Linzer biol. Beitr.	31/1	345-350	30.7.1999
			1

A new species of *Derops* SHARP from China (Coleoptera, Staphylinidae, Tachyporinae)

M. SCHÜLKE!

A b s t r a c t: Derops puetzi spec. nov. from China (Sichuan) is described and distinguished from related species. The male and female sexual characters are illustrated.

K e y w o r d s: Coleoptera, Staphylinidae, Tachyporinae, *Derops*, China, Shaanxi, Sichuan, new species.

Introduction

The genus *Derops* Sharp is distributed in the Nearctic, the Palearctic and the northern part of the Oriental region with nine described species. The Palearctic range of the genus is still disjunct, because species of the genus have been described from Korea, Japan, the Far East of Russia, and also from the Himalayas. The genus was recently revised by SMETANA (1983) and WATANABE (1985), new species were later added by WATANABE (1993, 1996) and SMETANA (1995). During the past years, specimens of at least one additional undescribed species from Sichuan and Shaanxi (China) were collected. This record shows that the disjunct distribution of the genus is merely a result of the lack of material from most of the Eastern Palearctic region, especially China. The new species was collected near small creeks in forests and in wet extensively used fields at altitudes of 650 to 1400 m. Species of the genus *Derops* are all very similar in coloration, punctation and body shape. For a safe identification an examination of the primary and secondary sexual characters is essential.

Derops puetzi spec. nov. (Fig. 1-8)

Holotype &: China, Sichuan, Qincheng Shan NW Chengdu, 650-700m, 30.53.57N, 103.32.23E, 3./4.06.1997, M. Schülke / Holotypus &, *Derops puetzi* spec. nov., det. M. Schülke 1998 (red) (coll. Schülke).

Paratypes: China, Sichuan, Qincheng Shan NW Chengdu, 650-700m, 30.53.57N, 103.32.23E, 3./4.06.1997, M. Schülke, 1 o (coll. Schülke); China, Sichuan, Qincheng Shan NW Chengdu, 650-700m, 30.53.57N, 103.32.23E, 3./4.06.1997, A. Pütz, 2 o o (coll. Pütz); All specimens with label Paratypus, Derops puetzi spec. nov., det. M. Schülke 1998 (red). Holotype and paratypes are deposited in the authors collection, paratypes also in the collection A. Pütz (Eisenhüttenstadt).

^{1 33} rd Contribution to the knowledge of Tachyporinae

A d d i t i o n a l m a t e r i a l: China: Shaanxi, Qin Ling Shan, 110.06 E, 34.27 N, Hua Shan Mt. N Valley, 1200-1400m, 118 km E Xian, sifted, 18./20.08.1995, leg. A. Pütz, 1 & (coll. Pütz), 1 \oplus (coll. Schülke). Both specimens are not regarded as paratypes, see discussion below.

Description

Body length 5-6 mm. Body elongate, subparallel, and somewhat convex. Whole body, legs and antennae dark pitchy brown to black, sometimes elytra slightly paler. First two joints of antennae and tarsi yellowish brown, maxillary and labial palps yellow.

Measurements in mm (Holotype; range): width of head (max.): 0.74; 0.74-0.77; width of pronotum (max.): 0.90; 0.90-0.94; length of pronotum (max.): 0.85; 0.85-0.90; width of both elytra (max.): 1.14; 1.14-1.26; length of elytral suture: 1.22; 1.20-1.28; length of elytra (shoulder to apex): 1.41; 1.41-1.54; length of forebody (front of clypeus to apex of elytra): 2.98; 2.98-3.26; length of body (with segments VII-X (\eth) or VIII-X (\wp) dissected): 4.31; 4.31-5.14; length of aedeagus (with paramera): 0.87; 0.87-0.88.

Ratios: pronotal length/width: 0.98; 0.94-0.98; elytral length/width: 1.25; 1.23-1.25; pronotal width/width of head: 1.22; 1.21-1.22; elytral length/length of pronotum: 1.65; 1.65-1.66; elytral width/width of pronotum: 1.29; 1.27-1.29.

Head subquadrate, somewhat depressed dorsally and transverse (width/length = 1.30), eyes 1.6 times longer than temples, surface densely covered with coarse punctures, without microsculpture. Antennae filiform and extending to the posterior margin of elytra (δ) or to middle of elytra (φ paratype), two proximal segments shiny with less dense pubescence, the remaining segments dull with dense pubescence. Relative length of antennal segments from base to apex (holotype): 12:11:16,5:16:17:17:16:14,5:14:12:15.; ratio of length/width of segment 5 = 3.40 and of segment 9 = 2.55. Neck with fine microsculpture composed of short meshes.

