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Taxonomic and Faunistic Contributions to the Knowledge of Palaearctic Quediina (Coleoptera, Staphylinidae, Staphylinini). Part 2

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Abstract Taxonomic and faunistic data on Palaearctic species of the genus *Quedius* are provided. *Quedius koltzei* EPPELSHEIM, 1887, *Q. mutilatus* EPPELSHEIM, 1888, *Q. annectens* SHARP, 1889, *Q. japonicus* SHARP, 1874 and *Q. lewisius* SHARP, 1874 are redescribed. Lectotypes are designated for *Q. mutilatus*, *Q. annectens*, *Q. japonicus* and *Q. lewisius*.

This is the second of the series of papers dealing with the Palaearctic Quediina (for the first paper see SMETANA, 1995 a). It deals with two species of the subgenus *Microsaurus* DEJEAN, 1833, one from the Russian Far East (*Q. koltzei* EPPELSHEIM, 1887) and the other from the vicinity of Lake Issyk-Kul in Kyrgyzstan (*Q. mutilatus* EPPELSHEIM, 1888). Three Japanese species of the subgenus *Distichalius* CASEY, 1915, *Q. annectens* SHARP, 1889, *Q. japonicus* SHARP, 1874 and *Q. lewisius* SHARP, 1874 are also treated. Lectotypes are designated for *Q. mutilatus*, *Q. annectens*, *Q. japonicus*, and *Q. lewisius*.

Quedius (*Microsaurus*) *koltzei* EPPELSHEIM

(Fig. 1)

Quedius koltzei EPPELSHEIM, 1887, 420; GRIDELLI, 1924, 24; COIFFAIT, 1978, 164.

Taxonomic notes. EPPELSHEIM (1887, 420) compared *Q. koltzei* to *Q. brevicornis* and *Q. ochripennis*. GRIDELLI (1924, 24) briefly redescribed this species, pointed out some of the diagnostic characters and confirmed the association with *Q. brevicornis*.

Quedius koltzei was described in detail by EPPELSHEIM (*l. c.*) and GRIDELLI (*l. c.*), therefore only some comments and the description of the female genital segment characters are given here. The species is quite distinctive by the chaetotaxy of the head and pronotum, by the red, coarsely punctate elytra, and by the distinctive tergite 10 of the female genital segment.

Both posterior frontal and temporal punctures on head situated distinctly closer to posterior margin of head than to posterior margin of eye. Surface of head bearing fine and dense microsculpture of transverse and oblique waves, intermixed with distinct,

sparse micropunctulation. Dorsal rows on pronotum each with two punctures; sublateral rows each with only one puncture, situated close to anterior margin of pronotum. Microsculpture on pronotum similar to that on head, but appreciably denser, micropunctulation finer and less noticeable. Punctation of elytra coarse and rather dense, transverse interspaces between punctures mostly about as large as diameters of punctures; pubescence rusty; surface between punctures shiny, without any microsculpture. Abdomen with tergite 7 (fifth visible) with very fine, whitish apical seam of palisade fringe; punctation and pubescence of abdominal tergites much finer than that on elytra, dense on first two visible tergites, becoming appreciably sparser toward apex of each tergite, and in general toward apex of abdomen; pubescence piceous.

Male unknown.

Female. First four segments of front tarsus distinctly 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 segments. Genital segment with tergite 10 of rounded triangular shape with slightly differentiated apical portion, with medio-apical part pigmented, apex narrowly arcuate, with numerous, unequally long setae at and near apical margin, and with numerous, considerably finer setae on middle portion in front of them (Fig. 1).

