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**Contributions to the knowledge of the Quediina
(Coleoptera: Staphylinidae: Staphylinini) of China. Part 56.
Genus *Quedius* STEPHENS, 1829
Subgenus *Microsaurus* DEJEAN, 1833. Section 23**

Aleš SMETANA

A b s t r a c t : Four new species of the subgenus *Microsaurus* DEJEAN, 1833 are described, based on specimens from the People's Republic of China: *Q. auchenias* nov.sp. (Hainan), *Q. trachelos* nov.sp. (Hainan), *Q. kurbatovi* (Sichuan) and *Q. norvegorum* nov.sp. (Shaanxi). Each species is described, illustrated and all available distributional and bionomic data are given. Two new species-groups are established and characterized: *Q. zeuxis*-group to include *Quedius zeuxis* SMETANA, 1997, *Quedius auchenyas* nov.sp. and *Quedius trachelos* nov.sp., and *Q. kurbatovi*-group to include *Quedius kurbatovi* nov.sp. *Quedius koltzei* EPPELSHEIM, 1887 is reported for the first time from mainland China from Heilongjiang and the male sexual characters of the species are described and illustrated. Additional faunistic and bionomic data on additional previously described species are presented.

Key words : Coleoptera, Staphylinidae, Staphylinini, Quediina, *Quedius*, subgenus *Microsaurus*, taxonomy, new species, descriptions, geographical distribution, mainland China, Palearctic Region.

Introduction

This is the fifty-sixth of a series of papers dealing with the Quediina of the People's Republic of China. It deals with the species of the subgenus *Microsaurus* DEJEAN, 1833. Four species are described as new: *Q. auchenias* nov.sp. (Hainan), *Q. trachelos* nov.sp. (Hainan), *Q. kurbatovi* nov.sp. (Sichuan) and *Q. norvegorum* nov.sp. (Shaanxi). Two new species-groups are established, the first one for the two first species and the second one for *Q. kurbatovi*. The species-group assignment of *Q. norvegorum* remains open at present.

Material and methods

The acronyms used in the text when referring to the deposition of the specimens are as follows:

ASC..... Collection of Aleš Smetana, deposited at The National Museum of Nature and Science, Toshiba, Japan

GRC Collection of Guillaume de Rougemont, London, England
 MHNG Collection of Muséum d'histoire naturelle, Genève, Switzerland
 NMW Collection of Naturhistorisches Museum, Wien, Austria
 SNUC Collection of the Department of Biology, Shanghai Normal University, Shanghai,
 P.R. China

The measurement ratios given in the descriptions are average values when more than one specimen was available. Label data for holotypes and allotypes are quoted exactly as they appear on the label. Separate lines are indicated by a slash, when applicable.

Descriptions and additional records

Quedius (Microsaurus) auchenias nov.sp. (Figs 1-8)

Type locality: China, Hainan, Ledong County, Jianfengling Nature Reserve, Mingfenngu, 950 m.

Type material: Holotype (♂): CHINA: "CHINA: Hainan Prov. Ledong County Jianfengling N. R. Mingfenngu 950 m., 29-IV-2012 Peng & Dai leg.". In SNUC. Allotype (♀): same data as holotype. In ASC. Paratypes: same data as holotype, 7♂♂, 9♀♀ (ASC, SNUC); same data as holotype, but date 30-IV-2012, 1♀ (SNUC); same data as holotype, but 1000 m, 18-V-2011, Bi Wen Juan leg., 1♀ (SNUC); Hainan, Lingshui County, Diaoluoshan N. R., 1000 m, 24-IV-2012, Peng & Dai leg., 1♂ (SNUC).

Description. Piceous to piceous-black, abdomen slightly iridescent; mouthparts, palpi, antennae and legs rufotestaceous. Head of rounded shape, wider than long (ratio 1.25), with posterior angles entirely obsolete, only vaguely narrowed behind eyes, neck therefore quite wide and not markedly differentiated from head, mostly by very fine superficial line interrupted medially; eyes large, moderately convex, tempora considerably shorter than eyes seen from above (ratio 0.22); no additional setiferous punctures between anterior frontal punctures; posterior frontal puncture and temporal puncture situated close to posteriomedial margin of eyes, separated from it by distance about equal to diameter of puncture; two punctures behind posterior frontal puncture at posterior margin of head; tempora impunctate; surface of head with extremely fine, superficial microsculpture of transverse waves with some micropunctulation. Antenna moderately long, segments 2 and 3 subequal in length, segments 4 and 5 longer than wide, following segments as long as wide, becoming gradually vaguely wider than long, last segment about as long as two preceding segments combined. Pronotum wider than long (ratio 1.25), widest at about posterior third, markedly narrowed anteriorly, with lateral margins continuously arcuate with broadly rounded base, transversely convex, lateral portions not explanate; dorsal rows each with three fine punctures,; sublateral rows each reduced to one puncture near anterior pronotal margin; microsculpture similar to that on head but still finer and partially rudimentary. Scutellum impunctate, but with very fine transverse rugae on basal portion, basal portion in addition mostly slightly depressed, on remaining surface with extremely fine microsculpture of rudimentary transverse waves. Elytra short, at base somewhat narrower than pronotum at widest point, not appreciably dilated posteriorly, at suture as long as, at sides vaguely longer (ratio 1.12) than pronotum at midline; punctuation moderately coarse and dense, becoming markedly finer toward lateral margin of each elytron, transverse interspaces between punctures on disc about as large

