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New species and additional records of *Lathrobium* and *Tetartopeus* from the Palaearctic region (Coleoptera: Staphylinidae: Paederinae)

V. Assing

A b s t r a c t : Four species are described and illustrated: *Lathrobium permutatum* nov.sp. (Georgia), *L. kastcheevi* nov.sp. (Kazakhstan), *Tetartopeus inexcisus* nov.sp. (N-Turkey), and *T. truncatus* nov.sp. (Russian Far East). The male and female sexual characters of *Lathrobium dimidiatipenne* BERNHAUER 1910 are illustrated. Additional records of 18 species of *Lathrobium* GRAVENHORST 1802 and three species of *Tetartopeus* CZWALINA 1888 are reported, among them several new country records.

K e y w o r d s : Coleoptera, Staphylinidae, Paederinae, *Lathrobium*, *Tetartopeus*, Palaearctic region, new species, new records.

Introduction

The speciose paederine genus *Lathrobium* GRAVENHORST 1802 is represented in the Palaearctic region by more than 250 species and subspecies in three subgenera; two names are of doubtful status. The number of species known from the Eastern Palaearctic is more than twice as large as that recorded from the Western Palaearctic (ASSING 2007b, 2008; SMETANA 2004). New species are being described almost every year, particularly from the Eastern Palaearctic region (e.g., WATANABE 2008), suggesting that the known inventory of the Palaearctic *Lathrobium* fauna is far from complete.

The genus *Tetartopeus* CZWALINA 1888, until a few decades ago regarded as a subgenus of *Lathrobium*, is represented in the Palaearctic region by approximately 30 species.

The present paper is based on an examination of material of both genera from various public and private collections, including four species new to science and numerous records of zoogeographic interest.

Material, methods, and measurements

The material referred to in this study is deposited in the following public institutions and private collections:

HNHM	. Hungarian Natural History Museum, Budapest (Gy. Makranczy)
IRSNB	Institut royal des Sciences naturelles de Belgique, Bruxelles (Y. Gérard)

MHNG Muséum d'Histoire naturelle Genève (G. Cuccodoro)			
MNHUB Museum für Naturkunde der Humboldt-Universität Berlin (J. Frisch, J. Willers)			
NHMW Naturhistorisches Museum Wien (H. Schillhammer)			
OÖLL Oberösterreichisches Landesmuseum Linz (F. Gusenleitner)			
SDEI Senckenberg Deutsches Entomologisches Institut, Müncheberg (L. Behne, L.			
Zerche)			
cAssauthor's private collection			
cPüt private collection Andreas Pütz, Eisenhüttenstadt			
cWun private collection Paul Wunderle, Mönchengladbach			
cZan private collection Adriano Zanetti, Verona			

The morphological studies were carried out using a Stemi SV 11 microscope (Zeiss Germany) and a Jenalab compound microscope (Carl Zeiss Jena) with a drawing tube. For the photographs a digital camera (Nikon Coolpix 995) was used.

Head length was measured from the anterior margin of the frons to the posterior margin of the head, elytral length at the suture from the apex of the scutellum to the posterior margin of the elytra, and the length of the aedeagus from the apex of the ventral process to the base of the median lobe.

Species descriptions and additional records

Lathrobium geminum KRAATZ 1857

M a t e r i a l e x a m i n e d : <u>Kazakhstan</u>: 1 Å, Altai, Marchikha river, 12.VII.1989, leg. Kastcheev (cAss). <u>Turkmenistan</u>: 1 Å, Karakumy desert, Repetek, 9.II.1973, leg. Kastcheev (cAss).

C o m m e n t : *Lathrobium geminum* has a trans-Palaearctic distribution, but was previously unknown from Turkmenistan (SMETANA 2004).

Lathrobium fulvipenne (GRAVENHORST 1806)

M a t e r i a l e x a m i n e d : <u>Turkey</u>: 2♂ ♂, Kastamonu, 25 km SE Tosya, Domkayatepe geç., 40°56'N, 34°14'E, 1600 m, partly flooded loamy meadow and road margin, under stones, 6.IV.2009, leg. Assing & Wunderle (cAss, cWun). <u>Georgia</u>: 1♀, Trialetskiy Khrebet, Bakuriani, 1800-2200 m, 4.-7.VII.1986, leg. Schülke & Wrase (cSch); 2♂♂, 3♀♀, same data, but 15.-20.VI.1987 (cSch, cAss); 1♀, Ossetia, Kazbegi, 1800-2500 m, 1.-7.VII.1988, leg. Wrase (cSch); 1♀, Tbilisi env., Mzcheta, 25.VI.1986, leg. Schülke & Wrase (cSch).

C o m m e n t : In Turkey, this widespread species was previously known only from few localities in Kars, Giresun, and Eskisehir provinces (KORGE 1971).

