Plutenko, 1997).

p. 717: *Pterostichus (Lenapterus) costatus* (Ménétriés, 1851); add NT WS. A Holarctic polar species: the tundra zone from Gydanskii Peninsula in the north of Eurasia to Hudson Bay in North America (Sundukov, 2005).

p. 720: *Pterostichus (Melanius) licenti* Jedlička, 1939; delete FE. Erroneously recorded from the Far East of Russia in the catalogue of the ground beetles of Russia (Kryzhanovskij et al., 1995). This information may have been used in the Catalogue of Palaearctic Coleoptera (Bousquet, 2003, 2017).

p. 720: *Pterostichus (Metallophilus) kamtschaticus alexejevi* Brinev, 2001; add ES, delete FE. Distribution: Central Yakuria (Brinev, Shilenkov, 2001).

p. 720: *Pterostichus (Metallophilus) kamtschaticus kamtschaticus* Motschulsky, 1860; delete ES. Known only from Kamchatka (Brinev, Shilenkov, 2001).
p. 720: *Pterostichus* (*Metallophilus*) *pfizenmayeri* Poppius, 1906; add FE. Distribution: Yakutia to the west of Yakutsk and Suntar-Khayata Ridge (Brinev, Shilenkov, 2001).

p. 720: *Pterostichus* (*Metallophilus*) *sublaevis* (J.R. Sahlberg, 1880); add FE, delete NT. Distributed from Yamal Peninsula (WS) to Chukotka (FE) (Brinev, Shilenkov, 2001).

p. 732: *Pterostichus* (*Petrophilus*) *nigellus* A. Morawitz, 1862; delete ES. Type locality: “Bai De Castries”, Khabarovsky Krai (Morawitz, 1862: 214[255]); “a syntype from USSR (Habarovsk kraj): De Castries B., Arthur N.” (Silfverberg, 1987: 21). Known only the syntype (Sundukov, 2013).

p. 733: *Pterostichus* (*Phonias*) *diligens* Sturm, 1824; add FE. Locations: Kurile Islands, Kamchatka, Sakhalin, Moneron Island (Berlov, Berlov, 1997b; Lafer, 2002, 2006; Sundukov, Makarov, 2013; Vertyankin, Shabalin, 2013; Sundukov, 2014, 2017).

p. 734: *Pterostichus* (*Phonias*) *kutensis* Poppius, 1905; add FE. Location: Khabarovsky Krai: northern Amur Region (Lyubechanski et al., 2006; Budilov, 2016; Koshkin et al., 2016; Kuberskaya, Mutin, 2016).

p. 735: *Pterostichus* (*Phonias*) *sotkaensis* Jedlička, 1958; delete FE. Excluded from fauna of the Russian Far East (*Pterostichus sotkaensis* auct. = *Pterostichus* (*Pledarus*) *larisae* Sundukov, 2013) (Sundukov, 2013).

p. 747: *Pterostichus* (incertae sedis) *marginatus* Matsumura, 1911; limited FE (Sakhalin). Originally described from Sakhalin (Matsumura, 1911), mentioned in the list of South Sakhalin beetles (Yokayama, Kanö, 1927). As it was not found later, it was excluded from the fauna of Sakhalin as an unclear taxon (nomen dubium) (Lafer, 2011).

p. 764: *Calathus*, subgenus *Neocalathus* Ball et Nègre, 1972, type species: *Carabus malanocephalus* Linnaeus, 1758; change *malanocephalus* to *melanocephalus*.

