

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

Part 8. Quediini Collected by S. UÉNO and Y. WATANABE
in Yunnan

Aleš SMETANA

Eastern Cereal and Oilseed Research Centre, Agriculture and Agri-Food Canada,
Ottawa, Ontario K1A 0C6, Canada

Abstract Two new species of the genus *Quedius* STEPHENS, 1829 from Yunnan are described and illustrated: *Q. (Microsaurus) vafer*, and *Q. (Raphirus) chrysogonus*. *Quedius (Raphirus) muscicola* is for the first time recorded from China, *Quedius (Microsaurus) inquietus* for the first time from Yunnan.

Introduction

Recently, a series of specimens of Quediina, collected by Drs. S. UÉNO and Y. WATANABE, Tokyo, in Yunnan in 1992 and 1993, was sent to me for study. This paper deals with the species of the genus *Quedius* STEPHENS, 1829, except for two additional species belonging to the *Muscicola* Group of species (SMETANA, 1988, 243; 1995 a, 68). These species will be dealt with in conjunction with the rich material of the group, collected by the author in several mountain ranges in Yunnan and Sichuan. The material studied also contained two species of the genus *Indoquedius* CAMERON, 1932. For reasons similar to those mentioned above, these two species will be dealt with later in a treatment of *Indoquedius* of China.

The holotypes of the new species are deposited in the collection of the Institute of Entomology, Academia Sinica, Shanghai, People's Republic of China. The other material is in the collection of the National Science Museum, Tokyo, Japan, and in my own collection.

Quedius (Microsaurus) inquietus (CHAMPION)

Velleius inquietus CHAMPION, 1925, 107.

Quedius inquietus: SMETANA, 1988, 189 (additional synonymy there).

New record. China: Yunnan: Zhonghe Feng (2,500 m), Diancang Shan Mts., Dali Shi, 4–IX–1993, Y. WATANABE, 1 male.

Comments. This is the first record of this species from Yunnan. *Quedius inquietus* was previously known from the Himalaya (SMETANA, 1988, 190) and from Si-

chuan (SMETANA, 1995 b, 235).

Quedius (Microsaurus) becvari SMETANA

Quedius becvari SMETANA, 1996, 119.

Record. China: Yunnan: Yuan Shan (2,120 m), Kunming, 5–XI–1992, Y. WATANABE, one female.

Comments. This specimen became part of the original series of *Q. becvari* (paratype). For the recognition of this species and for a discussion of its relationships, see the discussion in SMETANA, 1996, 120.

Quedius (Raphirus) vafer sp. nov.

(Fig. 1)

Description. Form robust, with wide pronotum. Piceous with piceous-black head; abdomen markedly iridescent; maxillary and labial palpi testaceo-brunneous, antennae brunneous, becoming slightly paler toward base, but first segment partially darkened; legs piceous with more or less paler tarsi. Head of rounded quadrangular shape, distinctly wider than long (ratio 1.24), with round impression in middle of frons, moderately narrowed posteriad behind eyes, posterior angles obsolete; eyes moderately large and convex; tempora vaguely shorter than eyes seen from above (ratio 0.90); no additional setiferous punctures between anterior frontal punctures; posterior frontal and temporal punctures situated close to postero-medial margin of eye, separated from it by distance about equal to diameter of puncture; a group of three to five additional punctures postero-mediad of posterior frontal puncture, in addition to two punctures at posterior margin of head; surface of head with extremely fine and dense microsculpture of transverse waves with numerous longitudinal junctions, with some intermixed sparse micropunctulation. Antenna moderately long, segment 3 slightly longer than segment 2, segments 4–6 longer than wide, gradually becoming shorter, segments 7–10 about as long as wide, last segment as long as preceding two segments combined. Pronotum voluminous, somewhat wider than long (ratio 1.13), widest slightly behind middle, broadly rounded basally, distinctly narrowed anteriorly, lateral portions inconspicuously explanate posteriad; dorsal rows each with three punctures; sublateral rows each with two punctures, posterior puncture situated before level of large lateral puncture; microsculpture on pronotum similar to that on head. Scutellum impunctate, with very fine and dense microsculpture of transverse striae. Elytra short, at base markedly narrower than pronotum at widest point (ratio 0.76), vaguely widened posteriad, at suture considerably shorter (ratio 0.65), at sides distinctly shorter (ratio 0.77) than pronotum at midline; punctation fine, moderately dense, transverse interspaces between punctures mostly about twice as large as diameters of punctures; pubescence piceous; surface between punctures with distinct microscopic irregularities, hence somewhat dull. Wings reduced to non-functional stumps. Abdomen with tergite