Lathrobium castaneipenne KOLENATI 1846 (Figs 7-8)

M a t e r i a l e x a m i n e d : <u>Austria</u>: 13, Burgenland, Weiden am See, flood debris, 7.IV.1991, leg. Sprick (cAss); 13, Steiermark, Bezirk Feldbach, Reitther-Teiche, 14.III.1998, leg. Holzer (cAss). <u>Slovakia</u>: 13, Malé Trakany, 13.V.2001, leg. Hlaváč (cAss). <u>Hungary</u>: 6 exs., Budapest, leg. Fodor (SDEI, cAss). <u>Slovenia</u>: 13, Police, Gor. Radgona, 7.III.1998, leg. Drovenik (cAss).

C o m m e n t : According to SMETANA (2004), this rare species is distributed from France and Scandinavia to the Caucasus region and Iran; remarkably, he does not indi-

cate it from the Iberian Peninsula, although the type locality is "Iberia" (KOLENATI 1846). *Lathrobium castaneipenne* has been confounded with a similar species described in the following section, based on material from Georgia. Therefore, at least all the previous records from the Caucasus region, Turkey, and Iran require revision; in Turkey, the species has been recorded only from Trabzon (FAUVEL 1873). The specimen was looked for at the IRSNB. Only a female of uncertain identity was found in the Fauvel collection. However, this specimen has three different localities labels attached to the pin, a common phenomenon with Fauvel material: "Caucase Leder / Trépizonde [=Trabzon] / Caucase Chaudoir"; it is uncertain, which of these labels refers to the specimen. Therefore, *L. castaneipenne* should be deleted from the list of Turkish Staphylinidae.

The aedeagus and the male sternite VIII of L. castaneipenne are illustrated in Figs 7-8.

Lathrobium permutatum nov.sp. (Figs 1-6)

T y p e m a t e r i a 1 : <u>Holotype ♂</u>: "Transcanc. [sic], Georgia, Zchneti pr. Tbilisi, 800 m, 1.-10.VI.1987, leg. Wrase/Schülke / Holotypus ♂ *Lathrobium permutatum* det. V. Assing 2009" (cAss). <u>Paratypes</u>: 6 exs., same data as holotype (OÖLL, cSch); 7 exs.: same data, but "22.VI.1986" (cSch, cAss); 2 exs.: same data, but "1200 m, 26.VI.1986 (cSch); 2 exs.: same data, but "1200 m, 5.VI.1987 (cSch); 21 exs.: "UDSSR - Transcauc. Georgia, Zchneti pr. Tbilisi, 800 m, 01.-10. Juni 1987, leg. Wrase/Schülke" (MNHUB, cAss); 2 exs.: same locality, "24.VI.1988, Wrase" (cSch, cAss); 4 exs.: same locality, "20.VII.1985, leg. D.W. Wrase" (cSch, cAss); 1 ex.: "Transcauc. Georgia, Mzcheta pr. Tbilisi, VI.1986, leg. Wrase/Schülke (cSch); 1 ex.: same locality, "16.VII.1985, leg. D.W. Wrase (cSch); 1 ex.: "Cauc. min. bor., Trialetskij Chreb., Borzhomi, 800 m, leg. Wrase/Schülke / 9.VII.1986" (cSch).

D e s c r i p t i o n : Body length 8.5-11.0 mm. Coloration: head, pronotum, and abdomen blackish, pronotum rarely and head exceptionally slightly paler dark-brown; elytra uniformly reddish, occasionally with the anterior margin indistinctly infuscate; legs and antennae reddish.

Head approximately as wide as long or weakly transverse; punctation coarse, rather dense in lateral and posterior portion of dorsal surface, with the interstices as wide as, or narrower than the diameter of the punctures, and sparse in median dorsal area; microsculpture very shallow and fine. Eyes approximately 1/4 the length of postocular region in dorsal view (Fig. 1).

Pronotum 1.20-1.25 times as long as wide and 0.95-0.99 times as wide as head; punctation as coarse and usually as dense as that of head, but density subject to some intraspecific variation; interstices without microsculpture and shiny (Fig. 1).

Elytra approximately 0.8 times as long as pronotum (Fig. 1); punctation somewhat similar to that of pronotum, but usually shallower and less defined; interstices without distinct microsculpture.

Abdomen 1.0-1.1 times as wide as elytra; punctation fine and moderately dense; interstices with distinct fine microsculpture; posterior margin of tergite VII with palisade fringe.

 δ : sternite VII with weakly concave posterior margin, pubescence unmodified (Fig. 3); sternite VIII with cluster of black modified setae in posterior median portion, posterior margin weakly excised in the middle (Fig. 4); aedeagus with very long, acute, and sinuate ventral process (Fig. 2).

 φ : sternite VII 1.05-1.10 times as long as wide, in posterior median portion with very fine micropubescence, posterior margin truncate in the middle (Figs 5-6); tergite IX undivided; tergite X approximately 0.7 times as long as tergite IX in the middle.