as diameters of punctures; each elytron with three inconspicuous, irregular longitudinal rows of two or three coarser punctures bearing long setae, such setae also present at posterior margin and lateral declivous portion of each elytron; pubescence piceous; surface between punctures without microsculpture. Wings fully developed. Abdomen with tergite 7 (fifth visible) bearing fine whitish apical seam of palisade fringe; tergite two (in front of first entirely visible tergite) pale and impunctate; punctuation of abdominal tergites finer and sparser than that on elytra, mostly evenly covering each tergite; pubescence piceous, long; surface between punctures with excessively fine, hardly detectable rudimentary microsculpture.

Male. First four segments of front tarsus moderately dilated, subbilobed, each densely covered with tenent setae ventrally; segment two about as wide as apex of tibia; segment four narrower than preceding segments. Sternite 8 with two large setae at each side, otherwise very sparsely setose; with inconspicuous medioapical sinuation, no impunctate flattened area before sinuation present (Fig. 1). Genital segment with tergite 10 evenly narrowed toward narrowly arcuate apex, with a few rather short setae at apex, otherwise asetose (Fig. 2); sternite 9 with narrow basal portion, apical portion slightly emarginated apically, with two apical setae, otherwise very sparingly setose (Fig. 3). Aedoeagus (Figs 4-7) with median lobe largely parallelsided, anteriorly suddenly narrowed into short apical portion with narrowly arcuate apex, on face adjacent to paramere, just in front of paramere, with conspicuous arcuate transverse carina, appearing as large dent in lateral view (Fig. 7). Paramere narrow, parallelsided or vaguely narrowed anteriorly, with arcuate apex about reaching transverse carina of median lobe; four minute apical setae and two much longer setae at each lateral margin below apex; underside with five fine sensory peg setae situated at apex of paramere.

Female. First four segments of front tarsus not appreciably different from those of male. Genital segment with tergite 10 as in Fig. 8, with numerous setae at and near apex, otherwise asetose.

Length 6.0- 6.8 mm.

Etymology. The specific epithet is the Greek noun in apposition *αυχενίας* (bull-necked). It refers to the wide neck of the species.

Geographical distribution. *Quedius auchenias* is at present known from two localities on the island of Hainan.

Bionomics. Nothing is known about the collecting circumstances of the specimens of the original series, except that they were collected at low elevations around 1000 m.

Recognition and comments. *Quedius auchenias* is similar to *Q. zeuxis* SMETANA, 1997, but it differs, in addition to the differently shaped aedoeagus, by several external characters, particularly by the larger size, by the larger eyes, by the even punctuation of the two first visible abdominal tergites, etc.

***Quedius (Microsaurus) trachelos* nov.sp. (Figs 9-15)**

Type locality: China: Hainan, Wuzhishan City, Shuiman Village, Wuzhishan Nature Reserve, 650-700 m.

Type material: Holotype (♂): CHINA: "CHINA: Hainan Prov. Wuzhishan City Shuiman Village Wuzhishan N. R. 650-700 m, 21-IV-2012 Peng & Dai leg.". In SNUC. Paratypes: Hainan: same data as holotype, 6♂♂ (ASC, SNUC); Lingshui County, Diaoluoshan N. R., 1000 m, 24-IV-2012, Peng & Dai leg., 1♂ (SNUC).

Description. In all characters similar to *Q. zeuxis*, including impunctate large middle portions of first two visible tergites, but different by a few external characters and particularly by the differently shaped aedoeagus. Eyes markedly larger, tempora considerably shorter than eyes from above (ratio 0.11, corresponding value for *Q. zeuxis* 0.41); both posterior frontal puncture and temporal puncture touching eye margin (both separated from eye margin by diameter of puncture in *Q. zeuxis*); punctuation of elytra somewhat denser, transverse interspaces between punctures about as large as diameters of punctures (at least twice as large as diameters of punctures in *Q. zeuxis*).

