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A new genus of trechine beetles, *Puertrechus* gen. n., with two new species and a new species of *Dactylotrechus* Belousov et Kabak, 2003 from Southern China (Coleoptera: Carabidae: Trechinae)

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Abstract

Puertrechus gen. n., related to both *Dactylotrechus* and *Quiennectrechus* Deuve, 1992 is established to accommodate two new trechine species: *P. mengsaensis* sp. n. (type species of the genus, type locality: Mountains East of Mengsa City, Lincang Prefecture, Yunnan, China) and *P. daxueshanicus* sp. n. (type locality: Daxueshan Mount, the same prefecture). Likewise, the second species of the genus *Dactylotrechus* Belousov & Kabak, 2003, *D. yalongensis* sp. n., is described from the right bank of the Yalong River, SW of Mianing, southern Sichuan, China. This species differs from the only known species of the genus in some important characters including the elytral chaetotaxy and the male genitalia structure. Some adjustments of the genus diagnosis are made to embrace the new species. Keys to species of *Dactylotrechus* and *Puertrechus* gen. n. are included and their distribution is mapped. A key is provided to differentiate *Puertrechus*, *Dactylotrechus* and *Quiennectrechus*.

Key words: *Quiennectrechus*, *Puertrechus*, taxonomy, carabids, Trechini, Sichuan, Yunnan, China

Introduction

In 1992, Thierry Deuve described a new genus and a new species of trechine beetles, *Quiennectrechus excentricus* Deuve, 1992, which was unique among all Chinese Trechini in having the hind angles of the pronotum modified in digitiform processes (Deuve, 1992 a) resembling those of *Gipsyella patagonica* Schweiger, 1959 from Tierra del Fuego (Deuve, 1992 b). Later, Uéno Shun-Ichi described a second member of the genus, *Quiennectrechus smetanai* S. Uéno, 1995. Among other characters, this species differs from *Q. excentricus* in the increased number of elytral setiferous discal pores (four or five vs. three in *Q. excentricus*). This character state, rather unusual for most Trechini, made it much easier to determine the taxonomic position of *Quiennectrechus*, which was placed by Uéno in the *Kozlovites* lineage of the *Agonotrechus* phyletic series (Uéno, 1995). According to this author, this lineage includes apart from *Kozlovites caviceps* Jeannel, 1935 and *Quiennectrechus*, one more genus, *Deuveotrechus* S. Uéno, 1995 established by him (Uéno, 1995) for *Kozlovites yuae* Deuve, 1992 and *Stevensius gregoryi* Jeannel, 1937 (Jeannel, 1937; Deuve, 1992). Despite the obvious heterogeneity of the *Agonotrechus* series (Belousov & Kabak, 2014), the *Kozlovites* lineage of its own seems to be a well defined natural group of trechines. Despite unusual shape of the pronotal hind angles, *Quiennectrechus* demonstrate clear affinities with its members in some important characters, including: elongate ovate body, rather long tempora, strong constriction of the pronotal base, lateral border of the pronotum more or less reduced posteriorly, and increased number of the discal setiferous pores on the elytra typical of most members of the genus (Belousov & Kabak, 2003).

In 2003, the authors of the present paper described a new genus and a new species, *Dactylotrechus setosus* Belousov & Kabak, 2003. This genus shares with *Quiennectrechus* a similar structure of the pronotal hind angles. Eight years later, a second member of *Dactylotrechus* was found in the basin of the Yalong Jiang. This species is described in the current paper and the diagnosis of the genus is modified to incorporate it.

- .) Elytra, pronotum and head without any trace of microsculpture; pronotal sides more weakly sinuate before hind angles which are noticeably shorter and produced more backward; Lateral groove of pronotum and elytra narrower; exterior setiferous pore on elytra located mostly at level between umbilicate pores 3 and 4. Ventral surface of aedeagus (Figs. 13–14) deeply impressed and carinate laterally in basal portion, with massive apical part, apex longer. Southern Yunnan: Lincang Prefecture: Mt Daxueshan (Fig. 15) *P. daxueshanicus* sp. n

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References

- Belousov, I.A. & Kabak, I.I. (2000) Contribution to the knowledge of species of the genus *Trechus* Clairv. (Coleoptera, Carabidae) of China. *Revue d'Entomologie de l'URSS*, 79, 49–78. [in Russian]
- Belousov, I.A. & Kabak, I.I. (2003) New Trechini from China (Coleoptera, Carabidae) (Coleoptera, Carabidae). *Tethys Entomological Research*, 8, 15–86.
- Belousov, I.A. & Kabak, I.I. (2014) A taxonomic review of the genus *Junnanotrechus* Uéno & Yin, 1993 (Coleoptera: Carabidae: Trechinae), with description of six new species. *Zootaxa*, 3811 (4), 401–437.
<http://dx.doi.org/10.11646/zootaxa.3811.4.1>
- Deuve, Th. (1992 a) Un nouveau genre de Trechinae des montagnes du Sichuan (Coleoptera, Trechidae). *Bulletin de la Société entomologique de France*, 96 (1991), 354.
- Deuve, Th. (1992 b) Contribution à la connaissance des Trechidae asiatiques (Coleoptera). *Bulletin de la Société entomologique de France*, 97, 171–184.
- Jeannel, R. (1928) Monographie des Trechinae. Morphologie comparée et distribution géographique d'un groupe de coléoptères. (Première livraison). *L'Abeille, Journal d'Entomologie*, 32, 221–550. [1928 (1926)]
- Jeannel, R. (1937) Nouveaux trechinae paléarctiques [Col. Carabidae]. *Bulletin de la Société entomologique de France*, 42, 82–88.
- Uéno, Sh.-I. (1995) A second species of the trechine genus *Queinnectrechus* (Coleoptera, Trechinae). *Bulletin of the Natural Sciences Museum (A)*, 21, 93–102.
- Uéno, Sh.-I. (1996) A new humicolous species of the *Stevensius* complex (Coleoptera, Trechinae) from western Yunnan, southwest China. *Elytra*, 24, 13–20.