New Species of the Tenebrionid-Beetle Subgenus *Cardiobioramix* Kasz., Genus *Bioramix* Bat. (Coleoptera, Tenebrionidae, Platyscelidini), from the Chinese Provinces Gansu and Sichuan

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Abstract—Two new species of the genus *Bioramix* Bat. (tribe Platyscelidini) are described from China, *Bioramix* (*Cardiobioramix*) splendida sp. n. (Sichuan) and *B.* (*Cardiobioramix*) kabaki sp. n. (Gansu). DOI: 10.1134/S0013873806090053

The subgenus *Cardiobioramix* Kaszab, 1940 of the genus *Bioramix* Bates, 1879 (tribe Platyscelidini) includes 20 species (Egorov, 2004). Among these, six are described from the Chinese provinces Gansu and Sichuan (Reitter, 1889, 1891; Schuster, 1923; Kaszab, 1940, 1960).

The present communication is based on the results of examination of the material of the genus *Bioramix* Bat., deposited in the collection of the Zoological Institute, Russian Academy of Sciences (St. Petersburg) (ZIN). In this paper, two new species of the subgenus *Cardiobioramix* Kasz. are described. Types of the taxa described are deposited in the collection of ZIN.

Parts of the body were measured mainly following the method used by Medvedev (2005a, 2005b); density of the punctation was characterized similarly to that in a review of the genus *Trichomyatis* Schust. (Egorov, 2006). The nomenclature of details of the structure of the female genital tubes follows that accepted by American authors (Tschinkel and Doyen, 1980) and supplemented by Medvedev (2001).

Bioramix (Cardiobioramix) splendida L. Egorov, sp. n. (Figs. 1–14)

Description. Pronotum shining, head dorsally and elytra weakly shining. Pronotum and head nearly black; elytra dark brown, with weak bronze shine. Venter, antennae, and mouthparts (except for mandibles) reddish brown.

Male. Head widest behind eyes. Ratio of width of head to distance between eyes 41 : 30. Labrum transverse, with shallow emargination of anterior margin. Punctation dense or moderately dense, irregular: punc-

tures at sides nearly twice as large as others. Surface covered with rather long, subrecumbent, brownish yellow hairs. Temples behind eyes roundly narrowing backwards, covered with rather fine recumbent hairs. Anterior margin of genae shallowly emarginate, glabrous. Most of genae densely punctate, covered with recumbent hairs. Anterior margin of clypeus straight, with group of yellow hairs directed forwards and reaching anterior margin of membrane between clypeus and labrum. Frontoclypeal suture widely and rather deeply arcuately depressed. Punctation fine, dense. Surface of clypeus and other (visible in dorsal view) parts of head glabrous. Posterior part of head covered with recumbent hairs. Punctation of head fine, dense or moderately dense. Ventral part of head (postgena, gula) with transverse wrinkles lateral to midline. Eyes transverse, with shallow emargination of anterior margin. Antennae with 2 apical segments extending beyond base of pronotum; 1st segment irregularly pear-shaped, length (width) ratio 30(18); ratio of lengths (widths) of 2nd-11th antennal segments 20(15): 45(15): 29(15): 28(15): 30(14): 29(15):31(16) : 28(17) : 27(17) : 34(18). Ratio of sum of lengths of segments to sum of their widths (antennal index) 1.92.

Pronotum transverse, 1.87–1.97 times as wide as head, 1.27–1.3 times as wide as long, widest at base, weakly and nearly straightly narrowing from base to middle, then strongly arcuately narrowing toward apex, with shallow emargination at sides before posterior angles (Fig. 1). Ratio of width at anterior margin to that in middle and to that at base 51 : 75 : 81. Surface weakly convex in cross-section (slightly more strongly at apex than at base) and in longitudinal di-