7 (fifth visible) lacking whitish apical seam of palisade fringe; punctation of abdominal tergites somewhat finer than that on elytra, moderately dense, evenly covering surface of each tergite, in general becoming vaguely sparser toward apex of abdomen; pubescence piceous; surface between punctures with exceedingly dense and fine microsculpture of transverse striae.

Female. First four segments of front tarsus considerably dilated, sub-bilobed, each densely covered with modified brownish setae ventrally; segment two about as wide as apex of tibia; segment four narrower than preceding segments. Genital segment with second gonocoxites very narrow and elongate, each with extremely small stylus bearing one long, strong seta; tergite 10 modified, of characteristic shape, pigmented medially, with minute, acutely triangular apex, with numerous unequally long setae at and near apical margin, and with two setae on apical portion in front of them (Fig. 3).

Length: 8.4–8.6 mm.

Type material. Holotype (female) and two female paratypes: China: "Yuzhu Feng (3,350 m), Diancang Shan Mts., Dali Shi, Yunnan, China. 5–IX–1993. Coll. S. UENO". The holotype is deposited at the Shanghai Institute of Entomology, Academia Sinica, Shanghai. One paratype at the National Science Museum (Natural History), Tokyo, Japan, and one paratype in the SMETANA collection, Ottawa, Canada.

Geographical distribution. *Quedius vafer* is known only from the type locality in the Diancang Shans in the vicinity of Dali in the southern portion of the Province of Yunnan of the People's Republic of China.

Bionomics. The specimens of the original series were taken in a habitat characterized by rhododendron trees intermixed with arrow-bamboo, with sparse *Abies* trees. The specimens were sifted from a pile of moist, dead rhododendron leaves accumulated among the roots of arrow-bamboo. This is one of the habitats of the carabid beetle *Deuveotrechus yinae* (see UENO, 1996, 19).

Recognition and comments. *Quedius vafer* may be easily recognized by the general habitus, in combination with the chaetotaxy of the head, particularly by the presence of additional punctures postero-mediad of the posterior frontal puncture, with the surface sculpture of the short elytra (see the description) and with the characteristic shape of tergite 10 of the female genital segment.

One of the paratypes (deposited in Tokyo) is distinctly teneral.

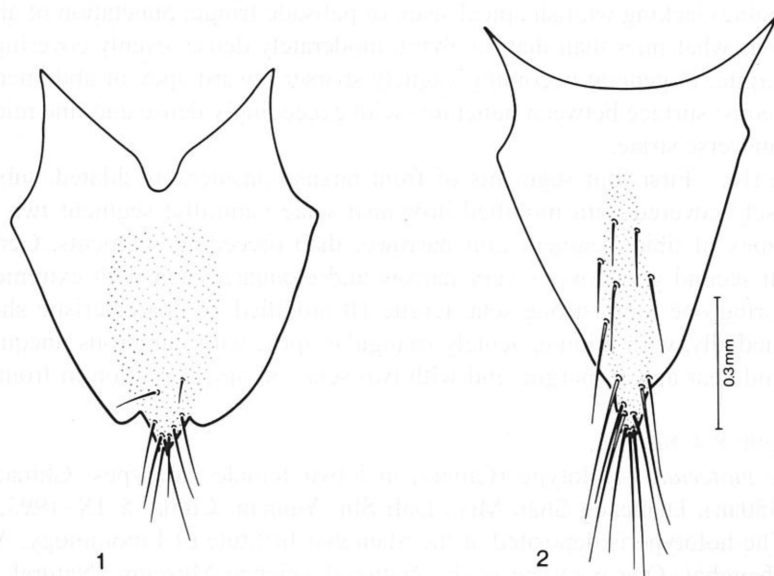
Etymology. The specific name is the Latin adjective *vafer*, *-fra*, *-frum* (sly, cunning). It refers to the "ingenious" development of the conspicuous group of additional punctures on the head (see the description).