p. 769: *Dolichus halensis* (Schaller, 1783); add SCH YUN. Junior synonyms were described from Sichuan and Yunnan: *Dolichus bicolor* Maindron, 1910 (de Yunnan Sen et de Tali), *Dolichus viduus* Maindron, 1910 (Yunnan), *Dolichus viduus* ab. *phaeopus* Maindron, 1910 (Yunnan), *Dolichus rufithorax* Jedlička, 1936 (Tatsienlu, Sichuan), *Dolichus rufithorax* ab. *pictus* Jedlička, 1936 (Pingshiang), *Dolichus viduus* ab. *brunneipennis* Jedlička, 1936 (Yunnan), *Dolichus viduus* ab. *triangularis* Jedlička, 1936 (Szetschuan), *Dolichus phaeopus* ab. *szetschuanus* Jedlička, 1936 (Kiating, Sichuan) (Maindron, 1910; Jedlička, 1936a).

p. 785: *Pseudotaphoxenus dauricus dauricus* (Fischer von Waldheim, 1823); delete FE. Erroneously recorded from the Far East of Russia (Casale, 1988; Kryzhanovskij et al., 1995). The confusion was probably caused by the label “all’Ussuri ad Est” (Casale, 1988), based on *Taphoxenus ussuriensis* Jedlička, 1953 (= *Pseudotaphoxenus dauricus dauricus*), type locality: “Transbaikal, Werchne-Udinsk” (= Ulan-Ude, Buryatia) (Jedlička, 1953).

p. 791: *Synuchus* (*Synuchus*) *arcuaticollis* (Motschulsky, 1861); add FE (Kamchatka, Sakhalin). Locations: Kamchatka, Sakhalin (Lafer, 1989, 2002; Berlov, Berlov, 1997b; Vertyankin, Shabalin, 2013).

p. 792: *Synuchus* (*Synuchus*) *crocatus* (Bates, 1883); delete FE. It was erroneously recorded in the fauna of Russia only from the Kunashir Island, southern Kurile Islands (Kryzhanovskij et al., 1975). Subsequent authors referred to these data (Habu, 1978; Hovorka, Sciaky, 2003), although this species was long excluded from the fauna of Russia (Kryzhanovskij et al., 1995). There are no later publications concerning *S. crocatus* in Russia.

p. 792: *Synuchus* (*Synuchus*) *orbicollis* A. Morawitz, 1862, synonym *cycloderus* Heyden,
1886c: 270 (Synuchus); change the genus Synuchus to Calathus. Originally described as Calathus cycloderus (Heyden, 1886).

p. 796: Amara (Amara) communis Panzer, 1797e: 40 no 2 (Carabus); change the year and page to: 1796g: no. 2 (Panzer, 1796). The catalogue contains further three references to “Panzer, 1797” (for the type species of Parapoecilus, the genus Amara, and the subgenus Amara), although there is no citation of Panzer 1797 contained in the bibliography list.

p. 798: Amara (Amara) kingdonoides Hieke, 2002; add ES NC WS (Altai). Locations: “Im sibirischen Teil von Russland: Altaj, West- und Ostsajan-Gebirge bis nach Jakutien und Gebiet Magadan; im Gebiet Iruktsk, in Transbaikalien und Amur-Gebiet. Im Ussuri-Gebiet im Sichote-Alin-Gebirge. Auch auf Sachalin und in den Bergen des nordlichen Korea” (Hieke, 2002).

p. 806: Amara (Bradytus) aurichalcea Germar, 1823; delete JA. There are no records of this species from Japan.

p. 807: Amara (Bradytus) fritzhiekei Sundukov, 2013: 165 (Bradytus); change the genus of description Bradytus to Amara (Sundukov, 2013).

p. 807: Amara (Bradytus) pseudosimplicipidens Lafer, 1980; add NC. Paratype: “Democratic People’s Republic of Korea, 2 ♀, Di Don-Yur leg.” (Lafer, 1980).

p. 809: Amara (Celia) laticarpa Bates, 1873; add BEI JA HEI MG SHA QIN. Type locality: “Hiogo”, Japan (Bates, 1873: 293); distribution: “Baikal-Gebiet, Transbaikalien, Amur-und Ussuri-Gebiet, Japan, N. Korea, N. und NO. China (Mandshurei, Umgebung von Peking, Shaanxi, Qinghai), O. Mongolei” (Hieke, 2000).