Male. First four segments of front tarsus moderately dilated, each densely covered with tenent setae ventrally; segment two about as wide as apex of tibia; segment four narrower than preceding segments. Sternite 8 very sparsely setose, with two long setae on each side; with inconspicuous, subarcuate medioapical emargination, no impunctate flattened area before emargination present (Fig.9). Genital segment with tergite 10 markedly narrowed toward arcuate apex, with several setae at and near apex, otherwise asetose (Fig. 10); sternite 9 with very narrow, elongate basal portion, apical portion with subtruncate to somewhat emarginated apex, with four differentiated apical setae, otherwise sparsely setose (Fig.11). Aedoeagus (Figs 12-15) similar to that of *Q. zeuxis*, but apical portion of median lobe markedly longer; on face adjacent to paramere with arcuate transverse carina, appearing as large dent in lateral view (Fig.14); paramere of similar shape as that of *Q. zeuxis*, with four long apical setae on apical margin and with two finer and shorter setae on each apical corner; underside with eight to nine finer sensory peg setae forming irregular group below apex (six coarser sensory setae situated at apical margin in *Q. zeuxis*).

Female unknown.

Length 5.5- 6.5 mm.

Etymology. The specific epithet is the Greek noun τραχηλος (bull-necked). It refers to the wide neck of the species.

Geographical distribution. The species is at present known from two localities on the island of Hainan.

Bionomics. Nothing is known about the collecting circumstances of the specimens of the original series, except that they were collected at low elevations around 1000 m.

Recognition and comments. *Quedius trachelos* is also similar to *Q. auchenias*, but it differs, in addition to the markedly different aedoeagus, by the smaller size, by the position of both posterior frontal and temporal punctures on the head, and by the presence of impunctate large middle portions of the first two visible abdominal tergites.

Quedius auchenias nov.sp. and *Q. trachelos* nov.sp., together with *Q. zeuxis*, belong to the *Zeuxis*-species group, members of which share the following character states: collum wide, only vaguely or not at all constricted behind eyes, separated from head only by a superficial fine line, or continuous with head; scutellum impunctate, but with very fine transverse rugae on basal portion, basal portion in addition mostly slightly depressed; elytra each with three additional, inconspicuous longitudinal rows of several coarser

punctures bearing longer stiff setae; lateral face of middle tibiae with numerous strong spines. Previously (SMETANA, 1995:49 and SMETANA, 2001: 211) I considered *Q. zeuxis* as a member of the *Placidus*- group, based on the presence of additional, inconspicuous longitudinal rows of coarser punctures on the elytra. The two groups share the characteristic type of elytral punctuation, however, the wide neck and the characteristic scutellum leave no doubt that the three above species form a separate species group.

***Quedius (Microsaurus) kurbatovi* nov.sp. (Figs 16, 17)**

Type locality : China: Sichuan, S Xichang, Mt. Luoji, 2300- 2500 m.

Type material : Holotype (♀): CHINA: "China S Sichaun S Xichang Mt. Luoji 2300-2500 litter 16-24. 07. 96 Kurbatov". In MHNG. Paratypes: Sichuan: same data as holotype, 2 ♀ ♀ (ASC, MHNG).

Description . Dark piceous, pronotum and narrow apical margins of abdominal tergites and apex of abdomen somewhat paler; abdomen slightly iridescent; mouthparts, palpi, legs and first three segments of antennae testaceous to brownish testaceous, rest of antennae more or less darkened. Head of rounded shape, about as long as wide, with posterior angles entirely obsolete, only slightly narrowed behind eyes, neck therefore rather wide; eyes moderately large, rather flat, tempora shorter than eyes seen from above (ratio 0.66); no additional setiferous punctures between anterior frontal punctures; posterior frontal puncture situated far from medioapical margin of eye but distinctly closer to it than to posterior margin of head; temporal puncture small, situated about midway between posterior margin of eye and posterior margin of head ; two punctures behind posterior frontal puncture at posterior margin of head; tempora impunctate; surface of head with very fine, superficial microsculpture of transverse waves with numerous longitudinal connections, appearing here and there as of incomplete transverse meshes. Antenna relatively short, segments 2 and 3 subequal in length, segments 4 to 6 longer than wide, becoming gradually shorter, following segments about as long as wide, last segment as long as two preceding segments combined. Pronotum slightly wider than long (ratio 1.13), widest at about posterior fifth, markedly narrowed anteriorly, with lateral margins continuously arcuate with obtusely rounded base with middle portion almost straight, transversely convex, lateral portions not explanate; dorsal rows each with four punctures, last puncture smaller than preceding punctures and shifted toward midline of pronotum; sublateral rows each with two punctures, both close to anterior margin of pronotum; microsculpture finer than that on head and composed of transverse and oblique waves. Scutellum conspicuously wide at base, impunctate, with extremely fine microsculpture of rudimentary transverse waves. Elytra markedly short, at base somewhat narrower than pronotum at widest point, slightly dilated posteriorly, at suture considerably (ratio 0.66), at sides somewhat (ratio 0.80) shorter than pronotum at midline; punctuation moderately coarse and sparse, becoming finer toward lateral margin of each elytron, transverse interspaces between punctures distinctly larger than diameters of punctures, pubescence piceous; surface between punctures without microsculpture. Wings apparently reduced to short stumps. Abdomen with tergite 7 (fifth visible) lacking fine whitish apical seam of palisade fringe; tergite two (in front of first entirely visible tergite) pale and impunctate; punctuation of abdominal tergites finer than that on elytra, in general becoming distinctly 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 only slightly dilated, subbilobed, each with tenent setae ventrally; segment two narrower than apex of tibia (ratio 0.83); tergite 10 of genital segment of characteristic shape, slightly pigmented medioapically, with several setae of unequal length at and near apex (Fig.16), or with two long, strong medial setae and two much shorter and finer setae at apex (Fig.17), otherwise asetose.

