

Description of new species from the genera *Odontotrypes* Fairmaire, 1887 and *Phelotrupes* Jekel, 1866 (Coleoptera: Scarabaeoidea: Geotrupidae)

Описание новых видов из родов *Odontotrypes* Fairmaire, 1887 и *Phelotrupes* Jekel, 1866 (Coleoptera: Scarabaeoidea: Geotrupidae)

**I.V. Shokhin
И.В. Шохин**

Southern Scientific Centre RAS, Chekhov str., 41, Rostov-on-Don 344006 Russia. E-mail: ishohin@mail.ru
Южный научный центр РАН, ул. Чехова, 41, Ростов-на-Дону 344006 Россия

Key words: Geotrupidae, *Odontotrypes*, *Phelotrupes*, China.

Ключевые слова: Geotrupidae, *Odontotrypes*, *Phelotrupes*, Китай.

Abstract. Two new species of Geotrupidae are described: *Odontotrypes meigu* sp. n., related to *O. emei* Král, Malý et Schneider, 2001, but differs from the latter in the shorter wings, and *Phelotrupes* (s. str.) *kerzhneri* sp. n., distinguished by the area between suture and humerus with 5 striae.

Резюме. Описываются два вида Geotrupidae: *Odontotrypes meigu* sp. n. (близок к *O. emei* Král, Malý et Schneider, 2001, отличается укороченными крыльями) и *Phelotrupes* (s. str.) *kerzhneri* sp. n., отличающийся крыльями несущими только 5 бороздок между швом и плечевым углом.

Introduction

Genera *Odontotrypes* Fairmaire, 1887 and *Phelotrupes* Jekel, 1866 are distributed in the border area between Palearctic and Oriental biogeographic regions, mainly in the mountain areas. Maximum of their diversity is situated in the Chinese provinces Sichuan and Yunnan, where brachypterous representatives of these genera form a considerable portion of local endemics [Král, et al, 2001; Löbl, et al, 2006]. The descriptions of 2 new species from the National Republic of China are given. Holotypes of the new species are transferred to the collection of the Zoological Institute of the Russian Academy of Sciences (ZISP), other material is preserved in the author's collection (ISC).

Odontotrypes meigu sp. n.

(Fig. 6, 7 color plate 1, fig. 2, 4, 5)

Type material. Holotype, ♂: China, S Sichuan, mts 40 km N Meigu, h = 2900 m, 17-19 VI 2006 leg. I. Shokhin, S. Murzin (ZISP). Paratypes: 6 ex. (including 2♀ 4♂), label. (1♀ – ZISP, others – ISC).

Description. Body length 12-19 mm (HT – 17 mm). Oblong-oval, convex; black, dorsal surface of head, pronotum, scutellum and elytron cuprous-green, with metallic luster. Tibia, tarsi, mouthparts black, shiny, claws brownish. Habitus as in color plate 1, fig. 2.

Male. Head. Labrum truncate anteriorly. Anterior clypeal margin angulate. Clypeal disc slightly elevated, with vague tubercle

in its posterior third. Area of frontoclypeal junction slightly depressed. Two strong tubercles between eyes. Clypeal surface rugosely punctate, vertex coarsely and densely, almost evenly punctate.

Pronotum with deep and dense punctation. Longitudinal midline present in basal third to half as irregular row of punctures; large exemplars having groove, other space empty, with individual punctures. Sides of pronotum with dense punctation, separate punctures can merge into grooves, lateral margins slightly rugose. Surface between punctures lustre, shagreen, with microsculpture consisting of small splits. Pronotum entirely bordered, basal border shortly interrupted laterally. Lateral margin slightly crenulate. Pronotum of large males in front with distinct depression.

Scutellum broadly triangular, slightly subparallel basally, except for basal margin slightly bordered, with several punctures.

Elytron with weakly developed humeri, their base distinctly narrower than pronotum. Area between suture and humerus with 7 striae; striae 1 – more staright, others – confluent, twisting, frequently bifurkating and crossing. Intervals poorly convex, frequently merging or, on the contrary, crossing. Sutural interval plain and more convex.

