РОССИЙСКАЯ АКАДЕМИЯ НАУК Южный научный центр

RUSSIAN ACADEMY OF SCIENCES Southern Scientific Centre



Kabkascknin Shtomoliolingecknin Bioliletehb

CAUCASIAN ENTOMOLOGICAL BULLETIN

Том 14. Вып. 2 Vol. 14. No. 2



Ростов-на-Дону 2018

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На титуле оригинальная фотография В.А. Кривохатского Distoleon tetragrammicus (Fabricius, 1798)

Специальный редактор выпуска (по Coleoptera: Tenebrionidae): Эрик Мэтьюс (Южноавстралийский музей, Аделаида, Австралия)

Special editor of the issue (on Coleoptera: Tenebrionidae): Eric G. Matthews (South Australian Museum, Adelaide, Australia)

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Русская версия журнала – http://www.ssc-ras.ru/ru/journal/kavkazskii_yntomologicheskii_byulleten/English version – http://www.ssc-ras.ru/en/journal/caucasian_entomological_bulletin/

Техническое редактирование и компьютерная верстка номера – С.В. и М.В. Набоженко; корректура – С.В. Набоженко

Издание осуществляется при поддержке Южного научного центра РАН (Ростов-на-Дону)

Журнал индексируется в eLibrary.ru, Thomson Reuters (Zoological Record, BIOSIS Previews, Russian Science Index Citation), ZooBank The journal is indexed/referenced in eLibrary.ru, Thomson Reuters (Zoological Record, BIOSIS Previews, Russian Science Index Citation), ZooBank



Гайирбег Магомедович Абдурахманов Gayirbeg Magomedovich Abdurakhmanov (1942–2018)

A new species of the genus *Oodescelis* Motschulsky, 1845 (Coleoptera: Tenebrionidae) from China

Новый вид рода *Oodescelis* Motschulsky, 1845 (Coleoptera: Tenebrionidae) из Китая

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State Nature Reserve "Prisursky", Lesnoy Settl., 9, Cheboksary 428034 Russia. E-mail: platyscelis@mail.ru Государственный природный заповедник «Присурский», пос. Лесной, 9, Чебоксары 428034 Россия

Key words: Coleoptera, Tenebrionidae, Platyscelidini, Planoodescelis, new species, Gansu, China. Ключевые слова: Coleoptera, Tenebrionidae, Platyscelidini, Planoodescelis, новый вид, Ганьсу, Китай.

Abstract. The new species Oodescelis (Planoodescelis) abdurakhmanovi sp. n. (Platyscelidini) is described from China (Gansu). The species is closest to Oodescelis kansouensis Kaszab, 1940 based on the habitus, general structure of male genitalia and pubescence of metafemora and tibiae, but clearly differs from the latter in the structure of the parameres of the aedeagus, the more transverse pronotum sharply narrowed in anterior third, and the elytra almost parallel sided in basal half.

Резюме. Описан новый вид *Oodescelis* (*Planoodescelis*) *abdurakhmanovi* **sp. n.** (Platyscelidini) из Китая. Вид по габитусу, общему плану строения гениталий самца, опушению его задних бедер и голеней наиболее близок к *Oodescelis kansouensis* Kaszab, 1940, однако хорошо отличается строением парамер эдеагуса, более поперечной и резкой суженной в передней трети переднеспинкой, почти параллельносторонними в базальной половине надкрыльями.

The genus *Oodescelis* Motschulsky, 1845 belongs to the tribe Platyscelidini Lacordaire, 1859 (Coleoptera: Tenebrionidae: Tenebrioninae) and includes 42 species from 11 subgenera [Egorov, 2008, 2009a, b]. At the same time, the taxonomic status of *Oodescelis* (*Acutoodescelis*) pyripenis Ren, 1999, *Oodescelis* (*Ovaloodescelis*) adriani Kaszab, 1940 and *Oodescelis* attenuata Motschulsky, 1860 needs clarification. Fourteen species in five subgenera are recorded in China [Egorov, 2006a, 2008].

