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Contributions to the knowledge of the Quediina (Coleoptera, Staphylinidae, Staphylinini) of China. Part 32. Genus *Quedius* Stephens, 1829. Subgenus *Distichalius* Casey, 1915. Section 2

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Taxonomy, new species, geographical distribution, Coleoptera, Staphylinidae, Staphylinini, Quediina, China

Abstract. Seven new species of the subgenus *Distichalius* Casey, 1915 are described, based on specimens from the People's Republic of China: *Q. ladas* sp. n. (Yunnan), *Q. phormio* sp. n. (Yunnan), *Q. elpenor* sp. n. (Sichuan), *Q. numa* sp. n. (Sichuan), *Q. menippus* sp. n. (Gansu), *Q. daedalus* sp. n. (Sichuan, Yunnan), and *Q. gyges* sp. n. (Gansu, Yunnan). Each species is described, illustrated and all available distributional and bionomic data are given.

INTRODUCTION

This is the second paper dealing with the species of the subgenus Distichalius Casey, 1915 of the genus Ouedius Stephens, 1829. The species dealt with in this paper belong to two different lineages within the subgenus Distichalius, lineages that are also represented in the Nearctic fauna. In both lineages the punctation of elytra more or less evenly covers the elytral surface, but the lineages differ in other characters. The first lineage is characterized by the presence of an additional puncture between the dorsal and sublateral rows of punctures on the pronotum, and by the presence of microscopic micropunctulation on interspaces between the punctures on the elytra. The other one lacks the additional puncture between the dorsal and sublateral rows of punctures on the pronotum, and the interspaces between the punctures on the elytra lack any microsculpture. All new species described in this paper, except Q. daedalus and *Q. giges*, belong to the first lineage. The Nearctic representative of the first lineage is O. transparens Motschulsky, 1845 (O. marginalis Mäklin, 1852), widely distributed on the Pacific coast of North America from California to Alaska (see Smetana, 1971: 156). The aedeagus of this species is of a similar type as those of the species described here (Figs 1-2). There are several Nearctic representatives of the second, apparently more primitive, lineage and their distribution is not limited to the Pacific coast. A typical representative is Q. rusticus Smetana, 1971, a transcontinental species, distributed from the Atlantic coast westward to British Columbia (see Smetana, 1971: 190). The aedeagus of *Q. rusticus* is remarkably similar to those of Q. daedalus and Q. gyges (Figs 3-4).

ACRONYMS

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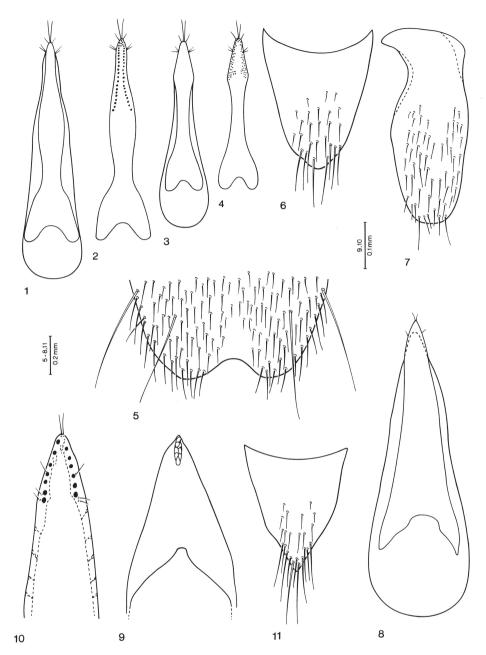
The acronyms used in text when referring to the deposition of the specimens are as follows:
ASC Collection of Aleš Smetana, Ottawa, Canada;
MSC Collection of Michael Schülke, Berlin, Germany;
NHMW Naturhistorisches Museum, Wien, Austria.
For holotypes and allotypes all data are presented in full.

SYSTEMATICS

Quedius (Distichalius) ladas sp. n. (Figs 5-11)

Type material. Holotype (\Diamond) and allotype (\Diamond): China: "CHINA: N-Yunnan Diqing Tibet. Aut. Pr. Deqin Co. Baima Shan pass 25 km SE Deqin, 28°19.38'N 99°05.47'E, 4225 m, 8.vi.2005, A. Smetana [C154]", (ASC).

Description. Black, elytra with suture and apical margin narrowly paler, brownish, apical margins of abdominal tergites vaguely paler; head slightly, pronotum and abdomen markedly iridescent. Palpi piceous, last segments of both maxillary and labial palpi paler; antennae black, bases of first two antennal segments yellowish; legs piceous-black with medial faces of front tibia and all tarsi paler. Head rounded, wider than long; eyes large and convex, tempora markedly shorter than length of eves seen from above (ratio 0.63); two additional setiferous punctures between anterior frontal punctures; posterior frontal puncture situated closer to posterior margin of eve than to posterior margin of head, two punctures between it and posterior margin of head; one small puncture at posterior margin of eye; temporal puncture situated slightly closer to posterior margin of eye than to posterior margin of head; surface of head with very fine, dense microsculpture of irregular transverse and oblique waves. Antenna moderately long, segments 2 and 3 subequal in length, segments 4 and 5 about as long as wide, outer segments slightly wider than long, last segment about as long as two preceding segments combined. Pronotum wider than long (ratio 1.12), widest at about posterior third, narrowed anteriad, with lateral margins continuously arcuate with broadly rounded base, transversely convex; dorsal rows each with three punctures, one puncture between each dorsal and sublateral row, sublateral rows each with two or three punctures, posterior puncture situated behind level of large lateral puncture; surface of pronotum with microsculpture similar to that on head but finer and denser. Scutellum with very fine, dense microsculpure of transverse waves, impunctate. Elytra relatively long, at suture about as long as, at sides longer (ratio 1.21) than pronotum at midline; punctation moderately coarse and dense, transverse interspaces between punctures mostly about as large as diameters of punctures; surface between punctures with microsculpture of dense microscopic punctulation; pubescence piceous-black, short, moderately dense. Wings fully developed. Abdomen with tergite 7 (fifth visible) with whitish apical seam of palisade setae; tergite 2 (in front of first visible tergite) with some scatterd, very fine punctures; punctation of tergites markedly finer than that of elytra, sparse and even on first two visible tergites, on remaining tergites denser



