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New taxons of Palaearctic Malthodes (Coleoptera, Cantharidae)

by S. Kazantsev

Abstract: One new subspecies – *Malthodes trifurcatus uralicus* n.ssp. (South Urals) – and six new species: *M. nikitskyi* (Kurils), *M. kurbatovi*, *M. parvus* (South Ussuri), *M. alatauicus* (Alatau), *M. tianshanicus* (Uzbekistan) and *M. romadinae* (Copet-Dagh) are described and illustrated.

Key words: Coleoptera, Cantharidae – Malthodes – new species – new subspecies – zoogeography.

In the process of the study of *Malthodes* material from the Far East and Central Asia several forms were found to be new to science. Examination of relevant literature and comparative collection material proved the necessity of introducing new taxons: one new subspecies from the tundra of the South Urals, three new species from the Far East (Kurils and Ussuri) and three species from Central Asia. Description thereof is presented below.

The following abbreviations are used:

IEE = Institute of Animal and Plant Ecology of the Russian Academy of Sciences, Ekaterinburg;

NHMB = Naturhistorisches Museum, Basel;

ZIP = Zoological Institute of the Russian Academy of Sciences, St. Petersburg;

ZMMU = Zoological Museum of Moscow University;

ZMN = Zoological Museum, Novosibirsk;

SVK = author's collection.

Malthodes trifurcatus uralicus n.ssp.

Figs 1–2.

♂. Black.

Head with two longitudinal ribs behind antennal sockets. Eyes small (interocular distance 3.5 times longer than the radius). Clypeus transverse, semicircular anteriorly. Maxillary palpi slender, with ultimate joint 1.5 times longer than 3rd, and equal in length to 2nd. Antennae cylindrical, as long as the elytra, with 1st joint 1.75 times longer than 2nd, 1.4 times longer than 3rd and slightly longer than 4th and following joints; all joints in short and dense decumbent

pubescence. Pronotum somewhat transverse, 1.1 times wider than long, with margined borders, convex anteriorly, narrowing to base, with blunt hind angles. Scutellum broad, rounded at apex. Elytra relatively long, 2.3 times as long as wide humerally, rather coarsely punctured, with conspicuous traces of two longitudinal costae each, with fine dark vestiture. Ultimate abdominal sternite with a deep median incision and a short process on each side (Figs 1–2). Tarsi with narrow joints gradually diminishing in length.

Aedeagus as in *M. trifurcatus trifurcatus* Kiesenwetter (WITTMER, 1970).

Length: 3.9 mm. Width (humerally): 1.1 mm.

♀. Unknown

Holotype ♂ (IEE): Russia: South Urals, Mt. Iremel, VII.1984.

M. trifurcatus uralicus n.ssp. differs from the nominative and other known forms of this species, not going farther east than Austria and Hungary (WITTMER, 1970), by the short lateral process of the ultimate abdominal sternite. This is the first record of M. trifurcatus from Russia, the fact of its capture in the mountain tundra at the border of Europe and Asia being of special interest.

Malthodes nikitskyi n.sp.

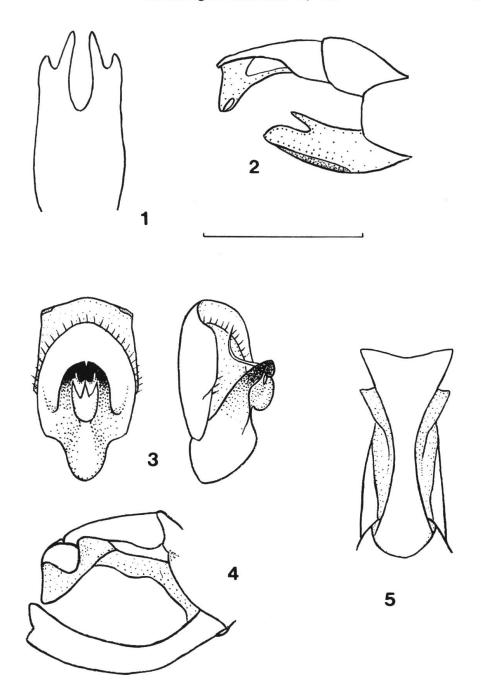
Figs 3-5.

3. Black.

Head flat, with two small round elevations behind antennal sockets. Eyes large (interocular distance only 1.6 times longer than the radius). Clypeus transverse, semicircular anteriorly. Maxillary palpi slender, with ultimate joint 1.8 times longer than 3rd, and equal in length to 2nd. Antennae cylindrical, reaching over the elytra, with 1st joint 1.7 times longer than 2nd, 1.3 times longer than 3rd and 1.2 times shorter than 4th and following joints; all joints in short and dense decumbent pubescence.

