

Contributions to the Knowledge of the Quediina (Coleoptera, Staphylinidae, Staphylinini) of China

Part 14. *Quelaestrygon puetzi* gen. nov., sp. nov. from Sichuan

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Abstract A new genus and species, *Quelaestrygon puetzi* is described from specimens taken on two different mountain ranges in Sichuan, China. Important features of the new taxon are discussed and its taxonomic position and relationships within the subtribe Quediina are briefly discussed.

Introduction

Some time ago, a very large, conspicuous specimen of a staphylinid from the Gongga Shan massive, suspected to belong to the subtribe Quediina, was submitted for study by H. SCHILLHAMMER, Naturhistorisches Museum, Wien, Austria. Somewhat later, another specimen of the same taxon, collected in southern Sichuan became available for study. Closer study of these two specimens confirmed what was suspected from the first moment, namely that the specimens indeed represented a new species of a unique, undescribed genus of the Quediina.

In the following, the new taxon is described and illustrated, and its taxonomic position and relationships within the tribe are briefly discussed. Both specimens at hand are females. It is hoped that future collecting in China will also soon produce males of this impressive member of this subtribe, and perhaps also reveal at least some information about its habits.

Quelaestrygon gen. nov.

(Figs. 1–4)

Type species: Quelaestrygon puetzi sp. nov.

Description. Body form very large, elongate, robust, in general rather flat; head and pronotum mostly glabrous, with only a few setiferous punctures; elytra lacking usual punctuation; appendages long (Fig. 1).

Head (Fig. 2) only gently convex, with frons slightly flattened, in general with a *Microsaurus*-type chaetotaxy (for details see specific description); labrum short,

widely, arcuately emarginate apically, with two very long and about seven shorter setae on each side of emargination. Mandibles each elongate, with sickle-shaped apical portion, basolateral ridge well developed, removed from lateral margin and bordered by a deep and very wide depression; right mandible with simple, subacute tooth below middle, left mandible with stout, slightly notched subtruncate tooth below middle, and with a smaller, subacute triangular tooth above it. Mandibular prostheca relatively small, medial edge copiously ciliate along entire length, with extensive basal group of long ciliae gradually becoming shorter apicad. Maxilla with stipes bearing one long seta, palpifer with one long lateral and one markedly shorter medial seta apically; lacinia with very long and dense ciliae medially; galea elongate, protruding, with three long lateroapical setae and with an apical group of dense long ciliae. Maxillary palpus

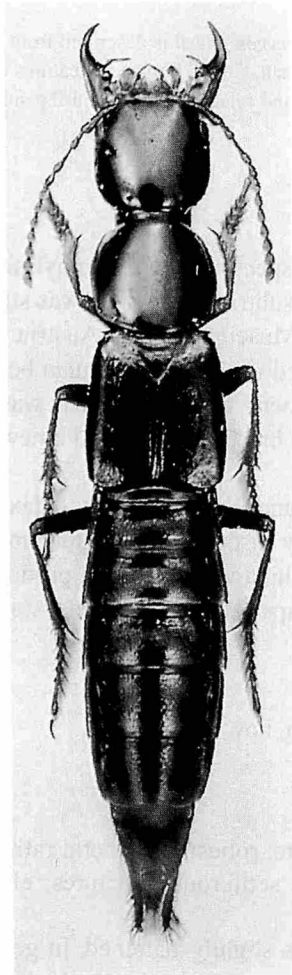


Fig. 1. *Quelaestrygon puetzi*: habitus.