The fauna of Chinese Platyscelidini has been studied extensively in recent years. However all new taxa described after 1999 belong to the large genus *Bioramix* Bates, 1879 [Egorov, 2006b; Li et al., 2013; Bai, Ren, 2016; Li et al., 2016a, b].

During the study of material from China (Gansu), kindly provided by I.I. Kabak and I.A. Belousov (St Petersburg), we found a new species of the genus *Oodescelis*, which belongs to the subgenus *Planoodescelis* Egorov, 2004 by morphology. This subgenus previously included only one species *Oodescelis kansouensis* Kaszab, 1940 [Kaszab, 1940; Egorov, 1989, 2004]. The description of this new species is given below.

The type series of the new species is deposited in the collection of the Zoological Institute of the Russian Academy of Sciences (St Petersburg, Russia).

Body measurements and characteristics of the density of punctation follow the usage in our other publications [Egorov, 2006b, c].

Oodescelis abdurakhmanovi **sp. n.** (Figs 1–8)

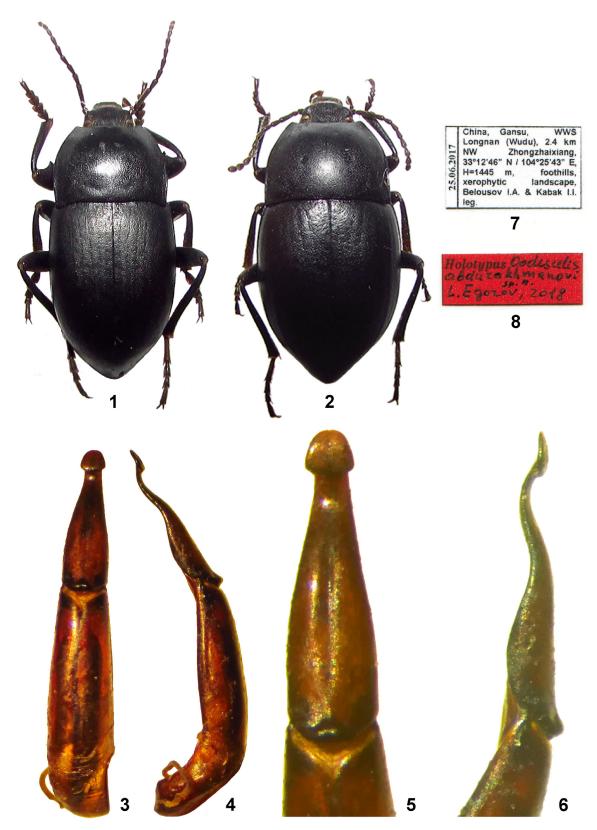
Material. Holotype, \circlearrowleft : China, Gansu, WWS Longnan (Wudu), 2.4 km NW Zhongzhaixiang, 33°12′46″N / 104°25′43″E, 25.06.2017, 1445 m (leg. I.A. Belousov, I.I. Kabak) (Fig. 7). Paratypes: 4 $^{\circ}$, collected with holotype.

Description. Head dorsally and pronotum weakly shiny, elytra matt. Head, ventral side of body, mouth structures, antennae and legs with pubescence. Dorsum black. Antennomeres 1 and 2, mouth structures (exluding mandibules), gula, coxae and trochanters dark brown.