Male unknown.

Length 5.5- 6.0 mm.

E t y m o l o g y . Patronymic, the species was named in honor of Dr. Serguei A. Kurbatov, Moscow, Russia, the collector of the specimens of the original series.

G e o g r a p h i c a l d i s t r i b u t i o n . *Quedius kurbatovi* is at present known only from the type locality in southern Sichuan.

B i o n o m i c s . Nothing is known about the collecting circumstances of the specimens, except that they were apparently sifted from "litter".

R e c o g n i t i o n a n d c o m m e n t s . *Quedius kurbatovi* is a very distinctive species that cannot be confused with any other *Quedius* species. It is the sole member of a distinctive *Q. kurbatovi* species- group, characterized mainly as follows: pronotal dorsal rows each composed of four punctures, with last puncture being finer than the rest and shifted toward midline of pronotum; basal margin of pronotum obtusely rounded with middle portion almost straight; scutellum conspicuously wide at base and elytra markedly short. Additional support is the chaetotaxy of the head with posterior frontal puncture and temporal puncture both being situated away from the eye margin (see above).

The markedly different setation of the apical portion of tergite 10 of the female genital segment is quite unusual, however, at present it must be assumed that both types represent one single species.

***Quedius (Microsaurus) norvegorum* nov.sp. (Figs 18-24)**

T y p e l o c a l i t y : China: Shaanxi Province, Mei County, Mt. Taibai Nature Reserve, 2350-2750 m.

T y p e m a t e r i a l : Holotype (♂) and allotype (♀): CHINA: "CHINA: Shaanxi Prov. Mei County Mt. Taibai N. R. alt. 2350-2750 m 14-VII-2004 Hu & Tang leg." Holotype in SNUC, allotype in ASC. **Paratypes:** Shaanxi: same data as holotype, 1♂ (SNUC). One male and one female in bad shape, labelled "Mt. Taibai Shaanxi Prov. Alt. 2700m, or 2350-2750 m 14-VII-2904 Hu & Tang leg.", were not labelled as paratypes (in ASC, SNUC).

D e s c r i p t i o n . Brownish-piceous to piceous-black with black head, abdomen slightly iridescent; maxillary and labial palpi testaceous, antennae and legs brownish, medial faces of middle and hind tibiae more or less darkened. Head of rounded shape, about as long as wide, with posterior angles entirely obsolete; eyes large, moderately convex, tempora markedly shorter than eyes seen from above (ratio 0.80); no additional setiferous punctures between anterior frontal punctures; posterior frontal puncture separated from posteriomedial margin of eye by distance about equal to diameter of puncture; temporal puncture situated closer to posterior margin of eye than to posterior margin of head, two punctures behind posterior frontal puncture at posterior margin of head; tempora with some fine punctures; surface of head with very fine and very dense microsculpture of transverse waves with some micropunctulation. Antenna rather short,

segments 3 slightly longer than segment 2, segments 4 and 5 longer than wide, following segments as long as wide, becoming gradually vaguely wider than long (more distinctly so in females), last segment about as long as two preceding segments combined. Pronotum wider than long (ratio 1.14), widest at about posterior third, narrowed anteriorly, with lateral margins continuously arcuate with broadly rounded base, transversely convex, lateral portions not explanate; dorsal rows each with three fine punctures, sublateral rows each reduced to one puncture near anterior pronotal margin; microsculpture similar to that on head but denser. Scutellum impunctate, with extremely fine microsculpture of transverse waves. Elytra quite short, at base somewhat narrower than pronotum at widest point, not appreciably dilated posteriorly, at suture considerably shorter (ratio 0.75), at sides distinctly shorter (ratio 0.82) than pronotum at midline; punctuation moderately coarse and dense, becoming markedly finer toward lateral margin of each elytron, transverse interspaces between punctures on disc about as large as diameters of punctures; pubescence pale brunneous; surface between punctures without microsculpture but with some microscopical irregularities. Wings reduced to non-functional stumps. Abdomen with tergite 7 (fifth visible) without fine whitish apical seam of palisade fringe; tergite two (in front of first entirely visible tergite) sparsely punctate; punctuation of abdominal tergites finer than that on elytra, tending to get sparser on middle portion of each tergite, in general becoming sparser toward apex of abdomen; pubescence brownish; surface between punctures with excessively fine, hardly detectable rudimentary microsculpture.