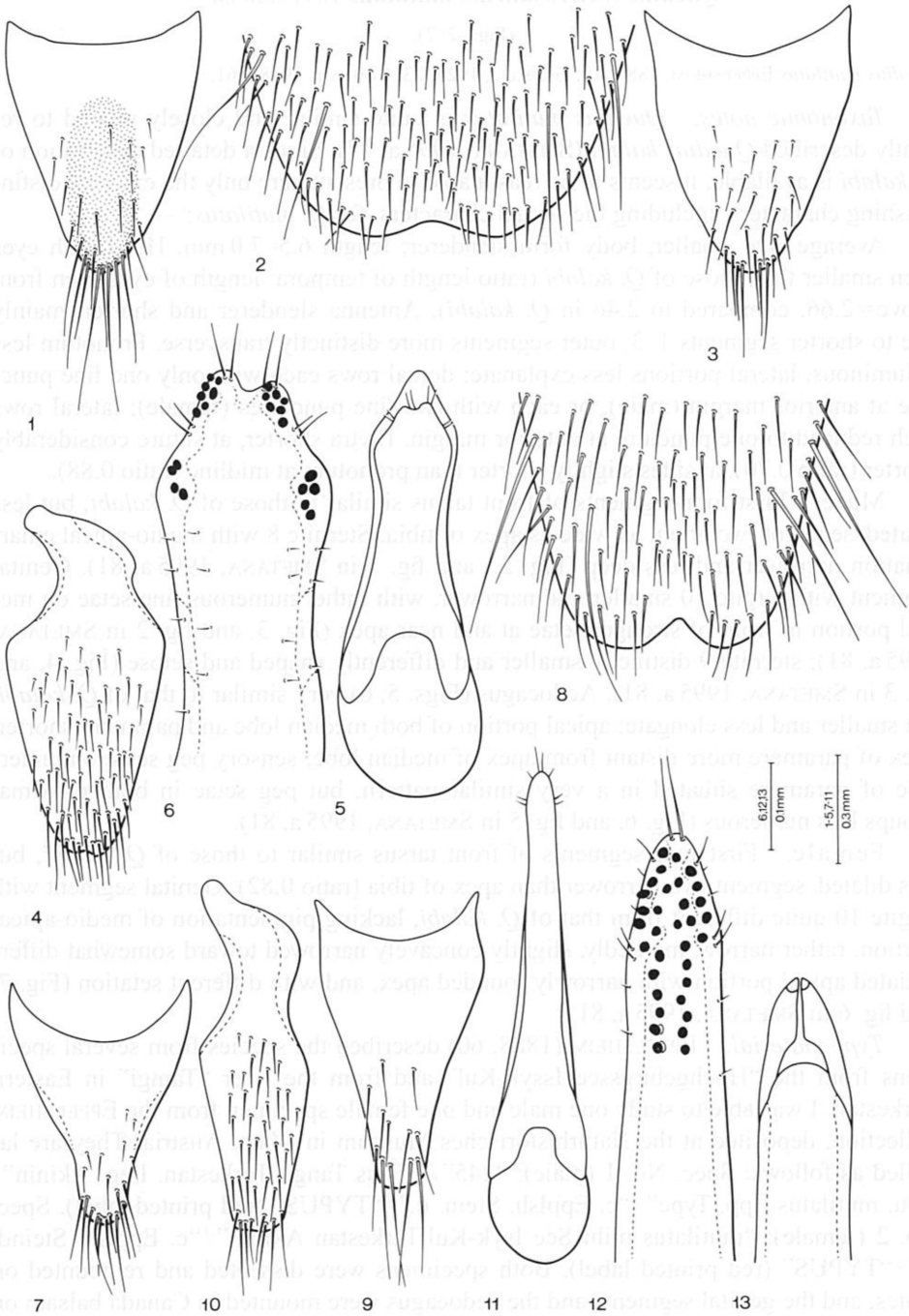
Length 7.7 mm.

Type material. EPPELSHEIM (1887, 420) described the species from a single female from "Chabarofka". The holotype is deposited in the EPPELSHEIM collection at the Naturhistorisches Museum in Wien, Austria. It is labelled as follows: "Ch." / "Koltzei mihi. Chabarofka Amur. Leg Graeser." / "c. Epplsh. Steind. d." / "TYPUS" (red printed label). The specimen was dissected and remounted on a plate, and the genital segment was mounted in Canada balsam on a transparent plate attached to the pin with the beetle. The specimen is in very good condition, but the left antenna is missing except for the first segment.

Geographical distribution. *Quedius koltzei* is, at present, known only from the Amur area of the Russian Republic, but it is likely much more widely distributed in the eastern portion of the Palaearctic region.

Comments. *Quedius koltzei* is not related to either of the west Palaearctic species mentioned above. The chaetotaxial characters on both the head and pronotum, seemingly relating it to the two species, are almost certainly just a convergence. The actual relationships of *Q. koltzei* must await the discovery of males of this species.

Figs. 1–13. —— 1. *Quedius koltzei*, tergite 10 of female genital segment. —— 2–7. *Quedius mutilatus*: 2, apical portion of male sternite 8; 3, tergite 10 of male genital segment; 4, sternite 9 of male genital segment; 5, aedoeagus, ventral view; 6, underside of apical portion of paramere; 7, tergite 10 of female genital segment. —— 8–13. *Quedius annectens*: 8, apical portion of male sternite 8; 9, tergite 10 of male genital segment; 10, sternite 9 of male genital segment; 11, aedoeagus, ventral view; 12, apical portion of underside of paramere; 13, apical portion of median lobe, paramere removed.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Quedius (*Microsaurus*) *mutilatus* EPPELSHEIM

(Figs. 2–7)

Quedius mutilatus EPPELSHEIM, 1888, 58; GRIDELLI, 1924, 23; COIFFAIT, 1978, 161.