Male (Fig. 1). Head widest behind eyes. Ratio of head width to interocular width 1.54. Labrum transverse (1.9 times as wide as long), with weakly sinuate anterior margin, finely shagreened and without punctation at the very base; punctation of other surfaces dense, irregular: punctures in transverse line at middle almost twice as large as other punctures; surface covered with long subrecumbent reddish-yellow hairs. Temples behind eyes roundly narrowed posteriorly, covered with sparse recumbent hairs. Anterior margin of genae sinuate on ventral side (lateral view), not pubescent. Most of genal surface with coarse and dense punctation and covered with recumbent hairs. Anterior margin of frontoclypeus weakly convex, with a group of anteriorly directed reddish-yellow hairs, reaching anterior margin of clypeo-labral membrane; punctation coarse and dense, only a small area at middle of base without punctation. Frontoclypeal suture fine, arcuate, not depressed. Surface of frontoclypeus and frons at middle between eyes pubescent with longer recumbent yellowish hairs. Punctation of head coarse, dense (as on frontoclypeus) or moderately dense, punctures on base weakly elongate. Ventral surface of head: temples microgranulated, gula with transverse wrinkles. Eyes strongly transverse, slightly emarginate anteriorly. Antennae barely reaching base of pronotum by apex of antennomere 11; antennomere 1 irregularly pyriform, with ratio of length/width 20: 13. Ratio of length(width) of antennomeres 2–11 as follows: 11(10):41(11):23(11):22(10):23(10):21(10):21(13):19(12):17(12): 24(14). Ratio of the sum of lengths of antennomeres to the sum of their width (antennal index): 1.92.

DOI: 10.23885/181433262018142-187190

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Figs 1–8. *Oodescelis (Planoodescelis) abdurakhmanovi* **sp. n**., general view and details of structure.

1 – male, holotype; 2 – female, paratype; 3 – aedeagus, dorsal view; 4 – aedeagus, lateral view; 5 – parameres, dorsal view; 6 – parameres, lateral view; 7–8 – holotype labels.

1 – самец, голотип; 2 – самка, паратип; 3 – эдеагус, вид сверху; 4 – эдеагус, вид сбоку; 5 – парамеры, вид сверху; 6 – парамеры, вид сбоку; 7-8 – этикетки голотипа.

Рис. 1–8. Oodescelis (Planoodescelis) abdurakhmanovi sp. n., общий вид и детали строения.

Pronotum weakly transverse (1.42 times as wide as long), 2.17 times as wide as head; widest at basal third, from which it very weakly arcuately narrows to base and distinctly arcuately narrows to apical margin. Ratio of width at anterior margin, at widest part and at base as follows: 67: 115: 112. Disc weakly convex, lateral sides very weakly flattened in anterior third and thereafter weakly impressed to base. Anterior margin strongly emarginate, base weakly bisinuate; anterior and posterior angles narrowly rounded at apex, acute. All lateral margins, lateral quarters of anterior margin and lateral thirds of base beaded. Lateral margin weakly S-shaped in lateral view. Punctation finer than on head, mainly dense or partly moderately dense on disc, finer on sides; punctures weakly elongate on disc and round near margins. Interspunctural space with fine isodiametric microsculpture. Outer margin of prothoracic hypomera strongly depressed in basal third and weakly depressed in anterior 2/3, pubescent with sparse recumbent hairs. Sculpture of hypomera not coarse, granulated, effaced along lateral margin. Anterior margin of prosternum beaded along head and effaced on lateral margins; basal margin finely beaded only at middle; pubescent with sparse recumbent hairs, anterior and basal margins with line of long reddish-yellow hairs; surface of prosternum without impression in anterior part, abruptly sloped to anterior margin, finely granulated. Hypomeral suture slightly S-shaped. Procoxae round, located near basal part of prosternum. Prosternal process projected as rectangular tooth near base of procoxae (lateral view); ratio of its width to maximal diameter of procoxae 10: 22; prosternal process pubescent with recumbent backwardly directed hairs, but its tooth pubescent with erect and forwardly directed reddish-yellow hairs.