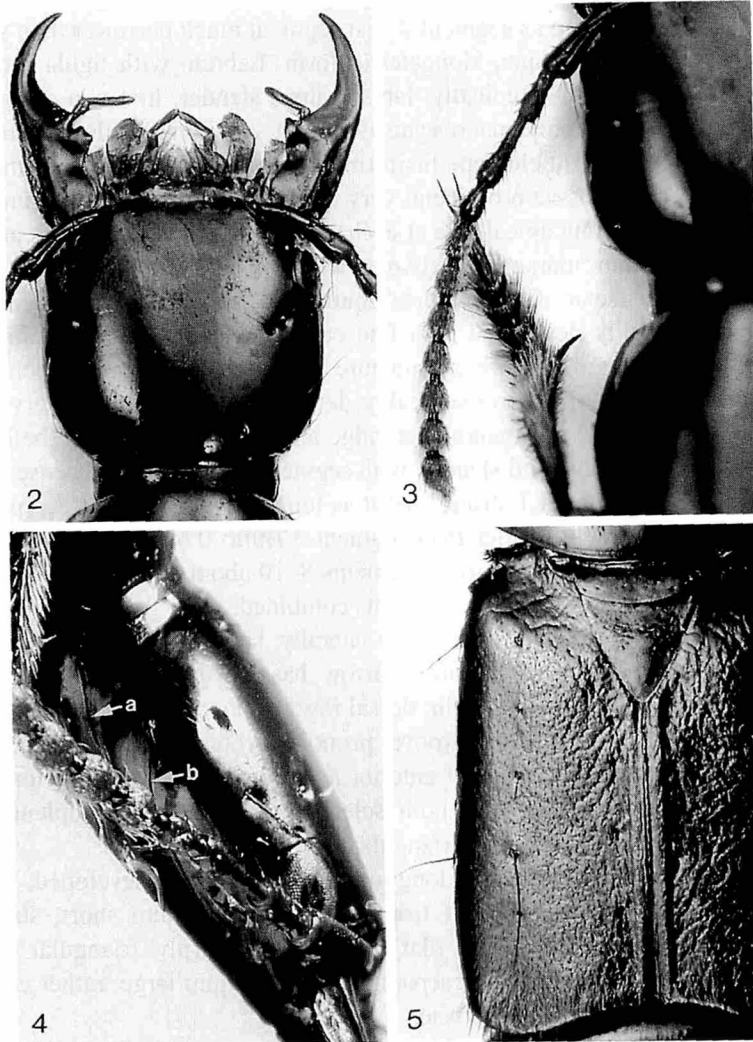
slender, elongate, all segments bearing only usual macrosetae, segment 2 markedly curved, almost twice as long as segment 3, last segment much narrower than segment 2 at apex and considerably longer, elongate-fusiform. Labium with ligula broadly, obtusely triangularly emarginate apically; labial palpus slender, first two segments subequal in length, bearing only macrosetae (segment 2 with three long, strong setae medioapically), last segment elongate fusiform, almost twice as long as segment 2, devoid of any setae; paraglossae prominent, very narrow and elongate. Mentum with one moderately long and strong apical seta at each side, with slight impression at each lateral margin. Submentum markedly declivous, with a pair of very long setae, and with several much shorter setae. Gular sutures contiguous for most of their length. Postmandibular ridge¹⁾ fully developed as a fine carina, extending from behind base of mandible posteriad toward infraorbital puncture and then curving dorsad behind eye to temporal puncture. Infraorbital ridge weakly developed, apparent as a very fine line, extending anteriorly toward postmandibular ridge and becoming obsolete before reaching it (Fig. 4). Antenna long and slender, with segments 1–4 devoid of dense appressed pubescence (Fig. 3); segment 1 strong, about as long as two following segments combined, segment 2 markedly shorter than segment 3 (ratio 0.66), segments 4–7 longer than wide, gradually becoming shorter, segments 8–10 about as long as wide, last segment about as long as two preceding segments combined.

Pronotum distinctly, narrowly grooved laterally, lateral groove gradually becoming narrower posteriad, to match quite narrow basal groove; lateral margins each slightly sinuate before posterior margin; dorsal rows of punctures missing, large lateral puncture situated directly in lateral groove; pronotal hypomeron of a typical quediine type, i.e. strongly inflexed in front of anterior angles of pronotum, therefore meeting prosternum at a sharp angle, with both sclerites separated by notopleural suture; pronotal epimeron large, sclerotized, triangular.

Prosternum large, with medial longitudinal keel weakly developed, with apex sharply protruding between bases of front coxae; furcasternum short, strongly declivous. Mesosternum rather short, flat, with long, sharply triangular intercoxal process, middle coxae only narrowly separated. Metasternum large, rather convex, appreciably protruding between hind coxae.