Quedius (Raphirus) muscicola CAMERON

Quedius muscicola CAMERON, 1932, 295; SMETANA 1988, 253.

Quedius dohertyi CAMERON, 1932, 297; SMETANA, 1988, 254.

Quedius heterogaster CAMERON, 1944, 14; SMETANA, 1988, 254.



Figs. 1-2. Tergite 10 of the female genital segment; 1, *Quedius vafer*; 2, *Q. chrysogonus*.

New record. China: Yunnan: Laohu Shan, Dali Shi, 2,200 m, 3-IX-1993, Y. WATANABE, 3 males, 1 female.

Comments. New record for China. The species was until recently known from the Himalaya (from northern Himachal Pradesh and Uttar Pradesh through Nepal eastward to the Darjeeling area in West Bengal), and from Burma (SMETANA, 1988, 254).

***Quedius (Raphirus) chrysogonus* sp. nov.**

(Fig. 2)

Description. Piceous-black; head and pronotum with distinct, dark green metallic lustre, elytra brilliant dark green; abdomen moderately iridescent; appendages rufo-testaceous. Head rounded, slightly wider than long (ratio 1.15); eyes very large and convex, tempora about five times shorter than eyes seen dorsally (ratio 0.18); clypeus with two shallow, rounded impressions; eight additional punctures between anterior frontal punctures; posterior frontal puncture situated very close to postero-medial margin of eye, separated from it by distance slightly smaller than diameter of puncture; three additional punctures antero-medial of posterior frontal puncture and three postero-medial of it along posterior margin of head; temporal puncture almost touching posterior margin of eye; all punctures coarse; surface of head with dense, moderately coarse microsculpture of transverse and oblique waves with numerous longitudinal junctions, gradually changing into more or less meshed microsculpture on anterior half

of head, intermixed micropunctulation becoming denser and coarser toward posterior margin of head. Antenna fairly short, segment 3 indefinitely longer than segment 2, segments 4–6 longer than wide, gradually becoming shorter, outer segments as long as wide, last segment about as long as two preceding segments combined. Pronotum as long as wide, strongly transversely convex, broadly rounded basally, widest at about posterior third, moderately narrowed anteriorly; dorsal rows irregular, each with seven punctures; sublateral rows each expanded into irregular group of eight to twelve punctures; entire surface of pronotum with very dense and fine microsculpture of transverse and oblique waves with numerous longitudinal junctions, with scattered, inconspicuous micropunctulation. Scutellum impunctate, with very fine, dense microsculpture of transverse and oblique waves. Elytra fairly long, at base slightly narrower than pronotum at widest point (ratio 0.91), at suture slightly (ratio 1.11) at sides distinctly longer than pronotum at midline (ratio 1.25); punctation rather coarse, dense, transverse interspaces between punctures mostly about as large as diameters of punctures, punctation becoming finer and sparser toward posterior margin; surface between punctures without microsculpture. Abdomen with tergite 7 (fifth visible) with whitish apical seam of palisade fringe; punctation of abdominal tergites fine and dense, gradually becoming somewhat sparser toward apex of each tergite, and in general toward apex of abdomen; pubescence uniform, piceous-black; surface between punctures with exceedingly fine and dense microsculpture of transverse striae.

Female. First four segments of front tarsus markedly dilated, sub-bilobed, each densely covered with pale modified setae ventrally; segment two about as wide as apex of tibia; segment four narrower than preceding segments. Genital segment with second gonocoxites narrow and long, each with extremely small stylus bearing one long, strong seta; tergite 10 rather wide basally, markedly, triangularly narrowed toward acute apex, with narrow medio-apical area pigmented, with six rather long setae at and near apical margin and with some additional setae on apical portion (Fig. 4).

Length: 8.0 mm.

Type material. Holotype (female): China: "(Mt. Ailao Shan) 2,500 m, Jingdong, Yunnan, China III-28, 1993 Coll. N. XIAO". In the collection of the Shanghai Institute of Entomology, Academia Sinica, Shanghai.