Brachypterous (color plate 1, fig. 4)

Parameres – figs. 6, 7. Endofallus – color plate 1, fig. 5. The internal sack is described for the first time for the genus *Odontotrypes*. Endophallus short, having three parts; at base with small ledge smoothly narrowed apically It is directed to the side from the main plane, approximately 45 degrees from an axis of symmetry. Median part as short bent tube densely covered by sclerites forming a uniform field. Endophallus apex as rounded camera, without fields of sclerites. Separate large sclerites absent.

Female without pronotal depression, tubercles between eyes slightly prominent, protibial denticles vague.

Differential diagnosis. Based on the structure of the anterior clypeal margin it is related to the species-group of *O. impressiusculus* (Fairmaire, 1887), and related to species with the markedly rugose elytra and crenulated margins of pronotum. New species is the closest to *O. emei* Král, Malý et Schneider, 2001. It differs from the latter in the features of colouration (strong brassy shine), structure of parameres, and short wings.

Etymology. The name is derived from the area of the known distribution of the new species, Meigu.

Distribution. China (S Sichuan).

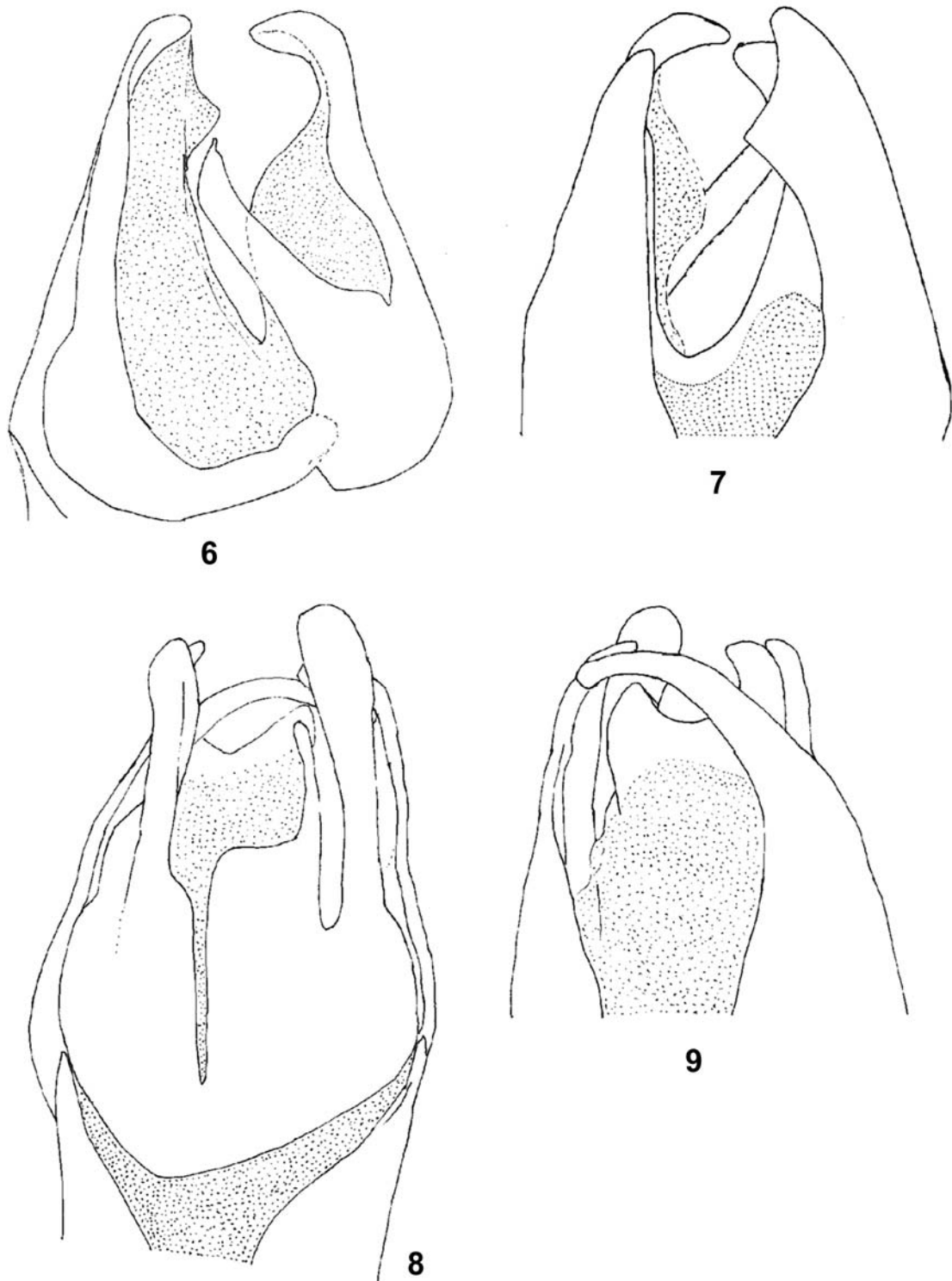


Fig. 6–9. Parameres.

6, 7 – *Odontotrypes meigu* sp. n.; 8, 9 – *Phelotrupes* (s. str.) *kerzhneri* sp. n. 6, 8 – dorsal view; 7, 9 – ventral view.

Рис. 6–9. Парамеры.

6, 7 – *Odontotrypes meigu* sp. n., 8, 9 – *Phelotrupes* (s. str.) *kerzhneri* sp. n. 6, 8 – сверху, 7, 9 – снизу.