C o m p a r a t i v e n o t e s : Based on the male primary and secondary sexual characters, *L. permutatum* is very closely related to *L. castaneipenne*, with which it was previously confounded and from which it is distinguished by the longer and more distinctly sinuate ventral process of the aedeagus and by the usually uniformly reddish elytra (in *L. castaneipenne* anteriorly distinctly blackish). In *L. permutatum*, the ventral process (measured from the ventral angle to apex) is almost 0.7 times as long as the basal portion of the aedeagus (measured from the same angle to base) (Fig. 2), whereas in *L. castaneipenne* the ventral process is little more than half as long as the basal portion (Fig. 7). Whether these differences are an expression of interspecific, intersubspecific, or possibly even intraspecific variation can only be clarified when material from the southern Balkans and Turkey becomes available for study.

The type material of *L. permutatum* is here considered a distinct species rather than an extreme form of *L. casteneipenne* for several reasons. Firstly, the observed differences appear to be constant. Secondly, there are numerous other examples of highly similar sibling species, also with a similar aedeagal morphology in the genus. Thirdly, the aedeagus of *Lathrobium* species is generally subject to little intraspecific variation. Fourthly, the difference in the aedeagal morphology also coincides with a different coloration of the elytra. And finally, similar examples of extremely similar sibling species, with one species distributed in the Caucasus region (including Iran) and/or southernwestern Russia, are *L. laevipenne* HEER 1839 and *L. impressifrons* EPPELSHEIM 1884 (ASSING 2007a), as well as *L. crassipes* MULSANT & REY 1878 and *L. sareptae* GREBENNIKOV 2001 (GREBENNIKOV 2001).

E t y m o l o g y : The specific epithet (Latin, adjective: confused) refers to the fact that this species was previously confounded with L. castaneipenne.

D is tribution: *Lathrobium permutatum* is currently known only from the environs of Tbilisi and Borzhomi, Georgia, but is probably more widespread. Previous records of *L. castaneipenne* from the Caucasus region and Iran (see notes in the section on *L. castaneipenne*) may refer to this species.

Lathrobium furcatum CZWALINA 1888

M a t e r i a l e x a m i n e d : <u>Romania</u>: 5 exs., Dobrudja, leg. Merkl (DEI, MHNG, cAss); 2 exs., Dobrudja, Cernavodă (NHMW). <u>Locality not identified</u>: 1 ex., Balian (NHMW).

C o m m e n t : *Lathrobium furcatum*, a rare species, has a distribution of the Ponto-Mediterranean type and is widespread from the Caucasus region (including Iran and Turkey) across the Balkans into the southeast of Central Europe.

Lathrobium andorranum KOCH 1937

M a t e r i a l e x a m i n e d : <u>France</u>: P r o v e n c e : 1 ex., Alpes-Maritimes, Caille inundation, 22.III.1959 (MHNG); 1 ex., Alpes-Maritimes, Vesubie inundation, XI.1950 (MHNG); 1 ex., Alpes-Maritimes, Caussols inundation, XI.1960 (cAss); 1 ex., Caussols inundation, 23.III.1959 (MHNG); 1 ex., Alpes-Maritimes, Var inundation, 1.X.1956 (MHNG); 1 ex., Alpes-de-Haute-Provence, Méailles, 2.VIII.1947 (MHNG).

C o m m e n t : The distribution of this species is of the Atlanto-Mediterranean type and ranges from the Iberian Peninsula across France to Switzerland.





Figs 1-8: *Lathrobium permutatum* nov.sp. (1-6) and *L. castaneipenne* KOLENATI (7-8): (1) forebody; (2, 7) aedeagus in lateral view; (3) male sternite VII; (4, 8) male sternite VIII; (5, 6) female sternite VIII. Scale bars: 1, 3-6, 8: 1.0 mm; 2, 7: 0.5 mm.

Lathrobium taxi BERNHAUER 1902

M a t e r i a l e x a m i n e d : <u>Romania</u>: 11 exs., Baile Herculane, 1909, leg. Hilf (SDEI, NHMW, cAss). <u>Ukraine</u>: 1 ex., Kiev, Kanev, 28.IX.1988, leg. Zerche (SDEI).

C o m m e n t : The Ponto-Mediterranean distribution of this rare species ranges from Turkey to the southeast of Central Europe.

Lathrobium magistrettiorum KOCH 1944

M a t e r i a l e x a m i n e d : <u>Italy</u>: 2 exs., Toscana, Lama (FI), 712 m, 7.XII.1991, leg. Campadelli (cAss, cZan).

C o m m e n t : The distribution of *L. magistrettiorum* is confined to Italy and Switzerland.