Pronotum transverse, 1.5 times wider than long, straight anteriorly and semicircularly cut at sides, with straight hind angles, conspicuous longitudinal ribs and median excavation. Scutellum slightly elongate, rounded at apex. Elytra relatively long, 2.9 times as long as wide humerally, finely punctured, each tapering apically, with traces of four longitudinal costae, with fine dark vestiture. Ultimate segments of abdomen conspicuously widened apically (Figs 4–5). Tarsi with narrow joints gradually diminishing in length.

Aedeagus Fig. 3.



Figs 1–5: 1–2: *Malthodes trifurcatus uralicus* n.ssp.: 1, last sternite. 2, ultimate abdominal segments laterally. 3–5: *M. nikitskyi* n.sp.: 3, aedeagus. 4, ultimate abdominal segments laterally. 5, last sternite. Scale 0.5 mm.

Length: 4.5–4.8 mm. Width (humerally): 1.0–1.1 mm. \circlearrowleft . Unknown.

Holotype & (ZMN); 2 Paratypes & (SVK): Russia: Kunashir, Ivanovskij Cape, light trap, 6.VII.1989, V. V. Dubatolov; Kunashir, env. Mendeleevo, 27.VI.1985, Nikitsky, Paratype & (ZMMU).

M. nikitskyi n.sp. is externally hardly distinguishable from M. kurosawai Wittmer differing by the less emarginate apical sternite, the broader and differently shaped apical tergite, and a somewhat different shape of the aedeagus.

This species is named after a well known coleopterologist Dr. Nikolaj B. Nikitsky who collected one of the typical specimens during his trips to the Far East.

Malthodes kurbatovi n.sp.

Figs 6-8.

3. Black.

Head flat, with two small round elevations behind antennal sockets. Eyes large (interocular distance only slightly longer than the radius). Clypeus transverse, semicircular anteriorly. Maxillary palpi slender, with ultimate joint 1.7 times longer than 3rd, and equal in length to 2nd. Antennae cylindrical, almost reaching the apex of elytra, with 1st joint 1.8 times longer than 2nd, 1.4 times longer than 3rd and as long as 4th and following joints; all joints in short and dense decumbent pubescence.

Pronotum transverse, 1.4 times wider than long, convex anteriorly and semicircularly cut at sides, with blunt hind angles, and conspicuous longitudinal median excavation. Scutellum broad, rounded at apex. Elytra long, 2.75 times as long as wide humerally, densely punctured, each with feeble traces of longitudinal costae, with fine dark vestiture. Ultimate sternite of abdomen conspicuously widened and rounded apically, the ultimate tergite relatively narrow (Figs 7–8). Tarsi with narrow joints gradually diminishing in length.

Aedeagus Fig. 6.

Length: 4.0 mm. Width (humerally): 1.0 mm.

♀. Unknown.

Holotype ♂ (SVK): Russia: S Primorje (Ussuri), env. Kamenushka, 13.VI.1989, S. Kurbatov.

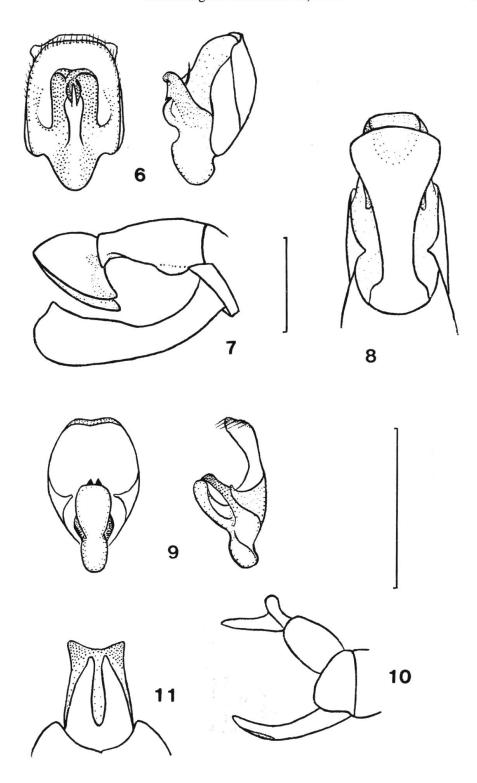
S. Kurbatovi n.sp. is to be placed near M. kurosawai Wittmer and M. nikitskyi n.sp. from the Kuril Islands readily distinguishable from both by rounded apically ultimate sternite, differently shaped ultimate tergite and a different shape of the aedeagus.

Malthodes parvus n.sp.

Figs 9–11.