p. 810: Amara (Celia) pseudobrunnea Lindroth, 1968; delete FE. There are no records of this species from the Far East of Russia.

p. 810: Amara (Celia) saginata vilis Tschiitschérine, 1894; delete JA. A. saginata Ménétriés, 1848 was recorded from Japan and referred to as a senior synonym of A. laticarpa Bates, 1873. Both are quoted in the Catalogue as two separate species.

p. 814: Amara (Curtonotus) katevi Sundukov, 2001: 440 (Amara); change the genus of description Amara to Curtonotus (Sundukov, 2001b).

p. 814: Amara (Curtonotus) larisae Sundukov, 2001: 437 (Amara); change the genus of description Amara to Curtonotus (Sundukov, 2001b).

p. 824: Amara (Reductocelia) arcticola Poppius, 1906; add FE. Locations: Bulun on Lena River and Yakutsk, Yakutia; Omsukchan in Magadanskaya oblast’; Wrangel Island, Chukotka (Hieke, 1999); Wrangel Island (Khruleva, 1987).

p. 824: Amara (Reductocelia) colvillensis Lindroth, 1968; add ES. Locations: Zhigansk and Kyzyr on Lena River, and Olenek River, Yakutia (Hieke, 1999).

p. 825: Amara, subgenus Xenocelia Hieke, 2001: 13; change page to: 2001: 7 (Hieke, 2001).

Far Eastern taxa with ambiguous page numbers

The International Code of Zoological Nomenclature (ICZN, 1999) does not control the “primacy” of the page numbers where the taxon is described. The description is often published together with an identification key and if the key is given before the description, then an ambiguous situation arises: the taxonomic name, part of the diagnostic features, and sometimes the type locality/-ies of the new taxon is a page or more earlier than the full description. In this situation, subsequent authors behave in different ways. Some are guided by the simple princi-
p. 590: Cymindis, subgenus Orientoherus Sundukov, 2011: 331; actually: 2011: 318 (key), 331 (description) (Sundukov, 2011).

p. 603: Microlestes minutulus (Goeze, 1777), synonym longulus Reitter, 1901f: 379; actually: 1901f: 372 (key), 379 (description) (Reitter, 1901).

p. 626: Diplocheila, subgenus Submera Habu, 1956a: 58; actually: 1956a: 50 (key), 58 (description) (Habu, 1956a).

p. 626: Diplocheila, subgenus Submera Habu, 1956, synonym Shirahataia Habu, 1956a: 63; actually: 1956a: 50 (key), 63 (description) (Habu, 1956a).

p. 635: genus Lachnocrepis LeConte, 1853, synonym Eulachnocrepis Habu, 1956b: 96; actually: 1956b: 79 (key), 96 (description) (Habu, 1956b).

p. 658: Gyrochaetostylus atricomes (Bates, 1873), synonym piceonigrum Jedlička, 1936d: 50; actually: 1936d: 48 (key), 50 (description) (Jedlička, 1936b).

p. 714: Pterostichus (Feroperis) alexandrovi Lafer, 1979: 16; actually: 1979: 7 (key), 16 (description) (Lafer, 1979).

p. 714: Pterostichus (Feroperis) arsenjevi Lafer, 1979: 27; actually: 1979: 7 (key), 27 (description) (Lafer, 1979).

p. 714: Pterostichus (Feroperis) chechchirensis Lafer, 1979: 28; actually: 1979: 8 (key), 28 (description) (Lafer, 1979).

p. 714: Pterostichus (Feroperis) kurentzovi kurentzovi Lafer, 1979: 18; actually: 1979: 7 (key), 18 (description) (Lafer, 1979).

p. 714: Pterostichus (Feroperis) kurentzovi labzuki Lafer, 1979: 24; actually: 1979: 7 (key), 24 (description) (Lafer, 1979).