Lathrobium impressifrons EPPELSHEIM 1884

M a t e r i a l e x a m i n e d : <u>Iran</u>: 1♂, Gilan province, Fuman county, Tales mts., Masuleh-Khalkhal road, 4 km NW Masuleh, 37°10'N, 48°59'E, 1400 m, leaf litter sifted, 8.VI.2008, leg. Pütz (cPüt). <u>Georgia</u>: 1♀, Trialetskiy Khrebet, Bakuriani, 1800-2200 m, 15.-20.VI.1987 (cSch); 1♀, same data, but 8.VII.1986 (cAss); 3♀♀, Tbilisi env., Zchneti, 800 m, 22.VI.1986, leg. Schülke & Wrase (cSch).

C o m m e n t : This species was only recently reported from Iran for the first time (Assing 2007a).

Lathrobium caspicum KOCH 1938

M a t e r i a l e x a m i n e d : <u>Iran</u>: M a z a n d a r a n : 1 ex., Tonekabon county, Elburz mts., 4.5 km SW Khanian, Sehezar forest, 36°33'N, 50°50'E, 940 m, leaf litter sifted, 5.VI.2008, leg. Pütz (cPüt); 1 ex., Ramsar county, Elburz mts., Eshkatechal, 36°51'N; 50°33'E, 1050 m, sifted, 6.VI.2008, leg. Pütz (cPüt); 1 ex., Sari county, Mohammadabad, Elburz mts., 2 km NE Bendela, 36°04'N, 53°10'E, 1530 m, beechforest, 30.V.2008, leg. Pütz (cAss). G i l a n : 1 ex., Rudbar county, Elburz mts., 7 km NW Bararu, 36°49'N, 49°38'E, 850 m, sifted, 7.VI.2008, leg. Pütz (cPüt); 2 exs., Fuman county, Tales mts., Masuleh-Khalkhal road, 4 km NW Masuleh, 37°10'N, 48°59'E, 1400 m, leaf litter sifted, 8.VI.2008, leg. Pütz (cPüt, cAss).

C o m m e n t : The known distribution of this species is confined to Azerbaijan and Iran.

Lathrobium brunnipes (FABRICIUS 1793)

Material examined: <u>Kazakhstan</u>: 3 ざ ざ, Dzhungar mountain, Argynati river, 20.VIII.2006, leg. Kastcheev (cAss).

C o m m e n t : The above specimens represent the first record of this widespread Palaearctic species from Kazakhstan.

Lathrobium fovulum STEPHENS 1833

M a t e r i a l e x a m i n e d : <u>Kazakhstan</u>: 1 φ, Ural district, Budarino, 20.X.1980, leg. Kastcheev (cAss); 2 φ φ, Irtysh river, Lebyazh'e, 21.V.1979, leg. Kastcheev (cAss).

C o m m e n t : According to SMETANA (2004), the distribution of *L. fovulum* ranges from Western Europe (including the Canary Islands) eastwards to West Siberia. The above specimens represent the first record from Kazakhstan and Middle Asia.

Lathrobium longulum GRAVENHORST 1802

M a t e r i a l e x a m i n e d : <u>Kazakhstan</u>: 1♂, Ural river, Shender, 3.VI.1982, leg. Kastcheev (cAss).

C o m m e n t : *Lathrobium longulum* has a trans-Palaearctic distribution, but was previously unknown from Kazakhstan and Middle Asia.

Lathrobium paphlagonicum Assing 2001

M a t e r i a l e x a m i n e d : <u>Turkey</u>: S i n o p : 5 exs., 25 km S Sinop, W Lala, 41°44'N, 35°01'E, 215 m, oak forest with undergrowth, sifted, 31.III.2009, leg. Assing (cAss); 4 exs., 25 km S Sinop, W Lala, 41°53'N, 35°02'E, 240 m, oak forest with undergrowth, sifted, 31.III.2009, leg. Assing & Wunderle (cAss, cWun); 28 exs., ca. 22 km S Sinop, N Lala, 41°53'N, 35°03'E, 160 m, oak and laurel forest with undergrowth, sifted, 31.III.2009, leg. Assing, Wunderle (cAss, cWun); 28 exs., ca. 22 km S Sinop, N Lala, 41°53'N, 35°03'E, 160 m, oak and laurel forest with undergrowth, sifted, 31.III.2009, leg. Assing, Wunderle (cAss, cWun); 4 exs., 15 km SW Sinop, S Kılıçlı, 41°57'N, 35°02'E, 80 m, grassy road margin, grass between shrubs, sifted, 3.IV.2009, leg. Assing & Wunderle (cAss, cWun). K a s t a m o n u : 2 exs., 40 km NW Kastamonu, Ballıdağ geç., 41°34'N, 33°20'E, 1270 m, mixed forest (fir, pine, beech), litter sifted, 7.&9.IV.2009, leg. Assing & Wunderle (cAss, cWun).

C o m m e n t : *Lathrobium paphlagonicum* was described from three type specimens from the Çangal Dağı in Sinop province (ASSING 2001). The above specimens represent the first records since the original description. The new data suggest that the species is not rare in Sinop and in the adjacent parts of Kastamonu province.

