On two species of the genus *Pentagonica* of the Russian fauna (Coleoptera: Carabidae)

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Distinctive characters and new data about distribution of two species of the genus *Pentagonica* Schmidt-Göbel, 1846 in Russia are provided.

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Pentagonica Schmidt-Göbel, 1846 is the largest genus of the tribe Pentagonicini, with about 85 species distributed mainly in the tropical, partly subtropical zones of the western and eastern hemispheres, with predominance in SE Asia, Australia and New Zealand. Although Bousquet (2003) in the recent catalogue of Palaearctic Coleoptera did not list Russia among the areas of distribution of the tribe Pentagonicini, one species of Pentagonica, P. angulosa Bates, 1883, has been reported from southern Primorsk Territory and southern Kuril Islands (Kryzhanovskij et al., 1975; Kryzhanovskij, 1983; Lafer, 1989; Kryzhanovskij et al., 1995). During my trip to the Far East of Russia in 2003, I collected two species of Pentagonica in the western part of Jewish Autonomous Province. In addition to P. angulosa, I found also P. daimiella Bates, 1892, a species widely distributed in E Asia. It was already reported from "Siberia or. [actually Jewish Autonomous Province]: Sotka Gora, leg. Bodemeyer" by Jedlièka (1952), however later he (1963) and other authors did not include "East Siberia" in the geographical range of this species. The discovery of two species of Pentagonica in Jewish Autonomous Province was not unexpected since the fauna of the southwestern slopes of the Malyi Khingan Mountain Range and the adjacent lands along the Amur River, where P. angulosa and P. daimiella were found, includes many southern elements and is very similar in this respect to the fauna of the south of the Primorsk Territory though located almost 700 km to the north (see, for example, Lafer & Morozinskij, 1992). It should be reminded that Harpalus tangutorum Kataev, 1993, which is widely distributed in the northern and central provinces of China, was also found in Russia only near Pashkovo village at the southwestern slopes of Malyi Khingan. The purpose of this paper is to make known new data about distribution of P.

angulosa and P. daimiella and provide distinctive characters of these species.

The following abbreviation is used in the paper: ZISP – Zoological Institute, Russian Academy of Sciences, St.Petersburg, Russia.

Key to species of Pentagonica of the Russian fauna

- (Fig. 8). Antennae densely pubescent from 4th article. Elytral striae clearly deepened, distinctly punctate. Elytral sutural angle almost right, rounded at apex. Median lobe of aedeagus as in Figs 6, 7 P. angulosa

Pentagonica daimiella Bates, 1892 (Figs 1-5)

Pentagonica daimiella Bates, 1892: 426.

Material. Russia, Jewish Autonomous Prov.: 1 o, ca 5 km NE of Pashkovo, 11.VII.2003, B. Kataev leg. (ZISP).

Distribution. Described from Nagasaki (Japan). The species is widely distributed over eastern Asia. It is known from northern India, China, Korea, Far East of Russia (see above), and Japan. Although Bousquet (2003) cited *P. daimiella* within China only from Fujian, Yunnan and Taiwan, this species seems to be rather widely distributed in this country. In the collections of ZISP and the Institute of Zoology, Chinese Academy of Sciences (Beijing, China), I examined specimens also from Zhejiang, Jiangxi, Shaanxi, Sichuan, Hubei, Guizhou, and Guangxi.

Remarks. The external characters of *P. daimiella* seem to be rather constant throughout the geographical range of the species but the shape of



Figs 1-8. *Pentagonica*. 1-5, *P. daimiella* (1-3, Pashkovo env., Russia; 4, 5, Tokunoshima Is., Japan); 6-8, *P. angulosa* (Radde env., Russia). 1, 8, right half of pronotum; 2, 4, 6, median lobe of aedeagus, dorsal aspect; 3, 5, 7, same, lateral aspect. Scales: 0.5 mm; A (Figs 1, 8), B (Figs 2-7).

the apical capitulum of the median lobe of the aedeagus is slightly variable in the examined specimens (Figs 3, 5). The nature of this variation, however, is obscure and invites further investigation.

Pentagonica angulosa Bates, 1883 (Figs 6-8)

Pentagonica angulosa Bates, 1883: 286.

Material. Russia: Jewish Autonomous Prov.: 1 of, Radde env., Lagor River, 13-14.VII.2003, B. Kataev leg. (ZISP); Primorsk Terr.: 1 of, Ussuriysk env., Gorno-Taezhnaya Station, at light, 21.VIII.1985, S. Sinev leg. (ZISP); 2 ç; Lazovskiy Nature Reserve, between Proselochnyi cordon and Glazkovka, 7.VII.2005, K. Nadein leg.

Distribution. Described from Japan, where it is distributed from Hokkaido to the Ryukyus. It is known also from the Far East of Russia: Jewish Autonomous Province, Primorsk Territory, and southern Kurils (Kunashir Island).

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References

- 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. Trans. entomol. Soc. London, 1883: 205-290.
- Bates. H.W. 1892. Viaggio di Leonardo Fea in Birmania e regioni vicine. XLIV. List of the Carabidae. Ann. Mus. Civ. Stor. Nat. Genova, 32: 267-428.
- Bousquet, Y. 2003. Tribe Pentagonicini Bates, 1873. In: Löbl, L. & Smetana, A. (Eds.). Catalogue of Palaearctic Coleoptera. Vol. 1. Archostemata - Myxophaga – Adephaga: 448. Stenstrup: Apollo Books.
- Jedlièka, A. 1952. Neue Carabiden aus der Sammlung des Ungarischen Naturwissenschaftlichen Museums in Budapest (Col.). Ann. hist.-natur. Mus. nat. Hung., **2**: 79-93.
- Jedlièka, A. 1963. Monographie der Truncatipennen aus Ostasien. Lebiinae - Odacanthinae - Brachyninae

(Coleoptera, Carabidae). Entomol. Abhandl. staatl. Mus. Tierkunde, Dresden, 28(7): 269-579.

- Kryzhanovskij, O.L. 1983. The beetles of the suborder Adephaga: families Rhysodidae, Trachypachidae, Carabidae. Introduction and a review of the USSR fauna. Fauna SSSR. Insecta Coleoptera. Vol.1. no. 2. Leningrad: Nauka. 341 pp. (In Russian).
- Kryzhanovskij, O.L., Okhotina, M.V., Bromlei, G.F. & Lafer, G.Sh. 1975. A review of the ground-beetles (Coleoptera, Carabidae) of the Kuril Islands. Trudy biol.-pochv. Inst., Vladivostok (N.S.), 28(131): 119-142. (In Russian).
- Kryzhanovskij, O.L., Belousov, I.A., Kabak, I.I., Kataev, B.M., Makarov, K.V. & Shilenkov, V.G. 1995. A checklist of the ground-beeles of Russia and adjacent lands (Insecta, Coleoptera, Carabidae). Sofia-Moscow: Pensoft Publishers. 272 pp.
- Lafer, G.Sh. 1989. Fam. Carabidae the ground-beetles. In: Lehr, P.A. (Ed.), Opredelitel' nasekomykh Dal'nego Vostoka [Keys to the insects of the USSR Far East], 3(1): 70-222. Leningrad: Nauka. (In Russian).
- Lafer, G.Sh. & Morozinskij, Ya. 1992. Fam. Carabidae. In: Chistyakov, Yu.A. (Ed.), Nasekomye Khinganskogo zapovednika [Insects of the Khingan Nature Reserve], 1: 71-94. Vladivostok: Dal'nauka. (In Russian).

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