Pronotum convex, slightly transverse and distinctly broader than head, widest distinctly before the middle and more strongly narrowed posteriorly than anteriorly; anterior margin carinate only near anterior angles, posterior and lateral margins almost straight and finely carinate, anterior angles bluntly rounded, invisible in dorsal view, posterior angles rectangular; surface closely covered with fine puncture and fine brownish pubescence, depressed in the middle from anterior margin to the posterior third of pronotal length and on both sides. Scutellum small, minutely and superficially punctured on the surface. Elytra oblong, distinctly longer than broad, 1.65 to 1.66 times longer and 1.27 to 1.34 times broader than pronotum, lateral sides almost straight, posterior margin slightly emarginate in the middle, posterior angles broadly rounded; surface rather densely covered with coarse setiferous punctures and longitudinally depressed at the side of each elytron. Abdomen subcylindrical and gradually narrowed towards apex; tergites three to six each transversely depressed at base; surface of each tergite covered with punctures and more densely and more finely pubescent than elytra. Third tergite with broad pruinose spots, seventh tergite with palisade fringe. Legs relatively long, as in other species of the genus.

M a le: Seventh sternite deeply and subtriangularly notched in the middle of posterior margin (Fig. 3); eighth sternite with deep triangular emargination at posterior margin, aedeagus (Fig. 1, 2) oval and moderately sclerotized except for dorsal side of median

lobe. Paramere symmetrical, distinctly longer than median lobe, broad, moderately reflexed apically, deeply divided in the middle.

F e m a I e: Eighth tergite (Fig. 4) with broad excision, which is triangular reflexed in the middle.

Derivatio nominis: I dedicate the species to the specialist of the coleopterous family Byrrhidae and dear friend Andreas Pütz, who collected part of the type series.

D is tribution and ecology: The species is known only from the Quincheng Shan in the northwest of Chengdu (Sichuan). The specimens were found in wet situations near streams and also in rotting grass and debris on extensively managed arable land.

C o m p a r a t i v e n o t e: In external body shape, coloration, punctation and microsculpture of body surface, *Derops puetzi* is similar to *Derops longipennis* (CAMERON), a species described from Eastern India (Assam, Naga Hills) without description of the primary and secondary sexual characters. A study of the type specimen, a female labeled "Naga Hills, Laimatak / Paraleaster longipennis Cam. Type / M. Cameron, Bequest., B.M. 1955-147 / Derops longipennis (Cam.), det. M. Schülke 1998" showed that this species, in spite of its similarity in external characters, is easily distuingished by the shape of the emargination at the apical margin of the female tergum VIII, which is more triangulary reflexed in *longipennis* (Fig. 8), and broad and rounded in *puetzi* (Fig. 4). The same difference in the female tergum VIII also distinguishes *D. puetzi* from *D. coreanus* (WATANABE), *D. longicornis* SHARP and *D. lisae* SMETANA. *Derops japonicus* (SAWADA) and *D. vietnamicus* WATANABE with a similar female tergum VIII, and *Derops uenoi* WATANABE (female unknown) are distinguished by the male sexual characters, especially by the shape of the paramere (Figs 1, 2). Finally *Derops okinawanus* WATANABE (male unknown) can be distinguished by the short antennae.

Discussion

Two specimens of a species closely resembling *Derops puetzi* were found at the Hua Shan mountain in Shaanxi (Central China). Both specimens $(1 \, \circ, 1 \, \circ)$ are immature. The aedeagus of the male (Fig. 5) and the shape and chaetotaxy of male sternites VII (Fig. 6) and VIII are not distinguishable from specimens described here as *Derops puetzi*. The female tergum VIII (Fig. 7) shows a different shape of emargination at the apical margin. More material is necessary to assess the variability of *D. puetzi* in order to answer the question whether or not these specimens refer to *D. puetzi*.

Acknowledgements

For the loan of *Derops* from China and the type specimen of *Derops longipennis* (CAMERON) I am indebted to A. Pütz (Eisenhüttenstadt) and M. Brendell (London), respectively, for his assistance in preparing the English manuscript to V. Assing (Hannover).