Male. First four segments of front tarsus markedly dilated, subbilobed, each densely covered with tenent setae ventrally; segment two slightly wider than apex of tibia (ratio 1.11); segment four narrower than preceding segments. Sternite 8 with three long setae at each side, otherwise very sparsely, finely setose; with inconspicuous medioapical sinuation, with very small impunctate area before sinuation (Fig. 18). Genital segment with tergite 10 evenly narrowed toward arcuate apex, with a few setae of unequal length near apex, otherwise quite sparsely setose on middle portion; sternite 9 with narrow basal portion, apical portion arcuate apically, very sparsely and finely setose (Fig. 20). Aedoeagus (Figs 21-23) with median lobe markedly asymmetrical, anteriorly narrowed into apical portion with acute apex, on face adjacent to paramere with arcuate transverse carina appearing as acute dent in lateral view. Paramere of characteristic, asymmetrical shape, with arcuate apex about reaching apex of median lobe, four fine apical setae and two similar setae at each lateral margin close to apex; underside with three or four small sensory peg setae located along each lateral margin below apex.

Female. First four segments of front tarsus similar to those of male, but slightly less dilated, segment two about as wide as apex of tibia. Genital segment with tergite 10 as in Fig. 24, with numerous unequally long setae at and near apex, otherwise sparingly, finely setose on middle portion.

Length 6.0- 6.5 mm.

E t y m o l o g y . The specific epithet is plural genitive of the noun Norvegi (Norwegians). It honors four Norwegian friends, whose company we, myself and my wife, enjoyed during our recent Caribbean cruise: Kjetil Nicolay Benjamin Sørli, Linn-Ann Sørli, Michael Wilson and Bjørn Kyvik.

G e o g r a p h i c a l d i s t r i b u t i o n . *Quedius norwegorum* is at present known only from the type locality in Qinling Shan in Shaanxi.

B i o n o m i c s . Nothing is known about the collecting circumstances of the specimens of the original series.

R e c o g n i t i o n a n d c o m m e n t s . *Quedius norwegorum* is habitually somewhat similar to *Q. schuelkeanus* Smetana, 2014 from Qinghai, but it differs, in addition to the differently shaped aedoeagus, by larger eyes, by the different chaetotaxy of the head, and by the considerably shorter elytra.

***Quedius (Microsaurus) holzschuhi* SMETANA, 1999**

Quedius holzschuhi SMETANA, 1999: 220 (*Quedius*; subgenus *Microsaurus*; description)

N e w r e c o r d . CHINA: Zhejiang, Lishui City, Qingyuan coun., Baishanzu Natural reserve, Guanlizhan, 1550 m, 30.VI.2009, Feng & Jin leg., 1 ♂ (SNUC).

C o m m e n t s . This is the first record of this species from Zhejiang. It was previously known from Guyizhou, Shaanxi, Sichuan, and from Laos.

***Quedius (Microsaurus) koltzei* EPPELSHEIM, 1887 (Figs 25-29)**

Quedius koltzei EPPELSHEIM, 1887: 420 (*Quedius*; description); GRIDELLI, 1924: 19, 24 (*Quedius*; subgenus *Microsaurus*; characters in key; redescription); COIFFAIT, 1978: 17, 164 (*Quedius*; subgenus *Microsaurus*; characters in key; redescription); SMETANA, 1998: 115 (*Quedius*; subgenus *Microsaurus*; characters; female sexual characters; type material; distribution).

N e w r e c o r d . CHINA: Heilongjiang Province, Lang Xian dist., Qing Yuan. N 46°47.470' E129°03.823' ca 600-700 m. F/I trap leg., J. Cooter. 25-29.v.2004, 1 ♂, 1 ♀ (ASC, DRC).

C o m m e n t s . The specimens were taken from a flight intercept trap, but no details are known about the habitat the trap was set in. This is the first record of *Q. koltzei* from Heilongjiang and from mainland China.

The aedoeagus of *Q. koltzei* was illustrated by COIFFAIT (l.c.), but the sclerites of the male genital segment were not described or illustrated. To make the male sexual characters comparable to those of other Chinese *Microsaurus* species in my papers, I present here their description and illustrations.