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Figs 1-11. *Quedius transparens* Motschulsky, 1845: 1- aedeagus, ventral view; 2- underside of paramere with sensory peg setae. *Quedius rusticus* Smetana, 1971: 3- aedeagus, ventral view; 4- underside of paramere with sensory peg setae (Figs 1- 4 from Smetana, 1971). *Quedius ladas* sp. n.: 5- apical portion of male sternite 8; 6- tergite 10 of male genital segment; 7- sternite 9 of male genital segment; 8- aedeagus ventral view; 9- apical portion of median lobe, paramere removed; 10- apical portion of underside of paramere with sensory peg setae; 11- tergite 10 of female genital segment.

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on basal portion of each tergite, and in general becoming sparser toward apex of abdomen; surface between punctures with excessively fine microsculpture of rudimentary striae.

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Male. First four segments of front tarsus markedly dilated, sub-bilobed, each densely covered with modified pale setae ventrally, segment 2 wider than apex of tibia (ratio 1.20); segment 4 narrower than preceding segments. Sternite 8 with two long setae on each side, apical margin with moderately deep and wide, obtusely triangular medioapical emargination, small triangular area before emargination flattened and smooth (Fig. 5). Genital segment with tergite 10 rather short and wide, markedly narrowed toward narrowly arcuate apex, setose as in Fig. 6; sternite 9 short and wide, with short basal portion, apical portion subtruncate apically, with two differentiated apical setae (Fig. 7). Aedeagus (Figs 8-10) relatively large and robust, median lobe gradually, evenly narrowed into acute apical portion, on face adjacent to paramere with fine short longitudinal carina just below apex. Paramere large, almost evenly narrowed toward subacute apex, apex of paramere exceeding apex of median lobe; two very fine apical setae at apex of paramere, one shorter seta and two minute setae at each lateral margin below apex; sensory peg setae on underside of paramere.

Female. First four segments of front tarsus similar to those of male, but only moderately dilated, segment 2 about as wide as apex of tibia. Tergite 10 of genital segment shaped as in Fig. 11, with two long apical setae and numerous additional setae.

Length 6.8-7.0 mm.

Geographical distribution. *Quedis ladas* is at present known only from the type locality in Baima Shan, northern Yunnan.

Bionomics. Both specimens of the original series were taken in an *Abies* forest with *Rhododendron* undergrowth by sifting various wet debris and moss directly in a large seepage.

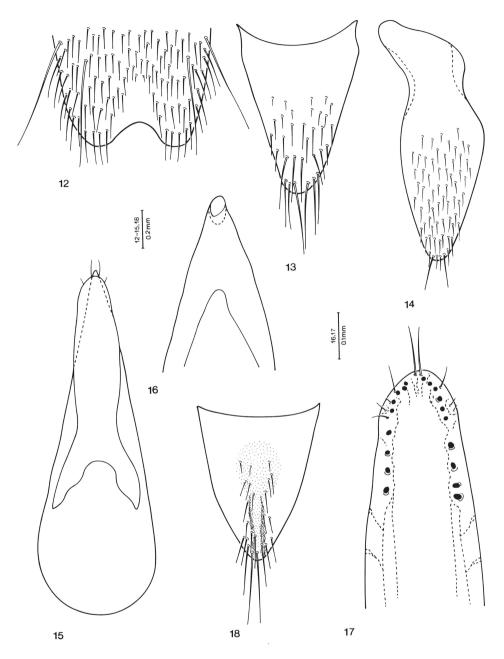
Recognition and comments. *Quedius ladas.* is well characterized by the combination of the external characters (coloration, chaetotaxy of the head and pronotum) with the shape of the aedeagus, and tergite 10 of the female genital segment. It resembles *Quedius kozlovi* Boháč, 1988 from northern Sichuan, and *Quedius tibetanus* Boháč, 1988 from Qinghai and northern Sichuan, but differs from both, in addition to the different aedeagus and tergite 10 of female genital segment, by the larger size.

Etymology. The specific epithet is the name of *Ladas*, *-ae*, m, a runner of Alexander the Great, whose name became a proverb for swiftness, in apposition.