p. 714: Pterostichus (Feroperis) levadensis Lafer, 1979: 21; actually: 1979: 7 (key), 21 (description) (Lafer, 1979).
p. 714: *Pterostichus* (*Feroperis*) *procax* decastricensis Lafer, 1979: 30; actually: 1979: 7 (key), 30 (description) (Lafer, 1979).

p. 714: *Pterostichus* (*Feroperis*) *shingarevi maichensis* Lafer, 1979: 19; actually: 1979: 7 (key), 19 (description) (Lafer, 1979).

p. 714: *Pterostichus* (*Feroperis*) *shingarevi shingarevi* Lafer, 1979: 23; actually: 1979: 7 (key), 23 (description) (Lafer, 1979).

p. 714: *Pterostichus* (*Feroperis*) *vladivostokensis* Lafer, 1979: 13; actually: 1979: 7 (key), 13 (description) (Lafer, 1979).

p. 56: *Nebria* (*Paranebria*) *livida livida* (Linnaeus, 1758); delete JA. This is incorrect for Japan, the only subspecies occurring in East Asia being *N. livida angulata* Bänninger, 1949 (Shilenkov, 1975).

p. 162: Add the following: *Carabus* (*Oho- mopterus*) *dehaanii nakagomei* Kubota, 2010: 49 A: JA (Kyushu). Type locality: Japon, Osumi peninsula, Kagoshima Pref. (Kubota, 2010).

p. 305: *Bembidion* (*Diplocampa*) *assimile* Gyllenhal, 1810; delete JA. This western Palaearctic species does not occur in East Asia. An erroneous record from Japan (Hokkaido: Hamakoshi-mizu near Abashiri) belongs to Habu and Baba (1968). Another species of the subgenus *Diplocampa* was later found to inhabit Hokkaido: *B. transparens prostratum* (Motschulsky, 1844).

p. 344: *Lymnastis yanoi* Nakane, 1963; add NC. Location: “Thesong” (Pawłowski, 1974).

p. 374: Add the following: *Dracotrechus meridians meridians* Uéno, 2011: 15 A: JA. Type locality: Getó-onsen, 750 m in altitude, Waga-chō of Iwate Prefecture in northeastern Honshu, Northeast Japan (Uéno, 2011).

p. 421: *Trechus* (*Epaphius*) *rivularis* (Gyllenhal, 1810); add ES. *T. nigricornis* Motschulsky, 1844 is listed as a synonym of *T. rivularis* in the Catalogue, described from “montagnes près de Kiakhta, au-delà du Baïcal”, that is, ES (Motschulsky, 1844).

p. 652: genus *Batenoplatynus* Morvan, 1998; add NC SC. Locations: NC — “Kaesong city, Kaesong, Hotel Janamsan; North Pyongan Prov. Myo-hyang-san, Iaon-nam vally”; SC — “Prov. Chejudo, Cheju-do, Halla-san, Songpanak, 750 m” (Park, Széll, 2004).

p. 666: genus *Paranchodemus* Habu, 1978a: 7, type species: *Anchodemus calleides* Bates, 1883; change *Anchodemus* to *Anchomenus* (Bates, 1883).

p. 671: genus *Sperkanhir* Morvan, 2010: 16, type species: *Sperkanhir babaulti* Louwerens, 1953; change to *Colpodes babaulti* Louwerens, 1953 (Louwerens, 1953).

p. 685: *Myas*, subgenus *Trigonognatha* Motschulsky, 1858, synonym *Aurisma* Fairmaire, 1889g: 9, type species: *Aurisma delavayi* Fairmaire, 1888; change 1888 to 1889.

p. 712: Add the following: *Pterostichus* (*Eo- steropus*) *matsunagai* Morita, 2011: 21 A: JA. Type locality: Mt. Shauzo-yama, 1,750–1,830
Yu.N. Sundukov, K.V. Makarov

m alt., Hamamatsu-shi, Shizuoka Prefecture, Central Japan (Morita, 2011).