3. Black.

Head flat. Eyes relatively small (interocular distance 2.5 times longer than the radius). Clypeus transverse, almost straight anterior-



Figs 6-11: 6-8: *Malthodes kurbatovi* n.sp.: 6, aedeagus; 7, ultimate abdominal segments laterally. 8, last sternite. 9-11: *M. parvus* n.sp.: 9, aedeagus. 10, ultimate abdominal segments laterally. 11, last sternite. Scale 0.5 mm.

ly. Maxillary palpi slender, with ultimate joint 1.8 times longer than 3rd, and equal in length to 2nd. Antennae cylindrical, reaching over the elytra, with 1st joint 1.7 times longer than 2nd, 1.2 times longer than 3rd and as long as 4th and following joints; all joints in short and dense decumbent pubescence.

Pronotum transverse, 1.3 times wider than long, flat, margined at borders, convex anteriorly, narrowing towards basis, with straight sides only slightly cut in front of hind angles, with straight hind angles. Scutellum broad, rounded at apex. Elytra 2.2 times as long as wide humerally, densely punctured, with fine dark vestiture. Ultimate abdominal sternite with a deep incision, ultimate tergite long, slightly emarginate at apex (Figs 10–11). Tarsi with narrow joints gradually diminishing in length.

Aedeagus Fig. 9.

♀. Similar to male, but eyes smaller (interocular distance 3.3 times longer than the radius), antennae more robust and shorter.

Length: 3.2–3.8 mm. Width (humerally): 0.8–0.9 mm.

Holotype ♂, Paratype ♀ (SVK): Russia: S Primorje (Ussuri), Shkotovo distr., Mt. Hualaza, 1100 m, 25.VII.1988, S. Kasantsev.

Rh. parvus n.sp. can be placed near M. guttifer Kiesenwetter differing by the shorter apical sternite and the shape of the aedeagus.

Malthodes alatauicus n.sp.

Figs 12–14.

3. Dark brown; clypeus, basis of 1st and 2nd antennal joints, pronotum except pronotal ribs and abdomen testaceus; apices of elytra yelow.

Head flat, with inconspicuous median excavation between antennal sockets. Eyes small (interocular distance 2.5 times longer than the radius). Clypeus transverse. Antennae cylindrical, reaching over the elytral apex, with 1st joint 2.5 times longer than 2nd, 1.6 times longer than 3rd and 1.4 times longer than 4th and following joints; all joints with short dense whitish decumbent pubescence and longer separate erect hairs.

Pronotum transverse, 1.2 times wider than long, convex anteriorly and almost straight at sides, not margined laterally, with bluntly rounded hind angles and inconspicuous transversal ribs. Scutellum slightly elongate, rounded at apex. Elytra moderately long, 2.3 times as long as wide humerally, finely punctured, with fine whitish vestiture. Ultimate abdominal sternite elongate, tapering apically and

slightly curved inward, ultimate tergites simple (Figs 13–14). Tarsi with narrow joints gradually diminishing in length.

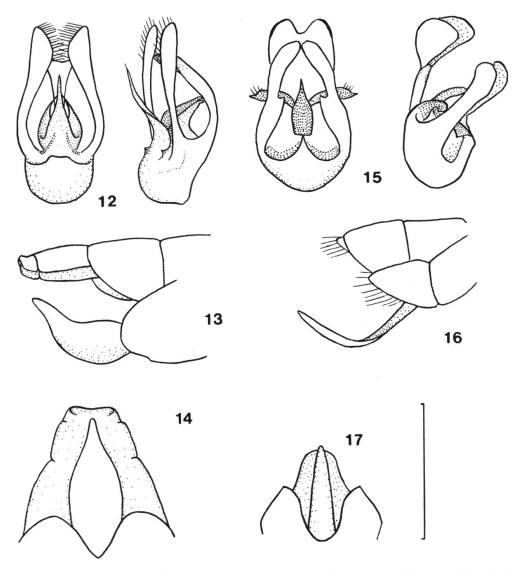
Aedeagus Fig. 12.

Length: 3.5 mm. Width (humerally): 0.8 mm.

♀. Unknown.

Holotype & (ZIN): Alatau, VI.(19)07, E. Fischer.

M. alatauicus n.sp. is to be put near M. esgaudensis Wittmer differing by the infuscated pronotal ribs and relatively short laterophyses that are twice as short as the median lobe and simply curved



Figs 12–17: 12–14: *Malthodes alatauicus* n.sp.: 12, aedeagus. 13, ultimate abdominal segments laterally. 14, last sternite. 15–17: *M. tianshanicus* n.sp.: 15, aedeagus. 16, ultimate abdominal segments laterally. 17, last sternite. Scale 0.5 mm.

towards the dorsal plate (Fig. 12) whereas in *M. esgaudensis* they are as long as the median lobe and conspicuously curved first to the dorsal plate then outwards (WITTMER, 1993).

Malthodes tianshanicus n.sp.