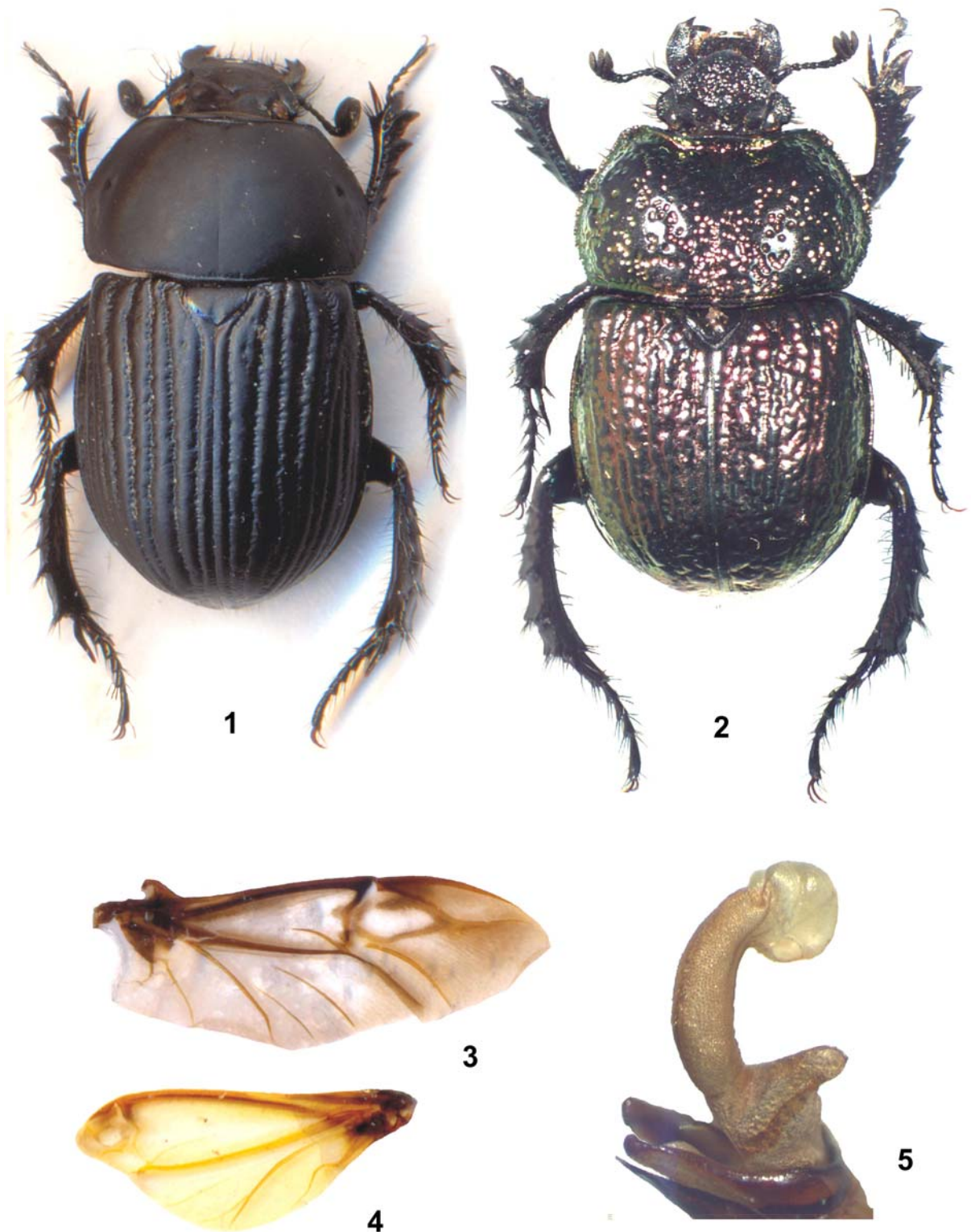


Fig. 1-5. Details of structure. 1, 3 – *Phelotrupes* (s.str.) *kerzhneri* sp. n., 2, 4, 5 – *Odontotrypes* (s.str.) *meigu* sp. n. 1, 2 – habitus, 2, 4 – wing, 5 – endophallus.

Рис. 1-5. Детали строения. 1, 3 – *Phelotrupes* (s.str.) *kerzhneri* sp. n., 2, 4, 5 – *Odontotrypes* (s.str.) *meigu* sp. n. 1, 2 – габитус, 2, 4 – крыло, 5 – эндофаллус.

Phelotrupes (s. str.) *kerzhneri* sp. n.

(Fig. 8, 9, color plate 1, fig. 1, 3)

Type material. Holotype: ♂, China, W. Yunnan, Haba Mts., Bailakou pass., h = 4200 m, 12.07.2002, leg S. Murzin, I. Shokhin (ZISP). Paratypes: 1 ♀, the same, 3450 m, 10.07.2002; 1 ♂, China, Yunnan, Mts. W Zhongdian (Shangri-La), h = 3800–4300 m, 26.05–14.07.2006, leg I. Shokhin, S. Murzin (ISC).

Description. Body length 16–17 mm. Oblong, convex, completely black, without metal shine, surface of head, pronotum and elytra shagreen (color plate 1, fig. 1).

Labrum slightly emarginated anteriorly, anterior clypeal margin semicircular. Pronotum convex, smooth, entirely bordered, except anterior angles and basal border shortly interrupted laterally. Lateral side with 1 deep puncture.

Scutellum broadly triangular, subparallel basally, narrowed sides slightly bordered.

Elytra with distinct humeri, their surface with 10 striae, area between suture and humerus with 5 striae intervals slightly convex, 2nd interval considerably wider and formed from merge of two intervals, sometimes has deep punctures (reduced striae, especially basally) other intervals sometimes with punctures too striae deeply irregularly punctated.

Macropterous (Color plate 1, fig. 3).

Parameres as in figs. 8, 9.

Metafemur of male armed, in female – simple.

Differential diagnosis. The new species differs from other described species by the structure of elytra, each having only 5 striae between suture and humerus.

Etymology. Patronymic; named in honour of the outstanding entomologist Izyaslav Moiseevich Kerzhner.

Distribution. China (Yunnan).

Acknowledgements

The author is much obliged to Dr. A.Yu. Solodovnikov (Zoological Museum, University of Copenhagen, Denmark) for the linguistic review of the manuscript.

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