NEW DATA ON THE CARABID FAUNA (COLEOPTERA, CARABIDAE) OF THE RUSSIAN FAR EAST

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Abstract—Two carabid species, Trechus nakaguroi S. Ueno, 1960 and Agonum chalcomus Bates, 1873, are recorded for the first time from Russia, and one, Agonum jurecekianum Jedlicka, 1952, from the Kuril Islands. Some additional data on the distribution of Paren a monostigma Bates, 1873 in the southern part of Primorskiy Territory are given.

Based on the author’s collections (Yu.N. Sundukov) made in Primorskiy Territory and those made by Yu.M. Marusik (Institute for Biological Problems of the North, Magadan) in the Kunashir Island, two carabid species, Trechus nakaguroi S. Ueno, 1960 and Agonum chalcomus Bates, 1873 from Russia and one, Agonum jurecekianum Jedlicka, 1952, from the Kuril Islands are reported for the first time. Additional data on the distribution of a rare species, Paren a monostigma Bates, 1873 in the southern part of Primorskiy Territory are given.

Previously, the name T. nakaguroi was used by Kryzhanovskij (Kryzhanovskij and Molodova, 1973) for a Trechus population from S Sakhalin and repeated in the papers concerning the fauna of Sakhalin (Lafer, 1984, 1989) and Sikhote-Alin (Lafer, 1977, 1989). Later (Ueno and Lafer, 1994), Trechus populations from Sikhote-Alin were described as a new species, T. sikhotealinus S. Ueno et Lafer; and populations from Sakhalin, as a distinct species, T. sachalinensis Lafer, initially described as a subspecies of T. nakaguroi. Thus, T. nakaguroi was excluded from the list of species of the fauna of Russia. In this connection, the couplets given in Lafer’s key (1989) for T. nakaguroi and T. sachalinensis cannot be used, since the external morphological characters of T. nakaguroi were indicated by Lafer based on the specimens collected in Sikhote-Alin, and the true T. nakaguroi was, apparently, not examined by him at that time. Only T. sikhotealinus has strongly smoothed outer elytral striae; in species from the islands, these are well developed.

A checklist of the ground-beetles of Russia (Kryzhanovskij et al., 1995) provides outdated data on T. nakaguroi, without taking into consideration the above-mentioned paper on Trechus from the Far East (Ueno and Lafer, 1994).

In the latter paper, the authors indicated only insignificant distinctions (primarily in the structure of endophallus) between T. sachalinensis and T. nakaguroi and attributed to these the sister state of differentiation, considering, nevertheless, the population from Sakhalin a distinct species on the basis of the morphological differences and disjunction of the ranges.
A thorough examination of specimens collected in Kunashir, Japan (♂, “C Hokkaido, NE Japan, 9.VII.1993, S. Uéno leg.,” “Mt. Asahi-dake, Susoai-daira, 1.730 m alt., Daisetsu Mts.,” “Trechus (s. str.) nakaguroi S. Uéno, 1960, det. S. Uéno, 1994”), and Sakhalin (12 specimens, including 2 topotypes from the Anna River mouth, labeled “South Sakhalin, Mouth Anna River, 27.VII.1977, G. Lafer leg.,” “No. 4a,” “Trechus sachalinensis Lafer, G. Lafer det. 94,” ♀, same locality, “No. 7,” same label) led me to conclude that distinctions between populations from these islands are insignificant and they should be considered subspecies of a single species. However, taking into account the great experience and authority of Dr. Uéno, a leading expert in Trechinae of E Asia, I consider it possible to accept the population from the Sakhalin Island as a distinct species and that from Kunashir, as one conspecific with T. nakaguroi populations.

Agonum (Agonum) chalcomum (Bates)


Type locality: Japan, “Hiogo, Nagasaki.”

Krivolutskaya, 1973: 67 (Kunashir); Habu, 1978: 80–81, Pl. X-fig. 4, figs. 106, 118, 123 (Japan, Kuril Islands).

Material. 1 ♂, Kunashir, Sukachev Cape, 5 km NE of Yuzhno-Kuril’sk, bank of a small brook—tributary of the Petrovka River, 8.IX.1997 (Marusik).

Distribution. Russia (Kuril Islands: Kunashir); Japan (Hokkaido, Honshu, Shikoku, Kyushu).

The species was reported by Krivolutskaya (1973) from the Kunashir Island on the basis of a single specimen identified at her request by Lafer. In “A Review of Carabid Beetles of the Kuril Islands,” Kryzhanovskij and co-authors (1975) referred, regarding A. chalconum, to her record and also indicated for Kunashir the closely related species A. fallax A. Mor., 1862. Later, Lafer (1992: 612, footnote) introduced a correction that “Our record (Kryzhanovskij et al., 1975) of A. chalconum Bat. (!) from the Kunashir Island actually refers to A. fallax” and did not include A. chalconum in his key to the Far Eastern species. Apparently, this was the reason why A. chalconum was not included in a catalogue of carabid beetles of Russia (Kryzhanovskij et al., 1995).