Lathrobium dilutum ERICHSON 1839

M a t e r i a l e x a m i n e d : <u>Hungary</u>: l ex., Győr-Moson-Sopron county, Dunakiliti, Öreg-Duna riverbank, under stones and logs, 13.V.1994, leg. Merkl (HNHM).

C o m m e n t : According to SMETANA (2004), *L. dilutum* was previously unknown from Hungary.

Lathrobium flavipes HOCHHUTH 1851

Material examined: <u>Kazakhstan</u>: 1δ, Ural river, Dzhangala, 20.IV.1982, leg. Kastcheev (cAss). <u>Ukraine</u>: 1δ, 5 φ φ, Kharkov district, Nizhnie, Melnitsy, 10.VI.1975, leg. Kastcheev (cAss); 3 φ φ, Chernozemnyi, Zapovednik, 8.VIII.1981, leg. Kastcheev (cAss).

C o m m e n t : This species was previously known from Siberia, the Russian Central European territory, and the Russian South European territory (ASSING 2008, SMETANA 2004). The above specimens represent the first records from Ukraine, Kazakhstan, and Middle Asia.

Lathrobium marani KOCH 1939

M a t e r i a l e x a m i n e d : <u>Kazakhstan</u>: 1♂, Dzhungar mountain, Argynati river, 20.VIII.2006, leg. Kastcheev (cAss); 1♂, Almaty, Kamenka, 5.V.1986, leg. Kastcheev (cAss); 1♀, Ketmen mountains, Temirlyk river, 29.VII.1988, leg. Kastcheev (cAss); 1♀, Ketmen mountains, Dolaity river, 9.VII.1988, leg. Kastcheev (cAss); 1♀, Ile river, splav, Zhelturanga, 29.V.1984, leg. Kastcheev (cAss).

C o m m e n t : The known distribution of *L. marani* is confined to Kazakhstan, Tajikistan, and Kyrgyzstan (SMETANA 2004). The illustrations of the aedeagus in COIFFAIT (1982) are misleading. The ventral process has a small, but distinct tooth at its base. For accurate figures see KOCH (1939).

Lathrobium dimidiatipenne BERNHAUER 1910 (Figs 13-19)

M a t e r i a l e x a m i n e d : <u>Kazakhstan</u>: 7 exs., Irtysh river, Lebyazh'e, 21.V.1979, leg. Kastcheev (cAss).

C o m m e n t : According to SMETANA (2004), the distribution of this species ranges from Turkey and the Caucasus region to the Russian Far East. The above specimens represent the first record from Kazakhstan and Middle Asia. The primary and secondary sexual characters of the material from Kazakhstan are illustrated in Figs 13-19.

Lathrobium serriae Assing 2007

M a t e r i a l e x a m i n e d : <u>Iran</u>: R a z a v i K h o r a s a n : 3 exs., 20 km NW Torbat-e Heydariyeh, Senobar, 35°26'N, 49°06'E, 1730 m, 28.V.2006, leg. Frisch & Serri (MNHUB, cAss); 1 ex., Emam Qoli-Kapkan road, 17 km E Emam Qoli, Aghmazar, 37°19'N; 58°41'E, 1850, 31.V.2006, leg. Frisch & Serri (MNHUB); 1 ex., 27 km SW Chanaran, SW Frizi, 36°28'N; 58°57'E, 1690 m, 29.V.2006, leg. Frisch & Serri (MNHUB); 2 exs., Sah Jahan mts., Mareshk, 36°48'N, 59°33'E, 1800 m, 26.V.2006, leg. Frisch & Serri (MNHUB, cAss); 4 exs., SW Shandiz, Zoshg, 36°20'N, 59°11'E, 1750 m, 27.V.2006, leg. Frisch & Serri (MNHUB, cAss).

C o m m e n t : This species was only recently described from Razavi Khorasan province, based on few type specimens (ASSING 2007a).

Lathrobium kastcheevi nov.sp. (Figs 9-12)

Type material: <u>Holotype ♂</u>: "Kazakhstan, Bajankol riv, near Karatogan vil., 11.09.1988, V. Kastcheev / Holotypus ♂ *Lathrobium kastcheevi* sp.n., det. V. Assing 2009" (cAss).

A d d i t i o n a l m a t e r i a l : <u>Kazakhstan</u>: 1 ♀ [identification doubtful], Ile Alatau, Zhynishke riv., 17.VI.1988, leg. Kastcheev (cAss).

C o m m e n t : The above female from Ile Alatau is similar to the holotype. However, in view of the fact that numerous other species are of similar morphology, too, and that most *Lathrobium* species are difficult to identify based on external characters alone, it is only tentatively attributed to this species and not designated as a paratype.

D e s c r i p t i o n : Body length 8.7 mm. Coloration: head, pronotum, and abdomen blackish; elytra reddish, anterior third distinctly infuscate; legs and antennae reddish.