Taxonomic notes. *Quedius mutilatus* is quite similar and closely related to recently described *Quedius kalabi* (SMETANA, 1995 a, 77). Since a detailed description of *Q. kalabi* is available, it seems to be reasonable to present here only the external distinguishing characters, including the sexual characters, for *Q. mutilatus*: —

Average size smaller, body form slenderer; length 6.5–7.0 mm. Head with eyes even smaller than those of *Q. kalabi* (ratio length of tempora: length of eyes seen from above=2.66, compared to 2.46 in *Q. kalabi*). Antenna slenderer and shorter, mainly due to shorter segments 1–3, outer segments more distinctly transverse. Pronotum less voluminous, lateral portions less explanate; dorsal rows each with only one fine puncture at anterior margin (male), or each with two fine punctures (female); lateral rows each reduced to one puncture at anterior margin. Elytra shorter, at suture considerably shorter (ratio 0.70), at sides slightly shorter than pronotum at midline (ratio 0.88).

Male. First four segments of front tarsus similar to those of *Q. kalabi*, but less dilated, segment two about as wide as apex of tibia. Sternite 8 with medio-apical emargination narrower and less deep (Fig. 2 , and fig. 1 in SMETANA, 1995 a, 81). Genital segment with tergite 10 smaller and narrower, with rather numerous fine setae on medial portion in front of stronger setae at and near apex (Fig. 3, and fig. 2 in SMETANA, 1995 a, 81); sternite 9 distinctly smaller and differently shaped and setose (Fig. 4, and fig. 3 in SMETANA, 1995 a, 81). Aedoeagus (Figs. 5, 6) very similar to that of *Q. kalabi*, but smaller and less elongate; apical portion of both median lobe and paramere shorter, apex of paramere more distant from apex of median lobe; sensory peg setae on underside of paramere situated in a very similar pattern, but peg setae in both proximal groups less numerous (Fig. 6, and fig. 5 in SMETANA, 1995 a, 81).

Female. First four segments of front tarsus similar to those of *Q. kalabi*, but less dilated, segment two narrower than apex of tibia (ratio 0.82). Genital segment with tergite 10 quite different from that of *Q. kalabi*, lacking pigmentation of medio-apical portion, rather narrow, markedly, slightly concavely narrowed toward somewhat differentiated apical portion with narrowly rounded apex, and with different setation (Fig. 7, and fig. 6 in SMETANA, 1995 a, 81).

Type material. EPPELSHEIM (1888, 60) described the species from several specimens from the "Hochgebirgssee Issyk-Kul" and from the river "Tamgi" in Eastern Turkestan. I was able to study one male and one female specimen from the EPPELSHEIM collection, deposited at the Naturhistorisches Museum in Wien, Austria. They are labelled as follows: Spec. No. 1 (male): "245" / "Fluss Tangi. Turkestan. Leg. Akinin" / "Qu. mutilatus Epp. Type" / "c. Epplsh. Stein. d." / "TYPUS" (red printed label). Spec. No. 2 (female): "mutilatus mihi See Isyk-Kul,Turkestan Akinin" / "c. Epplsh. Steind. d." / "TYPUS" (red printed label). Both specimens were dissected and remounted on plates, and the genital segments and the aedoeagus were mounted in Canada balsam on

transparent plates attached to the pins with the beetles. The specimens are in fair condition: the male specimen is missing the entire left antenna and the last two segments of the left hind tarsus. The female specimen is slightly teneral; it is missing the entire left antenna, and the head was originally separated from the rest of the body. The first (male) specimen is hereby designated as the lectotype of *Q. mutilatus*; the label "Lectotype Quedius mutilatus Eppelsheim A. Smetana des. 1997" has been attached to it.

Geographical distribution. *Quedius mutilatus* is at present known only from the vicinity of the lake Issyk-Kul in Kyrgyzstan.

Bionomics. Nothing is known about the habitat requirements of this species.

Comments. The two species *Q. kalabi* and *Q. mutilatus* are obviously two very similar and closely related species, as documented i.e. by the very similarly developed aedoeagus. In addition, they both come from the same general area around Lake Issyk-Kul. However, the differences given above, particularly the very different tergites 10 of the female genital segments (Fig. 7 and fig. 6 in SMETANA, 1995 a, 81) leave little doubt that two different taxa are involved.

The two species may perhaps be separated ecologically. *Quedius kalabi* is known from the northwestern slopes of the Terskey Alatau Khrebet of the Tian Shan massive from elevations up to 3,500 m, whereas *Q. mutilatus* may have been collected at the lake (elevation just above 1,500 m).

When describing *Q. kalabi*, I compared the species to the Himalayan *Q. dui* SMETANA, 1988 from Punjab. At that time I only knew *Q. mutilatus* from the original description and the additional comments by GRIDELLI (1924, 23), and neither provided enough information to suggest the possible relationship of *Q. kalabi* to *Q. mutilatus*.

Quedius (*Distichalius*) *annectens* SHARP, 1889

(Figs. 8–13)

Quedius annectens SHARP, 1889, 32; GRIDELLI, 1924, 78.