Male. First four segments of front tarsus moderately dilated, each covered with tenent setae ventrally; segment two about a wide as apex of tibia; segment four narrower than preceding segments. Sternite 8 finely and rather sparingly setose, with two long setae on each side; with moderately wide and deep medioapical emargination, without appreciable impunctate flattened area before emargination. Genital segment with tergite 10 markedly narrowed toward narrowly acute apex, with several long setae at and near apex, otherwise only sparingly setose (Fig. 25); sternite 9 rather short and wide, with very narrow basal portion, apical portion densely setose, with subtruncate apex (Fig. 26). Aedoeagus (Figs 27, 28) small, median lobe subparallelsided in middle portion, anteriorly narrowed into apical portion with narrowly arcuate apex; paramere markedly, widely constricted in middle portion, anteriorly shaped into obtusely triangular apical portion with obtuse, slightly emarginated apex, apex not quite reaching apex of median lobe; four fine apical setae, two similar setae at each lateral margin below apex; sensory peg setae on underside arranged into distinctive pattern of three separate groups (Fig. 28).

Female. First four segments of front tarsus similar to those of male, but slightly less dilated, segment two slightly narrower than apex of tibia. Tergite 10 of genital segment as in Fig. 29, with medioapical portion pigmented, and with quite numerous setae of variable length at apical margin, otherwise with only a few fine scattered setae.

G e o g r a p h i c a l d i s t r i b u t i o n . *Quedius koltzei* is at present known only from the Amur area in Russian Far East and from the adjacent Chinese province of Heilongjiang. COIFFAIT's (l. c.) records from "Asie centrale, Turkestan" (p.17) and "Asie centrale" (p. 165) are not supported by any details and they must be considered as doubtful.

***Quedius (Microsaurus) janatai* SMETANA, 2004**

Quedius janatai SMETANA, 2004: 97 (*Quedius*; subgenus *Microsaurus*; description)

N e w r e c o r d . CHINA: Sichuan: Xiaojin County, Rilong Shuangqiaogou, 3400-3700 m, 8.VIII.2011, HUANG Hao leg., 3 spec. (ASC, SNUC); Xiaojin County, Rilong Country, Changpinggou, 3300 m, 3.-9.VIII. 2011, HUANG Hao leg., 3 spec. (ASC, SNUC).

C o m m e n t s . The species was until now known only from the mountains around Sabde. Rilong is also known as Siguniangshan Town (coordinates 30.9925°N 102.8303°E).

***Quedius (Microsaurus) lih* SMETANA, 2004**

Quedius lih SMETANA, 2004: 98 (*Quedius*; subgenus *Microsaurus*; description)

N e w r e c o r d . CHINA: Sichuan, road Luding to Ya'an, Erlang Shan pass, W slope, 2800-2920 m, VI.-VII. 2007, leg. Puchner, 2♂♂ (ASC, NMW).

C o m m e n t s . Two additional specimens from the type locality. The species is at present known only from the Erlang Shan pass.

Acknowledgments

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Zusammenfassung

Quedius (Microsaurus) auchenyas nov.sp. (Hainan), *Quedius (Microsaurus) trachelos* nov.sp. (Hainan), *Quedius (Microsaurus) kurbatovi* nov.sp. (Sichuan) und *Quedius (Microsaurus) norvegorum* nov.sp. (Shaanxi) werden beschrieben und abgebildet. Zwei neue Art-Gruppen werden festgelegt und charakterisiert: die *Zeuxis*-Gruppe für *Quedius zeuxis* SMETANA, 1997, *Quedius auchenyas* nov.sp. und *Quedius trachelos* nov.sp. und die *Quedius kurbatovi*-Gruppe für *Quedius kurbatovi* nov.sp. Die männlichen und weiblichen Geschlechtsmerkmale von *Quedius (Microsaurus) koltzei* EPPELSHEIM, 1887 werden beschrieben und illustriert, die Art wird erstmals von China (Heilongjiang) gemeldet. Weitere Nachweise von mehrerer Arten werden angeführt.