rection; sides weakly flattened and very superficially and narrowly depressed along lateral margin. Anterior margin in dorsal view deeply emarginate, posterior margin shallowly bisinuate; anterior angles rather sharp, rectangular; posterior angles sharper, acute. Entire lateral margin, lateral thirds of anterior margin, and most of pronotum base (except for middle third) edged. Lateral margin in lateral view nearly straight, only weakly curved downwards at apex and at base. Punctation on disc very similar to that on frons, rather sparse or moderately dense, coarser and moderately dense or dense at sides; punctures on disc round, very weakly elongate at sides, not merging, very fine (as those on frons) and dense at lateral margin. Intervals between punctures with fine obliterated isodiametrical microsculpture more distinct at base and at sides. Propleura weakly depressed at outer margin, covered with sparse recumbent hairs, bearing rather delicate, weak longitudinal wrinkles smoothened at lateral margin. Prosternum sharply edged along entire anterior and posterior margins, covered with rather sparse hairs directed backwards. Its surface without depression anteriorly, smoothly beveled toward anterior margin, covered with uneven transverse wrinkles. Propleural suture S-curved. Coxal cavities rounded, situated much closer to posterior margin of prothorax than to anterior margin. Prosternal process weakly obtuseangled or rectangular, projecting beyond level of fore coxae (in lateral view). Ratio of its width to maximum diameter of fore coxa 14 : 36. In ventral view, prosternal process weakly saddle-shaped depressed on area between coxae. Mesosternum with rather sparse recumbent hairs; surface finely granulate, with strong depression, beveled toward anterior margin; anterior margin nearly straight. Mesosternal process wide, edged laterally, with shallow emargination of posterior margin. Joint between meso- and metasternal processes situated behind middle of middle coxae. Distance between coxal cavities subequal to that between hind coxae. Metasternum finely granulate, with rather sparse subrecumbent hairs; surface even; posterior margin shallowly emarginate.

Elytra oval, slightly wider at base than pronotum, very weakly widened up to middle, then roundly narrowing toward apex, 1.34–1.38 times as long as wide, 2.10–2.25 times as long, and 1.23–1.24 times as wide as pronotum. Humeri pronounced, rounded apically, obtuse-angled. Punctation fine, mainly rather sparse; intervals between punctures with sparse transverse wrinkles; microsculpture similar to that on pronotum.



Figs. 1–5. *Bioramix (Cardiobioramix) splendida* sp. n., male: (1) pronotum; (2) abdominal sternite VIII; (3) aedeagus, dorsal view; (4) aedeagus, lateral view; (5) aedeagus, ventral view. (*A*) Scale to Fig. 1, (*B*) to Figs. 2–5.

Punctures on declivity bearing minute hairs visible only at magnification more than \times 30. Elytra with traces of longitudinal carinae and rows of sparse large punctures. Surface weakly convex in cross-section and nearly flat in longitudinal direction; sides and declivity steeply sloping. Epipleura narrow, their inner and outer margins merging before apex of elytra. Lateral carina of elytra (outer margin of pseudepipleura) visible in dorsal view only anteriorly, explanate on humeri, merging with epipleura, not reaching sutural angle. Deflexed part of elytra weakly flattened, finely rugulosely punctate.

Abdomen weakly flattened along midline of 1st and 2nd visible sternites, covered there and in medial part of other segments with recumbent yellow hairs slightly denser and longer than those at sides. Middle of base of last visible sternite with shallowly depressed, impunctate semicircular area. Sternite VIII widely emarginate at apex, covered with dense and rather long subrecumbent yellow hairs; pheromone gland developed (Fig. 2).



Figs. 6–8. *Bioramix* (*Cardiobioramix*) *splendida* sp. n., male: (6) fore tibia; (7) spiculum gastrale, dorsal view; (8) spiculum gastrale, lateral view.