Mesoventrite with almost straight and beaded anterior margin, with anchor-like keel in middle of anterior half, covered with sparse recumbent hairs; surface microgranulated, with weak and wide V-shaped depression, continued on mesoventral process between mesocoxae; mesoventral process beaded on margins, with weakly emarginate apex. Joint between meso- and metaventral processes located behind middle of mesocoxae. Metaventrite with coarse rasp-like sculpture in middle and microgranulated sculpture on sides, covered with sparse recumbent hairs. Process of metaventrite between metacoxae beaded on sides, its anterior margin sloped to process of mesoventrite (deep trasverse groove between meso- and metaventrite). Basal margin of metaventrite weakly emarginate at middle.

Elytral base distinctly wider than base of pronotum, almost parallel-sided up to middle and rounded, sharply narrowed to apex behind middle; apex weakly extended; 1.44 times as long as wide, 1.1 times as wide and 2.17 times as long as pronotum. Humeral angles evident, rounded at apex, weakly obtuse. Punctation much finer than on pronotum, sparse or not dense, with traces of 4-5 fine longitudial striae; interpunctural space with fine isodiametrical microsculpture. Disc weakly convex transversely and almost straight longitudinally, sides and apical part sloped. Epipleura narrow, with fine and sparse transverse wrinkles; merged with lateral elytral carina near apex. Lateral elytral carina (outer margin of pseudoepipleura) visible dorsally for its entire length, slightly thickened at basal part. Pseudoepipleura weakly flattened, finely and sparsely punctate (locally punctation almost effaced). Interpunctural space with fine isodiametrical microsculpture, matt.

Abdomen without dense hairs, surface covered with fine recumbent reddish-yellow hairs. Punctation not coarse, dense or moderately dense; abdominal ventrites 3–5 with wide shallow impressions at sides; ventrite 4 with additional, wide transverse impression near base; ventrites 3–4 beaded on lateral sides, ventrite 5 with interrupted bead at base.

Ratio of length(width) of pro-, meso- and metafemora 70(29): 82(20): 98(21), tibiae accordingly 65(11): 67(11): 92(12), tarsi accordingly 48(11): 68(8): 72(7). Profemora with sharp acute tooth on dorsal anterior margin, moderately densely

punctated, pubescent with recumbent hairs. Protibiae slender, weakly widened to apex, weakly curved basally; outer margin (extensor side) without strong setae (excluding apical angle), not blade-like; inner surface (flexion side) pubescent with dense and short subrecumbent reddish-yellow hairs from basal third to apex; ventral side granulated, with shallow transverse impression before apex, covered with sparse reddishbrown setae and recumbent hairs. Ratio of length(width) of protarsomeres 1-5 as follows: 10(10):10(11):9(10):8(9):11(6); plantar surface of protarsomeres 1-4 with hair brush; plantar surface of protarsomere 5 pubescent with dense and rather long subrecumbent hairs. Pubescense and punctation of mesofemora as on profemora. Mesotibiae pubescent with almost evenly elongate reddish-brown setae and sparse reddish subrecumbent hairs, only inner side of apical half with denser pubescence; inner side with weakly expressed carina starting from middle and disappearing near apex; apical margin with line of terminal identical strong reddish-brown setae; spurs subequal in length. Mesotarsi more weakly widened than protarsi, narrower than mesotibiae, covered dorsally with sparse hairs. Ratio of length(width) of mesotarsomeres 1-5 as follows: 15(9):9(8):8(7):7(6):19(5). Plantar surface of mesotarsomeres 1-4 with hair brush; plantar surface of mesotarsomere 5 pubescent with dense and rather long subrecumbent hairs. Metafemora punctated and pubescent almost like pro- and mesofemora; inner side slightly emarginate in basal half and pubescent here with longer, subrecumbent, dense, reddish-yellow hairs. Metatibiae almost straight, weakly widened to apex, on outer side pubescent like mesotibiae, on inner flexion side pubescent in distal two thirds with dense suberect reddishyellow hairs; carina on inner side evident from basal third almost to apex; apical margin with line of terminal identical strong reddish-brown setae; inner spur visibly longer that outer one. Metatarsi not widened; plantar surface of metatarsomeres not densely covered with reddish-brown hairs and setae, dorsally with recumbent hairs. Ratio of length(width) of mesotarsomeres 1-4 as follows: 33(6): 14(5): 11(5): 18(5). Claws of all tarsi evenly curved.