p. 712: Pterostichus (Eosteropus) noburai Morita, 2008; change noburai to noborui (Morita, 2008).

p. 731: Pterostichus (Petrophilus) dilutipes Motschusky, 1844; add WS. Locations: north and center of West Siberia (Khobrakova et al., 2014).

p. 732: Pterostichus (Petrophilus) uralensis uralensis Motschusky, 1850a: 56 (Eurypessus); change the genus Eurypessus to Euryperis. Originally described as Euryperis uralensis (Motschusky, 1850).

p. 737: Pterostichus (Plectus) drescheri (Fischer von Waldheim, 1817); add KZ WS. Type locality: “jugo minori montium Altaicorum, prope fluvium Gorgon” (Fischer von Waldheim, 1817: 463); KZ WS (Dudko et al., 2002, 2010, etc.).

p. 750: Stomis, subgenus Stomis Clairville, 1806, synonym Stobeus Fairmaire, 1889g: 8, type species: Stobeus collucens Fairmaire, 1888; change 1888 to 1889.

p. 767, 771: Calathus (incertae sedis) pretus Jedlička, 1937f: 79 and Pristosi (Paradolicus) prenta Jedlička, 1937f: 79. This is the same taxon listed in the Catalogue as two different species in the subtribes Calathina and Pristosiina. Originally described as Calathus pretus (Jedlička, 1937).

p. 793: Synuchus (Synuchus) vivalis simplex Semenov, 1891; add KI KZ TD TM, delete NC. Widespread in the mountains of Central Asia; in East Asia, only the subspecies S. vivalis uenoi Lindroth, 1956 is found to occur.

**Conclusion**

Thus, taking into account the present paper, the fauna of the Far East of Russia currently includes 781 taxa of specific rank (700 species and 81 subspecies).

In addition to the updates in the list, some general comments on the systematic part of the Catalogue are necessary. For example, in the directory:

– in the distributional data, errors such as “ES (Altai)” are often encountered, although Altai is part of western Siberia and should be cited as “WS (Altai)”;

– there is no uniform writing of the names of G.G. Jakobson (“Jakobson” or “Jacobson”);

– a lot of errors in recapitulating the proper genus for the first descriptions of taxa of the species rank, this raising doubts about unverified taxa;

– there is no uniform choice for the pages of a taxon’s first description. We suggest that both the page containing the diagnosis and that from the key can be used.

Summarizing this study, it is worth noting that the section on ground beetles in the Catalogue of Palaearctic Coleoptera contains quite a few errors. Of the 761 taxa of the species rank listed in the Catalogue for the fauna of the Far East of Russia, our clarifications concern 145 species, subspecies or their synonyms. It appears that for a better preparation of such much-needed and practically important documents as catalogues of animal and plant diversity, it is necessary to recruit more specialists. These specialists can even duplicate each other, both in taxonomy and assessing the diversity of local faunas. They can even be used if not as authors, then for consulting or as reviewers.

**Acknowledgements**

We are sincerely grateful to Dr. Alexei Gusakov (Zoological Museum of the Moscow University, Moscow) for his help in studying some literature sources.

**References**

Andrewes H.E. 1937. Papers on Oriental Carabidae – XXXII // The Annals and Magazine of Natural History. Ser.10. Vol.20. P.561–576.

Ball G.E. 1966. A revision of the North American species of the subgenus Cryobius Chaudoir (Pterostichus,
Ground beetles of the Russian Far East: Additions and corrections