Ratio of lengths (widths) of fore, middle, and hind femora 59(19): 60(16): 73(15), that of corresponding tibiae 50(11): 48(10): 63(11), that of corresponding tarsi 38(14) : 46(10) : 62(5). For femur with sparse punctation and sparse recumbent hairs. Fore tibia (Fig. 6) moderately widened toward apex, weakly curved in basal third, with not blade-shaped outer margin bearing no strong setae (except for apical angle). Inner surface covered with short dense subrecumbent yellow hairs from middle to apex. Lower surface sparsely granulate, with not strong transverse depression before apex, covered with sparse setae and recumbent hairs. Apical margin of tibia with row of uniform strong setae, spurs of different length. Fore tarsus strongly widened, wider than fore tibia, covered dorsally with rather sparse hairs. Ratio of lengths (widths) of 1st-5th segments 5(5) : 10(14) : 8(12) : 7(8): 11(4). Sole surfaces of 1st-4th segments with hair brushes; 5th segment ventrally with dense and rather long subrecumbent hairs. Pubescence and punctation of middle femur as those of fore femur. Middle tibia almost regularly covered with rufescent setae and rather sparse subrecumbent yellow hairs; hairs denser only in apical third of inner face. Apical margin of tibia with row of uniform strong setae along perimeter, spurs of subequal length. Middle tarsus less strongly widened, as wide as middle tibia, covered dorsally with rather sparse hairs. Ratio of length (width) of 1st-5th segments 10(7) : 10(10) : 8(9) : 6(7) : 13(5). Sole surfaces of 1st-4th segments with hair brushes; 5th segment covered ventrally with rather long, dense, subrecumbent hairs. Hind femur punctate and pubescent similar to fore and middle femora. Hind tibia nearly straight, weakly widened toward apex; its pubescence very similar to that of middle tibia, with shorter and denser recumbent hairs on inner face along 3/4 of length. Apical margin of tibia with row of uniform strong setae along perimeter, spurs of subequal length. Hind tarsus not widened. Ratio of length (width) of 1st–4th segments 25(5) : 11(5) : 10(5) :30(4); 1st segment at apex and 2nd–4th segments covered ventrally with dense yellow hairs (pubescence much like that on claw-segments of fore and middle tarsi). Claws in all tarsi regularly curved.

Aedeagus (Figs. 3–5) 3 mm long and 0.7 mm wide (body length 10 mm). Parameres sharply narrowed in apical 1/4 and nearly parallel-sided up to distal end (Fig. 3). Length of parameres 0.95 mm, width 0.45 mm. Phallobase 2.2 times as long as parameres, strongly curved in lateral view (Fig. 4), without longitudinal depression dorsally (Fig. 3). Spiculum gastrale with sharply diverging unequal branches (Fig. 7), weakly curved in lateral view (Fig. 8).

Female. Body black; elytra with weak bronze shine, more convex than those in male, with traces of longitudinal carinae.

Antennal apices hardly reaching base of pronotum.

Pronotum transverse, 1.85 times as wide as head, 1.45 times as wide as long, widest behind middle, with lateral margins more strongly arcuately converging from middle toward apex, and less strongly converging toward base, with inconspicuous emargination before posterior angles. Anterior angles narrowly rounded, rectangular; posterior angles sharper, nearly rectangular. Ratio of width at anterior margin to maximum width and to width at base 56 : 87 : 85.

Elytra wide-oval, slightly wider at base than pronotum, distinctly widened toward middle, then roundly narrowing toward apex, 1.3 times as long as wide, 1.26 times as wide and 2.46 times as long as pronotum. Humeri pronounced, rounded apically, obtuse-angled.

Abdomen covered with shorter and sparser hairs. Middle of base of last visible sternite with flattened impunctate semicircular area.

Tibiae less densely covered with setae and recumbent hairs than those in male. Spurs on all tibiae wider than those in male, strong. Fore and middle tarsi not widened, without hair brushes on sole surface; 3 distal segments of fore and middle, and 2 distal segments of hind tarsi covered on underside with dense tufts of



Figs. 9–14. *Bioramix (Cardiobioramix) splendida* sp. n., female: (9) spiculum ventrale; (10) apex of spiculum ventrale, lateral view; (11) ovipositor, ventral view; (12) ovipositor, lateral view; (13) abdominal defensive glands; (14) genital tubes. *V*, vagina; *s. g*, spermathecal gland; *s. s*, spermathecal sphincter; *m. o*, median oviduct; *s. d*, spermathecal duct; *s*, spermatheca (reservoir). (*A*) scale to Fig. 13, (B) to Figs. 9–12, 14.

subrecumbent hairs (similarly to last tarsal segments of male).