Legs long, slender. Front coxae large, elongate-oval, each with two distinct carinae separating the punctate and setose ventral face from the glabrous ventrolateral face. Medioapical spur of all tibiae strong and long, outer faces of all tibiae distinctly spinose, less distinctly so on hind tibiae; last segment of hind tarsus relatively short, somewhat shorter than two following segments combined; empodial setae between claws of all tarsi present, but very fine and short.

1) This structure was discussed under the name "mandibular ridge" in one of my previous papers (SMETANA, 1977, 180). The term postmandibular ridge is more proper; it is discussed in detail in an upcoming paper dealing with the north-temperate taxa associated with the genus *Staphylinus* (*sensu lato*), and with the subtribes of the tribe Staphylinini.

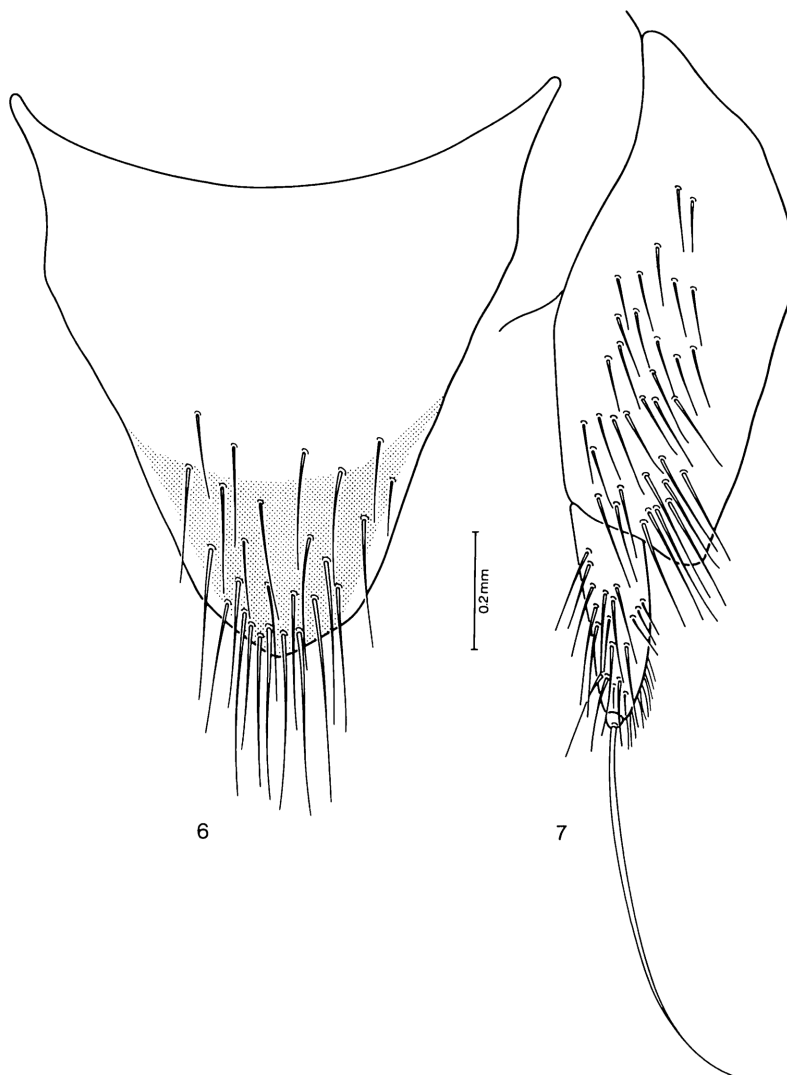


Figs. 2-5. *Quelaestrygon puetzi*: 2, head, dorsal view; 3, antenna, detail; 4, head in lateral view, showing infraorbital ridge (a) and postmandibular ridge (b); 5, left elytron, detail of sculpture.

Recognition and comments. This new genus may be easily distinguished from all other genera within the subtribe Quediina, in addition to its large size and the long appendages, by the combination of several characters, particularly: the simultaneous presence of the postmandibular and infraorbital ridges on the head; the distinct basolateral mandibular ridge, removed from the lateral mandibular margin and bordered by a deep and very wide depression; the first four (rather than only three) antennal segments devoid of dense appressed pubescence; the absence of dorsal rows of punctures

on the pronotum; and the surface sculpture of the elytra, lacking the usual punctation and pubescence.

