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Short scientific note

A new species of *Otiorhynchus* from central Asia (Coleoptera: Curculionidae)

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Abstract
Is described and illustrated the parthenogenetic species *Otiorhynchus* (*Eprahenus*) *cooteri* **sp. n.** from Kazakhstan and Uzbekistan, close to the amphigonic *O. aksudshabaglinus* Bajtenov, 1974 from an adjoining area of Kazakhstan. The new species is allied with other central Asiatic *O.* (*Eprahenus*), with all of which is shortly compared, whereas other members of the subgenus occurring in the Caucasus and surrounding area appear rather distantly related with the ones here considered. *Otiorhynchus kasakhstanicus* Arnoldi, 1964 is moved to *O*. (*Zariedus*) Reitter, 1912 from *O*. (*Eprahenus*) Reitter, 1912.

Key words: *Otiorhynchus (Eprahenus) cooteri*, new species, *Otiorhynchus* (*Zariedus*), Kazakhstan, Uzbekistan, Coleoptera, Curculionidae.

Introduction

During the ongoing studies of the first author on the Otiorhynchini from central Asia some new taxa were discovered by him, but the passing away of this outstanding taxonomist left them undescribed. While reviewing his notes, the second author found an incomplete description referring to a new species comprised by Magnano in a new subgenus, and decided to undertake the task of ending it. However, the speciose and almost surely composite genus *Otiorhynchus* Germar, 1822 is at the moment in such a chaotic taxonomic status, in particular for what concerns the borders between its 113 subgenera, that it seems unwise to propose an additional new subgeneric name. Nonetheless, the species here described forms together with the ones from central Asia a small group sharing a number of characters which in a way isolate them from the primarily Caucasian species of *O.* (*Eprahenus*) Reitter 1912, subgenus presently including some *Otiorhynchus* close to the new one (Magnano & Alonso-Zarazaga 2013). *Otiorhynchus kasakhstanicus* Arnoldi, 1964, although listed under *O.* (*Eprahenus*) by Magnano & Alonso-Zarazaga (2013), is completely different from all the hitherto known *O*. (*Eprahenus*), and is thus here moved to *O*. (*Zariedus*) Reitter, 1912, subgenus to which all its related species are presently comprised.

With this moving, the 13 central Asian species of *O*. (*Eprahenus*), differing as a rule from the Caucasian ones by their plump and rather shining body, at least in part punctured pronotum, lifted or semierect usually woolly setae, and elytra with comparatively shallowly or even almost impunctate striae, appear to form a group of closely related taxa - some of them parthenogenetic - which are distributed across the high mountain ranges of Tian-Shan, Pamir and Himalaya, whereas all the remaining 16 species occur in the Caucasus and surrounding area (Davidian & Savitsky 2006).

Material and methods

Measurements of the specimens were taken using a micrometer associated to a Wild M5 microscope. Total length is that of pronotum plus elytra, where rostral, pronotal and elytral length and width are the maximum ones, respectively. Genitalia are embedded in DHMF or preserved in microvials with glycol pinned with the specimen. Pictures were taken with a Nikon D90 camera and an AF Micro Nikkor 60 mm lens, and then elaborated with the programs Helicon Focus 5 and Adobe Photoshop PS4.

Type depositories are as follows: ECRI (= Enzo Colonnelli collection, Rome, Italy); JCHE (= Jonathan Cooter collection, Hereford, England); MZUR (= Museo di Zoologia dell'Università degli Studi "Sapienza", Roma); RCRI (= Roberto Casalini collection, Rome, Italy); SZMN (= Siberian Zoological Museum of the Institute of Animal Systematics and Ecology, Siberian Branch of Russian Academy of Sciences, Novosibirsk).