Sternite VIII with spiculum ventrale attached to membranous part by anchor-shaped widening (Fig. 9). Apex of spiculum ventrale thickened and weakly curved (Fig. 10). Ovipositor typical of species of the subgenus (Figs. 11, 12). Abdominal defensive glands sacculate (Fig. 13).

Only basal part of genital tubes in the female examined has remained (Fig. 14), its structure of the same type as that in closely related species of *Bioramix* from Sichuan and Gansu provinces. Median oviduct running into vagina from below in its anterior third. Spermatheca clearly differentiated from vagina and also beginning on ventral surface in anterior third. Spermathecal duct short. Spermatheca (reservoir) fine, rolled up into ball. Spermathecal gland separated from spermatheca by sphincter, narrow and long, slightly thicker than spermatheca. In closely related species [*B. championi* (Reitter, 1891), etc.], spermathecal gland no less than twice as long as spermatheca in straightened state.

Comparing the structure of the female genital tubes of *B. splendida* and closely related species of *Bioramix* with that of species of the tribe Blaptini (Medvedev, 2001), I can draw some preliminary conclusions. (1) The structure of the female genital tubes of the examined species of *Bioramix* is mainly similar to that of Blaptini species: the duct, one reservoir, sphincter, and spermathecal gland are well defined. (2) The structure exhibits distinct characters of specialization: the differentiation of spermatheca from vagina, presence of spermathecal duct, separation of spermathecal gland from vagina. (3) As a whole, the genital tubes are less differentiated than those of Blaptini: only one reservoir of spermathecal present (spermatheca proper), spermathecal duct without processes.

Length of body in male 10.0–10.5 mm, width 4.6–5.0 mm; in female 10.7 and 5.5 mm, respectively.

Material. Holotype: \Diamond , with label: "Mzhd. Nakhchukoi i Ma-gei-shchin [in Cyrillic], 20-V-93, Potanin" (China, Sichuan, ~30°N, 101°E, between Kanding and Litang, environs of Yajiang (Nyagquka)). Paratypes: 1 \Diamond and 1 \heartsuit , as holotype.

Diagnosis. The new species is closely related to *B. chinensis* (Kaszab, 1940) and *B. korschefskyi* (Kaszab, 1940), but differs from the former species in size, from the latter in the shape of the male pronotum,



Figs. 15–23. *Bioramix (Cardiobioramix) kabaki* sp. n., male: (15) pronotum; (16) abdominal sternite VIII; (17) abdominal defensive glands; (18) fore tibia; (19) aedeagus, dorsal view; (20) aedeagus, lateral view; (21) aedeagus, ventral view; (22) spiculum gastrale, dorsal view; (23) spiculum gastrale, lateral view. (A) scale to Figs. 15, 17, 18; (B) to Figs. 16, 19–23.

structure of the aedeagus, and more strongly widened fore tarsus.

Etymology. The name of the species originates from the Latin word "splendida" (shining), referring to the male pronotum, which is more shining than that of the closely related species.

Bioramix (Cardiobioramix) kabaki L. Egorov, sp. n. (Figs. 15–23)

Description. Dorsum weakly shining. Pronotum and head nearly black; elytra dark brown, with weak bronze shine. Venter, antennae, and mouthparts (except for mandibles) reddish brown.

Male. Head widest behind eyes. Ratio of width of head to distance between eyes 53 : 37. Labrum transverse, shallowly emarginate along anterior margin. Punctation dense or moderately dense, irregular: punctures at sides nearly twice as large as on rest of labrum. Surface covered with rather long subrecumbent