348

References

- CAMERON M. (1930): The fauna of British India including Ceylon and Burma. Coleoptera, Staphylinidae Vol. 1, London, 471 pp., 1 map, 3 plates.
- SHARP D. (1888-89): The Staphylinidae of Japan. Annals and Magazine of Natural History, Ser. 6/2: 277-295, 369-387, 451-464 and 3: 28-44, 108-121, 249-267, 319-334, 406-419, 463-476.
- SMETANA A. (1983): The status of the staphylinid genera *Derops* SHARP and *Rimulincola* SANDERSON (Coleoptera). Entomologica scandinavica 14: 269-279.
- SMETANA A. (1995): A new species of the genus *Derops* SHARP, 1889 from Taiwan (Coleoptera: Staphylinidae, Tachyporinae, Deropini). Fabreries 20/3: 99-104.
- WATANABE Y. (1985): A revision of the Japanese species of *Derops* (Coleoptera, Staphylinidae). Kontyu 53/3: 436-451.
- WATANABE Y. (1993): A new species of the genus *Derops* (Coleoptera, Staphylinidae) from the Russian Far East. Japanese Journal of Entomology 61/3: 557-561.
- WATANABE Y. (1996): A new species of the genus *Derops* (Coleoptera, Staphylinidae) from Northern Vietnam. Japanese Journal of Entomology 64/1: 145-149.

Anschrift des Verfassers: Michael SCHÜLKE

Rue Ambroise Paré 11, D-13405 Berlin, Germany.

Email: mschuelke.berlin@t-online.de

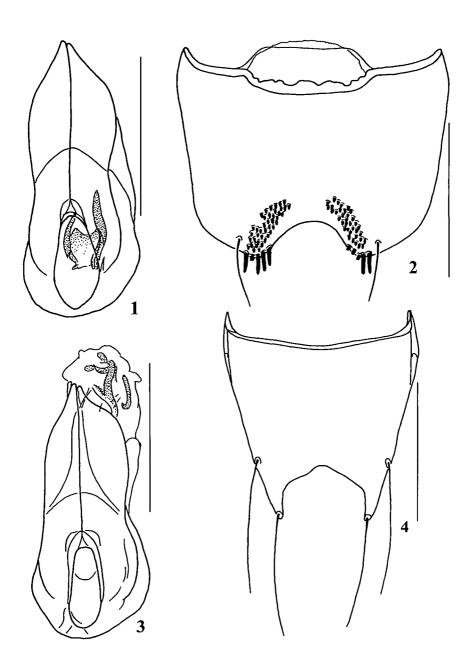


Fig. 1-4: Derops puetzi spec. nov. 1 – aedoeagus (holotype); 2 – aedoeagus (paratype), 3 – sternum VII (paratype), δ ; 4 –tergum VIII (paratype), \wp . Scales 0.5 mm.

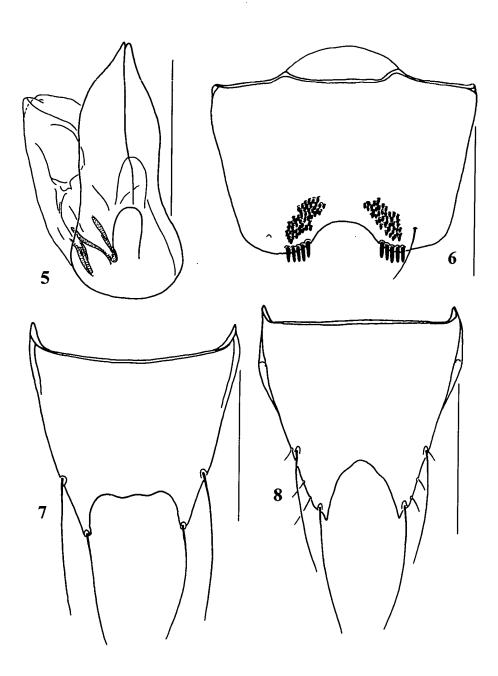


Fig. 5-7: Derops spec. (near D. puetzi), 5 – aedoeagus; 6 – sternum VII, $_{Q}$; 7 – tergum VIII, $_{Q}$. Fig. 8: Derops longipennis (CAMERON), tergum VIII (holotype), $_{Q}$; Scales 0.5 mm.

ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: Linzer biologische Beiträge

Jahr/Year: 1999

Band/Volume: <u>0031_1</u>

Autor(en)/Author(s): Schülke Michael

Artikel/Article: A new species of Derops SHARP from China (Coleoptera,

Staphylinidae, Tachyporinae). 345-350