Quedius (Distichalius) phormio sp. n. (Figs 12-18)

Type material. Holotype (\eth) and allotype (\bigcirc): China: "CHINA: N-Yunnan Diqing Tibet. Aut. Pr. Zhongdian Co. Xue Shan near lake, 23km S Zhongdian, 27°37.1'N 99°38.5'E 3895 m, 15.vi.2005, A. Smetana [C161]", (ASC). Paratypes: China: [Yunnan]: same data as holotype, 3 $\eth \circlearrowright$, 5 $\bigcirc \bigcirc$, (ASC); Xue Shan nr. Zhongdian 4000-4100 m, 27°49N 99°34E, 23.vi.96 [C36] /collected by A. Smetana, J. Farkač and P. Kabátek, 1 \circlearrowright , 2 $\bigcirc \bigcirc$, (ASC); same,

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Figs 12-18. *Quedius phormio* sp. n.: 12- apical portion of male sternite 8; 13- tergite 10 of male genital segment; 14sternite 9 of male genital segment; 15- aedeagus ventral view; 16- apical portion of median lobe, paramere removed; 17- apical portion of underside of paramere with sensory peg setae; 18- tergite 10 of female genital segment.

but 3900 m, 25.vi.1996 [C41], 2 ♂♂, 3 ♀♀, (ASC); Zhongdian Co. 10 km SW Zhongdian, Xue Shan, 27°46.5'N 99°36.5'E, 3800 m, 20.viii.2003 [C129], A. Smetana, 4 ♂♂, 9 ♀♀, (ASC).

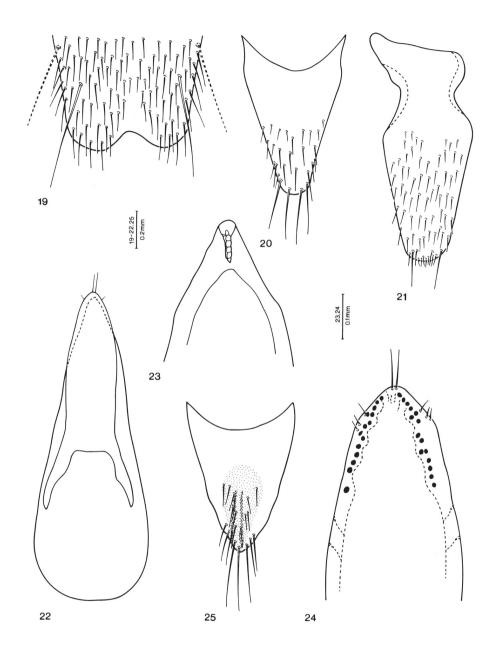
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Description. Piceous-black with black head, elytra dark brownish, apical margins of abdominal tergites paler; head and pronotum slightly, abdomen markedly iridescent. Palpi piceous, last segments of both maxillary and labial palpi paler; antennae black, particularly first three segments, bases of first two antennal segments yellowish; legs brownish, middle tibiae and hind femora and tibiae piceous-black to black. Head rounded, about as long as wide; eyes large and convex, tempora considerably shorter than length of eyes seen from above (ratio 0.43); two additional setiferous punctures between anterior frontal punctures; posterior frontal puncture situated close to posteriomedial margin of eye, separated from it by distance about equal to diameter of puncture, two punctures between it and posterior margin of head; one small puncture at posterior margin of eve; temporal puncture situated about midway between posterior margin of eye and posterior margin of head; surface of head with extremely fine, dense microsculpture of irregular transverse and oblique waves. Antenna moderately long, segment 3 longer than segment 2 (ratio 1.32), segments 4 to 6 longer than wide, gradually getting shorter outer segments about as long as wide, last segment about as long as two preceding segments combined. Pronotum wider than long (ratio 1.10), widest at about posterior third, narrowed anteriad, with lateral margins continuously arcuate with broadly rounded base, transversely convex; dorsal rows each with three punctures, one puncture between each dorsal and sublateral row, sublateral rows each with two or three punctures, posterior puncture situated behind level of large lateral puncture; surface of pronotum with microsculpture similar to that on head but finer and denser. Scutellum with extremely fine, dense microsculpure of transverse waves, impunctate. Elytra relatively long, at suture about as long as, at sides longer (ratio 1.18) than pronotum at midline; punctation fine, moderately dense, slightly asperate, transverse interspaces between punctures mostly larger than diameters of punctures; surface between punctures with microsculpture of dense microscopic punctulation, pubescence piceous-black, moderately long, moderately dense. Wings fully developed. Abdomen with tergite 7 (fifth visible) with whitish apical seam of palisade setae; tergite 2 (in front of first visible tergite) densely punctate and pubescent; punctation of tergites markedly finer than that of elytra, dense on basal portion of each tergite but becoming gradually sparser toward apical margin of each tergite, and in general toward apex of abdomen; surface between punctures with excessively fine microsculpture of rudimentary striae.

Male. First four segments of front tarsus considerably dilated, almost patellate, subbilobed, each densely covered with modified pale setae ventrally, segment 2 markedly wider than apex of tibia (ratio 1.50); segment 4 narrower than preceding segments. Sternite 8 with two long setae on each side, apical margin with moderately deep and wide, obtusely triangular medioapical emargination, small triangular area before emargination flattened and smooth (Fig. 12). Genital segment with tergite 10 moderately wide, markedly narrowed toward arcuate apex, with about six long apical setae, otherwise sparingly setose with shorter setae (Fig. 13); sternite 9 with robust basal portion, with two differentiated apical setae

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Figs 19-25. *Quedius elpenor* sp. n.: 19- apical portion of male sternite 8; 20- tergite 10 of male genital segment; 21- sternite 9 of male genital segment; 22- aedeagus ventral view; 23- apical portion of median lobe, paramere removed; 24- apical portion of underside of paramere with sensory peg setae; 25- tergite 10 of female genital segment.