hairs. Temples behind eyes roundly narrowing backwards, covered with rather sparse recumbent hairs. Anterior margin of genae shallowly emarginate, glabrous. Most of genae densely punctate, covered with recumbent hairs. Anterior margin of clypeus straight, with group of yellow hairs directed forwards and reaching, or extending beyond anterior margin of membrane between clypeus and labrum. Frontoclypeal suture widely and weakly arcuately depressed. Punctation fine, dense, and moderately dense. Surface of clypeus glabrous. Rest of head (visible in dorsal view) covered with recumbent hairs more distinct at sides and at base. Punctation of head fine, dense or moderately dense. Ventral part of head (postgena, gula) with granulate and weakly wrinkled sculpture lateral to median line. Eyes transverse, shallowly emarginate anteriorly. Antennae with 2 apical segments extending beyond base of pronotum; 1st segment irregularly pear-shaped, its length to width ratio 26(13); ratio of lengths(widths) of 2nd-11th antennal segments 13(11): 30(10) : 19(9) : 20(9) : 20(9) : 19(9) : 21(11) : 18(12): 16(12) : 20(11). Ratio of sum of lengths of segments to sum of their widths (antennal index) 1.9.

Pronotum somewhat wider than long, 1.67 times as wide as head, 1.27 times as wide as long, widest nearly in middle, then nearly parallel-sided to base (very weakly narrowing), with inconspicuous emargination at sides before posterior angles, rather strongly arcuately narrowing toward apex (Fig. 15). Ratio of width at anterior margin to width in middle and to that at base 60 : 90 : 89. Surface weakly convex in crosssection (distinctly more strongly at apex than at base) and in longitudinal direction; sides very weakly and widely depressed in middle. Anterior margin in dorsal view shallowly emarginate, posterior one shallowly bisinuate, nearly straight; anterior angles rounded, weakly obtuse; posterior angles sharper, rectangular. Entire lateral margin and lateral 1/4 of anterior and posterior margins of pronotum edged. Lateral margin weakly S-shaped in lateral view. Punctation on disc nearly as that on frons, mainly dense, coarser and dense at sides; punctures round on disc, oblong and partly merging into short longitudinal striae at sides. Punctures bearing minute hairs distinct at sides and at apex and strongly obliterated on disc. Intervals between punctures with fine abraded isodiametrical microsculpture more clearly visible at base and at sides. Propleura weakly depressed at outer margin only at base, covered with sparse recumbent hairs. Sculpture of propleura not coarse, weakly wrinkled, smoothened at lateral margin. Prosternum sharply edged along anterior and posterior margins, covered with rather sparse hairs directed backwards. Its surface without depression anteriorly, gently beveled toward anterior margin, covered with irregular transverse wrinkles. Propleural suture S-curved. Coxal cavities rounded, situated much closer to posterior margin of prothorax than to anterior margin. Prosternal process with acuteangled tooth projecting backwards and rounded at apex. Ratio of width of prosternal process to maximum diameter of fore coxa 17:43. Mesosternum covered with rather sparse recumbent hairs; its surface finely granulate, with strong depression, beveled toward anterior margin; latter nearly straight. Mesosternal process wide, edged at sides; its posterior margin shallowly emarginate. Joint between meso- and metasternal processes situated behind middle of middle coxae. Distance between coxal cavities subequal to that between hind coxae. Metasternum finely granulate, covered with rather sparse subrecumbent hairs. Surface with noticeable tubercle anteriorly and weak longitudinal depression behind tubercle; posterior margin shallowly emarginate.

Elytra oval, at base slightly wider than pronotum, very weakly widened toward middle, then roundly narrowing toward apex, 1.39 times as long as wide, 1.35 times as wide, and 2.43 times as long as pronotum. Humeri pronounced, rounded apically, obtuseangled. Punctation fine, mainly rather sparse, pronounced up to apex; intervals between punctures with sparse transverse wrinkles; microsculpture as that on pronotum. Punctures bearing minute hairs visible only at magnification more than 30×. Hairs on disc largely abraded. Elytra with obsolete traces of longitudinal carinae and rows of sparse large punctures. Surface weakly convex in longitudinal and transverse directions, sides and declivity steeply sloping. Epipleura narrow, their inner and outer margins merging before apex of elytra. Lateral carina of elytra (outer margin of pseudepipleura) visible in dorsal view only anteriorly, merging with epipleura, not reaching sutural angle. Deflexed part of elytra weakly flattened, with sparse minute hairs; its sculpture finely rugosely punctate.