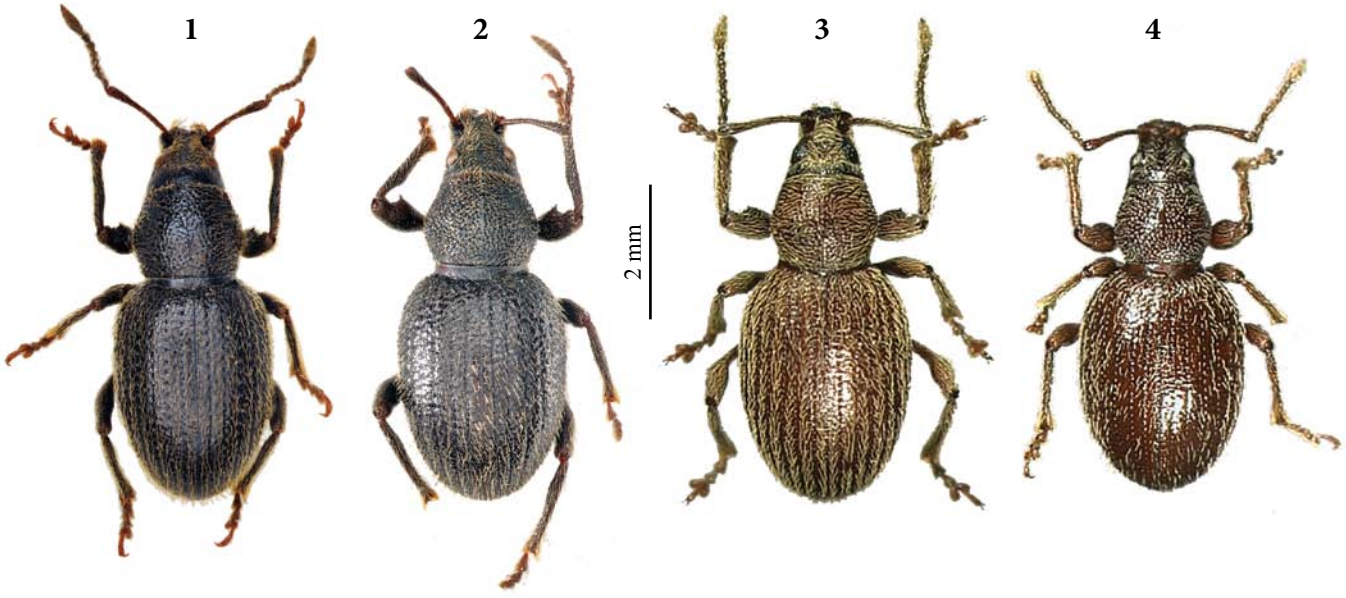
***Otiorhynchus (Eprahenus) cooteri* sp. n.**

Diagnosis
An almost surely parthenogenetic species close to the amphigonic and almost syntopic *O. aksudshabaglinus*, from which differs by the rather sparse punctures on pronotal disc and the only slightly lifted setae on elytral disc.

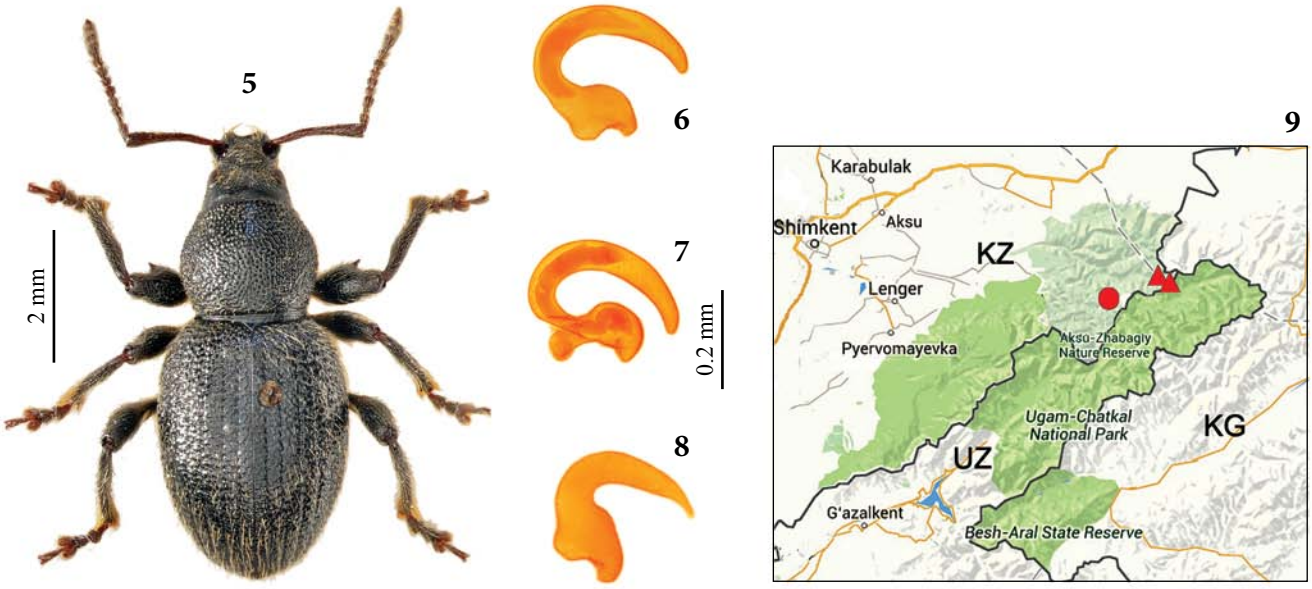
Type series. **Kazakhstan**: "Kazakhstan / W. Tian-Shan, / Chimkent Reg., / Aksu-Dzhabagly State N. R." printed on upper side and "70°39' / 42°22'30" handwritten on underside; "Ulken Kaindi Pass, / 3000 m, / 14.vi.1999. / Leg. J. Cooter" partly printed on upper side and "under / stone" handwritten on underside, 1 ♀ Holotypus (Oxford University Museum of Natural History) and 29 ♀♀ paratypes (6 ECRI, 19 JCHE, 1 MZUR, 1 RCRI, 2 SZMN). "Kazakhstan / W. Tian-Shan, / Chimkent Reg., / Aksu-Dzhabagly State N. R.» printed on upper side and «70°37' / 42°22' handwritten on underside; «Ulken Kaindi Pass, / 3000 m, / 13.vi.1999. / Leg. J. Cooter" partly printed on upper side and «snowmelt / - under stone» handwritten on underside, 1 ♀ paratypus (JCHE). "Kazakhstan / W. Tian-Shan, / Chimkent Reg., / Aksu-Dzhabagly State N. R.» printed on upper side and «70°37' / 42°23' handwritten on underside; «Ulken Kaindi Pass, / 3000 m, / 11.vi.1999. / Leg. J. Cooter" partly printed on upper side and «snowmelt» handwritten on underside, 1 ♀ paratypus (JCHE).