(Fig. 14). Aedeagus (Figs 15-17) relatively large and robust, median lobe gradually, evenly narrowed into acute apical portion, on face adjacent to paramere with fine hook just below apex. Paramere large, constricted in basal third, subparallel-sided in middle portion, with arcuate apex, apex of paramere not quite reaching apex of median lobe; two fine apical setae at apex of paramere, one shorter seta and two minute setae at each lateral margin below apex; sensory peg setae on underside of paramere forming longitudinal row at each lateral margin of apical portion of paramere, in each row becoming markedly larger in direction away of apex of paramere.

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Female. First four segments of front tarsus similar to those of male, but only moderately dilated, segment 2 about as wide as apex of tibia. Tergite 10 of genital segment of distinctive shape, with characteristically pigmented middle portion, and with midline before apex elevated to form obtuse longitudinal carina, setose as in Fig. 18.

Length 6.5-7.0 mm.

Geographical distribution. *Quedius phormio* is at present known from several localities in Xue Shan in northern Yunnan.

Bionomics. The specimens of the original series were collected in habitats at high mountain elevations, from 3800 m to 4100 m. The specimens bearing the code C161 were collected in a devastated *Abies* forest with intermixed *Betula*, *Larix* and *Rhododendron*, by sifting mainly moist needles under the branches of *Abies* trees cut down the previous year. Others (C36, C41, C129) were taken in high montane coniferous forest with intermixed rhododendrons and birches by sifting layers of fallen rhododendron leaves, and by sifting various floor debris, moss and pieces of rotting wood, together with *Q. bohemorum* Smetana, 1997, *Q. farkaci* Smetana, 1997, *and Q. amicorum* Smetana, 1997.

Recognition and comments. *Quedius phormio* may be positively distinguished from the three following species only by the shape of the aedeagus (Figs. 15-17) and that of tergite 10 of the female genital segment (Fig. 18). It is the on average largest and most robust species of the four involved species.

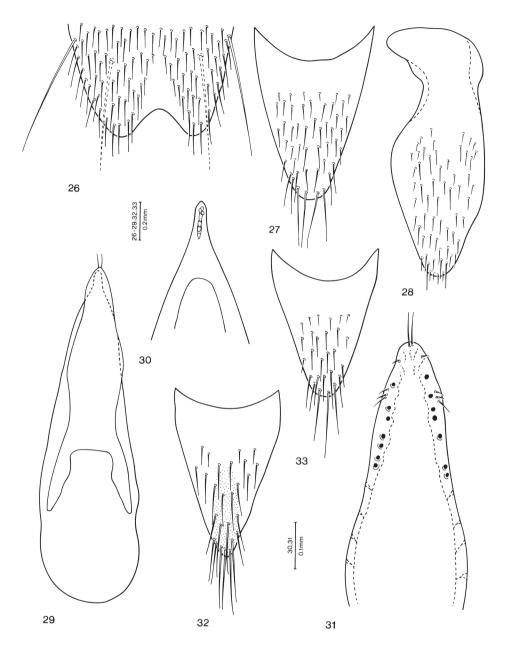
Etymology. The specific epithet is the name of *Phormio, -onis*, m, the peripathetic philosopher of *Ephesus*, who delivered a lecture in the presence of *Hannibal* on the duties of military commanders and on the art of war, in apposition.

Quedius (Distichalius) elpenor sp. n. (Figs 19-25)

Type material. Holotype (\Diamond) and allotype (\Diamond): China: "CHINE province du SINCHUAN Massif du JIU DING-SHAN, 3300/3500 m, M. TRONQUET, 31.vii.-1.viii.94", (ASC). Paratype: China: [Sichuan]: same data as holotype, 1 \Diamond (ASC).

Description. In all characters similar to *Q. phormio* and different mainly by male and female sexual characters. Coloration similar, but pronotum piceous and more distinctly iridescent, posterior margin of each elytron narrowly paler; antenna with first three segments piceous, remaining segments dark brunneous. Head smaller with less protruding eyes, antenna more slender.

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Figs 26-33. *Quedius numa* sp. n.: 26- apical portion of male sternite 8; 27- tergite 10 of male genital segment; 28sternite 9 of male genital segment; 29- aedeagus ventral view; 30- apical portion of median lobe, paramere removed; 31- apical portion of underside of paramere with sensory peg setae; 32- tergite 10 of female genital segment. *Quedius menippus* sp. n.: 33- tergite 10 of male genital segment.