Carabidae, Coleoptera) // Opuscula Entomologica Supplementum. Vol.28. P.1–166.
Barševskis A. 2007. Biogeography of the genus Notoophilus Dumeril, 1806 (Coleoptera: Carabidae) // Baltic Journal of Coleopterology. Vol.7. No.1. P.121–135.
Bates H.W. 1873. Descriptions of new genera and species of geodephagous Coleoptera, from China // The Transactions of the Entomological Society of London. Vol.2.1873). P.323–334.
Bates H.W. 1883. Supplement to the geodephagous Coleoptera of Japan, chiefly from the collection of Mr. George Lewis, made during his second visit, from February, 1880, to September, 1881 // The Transactions of the Entomological Society of London. Vol.1883. P.205–290, pl.xii.
Bates H.W. 1888. On some new species of Coleoptera from Kiu-Kiang, China // Proceedings of the Scientific Meetings of the Zoological Society of London. Vol.56. P.380–383.
Bates H.W. 1889. On new species of the coleopterous families Cicindelidae and Carabidae, taken by Mr. Pratt in Chang-Yang, near Tchang on the Yang-tsze, China // Proceedings of the Zoological Society of London. Vol.57. P.216–219.
Berlov E.Yu., Berlov O.E. 1997b. [The ground beetles (Coleoptera, Carabidae) of anthropogenic habitats of Khabarovsk] // Vestnik Irkutskogo Gosudarstvennogo Selskohozyaystvennogo Vuzovogo Instytutov. H.104. Troppau: Emmerich Reitter. S.1–288.
Brousquet Y. 2017. Tribe Pterostichini Bonelli, 1810 // I.
Brousquet Y. 2003. Tribe Pterostichini Bonelli, 1810 // I.
Budilov P.V. 2016. [To the fauna of ground beetles (Coleoptera, Carabidae) in the interfluve of Amur and Angun rivers, Khabarovsky Krai] // Chiteniya para- myati A.I. Kurentsova. Vladivostok. Vol.27. P.115–120 [in Russian].
Casale A. 1988. Revisione degli Sphodrina (Coleoptera, Carabidae, Sphodrina). Torino: Museo Regionale di Scienze Naturali, Monografie V. 1024 p.
Chaudoir M. de 1868. Observations synonymiques sur les carabiques de l’Amérique septentrionale et descriptions d’espèces nouvelles de ce pays // Revue et Magasin de Zoologie Pure et Appliquée. Vol.2. No.20. P.161–171, 211–217, 239–245, 283–301, 331–345.
Chaudoir M. de 1869. Descriptions de Calosoma nouvelle des collections de Mm. de Chaudoir et Salle // Annales de la Société Entomologique de France. Vol.4. No.9. P. 367–378.
Dudko R.Y., Efimov D.A., Fedorenko D.N. 2010. [The ground beetle fauna (Coleoptera, Carabidae) of the southeastern Altai] // Zoologicheskii Zhurnal. Vol.89. No.11. P.1312–1330 [in Russian].
Erjomin P.K. 1998. [Species of the Pterostichus (Crybius) brevicornis group (Coleoptera, Carabidae) of the Palaearctic] // Zoologicheskii Zhurnal. Vol.77. No.3. P.295–302 [in Russian].
Fedorenko D.N. 1991. [Carabids of the Dyschirius globosus species group (Coleoptera, Carabidae) from the Far East of the USSR] // Zoologicheskii Zhurnal. Vol.70. No.1. P.147–151 [in Russian].
Fedorenko D.N. 2003. New or little-known Dyschirioes Jeannel, 1941 from Asia (Coleoptera: Carabidae) // Russian Entomological Journal. Vol.12. No.4. P.369–372.
Fischer von Waldheim G. 1833. Monographie der Gattung Carabus L. // Bestimmungs-Tabellen der europäischen Coleopteren. H.104. Troppau: Emmerich Reitter. S.1–288.
Fischer von Waldheim G. 1820. Entomographie de la Russie [Entomographia Imperii Russici]. Tome I. Moscou: A. Semen. 26 pls.
Ground beetles of the Russian Far East: Additions and corrections
illustrissimi medicorum ordinis in celeberrima Academia Fridericiana Halensi et Vitebergensi consocia-
ta pro summis in medicina et chirurgia honoribus rite
obtindendis die X. mentis septembris MDCCXXII
publice defendet. Halae: Grunert. 48 p.