After looking through a preliminary copy of this paper, Lafer informed me that the Kunashir collection of ISB includes 2 specimens of A. chalconum: 1 ♂ labeled “Kunashir, near Kosmodem’yansk Vill., 26.VIII.1964 (G. Krivolutskaya),” “floodland forest in the Prozrachny Brook valley,” “Agonum sp. 1,” “Agonum sp. 2.”
num chalcomum Bat., Lafer det.” and “Agonum chal­
comum (Bates), G. Lafer det. 99” and 1 ♀ labeled
“Kunashir, Mendeleev Vill., mixed forest, under
deciduous trees, 2.1X.1975 (V. Kuznetsov)” and “Ago­
num chalcomum (Bates), G. Lafer det. 99”); and 1 fe­male of A. fallax. He also pointed that indication in
the footnote should be considered erroneous.

The male collected by Marusik from the Kunashir
Island entirely fits, judging from the external charac­
ters and the structure of aedeagus, the descriptions
and figures given by Habu (1954, 1978) for A. chalcomum.
It differs from the closely related species A. fallax in
the following characters:

1(2) Third elytral interval with 3 discal setiferous
pores. Second antennal segment with 1 seta at
apex. Posterior corners of pronotum angular at
the level of basal seta; line of lateral margin
abruptly refracted at the level of posterior setae
(figure, 1). Base of pronotum wider (PA / PB
0.80). Aedeagus as in figure, 3 ......................
.............................. A. chalcomus Bat.

2(1) Third elytral interval with 4–6 discal setiferous
pores. Second antennal segment with several se­
tae at apex. Posterior corners of pronotum regu­
larly rounded; line of lateral margin gently
rounded at the level of posterior setae, gradu­
ally passing into line of base (figure, 2). Base of
pronotum narrower (PA / PB 0.83–0.95, 0.83 on the
average). Aedeagus as in figure, 4 .................
.............................. A. fallax Mor.

These facts confirm that A. chalcomum actually oc­
curs in Kunashir, being sympatric there (as also in
Hokkaido) with A. fallax.

_Parensa (Parensa) monostigma_ (Bates)

_Crossoglossa monostigma_ Bates, 1873: 316.

Type locality: Japan, “Nagasaki, Hiogo.”

Habu, 1976: 158–159, Pl. XVI–fig. 3, figs. 275,
286, 294 (Japan); Solodovnikov, 1999: 108 (Primor­
skii Territory).

Material. 1 ♀, Primorski i Territory, Lazo-raitsentr
Vill. (133°54′01″ E, 43°22′24″ N), at light, 5–12.VII.
1994 (Sundukov).

_Distribution_. Russia (S Primorski i Territory), Japan
(Hokkaido, Honshu, Shikoku, Kyushu), Korea (Kwon
and Lee, 1986).

For the fauna of Russia, the species have been
known only from localities neighboring the Ussuriiskii
Nature Reserve (Solodovnikov, 1999).

The specimen from Primorski i Territory differs
from those collected in Japan (Ohkura, 1985) and Ko­
rea (Lafer’s personal communication) in darker col­
oration of the body and less distinct spot on the elytra.
In the other characters, it entirely fits the morphologi­
cal characteristic given by Habu (1967) for specimens
from Japan. This is a full-winged species.

In a personal communication, Lafer indicated that
the collection of ISB included 1 young, underdevelop­
specimen of _P. monostigma_, collected by
A.B. Egorov on 14.VI.1985 in hawthorn (Khasanski District of Primorski Territory, middle course of the
Ryazanovka River). One more specimen of this spe­
cies was collected in Primorski Territory by D.N. Fe­
dorenko (personal communication).

My record essentially supplements these data. I
assume that _P. monostigma_ is rather widespread over
the southern part of Primorski Territory.

_Agonum (Europhilus) jurecekianum_ Jedlička

_Agonum jurecekianum_ Jedlička, 1952: 80.

Type locality: Russia, Primorski i Territory,
“Wladiwostok.”

Material. 1 ♀, Russia, Kunashir, Kyugli Cape,
high-grass meadow, 23.IX.1997 (Marusik).

_Distribution_. Russia (Primorski Territory, Kuril
Islands: Kunashir), Japan (Hokkaido, Honshu), NE
China, ?Korea.

The species is new for the fauna of the Kuril Is­
lands.

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