Male. First four segments of front tarsus considerably dilated, almost patellate, subbilobed, each densely covered with modified pale setae ventrally, segment 2 markedly wider than apex of tibia (ratio 1.46); segment 4 narrower that preceding segments. Sternite 8 with two long setae on each side, apical margin with medioapical emargination similar to that of Q. *phormio* but somewhat narrower and less deep, small triangular area before emargination flattened and smooth (Fig. 19). Genital segment with tergite 10 similar to that of Q. *phormio*, but less setose (Fig. 20); sternite 9 somewhat wider (Fig. 21). Aedeagus (Figs 22-24) shorter and wider; apical portion of median lobe shorter, on face adjacent to paramere with distinct longitudinal carina. Paramere markedly shorter and somewhat wider than that of Q. *phormio*, less constricted in basal third, with narrowly arcuate apex about reaching, or vaguely exceeding, apex of median lobe; two apical setae at apex of paramere, one shorter and two minute setae at each lateral margin below apex; sensory peg setae on underside of paramere forming longitudinal row at each lateral margin of apical portion of paramere, similar to those of Q. *phormio*, but peg setae more numerous.

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Female. First four segments of front tarsus similar to those of male, but only moderately dilated, segment 2 about as wide as apex of tibia. Tergite 10 of genital segment very similar to that of *Q. phormio*, with similar obtuse carina, but with pigmented middle portion wider (Fig. 25).

Length 6.3-7.2 mm.

Geographical distribution. *Quedius elpenor* is at present known only from the type locality in northern Sichuan.

Bionomics. Nothing is known about the collection circumstances of the specimens of the original series.

Recognition and comments. *Quedius elpenor* may be easily distinguished from *Q. phormio* by the characters given in the description. It may be positively distinguished from the similar species *Q. numa* and *Q. menippus* only by the shape of the aedeagus.

The holotype is missing the left additional puncture between the anterior frontal punctures on the head.

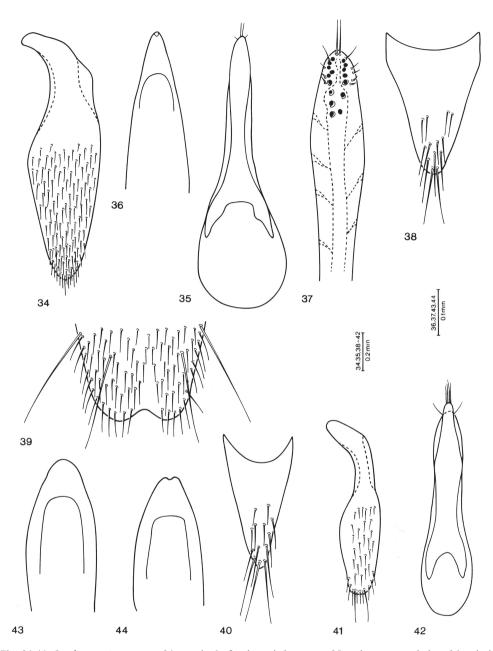
Etymology. The specific epithet is the name of *Elpenor*, *-oris* m, one of the companions of *Ulysses*, whom *Circe* changed into swine, in apposition.

Quedius (Distichalius) numa sp. n. (Figs 26-32)

Type material. Holotype (\Diamond) and allotype (\Diamond): China: "CHINA, Prov. SICHUAN Str. v. PINGWU nach NANPING MAONIU SHAN, Nordseite 3400-3450 m, I. A. PUCHNER, 29.v.-5.vi.2006". Holotype deposited in (NHMW), allotype in (ASC).

Description. In all characters similar to *Q. elpenor* and different mainly by male and female sexual characters. Antenna piceous with bases of segments 2 and 3 rufotestaceous. Head larger, pronotum more voluminous, elytra shorter, at suture shorter (ratio 0.88), at sides as long as pronotum at midline (in *Q. elpenor* elytra at suture about as long as, and at sides longer (ratio 1.11) than pronotum at midline).

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Figs 34-44. *Quedius menippus* sp. n.: 34- sternite 9 of male genital segment; 35- aedeagus ventral view; 36- apical portion of median lobe, paramere removed; 37- apical portion of underside of paramere with sensory peg setae; 38-tergite 10 of female genital segment. *Quedius daedalus* sp. n.: 39- apical portion of male sternite 8; 40- tergite 10 of male genital segment; 41- sternite 9 of male genital segment; 42- aedeagus ventral view; 43, 44- apical portions of median lobes, parameres removed.

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Male. First four segments of front tarsus considerably dilated, almost patellate, subbilobed, each densely covered with modified pale setae ventrally, segment 2 markedly wider than apex of tibia (ratio 1.45); segment 4 narrower than preceding segments. Sternite 8 with two long setae on each side, apical margin with medioapical emargination similar to that of Q. *elpenor* but somewhat wider and deeper (about same as that of Q. *menippus*), small triangular area before emargination flattened and smooth (Fig. 26). Genital segment with tergite 10 more setose than that of Q. *elpenor* (Fig. 27); sternite 9 wider, of different shape (Fig. 28). Aedeagus (Figs 29-31) longer than that of Q. *elpenor*; median lobe evenly and in straight line narrowed anteriad, anteriorly rather suddenly narrowed into rod-like, acute apical portion, on face adjacent to paramere with moderately long medial carina below apex. Paramere large, long, dilated in front of constricted portion and then narrowed anteriad into subacute apex, apex about reaching apex of median lobe; two fine apical setae at apex of paramere, one finer seta and three minute setae at each lateral margin below apex; sensory peg setae on underside of paramere small, not numerous, forming longitudinal, irregular row along each lateral margin of apical portion of paramere.

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Female. First four segments of front tarsus similar to those of male, but only moderately dilated, segment 2 about as wide as apex of tibia. Tergite 10 of genital segment similar to that of *Q. elpenor* but without appreciable carina, pigmented medioapically, more numerously setose (Fig. 32).