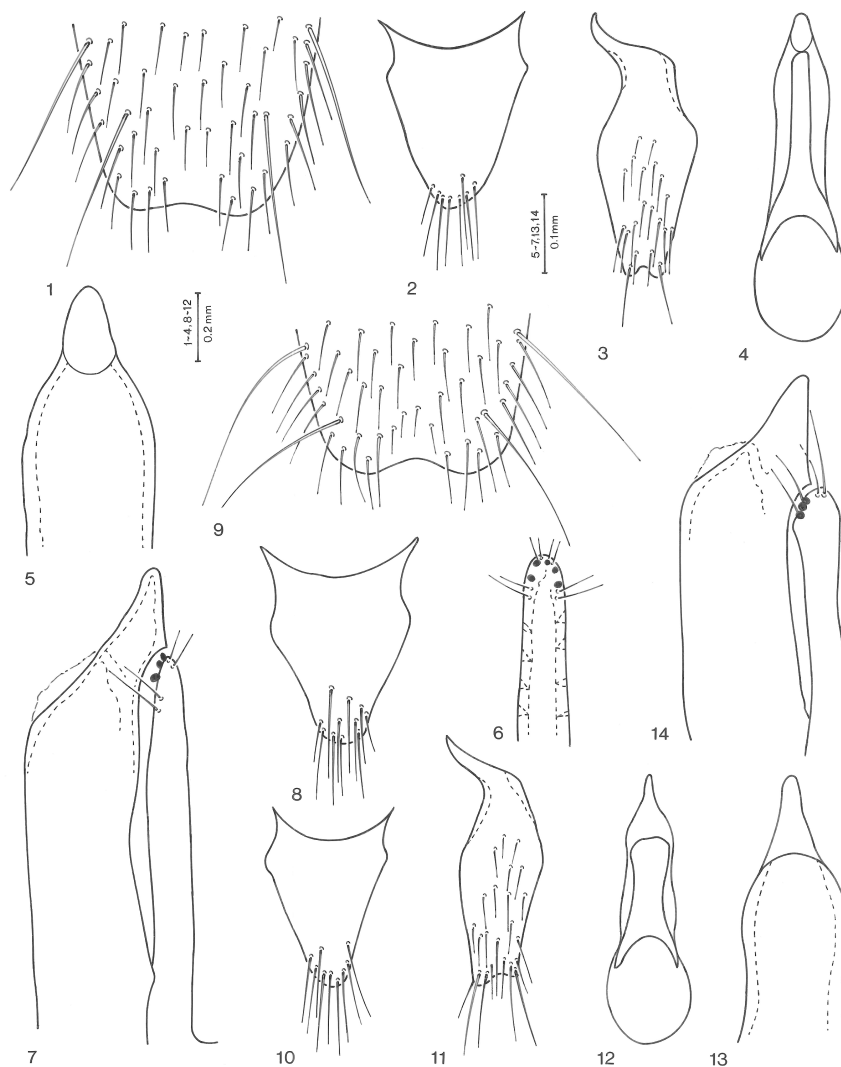
References

CAMERON M. (1932): The Fauna of British India, including Ceylon and Burma. Coleoptera. Staphylinidae. — Vol. III. London: Taylor & Francis, xiii+ 433 pp., 3 pls.