Description. Piceous-black with black head, elytra rufo-testaceous, with common, dark longitudinal stripe on suture, and, in addition, each with dark longitudinal lateral stripe on about apical third, not reaching apical margin of elytron, but extended on epipleuron to about basal third; sutural stripe extended along sides of scutellum to elytral base, but distinctly not reaching apex of elytra; abdominal tergites each with apical margin narrowly paler; head and pronotum vaguely, abdomen markedly iridescent; maxillary and labial palpi testaceo-rufous, antennae testaceo-rufous, vaguely darkened toward apex; legs rufo-testaceous, medial faces of all tibiae distinctly darkened. Head of rounded shape, slightly wider than long (ratio 1.13), markedly narrowed behind eyes, posterior angles entirely obsolete, indistinct; eyes large and convex, tempora considerably shorter than eyes seen from above (ratio 0.36); two additional setiferous punctures between anterior frontal punctures; both posterior frontal and temporal punctures situated quite close to posterior margin of eye, almost touching it, two punc-

tures behind posterior frontal puncture at posterior margin of head; surface of head with very fine and dense microsculpture of transverse waves. Antenna moderately long, segment 3 slightly longer than segment 2 (ratio 1.26), segments 4–6 longer than wide, gradually becoming shorter, outer segments 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, markedly narrowed anteriad, with broadly rounded base; transversely convex, lateral portions not explanate; dorsal rows each with three punctures (rarely with four punctures unilaterally); sublateral rows each with three punctures, posterior puncture situated behind level of large lateral puncture (posterior puncture sometimes missing unilaterally); microsculpture similar to that on head, but somewhat denser. Scutellum impunctate, with very fine microsculpture of transverse waves. Elytra moderately long, at base slightly narrower than pronotum at widest point (ratio 0.86), only vaguely widened posteriad; at suture about as long as, at sides somewhat longer than pronotum at midline (ratio 1.19); each elytron extremely finely, sparingly punctate and with three irregular, longitudinal rows of more or less coarse punctures, all bearing short stiff setae; epipleuron moderately finely and densely punctate, punctures extended on posterio-lateral portion of disc of each elytron; surface between elytral punctures without appreciable microsculpture, but with some microscopical irregularities, particularly near apical margin. Wings fully developed. Abdomen with tergite 7 (fifth visible) bearing fine, whitish apical seam of palisade fringe; punctation and pubescence of abdominal tergites fine and dense, becoming somewhat sparser toward apex of each tergite, and in general toward apex of abdomen; pubescence piceous-black; surface between punctures with exceedingly dense and fine microsculpture of transverse striae.

Male. First four segments of front tarsus markedly dilated, sub-bilobed, each densely covered with modified pale setae ventrally; segment two somewhat wider than apex of tibia (ratio 1.16); segment four narrower than preceding segments. Sternite 8 with two long setae on each side; with moderately wide and deep, subacutely triangular medio-apical emargination, small triangular area before emargination flattened and smooth (Fig. 8). Genital segment with tergite 10 moderately narrow, markedly narrowed toward subarcuate apex, with four differentiated subapical setae and with some shorter setae in front of them (Fig. 9); sternite 9 with short basal portion, subtruncate apically, without appreciably differentiated apical or subapical setae (Fig. 10). Aedoeagus (Figs. 11–13) elongate and narrow; median lobe gradually, vaguely narrowed toward moderately long, split apical portion. Paramere very long and narrow, subparallel-sided, almost entirely covering median lobe, slightly exceeding apex of median lobe; two fine setae at apex, one minute seta at each lateral margin below apex, two similar setae at each lateral margin well below apex; sensory peg setae on underside of paramere very numerous, forming solid apical field, extended posteriad as two more or less irregular, longitudinal medial rows; internal sac without larger sclerotized structures.

Female not available for study.

Length 6.2–7.0 mm.

Type material. SHARP (1889, 32) described the species from five specimens taken at Miyanoshita, Japan. I was able to study one male from the original series from the SHARP collection at the British Museum (Natural History), London. It is labelled as follows: "Quedius annectens. Type DS. Miyanoshita. Lewis." (on the plate with the beetle)/"Type" (round label with red margin)/"Japan. G. Lewis"/"Sharp Coll. 1905-313". The specimen was received dissected, with the aedoeagus (paramere separated) and the genital segment glued to the plate with the beetle. The dissected parts were mounted into Canada balsam on a transparent plate attached to the pin with the beetle; the specimen is intact. It is hereby designated as the lectotype of *Q. annectens*; the label: "Lectotype Quedius annectens Sharp A. Smetana des. 1997" has been attached to it.

Additional material studied. [JAPAN]: Honshu, Chiba, Ootaki-cho, Kaisho, 170 m, 20–VII–91, A. SMETANA, 1 ♂, in the SMETANA collection, Ottawa.

Geographical distribution. *Quedius annectens* is known to me at present only from the above two localities in Honshu. SHIBATA (1984, 130) recorded the species from Honshu and Shikoku.