Figs 15-17.

3. Yellow; head behind the eyes black; 3rd-11th antennal joints and elytra except their apices dark brown, with the disk of each elytron light brown.

Head flat, densely and rather coarsely punctured, slightly wider than pronotum. Eyes relatively small (interocular distance 2.8 times longer than the radius). Clypeus transverse, semicircular anteriorly. Maxillary palpi slender, with ultimate joint 1.7 times longer than 3rd, and subequal in length to 2nd. Antennae cylindrical, reaching over the body, with 1st joint twice as long as 2nd, 1.6 times longer than 3rd and 1.3 times longer than 4th and following joints; all joints in short and dense decumbent pubescence.

Pronotum transverse, 1.3 times wider than long, not margined laterally, straight anteriorly, convex posteriorly and narrowing towards basis, with rounded conspicuous front and hind angles. Scutellum slightly elongate, triangular, rounded at apex. Elytra moderately long, about twice as long as wide humerally, rather coarsely punctured, each tapering apically, with dense coarse yellow corrugation at apices, with fine dark vestiture. Ultimate abdominal sternite long and narrow (Figs 16–17). Tarsi with narrow joints gradually diminishing in length.

Aedeagus Fig. 15.

Q. Similar to male, but eyes smaller (interocular distance 5 times longer than the radius), antennae shorter (not reaching the apex of elytra).

Length: 3.2–3.3 mm. Width (humerally): 0.8–0.9 mm.

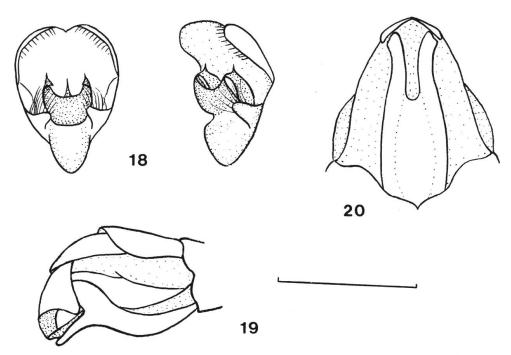
Holotype \mathcal{S} (ZIP); Paratype \mathcal{S} , Paratype \mathcal{S} (ZIP), Paratype \mathcal{S} (NHMB), 2 Paratypes \mathcal{S} , Paratype \mathcal{S} (SVK): Uzbekistan, 65 NE Tashkent, env. Hodzhikent, on *Impatiens* sp., 24.V.1988, S. Kurbatov.

S. tianshanicus n.sp. can be related to M. chorezmicus Šhihla differing in having a narrow ultimate sternite not emarginate apically and a different shape of the aedeagus.

Malthodes romadinae n.sp.

Figs 18-20.

3. Black; pronotum except diskal spots, ultimate abdominal segments testaceus; apices of elytra yellow.



Figs 18-20: *Malthodes romadinae* n.sp.: 18, aedeagus. 19, ultimate abdominal segments laterally. 20, last sternite. Scale 0.5 mm.

Head flat, finely and densely punctured, with two small longitudinal elevations behind antennal sockets. Eyes relatively small (interocular distance 3 times longer than the radius). Clypeus transverse, semicircular anteriorly. Maxillary palpi slender, with ultimate joint only slightly longer than 3rd. Antennae cylindrical, reaching over the body, with 1st joint twice as long as 2nd, 1.5 times longer than 3rd and about as long as 4th and following joints; all joints in short and dense decumbent pubescence.

Pronotum transverse, 1.2 times wider than long, margined at all borders, straight anteriorly, convex posteriorly and narrowing towards basis, with almost equal blunt front and hind angles, and inconspicuous transversal ribs and longitudinal impression. Scutellum slightly elongate, rounded at apex. Elytra moderately long, 2.3 times as long as wide humerally, irregularly punctured, with fine dark vestiture. Ultimate abdominal sternite deeply incised, ultimate tergite relatively long and conspicuously widened apically (Figs 19–20). Tarsi with narrow joints gradually diminishing in length.

Aedeagus Fig. 20.

♀. Similar to male, but eyes smaller (interocular distance about 5 times longer than the radius) and antennae shorter, not reaching the apices of elytra.

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Length: 2.8–3.0 mm. Width (humerally): 0.6–0.8 mm.

Holotype \Im (ZIP); 2 Paratypes \Im and Paratype \Im (ZIP), Paratype \Im (NHMB), Paratype \Im (SVK): Turkmenistan, Kopet-Dagh foothills, 15 km S Kyzyl-Arvat, 9.IV.1952, K. Romadina.

M. romadinae n.sp. is in many aspects similar to M. kopetdagensis Wittmer differing by the longer apical processes of the last tergite and sternite (Figs 19–20) and a different shape of the aedeagus.

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