Geographical distribution. *Quedius chrysogonus* is at present known only from the type locality in the southern portion of the Province of Yunnan, southwest of Kunming.

Bionomics. Nothing is known about the collection circumstances of the holotype.

Recognition and comparisons. *Quedius chrysogonus* is a new member of the *Multipunctatus* Group (SMETANA, 1995, 98) that until now included five species: one from the Himalaya (*Q. hariyo* SMETANA, 1988), one from Japan (*Q. multipunctatus* SHARP, 1889) and three from Taiwan (*Q. huann* SMETANA, 1995, *Q. bih* SMETANA, 1995, and *Q. yann* SMETANA, 1995). Another species of the group is being described by the author from northern Vietnam.

Quedius chrysogonus is the largest member of the group. It differs from all of them, in addition to the characters on tergite 10 of the female genital segment, by the uniformly piceous-black pubescence of the abdominal tergites. Members of all the remaining species bear some golden, golden-yellowish, or brownish-golden pubescence (intermixed or forming definite patches) on the abdominal tergites.

Etymology. The specific name is that of *Chrysogonus*, -i, m. (a Roman name), in apposition.

Acknowledgments

I thank Drs. S. UÉNO and Y. WATANABE for submitting this material for study. My colleagues Y. BOUSQUET and A. DAVIES, Eastern Cereal and Oilseed Centre, Ottawa, commented on the original draft of this manuscript. Mr. Go SATO from the same establishment inked the line drawings. Their assistance was greatly appreciated.

要 約

A. SMETANA: 中国産ツヤムネハネカクシ亜族に関する知見. 8. 上野俊一, 渡辺泰明両博士によって雲南省で採集されたツヤムネハネカクシ類. — 上野, 渡辺両博士によって雲南省で採集されたツヤムネハネカクシ類のうち, ツヤムネハネカクシ属には7種が認められた. そのうち2種は新種で, *Quedius (Raphirus) vafer* SMETANA および *Q. (R.) chrysogonus* SMETANA と命名した. また, 中国から未記録の1種と, 雲南省から未記録の1種が見いだされた.

References

- CAMERON, M., 1932. Coleoptera. Staphylinidae. Vol. III. *The Fauna of British India, including Ceylon and Burma*. XIII+443 pp., 4 pls. Taylor & Francis, London.
- 1944. Descriptions of new Staphylinidae (Coleoptera). *Proc. r. ent. Soc. London*, (B), **13**: 11–15.
- CHAMPION, G. C., 1925. Some Indian (and Tibetan) Coleoptera (16). *Entomologists' mon. Mag.*, **61**: 102–112.
- SHARP, D., 1889. IV. — The Staphylinidae of Japan III. *Ann. Mag. nat. Hist.*, (6), **3**: 28–44.
- SMETANA, A., 1988. Revision of the tribes Quediini and Atanygnathini. Part II. The Himalayan region (Coleoptera: Staphylinidae). *Quaest. ent.*, **24**: 163–464.
- 1995 a. Ditto. Part III. Taiwan. *Bull. natn. Mus. nat. Sci., Taichung*, (Spec. Publ.), (6): 145 pp.
- 1995 b. Contributions to the knowledge of the Quediina (Coleoptera, Staphylinidae, Staphylinini) of China. Part 7. Genus *Quedius* STEPHENS, 1829. Subgenus *Raphirus* STEPHENS, 1829. Section 2. *Elytra, Tokyo*, **24**: 225–237.
- 1996. Ditto. Part 5. Genus *Quedius* STEPHENS, 1829. Subgenus *Microsaurus* DEJEAN, 1833. Section 4. *Bull. natn. Sci. Mus., Tokyo*, (A), **22**: 113–132.
- STEPHENS, J. F., 1829. The Nomenclature of British Insects; being a compendious list of such species as are contained in the Systematic Catalogue of British Insects, and forming a guide to their classification. 68 columns. Baldwin & Cradock, London.
- UÉNO, S.-I., 1996. A new humicolous species of the *Stevensius* complex (Coleoptera, Trechinae) from western Yunnan, Southwest China. *Elytra, Tokyo*, **24**: 13–20.