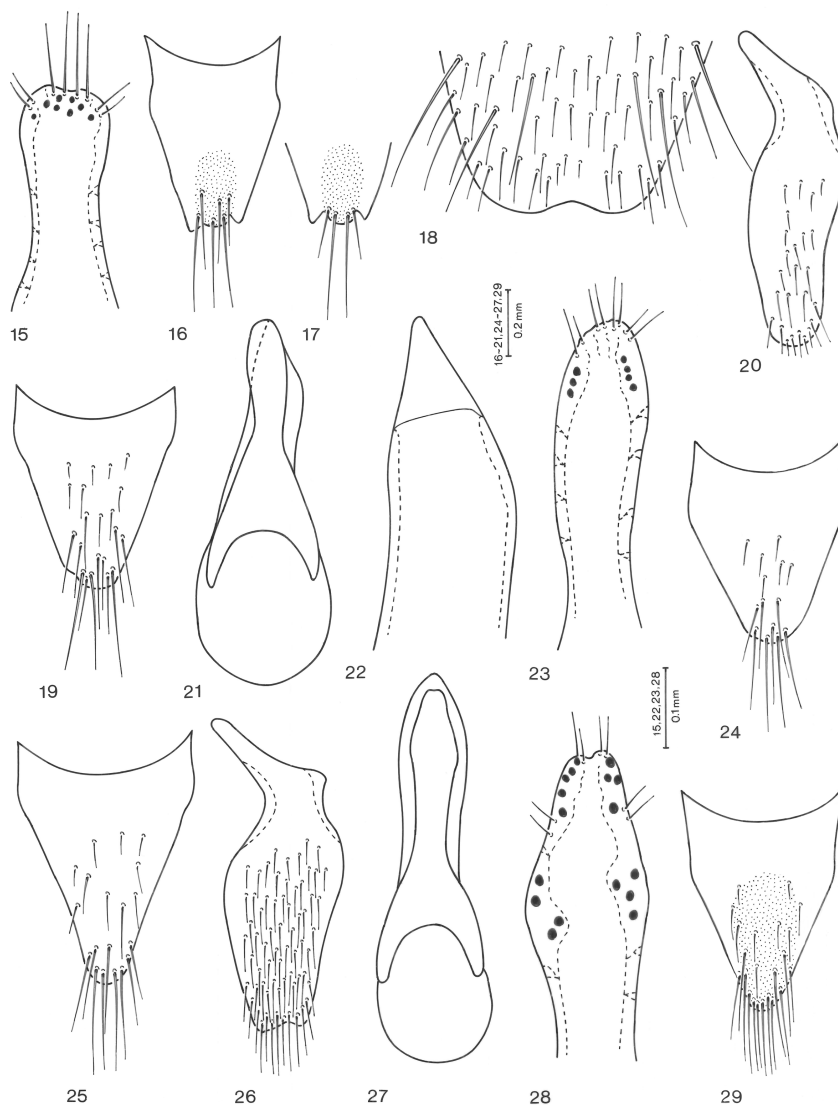
- COIFFAIT H. (1978): Coléoptères staphylinides de la région paéarctique occidentale III. Sous famille Staphylininae, tribu Quediini. Sous famille Paederinae, Tribu Pinophilini. — Nouvelle Revue d'Entomologie, Supplément **8** (4): 1-364.
- DEJEAN P.F.M.A. (1833): Catalogue des Coléoptères de la collection de M. Le Baron Dejean. — Ed. 2, fasc. 1-2. Paris: Méquignon-Marvis, pp. 1-176.
- EPPELSHEIM E. (1887): Neue Staphylinen vom Amur. — Deutsche Entomologische Zeitschrift **31**: 417-430.
- GRIDELLI E. (1924): Studi sul genere *Quedius* STEPH. Secondo contributo. Specie della regione paleartica. — Memorie della Società Entomologica Italiana **3**: 5-112.
- SMETANA A. (1995): Revision of the tribes Quediini and tanygnathini. Part III. Taiwan. (Coleoptera: Staphylinidae). — Special Publication of the Museum of Natural Science **6**: 145 pp. Taichung.
- SMETANA A. (1997): Two new species of the genus *Quedius* STEPHENS, 1829 (Coleoptera, Staphylinidae, Staphylinini, Quediina) from northern Vietnam. — Elytra, Tokyo **26**: 123-128.
- SMETANA A. (1998): Taxonomic and faunistic contributions to the knowledge of Palaearctic Quediina (Coleoptera, Staphylinidae, Staphylinini). Part 2. — Elytra, Tokyo **26**: 115-128.
- SMETANA A. (2001): Contributions to the knowledge of the Quediina (Coleoptera, Staphylinidae, Staphylinini) of China. Part 20. Genus *Quedius* STEPHENS, 1829. Subgenus *Microsaurus* DEJEAN, 1833. Section 12. — Elytra, Tokyo **29**: 193-216.
- SMETANA A. (2004): Contributions to the knowledge of the Quediina (Coleoptera, Staphylinidae, Staphylinini) of China. Part 24. Genus *Quedius* STEPHENS, 1829. Subgenus *Microsaurus* DEJEAN, 1833. Section 14. — Elytra, Tokyo **32**: 85-103.
- 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. — London: Baldwin & Cradock, 68 columns.

Author's address:

Aleš SMETANA
Agriculture and Agri-Food Canada, Biodiversity
Central Experimental Farm, K.W. Neatby Bldg
Ottawa, Ontario K1A 0C6, Canada
E-mail: ales.smetana@agr.gc.ca



Figs 1-14: 1-8. *Quedius auchenyas* nov.sp.: (1) apical portion of male sternite 8; (2) tergite 10 of male genital segment; (3) sternite 9 of male genital segment; (4) aedeagus, ventral view; (5) apical portion of median lobe, paramere removed; (6) apical portion of underside of paramere with sensory peg setae; (7) apical portion of aedeagus, lateral view; (8) tergite 10 of female genital segment. 9-14. *Quedius trachelos* sp. nov.: (9) apical portion of male sternite 8; (10) tergite 10 of male genital segment; (11) sternite 9 of male genital segment; (12) aedeagus, ventral view; (13) apical portion of median lobe, paramere removed; (14) apical portion of aedeagus, lateral view.



Figs 15-29: (15) *Quedius trachelos* nov.sp.: apical portion of underside of paramere with sensory peg setae. (16, 17) *Quedius kurbatovi* nov.sp.: tergites 10 of female genital segment. (18-24) *Quedius norvegorum* nov.sp.: (18) apical portion of male sternite 8; (19) tergite 10 of male genital segment; (20) sternite 9 of male genital segment; (21) aedoeagus, ventral view; (22) apical portion of median lobe, paramere removed; (23) apical portion of underside of paramere with sensory peg setae; (24) tergite 10 of female genital segment. 25-29. *Quedius koltzei*: (25) tergite 10 of male genital segment; (26) sternite 9 of male genital segment; (27) aedoeagus, ventral view; (28) apical portion of underside of paramere with sensory peg setae; (29) tergite 10 of female genital segment.

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