Abdomen superficially depressed in medial part of 1st and 2nd visible sternites, regularly covered with long recumbent yellow hairs, with subrecumbent hairs only in medial part of last visible sternites. Sternite VIII covered with dense and rather long subrecumbent yellow hairs, with wide emargination at apex, bearing pheromone gland attached to membranous part (Fig. 16). Abdominal defensive glands sacculate (Fig. 17).

Ratio of lengths (widths) of fore, middle, and hind femora 67(21) : 71(17) : 89(17), that of corresponding tibiae 57(14) : 60(14) : 88(15), that of corresponding tarsi 48(17) : 55(12) : 74(7). Fore femur sparsely punctate and sparsely covered with recumbent hairs. Fore tibia (Fig. 18) moderately widened toward apex, weakly curved in basal third; its outer margin (except for apical angle) without strong setae, not bladeshaped. Inner surface covered with short dense subrecumbent yellow hairs in apical half. Lower surface sparsely granulate, with not strong transverse depression before apex, covered with sparse setae and recumbent hairs. Apical margin of tibia with 1 row of uniform strong setae; spurs of unequal lengths. Fore tarsus strongly widened, wider than fore tibia, covered dorsally with rather sparse hairs. Ratio of lengths (widths) of 1st-5th segments 15(16) : 30(30) : 21(26) : 15(14) : 31(11). Sole surfaces of 1st-4th segments with hair brushes; 5th segment with rather long, dense, subrecumbent hairs on sole surface. Pubescence and punctation of middle femur as those of fore femur. Middle tibia almost regularly covered with elongate rufescent setae and rather sparse subrecumbent yellow hairs; only apical half of inner side with denser hairs. Apical margin of tibia with 1 row of uniform strong setae along perimeter, spurs of subequal length. Middle tarsus less strongly widened, narrower than middle tibia, covered dorsally with rather sparse hairs. Ratio of lengths (widths) of 1st-5th segments 20(18) : 24(25): 20(21): 15(14): 36(11). Sole surfaces of 1st-4th segments with hair brushes; 5th segment covered ventrally with rather long, dense, subrecumbent hairs. Hind femur punctate and pubescent similarly to fore and middle femora. Hind tibia weakly curved, slightly widened toward apex; its pubescence nearly as that of middle tibia, except for denser short recumbent hairs along 3/4 of tibia length. Apical margin of tibia with 1 row of uniform strong setae along perimeter; spurs of subequal length. Hind tarsus not widened. Ratio of lengths (widths) of 1st-4th segments 60(15) : 32(13) : 23(13) : 42(11). Apex of 1st segment and ventral surfaces of 2nd-4th segments with dense yellow hairs (pubescence about as that on claw-segments of fore and middle tarsi). Claws of all tarsi regularly curved.

Aedeagus (Figs. 19–21) 3.6 mm long and 0.95 mm wide (body length 13 mm). Parameres gradually and almost straightly narrowing in basal 2/3, shallowly emarginate before distal third, with widely rounded apices. Median sulcus situated in depression along most of its length and poorly visible only at base (Fig. 19). Length of parameres 1.22 mm, width 0.7 mm. Phallobase about twice as long as parameres, distinctly widened from base to middle and then narrowing toward apex, weakly curved in lateral view, dorsally with longitudinal depression deep at base and shallow at apex (Fig. 20). Spiculum gastrale with sharply diverging and unequal branches (Fig. 22), weakly curved in lateral view (Fig. 23).

Length of body of male 13 mm, width 6 mm.

Material. Holotype: ♂, China, S Gansu, SSW Minxian, 6 km NE Luoda, NE Jiabu, ~2900 m, 12.VII.2002, I. Belousov, I. Kabak.

Diagnosis. The new species is closely related to *B. championi* (Reitter, 1891) described from Gansu, but differs from it in the size, shape of the pronotum, sculpture of the elytra, and structure of the metasternum and aedeagus.

Etymology. The species is named for I.I. Kabak.