Bionomics. The specimen from Chiba Prefecture was collected in an old mixed forest by sifting accumulated leaf litter and other debris along a trail.

Recognition and comments. *Quedius annectens* may be easily distinguished from similar *Q. japonicus*, in addition to the secondary sexual characters and the differences on the aedoeagus, by the coloration of the elytra alone (the dark lateral stripe is missing in *Q. japonicus*).

Quedius* (*Distichalius*) *japonicus SHARP, 1874

(Figs. 14–20)

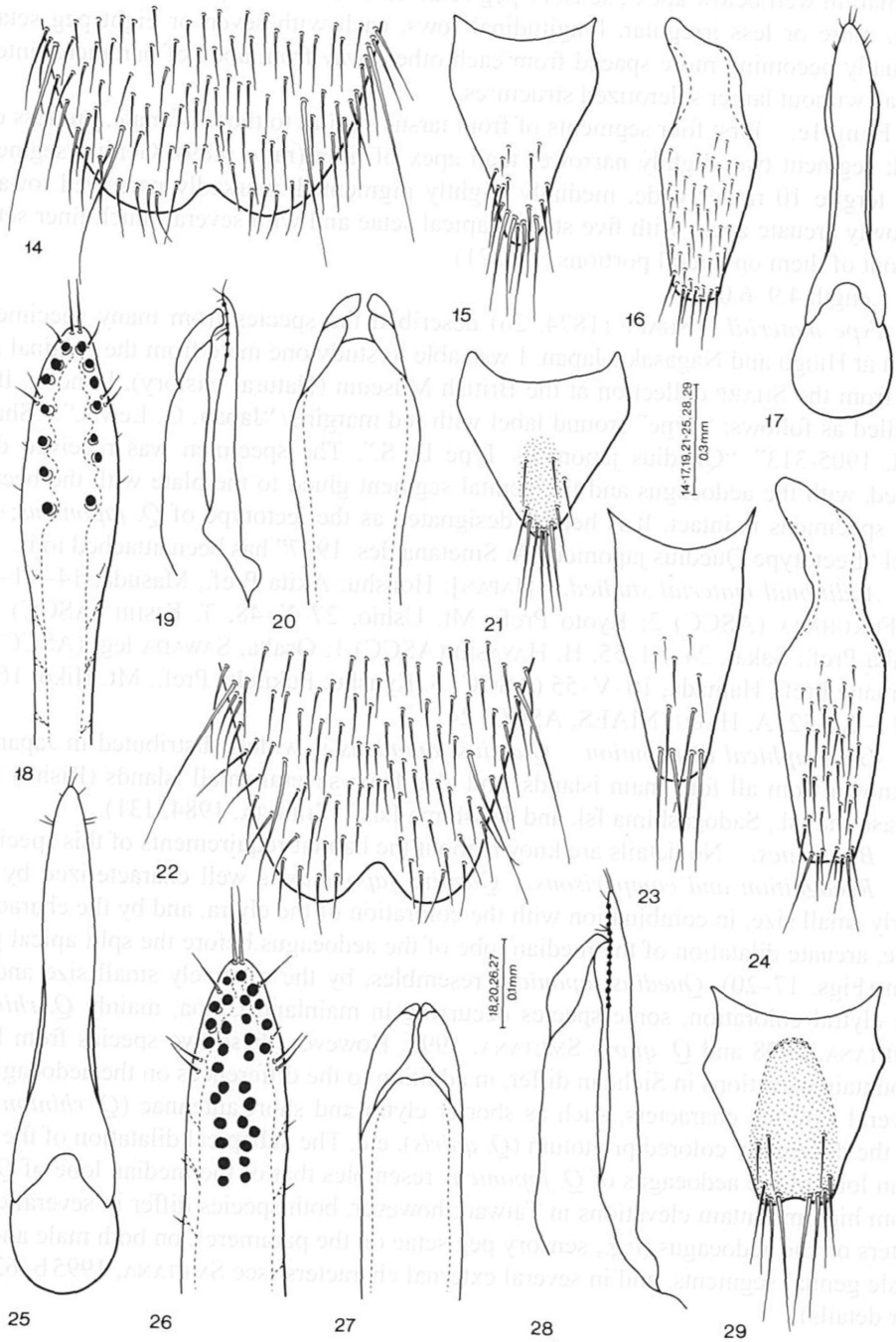
Quedius japonicus SHARP, 1874, 26.