Length 7.0 mm.

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Geographical distribution. *Quedius numa* is at present known only from the type locality in Maoniu Shan in northern Sichuan.

Bionomics. Nothing is known about the collection circumstances of the specimens of the original series.

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Recognition and comments. *Quedius numa* may be positively distinguished from the similar species *Q. elpenor* and *Q. menippus* only by the shape of the aedeagus. It differs from *Q. phormio*, in addition to the different aedeagus and tergite 10 of female genital segment, by the narrower body form, smaller size, by the smaller head with less protruding eyes, and by the more slender antenna.

Etymology. The specific epithet is the name of *Numa*, *-ae*, m, which is a Roman proper name, in apposition.

Quedius (Distichalius) menippus sp. n. (Figs 33-38)

Type material. Holotype (\Im) and allotype (\bigcirc): China: "CHINA, Sichuan Langmusi, 3500-3600 m, 13.vii. 94, A. Smetana [C14]", (ASC). [But see Geographical distribution]. Paratypes: China: [Sichuan, but see Geographical distribution]: same data as holotype, 1 \Im , 10 $\bigcirc \bigcirc$, (ASC); [Gansu]: Mts. 25km E Xiahe 3000 m, 5.viii.1994, A. Smetana [C30], 1 \bigcirc , (ASC).

Description. In all external characters, including coloration, similar to *Q. elpenor* and different mainly by male and female sexual characters. Pronotum only vaguely iridescent, body form narrower, size slightly smaller.

Male. First four segments of front tarsus considerably dilated, almost patellate, subbilobed, each densely covered with modified pale setae ventrally, segment 2 markedly wider than apex of tibia (ratio 1.40); segment 4 narrower than preceding segments. Sternite 8 with two long setae on each side, apical margin with medioapical emargination about same as that of *Q. numa*, small triangular area before emargination flattened and smooth. Genital segment with tergite 10 similar to that of *Q. elpenor*, but slightly wider and shorter (Fig. 33); sternite 9 more elongate with narrower basal portion and without differentiated apical setae (Fig. 34). Aedeagus (Figs 35-37) very narrow, elongate; median lobe narrow, parallelsided, anteriorly narrowed into acute apical portion, no carina below apex on face adjacent to paramere. Paramere very long, widely constricted in middle portion, anteriorly dilated into fusiform apical portion with narrowly arcuate apex, apex somewhat exceeding apex of median lobe; two fine apical setae at apex of paramere, two somewhat finer setae and several minute setae at each lateral margin below apex; sensory peg setae on underside of paramere forming two longitudinal rows along midline of apical portion of paramere.

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Female. First four segments of front tarsus similar to those of male, but only slightly dilated (less so than those of *Q. elpenor*), segment 2 slightly narrower than apex of tibia. Tergite 10 of genital segment narrowly triangular, simple, lacking obtuse longitudinal carina on apical portion, with two long apical setae, otherwise sparingly setose (Fig. 38).

Length 5.8-6.5 mm.

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Geographical distribution. *Quedius menippus* is at present known from two mountain ranges in Gansu. Most specimens come from the mountain range at Langmusi. The locality labels of the specimens taken at Langmusi give Sichuan as the province of provenience. However, this is erroneous. The area near Langmusi (Dagcanglhamo) the specimens were collected in, is in the province of Gansu, quite close to the Sichuan border.

Bionomics. The specimens collected at Langmusi [C14] were taken in a coniferous forest (mostly *Abies*), together with *Q. bito* Smetana, 1996 and *Q. chremes* Smetana 1996 by sifting moist debris and needles under branches left behind from a cut down *Abies* tree. The specimen collected at 25km E Xiahe [C30] was taken in a mixed forest by sifting moist to wet leaf litter in a shady gully.

Recognition and comments. *Quedius menippus* differs from *Q. elpenor* by the characters outlined in the description above. It differs from *Q. phormio*, and any other similar species, by the entirely different, characteristically shaped aedeagus.

One of the paratypes is missing the right additional puncture between the anterior frontal punctures on the head, and another paratype has four punctures in each of the dorsal rows on the pronotum.

Etymology. The specific epithet is the name of *Menippus, -i*, m, the great Asiatic orator from *Stratonice* in the time of *Cicero*, in apposition.

Quedius (Distichalius) daedalus sp. n. (Figs 39-46)

Type material. Holotype (\bigcirc) and allotype (\bigcirc): China: "CHINA Sichuan, Gongga Shan, Hailuogou, above Camp 3, 3000 m, 6.vii.96, 29°35N 102°00E C53"/"collected by A.