Sasakawa K., Kubota K. 2007. Phylogeny and genital
evolution of carabid beetles in the genus _Pterostichus_
and its allied genera (Coleoptera: Carabidae) inferred
from two nuclear gene sequences // Annals of the
Entomological Society of America. Vol.100. No.2.
P.100–109.

Semenov A.P. 1912. De novo Chlaeninnorum genere et fauna
Imperii Rossicii (Coleoptera, Carabidae) // Russkoe
Entomologicheskoe Obozrenie. Vol.12. P.601–603.

Semenov A.P., Znojko D.V. 1932. Nouvelles données à
l’étude de genre _Carabus_ (L.) (Coleoptera, Carabidae),
IV // Doklady Akademiy Nauk SSSR. P.215–218.

Shilenkov V.G. 1975. [Taxonomic review of the genus
_Nebria_ Latr. (Coleoptera, Carabidae) from Siberia
and the Far East of the USSR] // Entomologicheskoe
Obozrenie. Vol.54. P.830–845 [in Russian].

Shilenkov V.G. 1979. [New data on the ground beetle
fauna (Coleoptera, Carabidae) of southern Trans-
baikalia] // Zhuki Dal’nego Vostoka i Vostochnoy
Sibiri: novye dannye po faune i sistematike. Vladivos-
tok: DVO AN SSSR. P.36–57 [in Russian].

Shilenkov V.G., Anichtchenko A.V. 1998. [Interesting
faunistic findings of carabids (Coleoptera, Carabidae)
in the Baikal Region] // Entomologicheskie problemy
Baikalskoi Sibiri. Novosibirsk: Nauka Publ. P.94–
101 [in Russian].

Silfverberg H. 1987. Lists of the insect types in the
Zoological Museum, University of Helsinki. 2. Co-
leoptera: Carabidae // Acta Entomologica Fennica.
Vol.48. P.11–31.

Smith D.R. 2001. World catalog of the family Aulacidae
(Hymenoptera) // Contributions on Entomology, In-
ternational. Vol.4. No.3. P.263–319.

Smith D.R., Tripotin P. 2012. Trigonalidae (Hymenoptera)
of Madagascar // Journal of Hymenoptera Research.
Vol.24. P.1–25.

Späth F. 1900. Uebersicht der pälurktischen Arten des
Genus _Naticophillus_ Dumeril // Verhandlungen der
Kaiserlich-königlichen Zoologisch-botanischen Ge-
sellschaft in Wien. Bd.49[1899]. S.510–523.

Sundukov Yu.N. 2001a. [New data on the carabid fauna
(Coleoptera, Carabidae) of the Russian Far East] //
Zoologicheskii Zhurnal. Vol.80. P.754–757 [in Rus-
sian].

Sundukov Yu.N. 2001b. [Two new species of the genus
_Carotonotus_ Stephens (Coleoptera, Carabidae) from
the south of the Russian Far East] // Entomologiches-
ko Obozrenie. Vol.80. P.436–442 [in Russian].

Sundukov Yu.N. 2005. [A review of species of the subge-
genus _Lenapterus_ (Coleoptera, Carabidae, _Pterostichus_),
with description of a new species and a new subspe-
cies from Sikhote-Alin Mountains] // Zoologicheskii
Zhurnal. Vol.84. P.303–314 [in Russian].

Sundukov Yu.N. 2009a. [Family Carabidae] // S.Yu.
Storozenko (ed.). Nasekomye Lazovskogo zapovednika.
Vladivostok: Dalnauka. P.88–109 [in Russian].
Sundukov Yu.N. 2009b. [New data on the ground-beetle fauna (Coleoptera, Carabidae) of the Sikhote-Alin Mountains] // Zoologicheskii Zhurnal. Vol.88. P.23–26 [in Russian].

Sundukov Yu.N. 2011. [A review of the genus Cymindis Latreille, 1806 (Coleoptera, Carabidae, Lebiini) of East Asia] // Amursky Zoologicheskii Zhurnal. Vol.3. P.315–344 [in Russian].