Description. Piceous-black with black head or entirely black, elytra reddish-testaceous, sometimes vaguely, indefinitely darkened at suture, darkening gradually fading toward apical margin; abdominal tergites each with apical margin narrowly paler; head and pronotum vaguely, abdomen markedly iridescent; maxillary and labial palpi brown to dark brown, antennae brownish to piceous-brown; legs brown, medial faces of all tibiae distinctly darkened. Head of rounded shape, slightly wider than long (ratio 1.15), distinctly narrowed behind eyes, posterior angles entirely obsolete, indistinct; eyes large and convex, tempora considerably shorter than eyes seen from above (ratio 0.47); two additional setiferous punctures between anterior frontal punctures; both posterior frontal and temporal punctures situated close to posterior margin of eye, separated from it by distance about equal to diameter of puncture, two punctures behind posterior frontal puncture at posterior margin of head; surface of head with very fine and dense microsculpture of transverse waves. Antenna moderately long, segment 3

vaguely longer than segment 2 (ratio 1.20), segments 4 and 5 slightly longer than wide, segment 6 about as long as wide, outer segments vaguely wider than long, last segment as long as two preceding segments combined. Pronotum slightly wider than long (ratio 1.12), widest at about posterior third, markedly narrowed anteriad, with broadly rounded base; transversely convex, lateral portions not explanate; dorsal rows each with three punctures (rarely with four punctures unilaterally), sublateral rows each with two punctures (rarely with three punctures unilaterally), posterior puncture situated behind level of large lateral puncture; microsculpture similar to that on head, but slightly denser. Scutellum impunctate, with very fine microsculpture of transverse waves. Elytra relatively long, at base somewhat narrower than pronotum at widest point (ratio 0.90), only vaguely widened posteriad; at suture slightly (ratio 1.12), at sides distinctly longer than pronotum at midline (ratio 1.30); each elytron extremely finely, sparingly punctate and with three irregular, longitudinal rows of rather coarse punctures, all bearing short stiff setae; epipleuron finely, moderately densely punctate and pubescent; surface between punctures without appreciable microsculpture, but with some microscopical irregularities. Wings fully developed. Abdomen with tergite 7 (fifth visible) bearing fine, whitish apical seam of palisade fringe; punctation and pubescence of abdominal tergites fine and dense, becoming appreciably sparser toward apex of each tergite and in general toward apex of abdomen; pubescence piceous-black; surface between punctures with exceedingly dense and fine microsculpture of transverse striae.

Male. 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 segments. Sternite 8 with two long setae on each side; with moderately wide and deep, obtusely triangular medio-apical emargination, small triangular area before emargination flattened and smooth (Fig. 14). Genital segment with tergite 10 markedly, concavely narrowed toward narrowly arcuate apex, with four subapical setae and with several finer setae in front of them (Fig. 15); sternite 9 with narrow and rather short basal portion, apical portion subtruncate apically, with two vaguely differentiated apical setae (Fig. 16). Aedoeagus (Figs. 17–20) narrow and elongate; median lobe distinctly, arcuately dilated apically before rather short, split apical portion. Paramere elongate and narrow, fusiform, with long attenuate middle portion and with apex slightly exceeding apex of median lobe; two fine setae at apex, one minute seta at each lateral margin below apex, two similar setae at each lat-

Figs. 14–29. —— 14–21. *Quedius japonicus*: 14, apical portion of male sternite 8; 15, tergite 10 of male genital segment; 16, sternite 9 of male genital segment; 17, aedoeagus, ventral view; 18, underside of apical portion of paramere; 19, apical portion of aedoeagus, lateral view; 20, apical portion of median lobe, paramere removed; 21; tergite 10 of female genital segment. —— 22–29. *Quedius lewisius*: 22, apical portion of male sternite 8; 23, tergite 10 of male genital segment; 24, sternite 9 of male genital segment; 25, aedoeagus, ventral view; 26, apical portion of underside of paramere; 27, apical portion of median lobe, paramere removed; 28, apical portion of aedoeagus, lateral view; 29, tergite 10 of female genital segment.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eral margin well below apex ; sensory peg setae on underside of paramere forming two short, more or less irregular, longitudinal rows, each with seven or eight peg setae, gradually becoming more spaced from each other away from apex of paramere; internal sac without larger sclerotized structures.

Female. First four segments of front tarsus similar to those of male, but less dilated; segment two slightly narrower than apex of tibia (ratio 0.89). Genital segment with tergite 10 rather wide, medially slightly pigmented, markedly narrowed toward narrowly arcuate apex; with five strong, apical setae and with several much finer setae in front of them on lateral portions (Fig. 21).

Length 4.9–6.0 mm.

Type material. SHARP (1874, 26) described the species from many specimens taken at Hiogo and Nagasaki, Japan. I was able to study one male from the original series from the SHARP collection at the British Museum (Natural History), London. It is labelled as follows: "Type" (round label with red margin) / "Japan. G. Lewis." / "Sharp Coll. 1905-313" / "Quedius japonicus Type D. S.". The specimen was received dissected, with the aedoeagus and the genital segment glued to the plate with the beetle. The specimens is intact. It is hereby designated as the lectotype of *Q. japonicus*; the label "Lectotype Quedius japonicus A. Smetana des. 1997" has been attached to it.