Aedeagus (Figs 3, 4) lengh 6.5 mm, width 1 mm. Parameres dorsally almost parallel-sided in basal third, then sharply almost straightly narowed and widened before apex (Fig. 5); with two merged tubercles at base (Figs 5, 6); middle groove barely visible for distal third and near base, and deeply depressed in middle; parameres strongly S-shaped in distal part (lateral view) (Fig. 6); length of parameres 2.5 mm, width 0.7 mm, 1.6 times shorter than phallobase. Phallobase almost straight in lateral view, only sharply curved near base (Fig. 4), with fine longitudinal groove dorsally (visible near apex and from middle to sharp bend).

Female (Fig. 2). Only differential characters are given. Body more robust. Antennae not reaching base of pronotum. Pronotum transverse, widest at base, from which it weakly, evenly narrows to middle, then sharply narrows to apex, 1.42-1.52 times as wide as long, 2.13-2.22 times as wide as head. Ratio of width at anterior margin, at widest part and at base as follows: 67: 108: 115. Elytra widely oval, more convex, weakly widened to middle, from which they sharply arcuately narrow to apex, 1.33-1.36 times as long as wide, 1.14-1.21 times as wide and 2.28-2.38 times as long as pronotum. Lateral sides of elytra weakly sinuate near apex, therefore apex of elytra more strongly extended than in male. Lateral elytral carina visible dorsally, but not for all its length. Abdomen pubescent with sparser and shorter hairs. Metafemora without dense pubescence. Metatibiae without dense erect hairs on inner side. Carina on inner side of metatibiae weakly expressed. Spurs of mesotibiae stronger than in male and differing in length. Pro- and mesotarsi not widened, without dense hair brush on plantar surface; pubescence of tarsi almost the same as in male metatarsi. Gonostyles of ovipositor not protruding.

Male body length 14 mm, width 6.3 mm; female body length 13.5-14 mm, width 6.4-6.9 mm.

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Differential diagnosis. The species is closest to *Oodescelis kansouensis* Kaszab, 1940 in habitus, general structure of male genitalia, and pubescence of metafemora and tibiae, but clearly differs in the structure of the parameres of the aedeagus, in the pronotum being more transverse and sharply narrowed in anterior third, and the elytra being almost parallel sided in basal half.

Distribution. The new species was collected in the western foothills of Min Shan Ridge (Min Mountains), sometimes included in the Hengduan Mountains; it occurs in areas with xerophytic vegetation.

Etymology. The species is dedicated to the memory of Gayirbeg Magomedovich Abdurakhmanov.

Acknowledgements

The author wishes to thank I.I. Kabak and I.A. Belousov (All-Russian Institute of Plant Protection, St Petersburg, Pushkin, Russia) for the material provided, N.V. Borisova (State Nature Reserve "Prisursky", Cheboksary, Russia) and M.L. Egorova (Cheboksary, Russia) for their help with preparation of illustrations, M.V. Nabozhenko (Caspian Institute of Biological Resources of the Russian Academy of Sciences, Makhachkala, Russia) and Eric G. Matthews (South Australian Museum, Adelaide, Australia) for the linguistic review and valuable comments.