Head 1.05 times as wide as long; punctation coarse and rather dense, slightly sparser in in median dorsal area; microsculpture shallow and fine, but distinct. Eyes approximately 1/3 the length of postocular region in dorsal view.

Pronotum 1.23 times as long as wide and approximately as wide as head; punctation similar to that of head; interstices without microsculpture and shiny.

Elytra 0.92 times as long as pronotum; punctation dense, shallower and less defined than that of pronotum; interstices without distinct microsculpture.

Abdomen as wide as elytra; punctation fine and dense; interstices with distinct fine microsculpture; posterior margin of tergite VII with palisade fringe.

 δ : sternite VII with weakly concave posterior margin, pubescence unmodified; sternite VIII with cluster of black modified setae in posterior median portion (Fig. 12), posterior margin weakly concave; aedeagus large, 2.8 mm long, with weakly asymmetric ventral process of distinctive shape (Figs 9-11).





Figs 9-19: *Lathrobium kastcheevi* nov.sp. (9-12) and *L. dimidiatipenne* BERNHAUER (13-19): (9, 13-14) aedeagus in lateral view; (10, 16) apical portion of aedeagus in lateral view; (11) apical portion of aedeagus in ventral view; (12) posterior median portion of male sternite VIII; (15) aedeagus in ventral view; (17) male sternite VII; (18) male sternite VIII; (19) female sternite VIII. Scale bars: 0.5 mm.

C o m p a r a t i v e n o t e s : Based on the similar external morphology, as well as on the similar male primary and secondary sexual characters, particularly the shape of the aedeagus, *L. kastcheevi* is the sister species of *L. lackneri* ASSING 2007 from southern Kyrgyzstan. Both species are distinguished only by the shape of the aedeagus: in *L. lackneri* the ventral process is longer, less strongly curved, and the apex is of different shape. For illustrations of *L. lackneri* see ASSING (2007b).

E t y m o l o g y : This species is dedicated to Vitaly Kastcheev, Almaty, who collected the holotype, also in appreciation of his merits in the study of the staphylinid fauna of Kazakhstan.

D is tribution and bionomics: The type locality is situated in southern Kazakhstan, in the region to the northwest of Dzambul. The female listed as additional material was collected in the Ile Alatau in southeastern Kazakhstan. Bionomic data are not available.

Tetartopeus rufonitidus (REITTER 1909)

M a t e r i a l e x a m i n e d : <u>Kazakhstan</u>: 2♂♂, Ural district, Budarino, 20.X.1980, leg. Kastcheev (cAss); 1♂, Ile river, Aidarly, 9.V.1990, leg. Kastcheev (cAss); 1♂, 1♀, same data, but 21.VI.1991 (cAss); 2♀♀, same data, but 12.IV.1986 (cAss); 2♀♀, same data, but 9.IV.1984 (cAss); 1♀, same data, but 15.IV.1988 (cAss); 3♂♂, same data, but 21.IV.1985 (cAss); 1♀, same data but 20.IV.1986 (cAss); 1♀, Karachaganak, Utwa river, 9.VI.1985, leg. Kastcheev (cAss); 1♀, Irgyz river, Irgyz town, 27.VII.1985, leg. Kastcheev (cAss).

C o m m e n t : In Middle Asia, the widespread *T. rufonitidus* has become known only from Kazakhstan and Uzbekistan (SMETANA 2004).

Tetartopeus quadratus (PAYKULL 1789)

M a t e r i a l e x a m i n e d : <u>Kazakhstan</u>: 1♂, 1♀, Irtysh river, Lebyazh'e, 21.V.1979, leg. Kastcheev (cAss); 1♀, Narym river, Maimer, 6.VIII.1986, leg. Kastcheev (cAss); 1♀, Tasutkol lake, 9.V.1985, leg. Kastcheev (cAss).

C o m m e n t : According to SMETANA (2004), this species has a trans-Palaearctic distribution, but was previously unknown from Kazakhstan and Middle Asia.

Tetartopeus stylifer (REITTER 1909)

M a t e r i a l e x a m i n e d : <u>Iran</u>: M a z a n d a r a n : 3 exs., 35 km SW Pol-e Sefid, Sheshrudbar, 36°00'N, 52°52'E, 1540 m, 8.VI.2006, leg. Frisch & Serri (MNHUB, cAss); 1 ex., 12 km E Kiyasar, Alikolar, 36°13'N, 53°39'E, 1590 m, 9.VI.2006, leg. Frisch & Serri (MNHUB); 1 ex., Chalus county, Elburz mts., 10 km SE Abbasabad, 36°39'N, 51°12'E, 150 m, leaf litter sifted, 4.VI.2008, leg. Pütz (cPüt). E s f a h a n : 1 ex., 15 km NNE Semirom, 31°32'N, 51°37'E, 2650 m, 12.V.2007, leg. Frisch & Serri (MNHUB). G i l a n : 2 exs., Rasht county, Elburz mts., 29 km S Rasht, 37°01'N; 49°36'E, 140 m, sifted, 6.VI.2008, leg. Pütz (cPüt); 2 exs., Fuman county, Tales mts., Masuleh-Khalkhal road, 8 km NW Masuleh, 37°10'N, 48°57'E, 1930 m, springs, small pools, 8.VI.2008, leg. Pütz (cPüt, cAss).