Additional material studied. [JAPAN]: Honshu: Akita Pref., Masuda, 14–VI–57, H. FUKUHARA (ASCC) 2; Kyoto Pref., Mt. Ushio, 27–X–48, T. KISHII (ASCC) 10; Osaka Pref.: Sakai, 24–XI–55. H. HAYASHI (ASCC) 1; Osaka, SAWADA leg. (ASCC) 1; Shimane Pref., Hamada, 10–V–55 (ASCC) 5. Kyushu: Fukuoka Pref., Mt. Hiko, 16–X and 5–XI–52, A. HABU (NIAES, ASCC) 24.

Geographical distribution. *Quedius japonicus* is widely distributed in Japan; it is known from all four main islands, and also from several small islands (Rishiri Isl., Awashima Isl., Sadogashima Isl. and Tsushima Isls.) (SHIBATA, 1984, 131).

Bionomics. No details are known about the habitat requirements of this species.

Recognition and comparisons. *Quedius japonicus* is well characterized by the fairly small size, in combination with the coloration of the elytra, and by the characteristic, arcuate dilatation of the median lobe of the aedoeagus before the split apical portion (Figs. 17–20). *Quedius japonicus* resembles, by the relatively small size and by the elytral coloration, some species occurring in mainland China, mainly *Q. rhinton* SMETANA, 1998 and *Q. quiris* SMETANA, 1998. However, these two species from high mountain elevations in Sichuan differ, in addition to the differences on the aedoeagi, by several external characters, such as shorter elytra and short antennae (*Q. rhinton*), or by the differently colored pronotum (*Q. quiris*), etc. The subapical dilatation of the median lobe of the aedoeagus of *Q. japonicus* resembles that of the median lobe of *Q. lin* from high mountain elevations in Taiwan; however, both species differ in several characters on the aedoeagus (*e.g.*, sensory peg setae on the paramere), on both male and female genital segments, and in several external characters (see SMETANA, 1995 b, 62–64 for details).

Quedius (*Distichalius*) *lewisius* SHARP, 1874

(Figs. 22–29)

Quedius lewisius SHARP, 1874, 27; GRIDELLI, 1924, 78.

Description. Piceous to piceous-black with black head, elytra indefinitely, vaguely paler around each humerus, narrowly, markedly paler along suture and particularly at apical margin; abdominal tergites, except for tergite eight (sixth visible), distinctly paler at apical margin; head and pronotum vaguely, abdomen distinctly iridescent; maxillary and labial palpi rufo-testaceous, antennae brunneous, legs testaceo-brunneous, medial faces of all tibiae distinctly darkened. Head of rounded shape, appreciably wider than long (ratio 1.20); distinctly narrowed behind eyes, posterior angles entirely obsolete, indistinct; eyes large and convex, tempora considerably shorter than eyes seen from above (ratio 0.27); two additional setiferous punctures between anterior frontal punctures; both posterior frontal puncture and temporal punctures situated quite close to posterior margin of eye, almost touching it, two fine punctures behind posterior frontal punctures at posterior margin of head; surface of head with very fine and dense microsculpture of transverse waves. Antenna moderately long, segment 3 somewhat longer than segment 2 (ratio 1.25), segments 4 and 5 slightly longer than wide, segments 6 and 7 about as long as wide, outer segments as long as wide to slightly wider than long, last segment as long as two preceding segments combined. Pronotum vaguely longer than wide (ratio 1.09), widest at about posterior third, distinctly narrowed anteriad, with broadly rounded base; transversely convex, lateral portions not explanate; dorsal rows each with three punctures, sublateral rows each with three punctures, posterior puncture situated distinctly behind level of large lateral puncture; microsculpture similar to that on head, but somewhat denser. Scutellum impunctate, with very fine microsculpture of transverse waves. Elytra moderately long, at base narrower than pronotum at widest point (ratio 0.88), slightly widened posteriad; at suture about as long as, at sides slightly longer than pronotum at midline (ratio 1.16); each elytron extremely finely, sparingly punctate and with three irregular, longitudinal rows of coarse punctures, some coarser punctures present also at posterio-lateral angles, all bearing short stiff setae; epipleuron finely and rather densely punctate and pubescent; surface between punctures without appreciable microsculpture, but with some microscopical irregularities, particularly near apical margin. Wings fully developed. Abdomen with tergite 7 (fifth visible) bearing fine, whitish apical seam of palisade fringe; punctation and pubescence of abdominal tergites fine and dense, becoming appreciably sparser toward apex of each tergite and in general toward apex of abdomen; pubescence piceous-black; surface between punctures with exceedingly dense and fine microsculpture of transverse striae.