Quelaestrygon is the only genus within the Quediina that displays a complete postmandibular ridge, developed in a way that is typical for most members of the subtribe Xanthopygina, combined with the presence of a weakly developed, linear infraorbital ridge. The simultaneous presence of postmandibular and infraorbital ridges was so far known only in some members of the subtribe Xanthopygina (those differ sub-



Figs. 6-7. *Quelaestrygon puetzi*: 6, tergite 10 of female genital segment; 7, second gonocoxite of female genital segment.

stantially by the different development of the pronotal hypomeron, including the absence, in Xanthopygina, of the notopleural suture). A postmandibular ridge occurs in members of some Afrotropical genera, such as *Glyphesthus* KRAATZ, 1858 or *Moeocerus* FAUVEL, 1899 that are at present assigned to Quediina. However, based on several characters, these genera do not belong to Quediina; they both are highly differentiated members of Philonthina. The front coxae of *Quelaestrygon puetzi* are developed in a similar way as those of the members of the genera *Strouhalium* SCHEERPELTZ, 1962, *Heinzia* KORGE, 1971 and *Beeria* HATCH, 1957 (the first two genera are partially sympatric with *Quelaestrygon*, the third genus occurs on the Pacific Coast of North America, see SMETANA, 1977, 1993); however, this may be attributed to the notable length of the legs of all members of these taxa, and therefore a matter of convergence, since the three above genera differ from *Quelaestrygon* in many other characters (on the mandibles and antennae, the absence of the postmandibular ridge, the chaetotaxy of the pronotum, the surface sculpture of the elytra, etc.) and are clearly not related to it. *Quelaestrygon* is at present the only member of the subtribe with first four antennal segments lacking the dense appressed pubescence, the usual number is three, only members of the genus *Bolitogyrus* CHEVROLAT, 1842 lack this pubescence on first five antennal segments.

Etymology. The generic epithet is a combination of the existing generic name *Quedius* and that of the singular form of “*Laestrygones*”, who were the savage cannibalistic giants of HOMER, residing in a “remote western country”. The name denotes the assignment of this genus to the subtribe Quediina, and refers to the large size and “intimidating” habitus of the single species of the genus.

Quelaestrygon puetzi sp. nov.

(Figs. 5–7)

Description. Piceous, lateral margin of pronotum narrowly rufo-brunneous, abdomen from third visible tergite becoming gradually paler toward apex, apex including genital segment rufotestaceous; abdomen markedly iridescent. Mouthparts testaceous-brunneous, antennae piceous, legs dark brownish to partially piceous (especially middle and hind femora). Head of rounded quadrangular shape, about as long as wide, not appreciably widened behind eyes, with posterior angles broadly rounded; eyes very small and flat, not protruding from lateral contours of head, tempora considerably longer than eyes seen from above (ratio 2.33); no additional setiferous punctures between anterior frontal punctures; posterior frontal puncture situated close to posterior-medial margin of eye, separated from it by distance about equal to two to three diameters of puncture, one minute puncture (doubled unilaterally in one specimen) between it and posterior margin of eye, one coarse puncture laterad of posterior frontal puncture; temporal puncture situated distinctly closer to posterior margin of head than to posterior margin of eye; one puncture at posterior margin of head on each side; tempora impunctate; surface of head with very fine and only moderately dense micro-