C o m m e n t : The species is distributed from Ukraine and Turkey to Iraq and Iran, where it is apparently rather common (ASSING 2007a).

Tetartopeus truncatus nov.sp. (Figs 20-23)

T y p e m a t e r i a l : <u>Holotype ♂</u>: "Primorskij Kraj, Ussurijskij Nat.Res., 100 km N von Wladiwostok / 23.-24.VII.1991, leg. F. Hieke / Holotypus ♂ *Tetartopeus truncatus* sp. n., det. V. Assing 2009" (MNHUB). <u>Paratypes</u>: 1♂ [slightly teneral]: "Primorskij Kraj, Lasurnij bereg, 28.VII.1991, leg. F. Hieke" (MNHUB); 1♂: "Primorskij Kraj, Barabasch-Lewada, 30.VII.-1.VIII.1991 / ca. 40 km WNW v. Kamen Rybolow, leg. F. Hieke" (cAss).

D e s c r i p t i o n : Body length 4.8-5.5 mm. Coloration: body blackish, with the posterior 1/4-1/3 of the elytra yellowish; legs reddish-yellow; antennae dark-reddish.

Head approximately 1.1 times as long as wide (Fig. 20); punctation moderately coarse and not very dense, interstices on average wider than diameter of punctures; median dorsal area without, lateral and posterior dorsal area with shallow traces of microsculpture. Eyes approximately half as long as postocular region from posterior margin of eye to neck. Antenna slender; antennomere IV approximately twice as long as wide; X approximately 1.5 times as long as wide.

Pronotum 1.15-1.20 times as long as wide and approximately 1.1 times as wide as head; punctation similar to that of head or slightly coarser, of variable density; interstices without microsculpture and shiny (Fig. 20).

Elytra relatively short, approximately 0.8 times as long as pronotum (Fig. 20); punctation rather dense, shallower and less defined than that of pronotum; interstices without distinct microsculpture.

Abdomen approximately as wide as elytra; punctation very fine and very dense; interstices with distinct fine microsculpture; posterior margin of tergite VII with palisade fringe.

 δ : posterior margin of tergite VIII convexly produced in the middle (Fig. 21); posterior margin of sternite VII weakly concave in the middle; sternite VIII in posterior 2/3 of median portion with cluster of black setae, posterior margin with V-shaped incision in the middle (Fig. 22); aedeagus with short ventral process of distinctive shape (Fig. 23).

♀: unknown.

C o m p a r a t i v e n o t e s : *Tetartopeus truncatus* is distinguished from all its congeners by the distinctive morphology of the aedeagus, from all other representatives of the genus distributed in the Eastern Palaearctic region also by the combination of short elytra and the broadly and distinctly yellowish posterior portion of the elytra. Other species recorded from the Eastern Palaearctic have either longer or differently coloured elytra (either uniformly blackish or with indistinctly or narrowly yellowish posterior margin). For illustrations of the sexual characters of *T. baicalicus* (EPPELSHEIM 1878), *T. lentus* RYVKIN 1989, *T. niger* (LECONTE 1863), and *T. poppiusi* (KOCH 1939) see COIFFAIT (1982) and RYVKIN (1989).

E t y m o l o g y : This specific epithet (Latin, adjective) alludes to the short ventral process of the aedeagus.

D is tribution and bionomics: The species is known from three localities in the Russian Far East. Bionomic data are not available.



Figs 20-28: *Tetartopeus truncatus* nov.sp. (**20-23**) and *T. inexcisus* nov.sp. (**24-28**): (**20, 25**) forebody; (**21**) male tergite VIII; (**22, 26**) male sternite VIII; (**23, 27**) aedeagus in lateral view; (**24**) habitus; (**28**) apical portion of aedeagus. Scale bars: 24: 1.0 mm; 20-23, 25-27: 0.5 mm; 28: 0.1 mm.

Tetartopeus inexcisus nov.sp. (Figs 24-28)

T y p e m a t e r i a l : <u>Holotype &</u>: "TR [28a] - Kastamonu, 25 km SE Tosya, 40°56'26"N, 34°13'53"E, 1600 m, moist meadow, 6.IV.2009, V. Assing / Holotypus & *Tetartopeus inexcisus* sp. n., det. V. Assing 2009" (cAss).