Male. First four segments of front tarsus markedly dilated, sub-bilobed, each densely covered with modified pale setae ventrally; segment two slightly wider than apex of tibia (ratio 1.15); segment four narrower than preceding segments. Sternite 8 with two long setae on each side; with rather wide, moderately deep, subacutely trian-

gular medio-apical emargination, small triangular area before emargination flattened and smooth (Fig. 22). Genital segment with tergite 10 rather narrow, markedly narrowed toward arcuate apex, with two pairs of long, subapical setae, with two shorter medial setae, and several fine short setae in front of them (Fig. 23); sternite 9 narrow, with narrow and rather long basal portion, subtruncate to subemarginate apically, with two differentiated apical setae (Fig. 24). Aedoeagus (Figs. 25–28) very narrow and elongate; median lobe slightly narrowed anteriad, vaguely, gradually constricted at about apical third, with moderately long split apical portion. Paramere narrow and elongate, fusiform, almost entirely covering median lobe, distinctly exceeding apex of median lobe; two fine setae at apex, one minute seta at each lateral margin below apex, two similar, usually unequally long, setae at each lateral margin well below apex; underside of paramere with numerous sensory peg setae, densely covering almost entire apical portion and extended posteriad as two more or less irregular, longitudinal medial rows; internal sac without larger sclerotized structures.

Female. First four segments of front tarsus similar to those of male, but distinctly less dilated; segment two slightly narrower than apex of tibia (ratio 0.90). Genital segment with tergite 10 short and wide, extensively, distinctly pigmented medially with markedly darker, narrow basal transverse band; slightly emarginate apically; with two long and strong apical setae at each side of emargination and with several variably finer and shorter setae around them (Fig. 29).

Length 6.8–7.8 mm.

Type material. SHARP (1874, 27) described the species from a pair of specimens taken at Hiogo, Japan. I was able to study the male specimen from the SHARP collection at the British Museum (Natural History), London. It is labelled as follows: "Type" (round label with red margin) / "Japan. G. Lewis." / "Sharp Coll. 1905-313." / "Quedius lewisius type D. S." / "Japan" (yellow round label). It was received dissected, with the genital segment and the aedoeagus glued to the plate with the beetle. The specimen is in good shape, but the last three segments of the left antenna and the tibia and tarsus of the left middle leg are missing. The genital segment and the aedoeagus were mounted in Canada balsam on a transparent plate attached to the pin with the beetle. The specimen is hereby designated as the lectotype of *Q. lewisius*; the label: "Lectotype Quedius lewisius Sharp A. Smetana des. 1997" has been attached to it.

Additional material studied. [JAPAN]: Honshu: Iwate Pref., Kawai, Yoshibezawa, 1,050 m, 15–VIII–91, A. SMETANA (ASCC) 4. Kyushu: Fukuoka Pref., Mt. Hiko, 4, 5, 14, 16–X–52 , A. HABU (NIAS, ASCC) 28.

Geographical distribution. *Quedius lewisius* seems to be widely distributed in Japan, from Kyushu and Shikoku to northern Honshu (Tôhoku). SHIBATA (1984, 132) recorded the species from Honshu, Shikoku and from Sadogashima Isl.

Bionomics. Little is known about the habitat requirements of this species. The specimens from Yoshibezawa were taken in an old beach forest by sifting old mushrooms growing on decaying wood.

Recognition and comparisons. *Quedius lewisius* may be easily distinguished

from the other Japanese species of *Distichalius*, in addition to the male and female sexual characters (tergite 10 of female genital segment), by the rather dark elytra with narrowly paler suture and particularly the apical margin (see above). The general coloration of *Q. lewisius*, especially that of the elytra, distinctly resembles of European *Q. punctatellus* HEER, 1839.

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要　約

A. SMETANA：旧北区産ツヤムネハネカクシ亜族に関する分類学的ならびに生物地理学的知見．—— EPPELSHEIM (1887, 1888)によってアムールおよびキルギスタンから記載された2種，ならびにSHARP (1874, 1889)によって日本から記載された3種のツヤムネハネカクシ類を，基準標本に基づいて検討し，必要に応じて再記載または捕捉的な記載を行うとともに，そのうちの4種に対して後基準標本を指定した．

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Catops angustipes apicalis (Coleoptera, Cholevidae) Found in an Ant Nest

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Through the courtesy of Mr. K. TOYODA, I have examined a specimen of *Catops angustipes apicalis* PORTEVIN which was found in a nest of *Lasius niger* (LINNAEUS) (Hymenoptera, Formicidae). Ecological information of the present beetle was only given by JEANNEL (1950), HIDAKA (1950) and NISHIKAWA (1990); in the former two, it was found at the entrance to a cellar, and in the latter, it was attracted to a fluorescent light. This is the first record of the beetle from an ant nest.

According to TOYODA's observation (pers. comm.), ants did not attack the beetle within the colony, though they are active; the beetle was dug out from a broad portion of the nest gallery under stones. The collecting data of the present specimen are as follows: 1 ♀, Ozawaguchi, Ryôgami-mura, Saitama Pref., central Honshu, 23–XI–1996, K. TOYODA leg.

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