References

- Bai L., Ren G. 2016. Two new species of the subgenus Cardiobioramix Kaszab from China (Coleoptera: Tenebrionidae: Bioramix). Zoological Systematics. 41(2): 186–194. DOI: 10.11865/zs.201617
- Egorov L.V. 1989. New species and subspecies of the genus *Oodescelis* Motsch. (Coleoptera, Tenebrionidae) of the USSR fauna. *In:* Trudy Zoologicheskogo Instituta AN SSSR. T. 208. Voprosy sistematiki zhestkokrylykh [Proceedings of the Zoological Institute, USSR

- Academy of Sciences. Vol. 208. Problems of systematic of Coleoptera]. Leningrad: Zoological Institute of the Academy of Sciences of the USSR: 102–106 (in Russian).
- Egorov L.V. 2004. On the classification of the tenebrionid tribe Platyscelidini (Coleoptera, Tenebrionidae) of the world. *Entomological Review*. 84(6): 641–666.
- Egorov L.V. 2006a. On the distribution of the tenebrionid tribe Platyscelidini (Coleoptera, Tenebrionidae). *Cahiers Scientifiques du Muséum de Lyon*. 10: 139–142.
- Egorov L.V. 2006b. New species of the tenebrionid-beetle subgenus Cardiobioramix Kasz., genus Bioramix Bat. (Coleoptera, Tenebrionidae, Platyscelidini), from the Chinese Provinces Gansu and Sichuan. Entomological Review. 86(9): 1016–1023.
- Egorov L.V. 2006c. Review of tenebrionid beetles of the genus *Trichomyatis* Schuster, 1931 (Coleoptera: Tenebrionidae: Platyscelidini). *In*: Trudy Russkogo entomologicheskogo obshchestva. T. 77 [Proceedings of the Russian Entomological Society. Vol. 77]. St Petersburg: Zoological Institute of the Russian Academy of Sciences: 85–93 (in Russian).
- Egorov L.V. 2008. Tribe Platyscelidini Lacordaire, 1859. *In*: Catalogue of Palaearctic Coleoptera. Vol. 5. Tenebrionoidea. (I. Löbl, A. Smetana eds). Stenstrup: Apollo Books: 291–297.
- Egorov L.V. 2009a. Darkling beetles of the tribe Platyscelidini (Coleoptera, Tenebrionidae) of the world: morphology, zoogeography, system. In: Chteniya pamyati N.A. Kholodkovskogo. T. 61, ch. 1 [Meetings in memory of N.A. Cholodkovsky. Vol. 61, part 1]. St. Petersburg: Zoological Institute of the Russian Academy of Sciences: 1–122 (in Russian).
- Egorov L.V. 2009b. New species of the tenebrionid beetle genus *Oodescelis* Motschulsky, 1845 (Coleoptera: Tenebrionidae: Platyscelidini) from the West Tien Shan. *Caucasian Entomological Bulletin*. 5(2): 217–220 (in Russian).
- Kaszab Z. 1940. Revision der Tenebrioniden-Tribus Platyscelini (Coleoptera, Tenebrionidae). Mitteilungen der Münchener Entomologischen Gesellschaft. 30(3): 896–1004.
- Li Y.C., Egorov L.V., Shi A.M. 2013. Two new species of the genus *Bioramix*Bates, 1879 (Coleoptera: Tenebrionidae: Platyscelidini), from the
 Chinese Provinces Sichuan and Tibet. *Caucasian Entomological*Bulletin. 9(1): 89–94. DOI: 10.23885/1814-3326-2013-9-1-89-94
- Li Y.C., Egorov L.V., Shi A.M. 2016a. Three new species of the subgenus Leipopleura Seidlitz from Tibet, China (Coleoptera, Tenebrionidae, Bioramix Bates). ZooKeys. 609: 29–41. DOI: 10.3897/zookeys.609.8250
- Li Y.C., Egorov L.V., Shi A.M. 2016b. Two new species of the subgenus *Cardiobioramix* Kaszab (Coleoptera: Tenebrionidae: *Bioramix* Bates) from the Sichuan Province, China. *Zootaxa*. 4111(5): 584–590. DOI: 10.11646/zootaxa.4111.5.4

Received / Поступила: 20.10.2018 Accepted / Принята: 8.11.2018