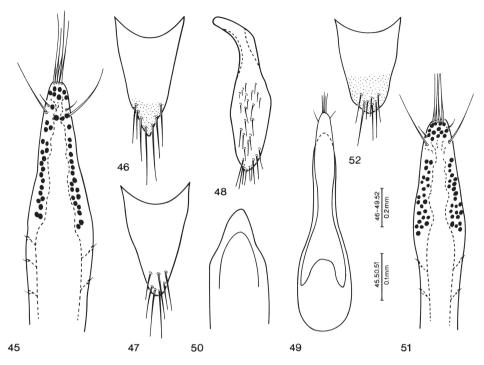
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Smetana, J. Farkač and P. Kabátek", (ASC). Paratypes: China: [Sichuan]: same data as holotype, $3 \stackrel{\circ}{\circ} \stackrel{\circ}{\circ} \stackrel{\circ}{\circ} \stackrel{\circ}{\circ}$, (ASC); same, but C52, $4 \stackrel{\circ}{\circ} \stackrel{\circ}{\circ}$, (ASC); same, but 3050 m, 22.VII.1994, C18, $1 \stackrel{\circ}{\circ}$ (ASC); same, but 3200m, 7.vii.96 C54, $5 \stackrel{\circ}{\circ} \stackrel{\circ}{\circ} \stackrel{\circ}{\circ} \stackrel{\circ}{\circ}$, (ASC); Kangding (formerly Tatsienlu) 2900 m, 30°03N 102°02E, 2.vii.1996, A. Smetana [C48], $1 \stackrel{\circ}{\circ} \stackrel{\circ}{\circ} \stackrel{\circ}{\circ} \stackrel{\circ}{\circ}$, (ASC); W Sichuan Kangding, 2800m, 30°04N 101°58E, 21.vii.1998, A. Smetana [C88]"/"1998 China Expedition J. Farkač, D. Král, J. Schneider & A. Smetana", $1 \stackrel{\circ}{\circ} \stackrel{\circ}{\circ} \stackrel{\circ}{\circ}$, (ASC); W Sichuan, 15km W Kangding, Rte. 138, 3250 m, 29°57N 102°54E, 19.vii.1998, A. Smetana [C86]"/" 1998 China Expedition J. Farkač, D. Král, J. Schneider & A. Smetana", $1 \stackrel{\circ}{\circ} (ASC)$; W Sichuan 20km N Sabdé, 3200 m, 29°35N 102°23W, 12.viii.1998, A. Smetana [C78], $1 \stackrel{\circ}{\circ}$ (ASC); same, 3300m, 14.vii.1998, [C82], $1 \stackrel{\circ}{\circ}$, (ASC); same, 15.vii.1998, [C83], $1 \stackrel{\circ}{\circ}$, (ASC). [Yunnan]: Yunnan pass 50 km W Judian, 10.-13.vi.2005, leg. Ivo Jeniš, $1 \stackrel{\circ}{\circ}$, $1 \stackrel{\circ}{\circ}$, (ASC, MSC).

 (\blacklozenge)

Description. Head and pronotum black, elytra brunneous to testaceo-brunneous, abdomen piceous with apical margins of tergites usually paler; head and pronotum slightly, abdomen markedly iridescent. Maxillary and labial palpi testaceous, slightly darkened in some specimens; antennae testaceous with first three segments usually slightly darkened; legs brownish, lateral faces of front tibiae, middle and hind tibiae, and middle and hind femora piceous-black. Head rounded, wider than long (ratio 1.19); eves very large and convex, tempora considerably shorter than length of eyes seen from above (ratio 0.23); two additional setiferous punctures between anterior frontal punctures; posterior frontal puncture touching posteriomedial margin of eye, two punctures between it and posterior margin of head; temporal puncture close to posterior margin of eve, separated from it by distance about equal to diameter of puncture; surface of head with very fine, dense microsculpture of irregular transverse and oblique waves, becoming more distinct ob clypeus. Antenna moderately long, segments 2 an 3 subequal in length, segments 4 to 6 longer than wide, gradually getting shorter, segements 7-10 about as long as wide, last segment as long as two preceding segments combined. Pronotum about as long as wide, widest at about posterior third, narrowed anteriad, with lateral margins continuously arcuate with broadly rounded base, transversely convex; dorsal rows each with three punctures, sublateral rows each with two or three punctures, posterior puncture situated behind level of large lateral puncture; surface of pronotum with microsculpture similar to that on head. Scutellum with extremely fine, dense microsculpure of transverse waves, impunctate. Elytra relatively long, at suture vaguely shorter (ratio 0.93), at sides longer (ratio 1.21) than pronotum at midline; punctation fine, dense, transverse interspaces between punctures about as large as diameters of punctures; surface between punctures without microsculpture, piceous-black pubescence moderately long and dense. Wings fully developed. Abdomen with tergite 7 (fifth visible) with whitish apical seam of palisade setae; tergite 2 (in front of first visible tergite) with a few very fine punctures; punctation of tergites finer than that of elytra, dense on basal portion of each tergite but becoming gradually sparser toward apical margin of each tergite, and in general toward apex of abdomen; pubescence piceous, forming indistinct denser patch at each side of base of each tergite; surface between punctures with excessively fine microsculpture of rudimentary striae.



Figs 45-52. *Quedius daedalus* sp. n.: 45- apical portion of underside of paramere with sensory peg setae; 46- tergite 10 of female genital segment. *Quedius gyges* sp. n.: 47- tergite 10 of male genital segment; 48- sternite 9 of male genital segment; 49- aedeagus, ventral view; 50- apical portion of median lobe, paramere removed; 51- apical portion of underside of paramere with sensory peg setae; 52- tergite 10 of female genital segment.