CORRECTIONS

In the original text of the paper on the classification of tenebrionid beetles of the tribe Platyscelidini (Coleoptera, Tenebrionidae) (Egorov, 2004), the following errors were made: the phrases "Among them, it is important to mention the description of the new genera Platyscelis, Faustia Kraatz, 1882, and Somocoelia ..." (p. 584 [p. 643 in English translation in Entomol. Rev.]), "Platyscelis gages Fischer-Waldheim, 1832 (Kaszab, 1938d : 26) ..." (p. 594 [p. 651 in Entomol. Rev.])), and "A new subgenus of the genus Bioramix, Ovalobioramix (type species Platyscelis molesta Bogatshev, 1947 ..." (p. 612 [p. 641 in Entomol. Rev.]), should read, respectively: "Among them, it is important to mention the description of the new genera Platynoscelis, Faustia Kraatz, 1882, and Somocoelia ...," "Platynoscelis gages Fischer-Waldheim, 1823 (Kaszab, 1938d : 26) ...," and "A new subgenus of the genus Bioramix, Ovalobioramix (type species Platynoscelis molesta Bogatshev, 1947 ...". The species Bioramix (Cardiobioramix) kulzeri (Kaszab, 1960) (p. 597 [p. 645 in Entomol. Rev.]) should be placed in Section III, as it has been described from China (Sichuan).

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REFERENCES

- Egorov, L.V., "The Classification of Tenebrionid Beetles of the Tribe Platyscelidini (Coleoptera, Tenebrionidae) of the World Fauna," Entomol. Obozr. 83 (3), 581–613, (2004) [Entomol. Rev. 84 (6), 641–666 (2004)].
- Egorov, L.V., "A Review of Tenebrionid Beetles of the Genus *Trichomyatis* Schuster, 1931 (Coleoptera: Tenebrionidae: Platyscelidini)," Trudy. Russ. Entomol. O-va 77, 85–93 (2006).

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- Kaszab, Z., "Revision der Tenebrioniden-Tribus Platyscelini (Coleoptera, Tenebrionidae)," Mitt. Munch. Entomol. Ges. 30 (1), 119–235 (1940).
- Kaszab, Z., "Die Tenebrioniden Afghanistans, auf Grund der Ergebnisse der Sammelreise des Herrn J. Klapperich in den Jahren 1952/53 (Coleoptera)," Entomol. Arb. Mus. Frey 11 (1), 1–179 (1960).
- Medvedev, G.S., "Evolution and Classification of Tenebrionid Beetles of the Tribe Blaptini (Coleoptera, Tenebrionidae)," in *Readings in Memory of N.A. Kholodkovsky* (St. Petersburg, 2001), No. 53.
- Medvedev, G.S., "The Classification of Tenebrionid Beetles of the Genus *Prosodes* Eschsch. (Coleoptera, Tenebrionidae): IV. Subgenera *Prosodestes* Rtt. and *Gebleria* Motsch.," Entomol. Obozr. 84 (1), 62–107 (2005) [Entomol. Rev. 85 (1), 53–90 (2005)].
- Medvedev, G.S., "New Species of the Tenebrionid Genus Asidoblaps Fairm. (Coleoptera, Tenebrionidae) from Gansu and Sichuan Provinces of China," Entomol. Obozr. 84 (3), 531–568 (2005) [Entomol. Rev. 85 (6), 609–641 (2005)].
- Reitter, E., "Insecta Cl. G. N. Potanin in China et Mongolia novissime lecta XIII. Tenebrionidae," Horae Soc. Entomol. Ross. 23, 678–710 (1889).
- 9. Reitter, E., "Coleopterologische Notizen," Wien. Entomol. Zeit. **10**, 226–228 (1891).
- 10. Schuster, A., "Neue paläarktischen Tenebrioniden (Coleoptera)," Wien. Entomol. Zeit. **40**, 156–162 (1923).
- Tschinkel, W.R. and Doyen, J.T., "Comparative Anatomy of the Defensive Glands, Ovipositors and Female Genital Tubes of Tenebrionid Beetles (Coleoptera)," Int. J. Insect Morphol. Embryol. 9, 321–368 (1980).