Sundukov Yu.N. 2013. [An annotated catalogue of the ground beetles (Coleoptera: Caraboidae) of the Sikhote-Alin]. Vladivostok: Dalnauka. 271 p. [In Russian]

Sundukov Yu.N. 2014. [Features of the formation of the modern ground beetle fauna (Coleoptera, Carabidae) of Shikotan Island, Kuriles] // Chteniya pamyati A.I. Kurentsova. Vladivostok. Vol.25. P.25–33 [in Russian].

Sundukov Yu.N. 2017. [The ground beetles (Coleoptera, Carabidae) of the Yuri Island, southern Kuriles] // Chteniya pamyati A.I. Kurentsova. Vladivostok. Vol.28. P.101–110 [in Russian].

Sundukov Yu.N., Makarov K.V. 2013. [The ground beetles (Coleoptera, Carabidae) of Shikotan Island, Kurile Islands, Russia] // Euroasian Entomological Journal. Vol.12. P.339–348 [in Russian].

Sundukov Yu.N., Makarov K.V. 2016. New or little-known ground beetles (Coleoptera: Carabidae) of Kunashir Island, Kurile Islands, Russia // Russian Entomological Journal. Vol.25. No.2. P.121–160.

Sundukov Yu.N., Smirnov M.E. 2010. First record of Pentagonica daimiella (Coleoptera: Carabidae) from Primorski Krai // Far Eastern Entomological Journal. Vol.18. P.5–46.

Toledano L., Schmidt J. 2010. Revision of the Bembidion kara Andrews, 1921 species group and notes on the Palearctic species of Bembidion subgenus Trichoplataphus Netolitzky, 1914 (Coleoptera, Carabidae, Bembidini) // Entomologische Blätter. Bd.106. S.371–406.

Uéno S.-I. 1984. Additions to the trechine fauna of Northeast Japan (Coleoptera, Trechinae) // Bulletin of the National Science Museum, Tokyo. Series A. Vol.10. P.135–143.

Uéno S.-I. 2011. New blind trechine beetles belonging to the Kurasawatrechus-complex (Coleoptera, Trechinae) from Northeast Japan II. Species from the Ôwu Mountains // Elytra. New Series. Vol.1. No.1. P.15–20.

Uéno S.-I., Lafer G.S. 1994. Two relatives of Trechus nakaguroi (Coleoptera, Trechinae) with notes on the Trechus fauna of northeast Asia // Bulletin of the National Science Museum, Tokyo. Series A. Vol.20. P.111–126.

van Achterberg C., Talebi A.A. 2014. Review of Gasteruption (Hymenoptera, Gasteruptiidae) from Iran and Turkey, with the description of 15 new species // ZooKeys. Vol.458. P.1–187.

Vertyanin A.V., Shabalina S.A. 2013. [Provisional data on the population and domination of ground beetles (Coleoptera, Carabidae) in the meadows of southern Sakhalin Island] // Chteniya pamyati A.I. Kurentsova. Vladivostok. Vol.24. P.179–188 [in Russian].

Yokoyama K., Kanô T. 1927. List of Coleoptera hitherto been found in southern Saghalien // Zoological Magazine, Tokyo. Vol.39. No.459. P.1–39.

Yoshitake H., Kurihara T., Yoshimatsu S.I., Nakatani Y., Yasuda K. 2011. A list of carabid specimens (Insecta: Coleoptera) collected by the late Dr. Akinobu Habu preserved in the Insect Museum of the National Institute for Agro-Environmental Sciences // Bulletin of the National Institute for Agro-Environmental Sciences. Vol.28. P.1–327.

Zhao K.X., van Achterberg C., Xu Z.F. 2012. A revision of the Chinese Gasteruptiidae (Hymenoptera, Evanioidea) // ZooKeys. Vol.237. P.1–123.

Responsible editor K.G. Mikhailov