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Male. First four segments of front tarsus markedly, sub-bilobed, each densely covered with modified pale setae ventrally, segment 2 wider than apex of tibia (ratio 1.28); segment 4 narrower than preceding segments. Sternite 8 with two long setae on each side, apical margin with moderately deep and wide, obtusely triangular medioapical emargination, small triangular area before emargination flattened and smooth (Fig. 39). Genital segment with tergite 10 narrow, markedly narrowed toward narrowly arcuate apex, setose as in Fig. 40; sternite 9 with long and narrow basal portion, apical portion with obtuse apex, with two differentiated apical setae (Fig. 41). Aedeagus (Figs 42-45) narrow, elongate, median lobe with apex evenly arcuate, or slightly emarginate in middle. Paramere elongate, apical portion of narrow, elongate lancet-like shape with narrowly arcuate apex markedly exceeding apex of median lobe (Figs 42, 45); four closely set, strong and long apical setae at apex of paramere, one somewhat finer but equally long seta, and one fine, short seta at each lateral margin below apex; sensory peg setae on underside of paramere numerous, forming small group below apical margin of paramere and continuing posteriad as long, single longitudinal row along each lateral margin of apical portion of paramere.

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Female. First four segments of front tarsus similar to those of male, but distinctly less dilated, segment 2 about as wide as apex of tibia. Tergite 10 of genital segment narrow, pigmented apically, with slightly differentiated apical portion with acute apex, bearing two apical and two or three shorter setae at each lateral margin, otherwise asetose (Fig. 46).

 (\blacklozenge)

Length 4.8-6.0 mm.

Geographical distribution. *Quedius daedalus* is at present known from several localities in western Sichuan, particularly in the Gongga Shan range.

Bionomics. The specimens of the original series were collected mostly in mixed forests (*Abies, Picea, Pinus, Betula, Populus*) by sifting moist to wet needles and other debris under piled up branches of recently felled *Abies* trees, by sifting old mushrooms and debris around them, and by sifting fallen leaves and other debris accumulated in depressions of the forest floor.

Recognition and comments. *Quedius daedalus* may be at present confused only with *Q. gyges,* from which it can be positively distinguished only by the shape of the aedeagus and that of tergite 10 of the female genital segment. The shape of tergite 10 of the female genital segment is equally reliable for the distinguishing of these two species as the shape of the aedeagus.

Note that both species occur together in the pass 50km W Judian in Yunnan.

Etymology. The specific epithet is the name of *Daedalus*, -*i*, m, the mythical Athenian architect of the times of *Theseus* and *Minos*, father of *Icarus*, and builder of the Cretan labyrinth, in apposition.

Quedius (Distichalius) gyges sp. n. (Figs 47-52)

Type material. Holotype (\Diamond) and allotype (\Diamond): China: "CHINA, Gansu, Mts. 25 km E Xiahe, 2805-2925 m, 3.viii.1994, A. Smetana [C28]", (ASC). Paratypes: [Yunnan]: Yunnan pass 50 km W Judian 10.-13.vi.2005, leg. Ivo Jeniš, 1 \Diamond , 4 $\Diamond \Diamond$, 4 $\Diamond \Diamond$, (ASC, MSC).

Description. In all external characters similar to *Q. daedalus* and different only by male and female sexual characters. Average size smaller.

Male. First four segments of front tarsus markedly dilated, but slightly less so that those of *Q. daedalus*, sub-bilobed, each densely covered with modified pale setae ventrally, segment 2 about as wide than apex of tibia; segment 4 narrower that preceding segments. Sternite 8 with two long setae on each side, apical margin with medioapical emargination not appreciably different from that of *Q. daedalus*, small triangular area before emargination flattened and smooth. Genital segment with tergite 10 markedly smaller and less setose than that of *Q. daedalus* (Fig. 47); sternite 9 similar to that of *Q. daedalus*, but smaller and less setose (Fig. 48). Aedeagus (Figs 49- 51 similar to that of *Q. daedalus*, but narrower; median lobe anteriorly narrowed into apical portion with narrowly arcuate apex. Paramere similar, but more attenuate in middle portion, and with apical portion of different shape, with narrowly arcuate apex more distinctly exceeding apex of median lobe; four closely set, strong and long

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apical setae at apex of paramere, one somewhat finer but equally long seta, and one fine, short seta at each lateral margin below apex; sensory peg setae on underside of paramere forming small group under apical margin of paramere, separated from shorter and wider longitudinal row at each lateral margin of apical portion of paramere.

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Female. First four segments of front tarsus similar to those of male, but less dilated, segment 2 slightly narrower than apex of tibia. Tergite 10 of genital segment quite different from that of *Q. daedalus*, markedly shorter and wider, extensively pigmented apically, moderately narrowed toward obtuse apex, setose as in Fig. 52.

Length 5.00 mm.

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Geographical distribution. *Quedius gyges* is at present known only from the type locality in Gansu.

Bionomics. The two specimens of the original series from Gansu [C28] were taken in a mixed forest by sifting a pile of moist wood chips.

Recognition and comments. *Quedius gyges* may be at present confused only with *Q. daedalus*, from which it can be positively distinguished only by the shape of the aedeagus, and that of tergite 10 of the female genital segment. The shape of tergite 10 of the female genital segment is equally reliable for the distinguishing of these two species as is the shape of the aedeagus.

Note that both species occur together in the pass 50 km W Judian in Yunnan.

Etymology. The specific epithet is the name of *Gyges*, *-is*, m, the king of *Lydia*, famous for the possession of a ring, with which he could render himself invisible, in apposition.

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