Other material. **Uzbekistan**: "Uzbekistan; S-W. Ťan-Šan Mt.; Ugam Mt." / "Urumgač valley; 1500-2500 m 26.6.90 / Dr. A. Hamet lgt.", 3 ♀♀ (ECRI). Spiculum ventrale and spermateca of the holotype are in a microvial filled with glycol, whereas metaventrites 4 and 5 are glued dry on the same label bearing the specimen.

Holotypus ♀
Length mm 5.5, maximum elytral width mm 2.75. Piceous, antennae and tarsi brownish. Rostrum 1.23 times as wide as long, pterigia barely widening outwards, scrobes open forward. Epistome crescent-shaped, its posterior margin keeled. A transverse keel separates frons from epifrons at the level of antennal insertion. Epifrons not bordered on sides by any keel, and carinate on midline. Rostral punctures rather dense and separate each other by a distance equal to half the diameter of one of them. Scape gradually thickening towards apex. Antennomeres 1 and 2 three times longer than wide and of about the same length; third to seventh hardly longer than wide; club fusiform, three times as long as wide and equal in length to the four preceding antennomeres. Head twice as long as wide, eyes subdorsal and slightly oval; interocular distance the same as epifrons between antennae and twice the greater diameter of an eye, head and rostrum conical up to pterygia, punctures on head similar to those on rostrum. Prothorax 1.1 times as wide as long, sides strongly rounded, maximum width basad of middle, anterior margin narrower than finely bordered base. Pronotal punctures small and separate each other by a distance equal to the diameter of one of them. Elytra oval, 1.4 times as long as wide, maximum width at basal quarter, barely narrowing at apical third, then rounded towards apex. Strial punctures rather minute, slightly oval, distance between them the same as the length of one of them. Interstriae flat, twice as wide as striae and with two irregular rows of small punctures replaced on lateral intervals and on posterior declivity by minute granules. Dorsal clothing formed by pale slanted yellowish setae as long as the width of one interstria, directed towards midline on head and pronotum, and forming 2-5 irregular rows on elytral intervals, being these se-



Figs 1-4 – Habitus of *Otiorhynchus* spp.: **1**, *O. cooteri* sp. n., holotype; **2**, *O. aksudshabaglinus* Bajtenov, female paratype; **3**, *O. schmidtianus* Behne, holotype from Behne (2003); **4**, *O. gilgitensis* Braun, female paratype from Behne (2003).