D e s c r i p t i o n : Body length 7.5 mm. Habitus as in Fig. 24. Coloration: body blackish, with the posterior 3/5 of the elytra reddish; legs pale yellowish-brown; antennae dark-brown, with antennomeres I, II, and XI reddish.

Head 1.1 times as long as wide; punctation moderately coarse and not very dense, interstices in lateral and posterior dorsal portions on average approximately as wide as or slightly wider than diameter of punctures, in median dorsal area distinctly wider than diameter of punctures; interstices without microsculpture, shiny. Eyes little more than one third the length postocular region from posterior margin of eye to neck (Fig. 25). Antenna slender; antennomeres IV-X almost twice as long as wide.

Pronotum 1.25 times as long as wide and 1.13 times as wide as head; punctation similar to that of head; impunctate midline narrow; interstices without microsculpture and shiny (Fig. 25).

Elytra 1.2 times as wide as pronotum and relatively short, approximately 0.8 times as long as pronotum (Fig. 25); punctation shallower and less defined than that of pronotum; interstices without distinct microsculpture.

Abdomen approximately as wide as elytra; punctation very fine and very dense; interstices with distinct fine microsculpture; posterior margin of tergite VII with palisade fringe.

 δ : posterior margin of tergite VIII weakly convex in the middle; sternite VIII with extensive cluster of black setae, posterior margin weakly and broadly concave, but not incised in the middle (Fig. 26); aedeagus with ventral process of distinctive shape (Fig. 27).

♀: unknown.

C o m m e n t : The apico-ventral portion of the ventral process of the aedeagus is evidently broken off (Fig. 28). Nevertheless, even the incomplete apex of the aedeagus is highly distinctive and completely different from those of similar and geographically close congeners.

C o m p a r a t i v e n o t e s : *Tetartopeus inexcisus* is distinguished from all its congeners by the distinctive morphology of the aedeagus. In coloration and other external characters, it is most similar to *T. scutellaris* (NORDMANN 1837), which is distributed in southeastern Europe and probably absent from Turkey, and which is separated from the new species by the less oblong pronotum, the presence of a weak median excision at the posterior margin of the male sternite VIII, and by the conspicuous shape of the ventral process of the aedeagus. From other geographically close species with reddish elytra, *T. inexcisus* is additionally distinguished as follows:

from *T. stylifer* (REITTER 1909) (Caucasus region, Iran, Iraq) and *T. adanensis* ASSING 2004 (central southern Anatolia) by the coloration of the elytra (*T. stylifer* and *T. adanensis*: uniformly reddish), the smaller and more slender body, the relatively smaller (in relation to pronotum) and more oblong head, the much smaller eyes, the shorter antennae, the distinctly narrower and shorter elytra, the uniformly blackish abdomen (*T. stylifer* and *T. adanensis*: apex reddish), and the absence of a median excision of the posterior margin of the male sternite VIII;

from *T. tezcani* ANLAŞ 2009 (central southern Anatolia) by the different coloration of the elytra (*T. tezcani*: uniformly reddish) and the abdomen (*T. tezcani*: apex reddish), as well as by the different chaetotaxy of the male sternite VIII;

from *T. persicus* COIFFAIT 1972 (Iran, Iraq, southeastern Anatolia) by the different coloration of the elytra (*T. persicus*: only anterior margin and scutellar area infuscate) and the abdomen (*T. persicus*: apex reddish), the smaller and more slender head, the smaller eyes, the longer and broader elytra, as well as by the different shape and chaetotaxy of the male sternite VIII.

For illustrations of the above species, as well as of *T. czwalinai* (JAKOBSON 1909) (known only from the type locality in Izmir) see ANLAŞ (2009) and ASSING (2004, 2008, 2009).

E t y m o l o g y: The specific epithet (Latin, adjective) alludes to the absence of a median incision at the posterior margin of the male sternite VIII, one of the characters distinguishing this species from similar congeners.

D is tribution and bionomics: *Tetartopeus inexcisus* is the first representative of the genus to become known from central northern Anatolia. The type locality is situated in the Geçmiş Dağı, in the south of Kastamonu province. The holotype was found under a stone in a loamy, still barely vegetated and wet meadow partly covered with snow at an altitude of 1600 m.

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Zusammenfassung

Vier Arten werden beschrieben und abgebildet: *Lathrobium permutatum* nov.sp. (Georgien), *L. kastcheevi* nov.sp. (Kasachstan), *Tetartopeus inexcisus* nov.sp. (N-Türkei) und *T. truncatus* nov.sp. (Ferner Osten Russlands). Die männlichen und weiblichen Geschlechtsmerkmale von *Lathrobium dimidiatipenne* BERNHAUER 1910 werden abgebildet. Weitere Nachweise von 18 Arten der Gattung *Lathrobium* GRAVENHORST 1802 und drei Arten der Gattung *Tetartopeus* CZWALINA 1888 werden gemeldet, darunter eine Reihe von Erstnachweisen.

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