sculpture of superficial, “scratch-like” short lines, directed mostly obliquely antero-medial and with intermixed very sparse micropunctulation. Pronotum slightly sinuate posteriorly in front of basal margin, at widest point indistinctly wider than long (ratio 1.1), moderately transversely convex anteriorly; sublateral rows each with two punctures, posterior puncture situated slightly in front, or at level of large lateral puncture; surface with microsculpture similar to that on head, but still somewhat finer, with short lines directed mostly antero-laterad. Scutellum impunctate, but with a few rudimentary transverse rugae medio-basally, with excessively fine and dense microsculpture of mostly transverse striae. Elytra (Fig. 5) relatively long, at base somewhat narrower than pronotum at widest point, not appreciably dilated posteriad, at suture indistinctly (ratio 1.1), at sides appreciably longer (ratio 1.28) than pronotum at midline; each elytron with small oblong impression just medial of postero-lateral angle; medial portion of each elytron (except for narrow stripe along suture) finely, leather-like rugulose, with several narrow, deeper rugae near sides of scutellum, directed obliquely postero-laterad; entire surface of each elytron with complex microsculpture, consisting of “scratch-like” short lines similar to those on head and pronotum, directed more or less straight posteriad, and, in addition, with puncture-like impressions most noticeable (and dense) on leather-like rugulose portion of surface of elytron; each elytron with two large punctures at same level at about posterior third of length of elytron, each bearing very long seta, and with some smaller punctures (bearing short setae) at level of apex of scutellum, along suture, around the two large punctures, and near apical margin. Wings fully developed. Abdomen with tergite 7 (fifth visible) bearing distinct whitish apical seam of palisade fringe; tergites with fine, moderately dense, evenly dispersed punctation becoming gradually somewhat sparser toward apex of abdomen; surface between punctures with excessively fine and dense microsculpture of transverse striae.

Female. First four segments of front tarsus markedly dilated, sub-bilobed, each densely covered with modified pale setae ventrally; segment two about as wide as apex of tibia; segment four narrower than preceding two segments. Sternite 8 with one strong and very long seta on each side; tergite 8 inconspicuously, arcuately emarginate medio-apically. Genital segment with styli of tergite 9 moderately long, copiously setose; second gonocoxites moderately long, slightly narrowed apicad, each with minute stylus bearing one long, strong seta (Fig. 7); tergite 10 wide, with subacute apex, apical portion somewhat pigmented, with numerous setae (Fig. 6).

Length: 20.0 mm (abdomen slightly extended).

Type material. Holotype (female): “CHINA Sichuan, Daxue Shan Gongga Shan Mt., Hailuogou Glacier Park way from Camp II to Camp I, 2620 m–1940 m, 31. V. 1997, leg. A. PÜTZ”. In the SMETANA collection, Ottawa, Canada.

Paratype (female): China: [Sichuan]: S Sichuan, 15 km NW Muli (Bowa), mixed forest, cca 3100 m, 27.55 N 101.19 E, 30. VI. 98, J. TURNA. In the collection of the Naturhistorisches Museum, Wien, Austria.

Geographical distribution. *Quelaestrygon puetzi* is at present known from two

rather distant localities in the province of Sichuan, one in the Gongga Shan massive in western Sichuan, and another in southern Sichuan in Jinping Shan.

Bionomics. Nothing is known about the habitat requirements of this species. The holotype from Gongga Shan was taken when it came flying and landed on the clothing of the collector.

Etymology. Patronymic, this spectacular species was named in honor of its first collector, Mr. Andreas PÜTZ, Eisenhüttenstadt, Germany, in recognition of his outstanding contribution to the knowledge of the Chinese beetle fauna through his numerous explorations in that country.

Acknowledgments

The original draft of this paper was reviewed by two of my colleagues, Dr. Y. BOUSQUET and Mr. A. DAVIES. Their comments eventually led to the improvement of the paper. Dr. H. GOULET kindly provided the photographs; they were computer generated, using a Sony DXC-950 video camera, digitized with Snappy[®], and enhanced and modified by Photoshop 3.0 software. Mr. Go SATO carefully finished the line drawings and mounted the photographs. Mr. A. PÜTZ kindly allowed me to keep the holotype in my collection. Their help is gratefully acknowledged.

要 約

A. SMETANA: 中国産ツヤムネハネカクシ亜族に関する知見. 14. 四川省産ツヤムネハネカクシの新属新種 *Quelaestrygon puetzi*. — 中国四川省の2カ所の山地で発見された巨大なツヤムネハネカクシの一種を新属新種と認め、*Quelaestrygon puetzi*と命名記載した. また、ツヤムネハネカクシ亜族におけるこの新属の類縁関係について私見を述べた.

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