Figs 5-9 – 5, habitus of *Otiorhynchus aksudshabaglinus* Bajtenov, male paratype. Spermathecae of *Otiorhynchus* spp.: **6**, *O. cooteri* sp. n., paratype; **7**, *O. schmidtianus* Behne, holotype from Behne (2003); **8**, *O. gilgitensis* Braun, female paratype from Behne (2003). **9**, distribution of *O. cooteri* sp. n. (triangles) and *O. aksudshabaglinus* Bajtenov (circle) (KG = Kyrgyzstan, KZ = Kazakhstan and UZ = Uzbekistan).

tae sligtly more lifted on elytra, particularly on declivity. Urosternites smooth and shiny, urosternite 1 granulate between metacoxae, whereas all the remaining ones are quite sparsely punctured separated each other by a distance equal to 3 times or more the diameter of one of them, each puncture bearing a seta similar to those on elytra. Habitus as in Fig. 1, spermatheca as depicted in Fig. 6.

Variability

All specimens are very similar each other and to the holotype, just density of pronotal punctures varies a little. Length: 4.5-3.5 mm.

Etymology

The new species is named after Jonathan Cooter (Hereford, UK) who collected most of the specimens.

Comparative notes

Otiorhynchus cooteri is very close to *O. aksudshabaglinus* Bajtenov, 1974 from Aksu-Zhabagly, a locality adjoining those where the new species was collected. The new species differs from *O. aksudshabaglinus* by the larger eyes more approached each other since the interocular distace is the same as epifrons between antennae instead of one third wider than it like in *O. aksudshabaglinus*, shorter club, dorsum of pronotum punctured instead of somewhat finely granulate, shorter elytra, setae on dorsum of elytra slightly lifted instead of suberect, femora with smaller tooth (Figs 1-2). In addition, being the 33 known specimens of *O. cooteri* all females, it is almost sure that the new species is parthenogenetic instead of amphigonic like *O. aksudshabaglinus*.

Among the central Asian *O.* (*Eprahenus*), the new species is not unlike the parthenogenetic *O. schmidtianus* Behne, 2003 (Figs 1, 3, 6, 7) from Nepal, which differs from *O. cooteri* by ist piceous instead of brownish derm colour, shorter pronotum 0.95-0.98 instead of 1.1 times as wide as long, elytral base with transverse glossy ridge, second antennomere twice instead of at most 1.5 times as long as first one (Behne 2003). The amphigonic *O. gilgitensis* Braun, 1988 from Pakistan (Figs 4, 8) has piceous integument, eyes quite strongly convex, plumper elytra, pronotum with smooth central line, different shape of spermatheca (Braun 1988; Behne 2003). The remaining central Asian species are more distantly related with the new one. In particular both *O. arctos* Reitter, 1914 from Tadzikhstan and *O. juldusanus* Reitter, 1914 from Tien-Shan are immediately differentiated from *O. cooteri* because of their granulose pronotum (Reitter 1914). *Otiorhynchus haplolophus* Reitter, 1914 from Kazakhstan has reddish legs, femora with barely perceptible tooth, and its size is not above mm 4.5 (Reitter 1914), whereas *O. pertinax* Faust, 1887 from Tian-Shan, besides its reddish legs and antennae and hardly visible femoral teeth, has pupillate punctures of pronotum, quite strong elytral striae, long and erect elytral setae (Faust 1887a). *O. conradti* Faust, 1887 from Uzbekistan and Xinjiang has striae formed by deep large punctures and rostrum separate from epifrons by a sulcus (Faust 1887a). The same feature plus coarser punctures and smooth central line on pronotum (Braun 1998) separate from the new species *O. planulus* Braun, 1998 from Pakistan. On the other hand, both *O. albohirtus* Faust, 1887 from Kazakhstan, Kyrgyzstan, Uzbekistan, and *O. zariedoides* Reitter, 1914 from Kyrgyzstan and Uz-

bekistan have dorsum of elytra with long erect setae, which is not the case of *O. cooteri* (Faust 1887b, Reitter 1914). The pronotum of *O. marshalli* F. Solari, 1937 from Pakistan (= *O. peregrinus* Marshall, 1916 not *O. peregrinus* Stierlin, 1861) has pronotum with maximum width basad of middle, sides strongly rounded and dorsum with smooth central line on its apical half, and anterior tibiae denticulate on inner margin (Marshall 1916). The last remaining Asian species is *O. ketmenicus* Bajtenov, 1974 from Kyrgyzstan - not Kazakhstan as wrongly reported by Magnano & Alonso-Zarazaga (2013) - which differs immediately from *O. cooteri* by the interocular distance much narrower than that between antennal insertion on rostrum, and much more elongate elytra (Bajtenov 1974). The peri-Caucasian species of *O.* (*Eprahenus*) are only distantly related, and cannot be thus confused, with the here described one.

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