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Staphylinini and Quediini from Israel (Coleoptera, Staphylinidae)

(109th contribution to the knowledge of Staphylinidae)

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With 7 figures

ABSTRACT

Staphylinus hebraeus and Quedius loebli, both from Israel, are described as new and a lectotype is designated for *Quedius coloratus* Fauv. Distributional records in Israel for 25 species belonging to the tribes Staphylinini and Quediini are given.

Recently, I received from Dr. I. Löbl, Genève, Switzerland, material of staphylinids belonging to the tribes Staphylinini and Quediini collected by him in Israel. The results of this study are presented here. The staphylinid fauna of Israel is very poorly known, therefore, the localities in Israel, together with the habitat data, and the general distribution are given for each species.

The material studied is deposited in the collection of the Muséum d'histoire naturelle, Genève, and in the Canadian National Collection, Ottawa, Canada.

The original material of Q. coloratus was made available to me by Mr. L. Baert (Institut Royal des Sciences Naturelles de Belgique, Bruxelles). His assistance is gratefully acknowledged.

I wish to thank Dr. I. Löbl for making this material available for study and for permitting some of the specimens studied to be deposited in the Canadian National Collection. I would also like to thank my colleagues, Drs. E. C. Becker, D. E. Bright and J. M. Campbell, for their criticisms of the manuscript.

TRIBE STAPHYLININI

Gabrius nigritulus (Gr.)

Staphylinus nigritulus Gravenhorst, 1802, Col. Micr. Brunsv.: 41. Gabrius nigritulus; Smetana, 1960, Dtsch. ent. Z., N. F. 7: 325.

Material examined: Galilee, Ginosar (-210 m), 20. -21.V.73 (2); Galilee, Tel Dan, 29.V.73 (1); Mt. Carmel, Little Switzerland, 28.V.73 (1); Golan, 2 km E Banias, 2.VI.73 (8). The specimens were collected under stones or among low vegetation at edges of creeks, and by sifting wet leaf-litter under Oleander-trees.

The species is widely distributed throughout the palaearctic and nearctic regions. It seems to be missing in the easternmost portions of the palaearctic region.

Gabrius latro Joy

Gabrius latro Joy, 1913, Ent. mon. Mag. 49: 26, pl. 1, Fig. 8. Gabrius latro; Smetana, 1960, Dtsch. ent. Z., N.F. 7: 321.

Material examined: Galilee, Jordan, 3 km N Lac Kinneret (-200 m), 6.VI.73 (2); Golan, Banias, 2.VI.73 (2).

The specimens were collected on the muddy banks of the Jordan River.

This is a mediterranean species, occurring from Southern France (Alpes Maritimes) through the Balkan Peninsula to Israel, Lebanon, Turkey and the Caucasus.

Gabronthus maritimus (Motsch.)

Gabrius maritimus Motschulsky, 1858, Bull. Soc. natural. Moscow 31, 2: 661. Gabronthus maritimus; Tottenham, 1955, Trans. R. ent. Soc. London 106: 185. Gabronthus maritimus; Smetana, 1959, Dtsch. ent. Z., N.F. 6: 452.

Material studied: Golan, 2 km E Banias, 2.VI.73 (1).

The specimen was taken in a ravine under stones near a creek.

The species is widely distributed throughout the coastal areas of the central and eastern portions of the mediterranean subregion.

Philonthus (Philonthus) corruscus (Gr.)

Staphylinus corruscus Gravenhorst, 1802, Col. Micr. Brunsv.: 33. Philonthus corruscus; Coiffait, 1974, Col. Staph. rég. pal. occ. II: 259.

Material examined: Galilee, au-dessous Safad (500 m), 30.V. and 14.VI.73 (6). The specimens were collected by sifting deep layers of wet fallen leaves in a deep ravine.

The species is widely distributed throughout the whole Europe (except for the northern parts), the mediterranean subregion (eastwards to Israel, Lebanon, Asia Minor), and further east to the Caucasus, Transcaucasia and the Middle Asiatic republics of the U.S.S.R.

Philonthus (Philonthus) concinnus (Gr.)

Staphylinus concinnus Gravenhorst, 1802, Col. Micr. Brunsv.: 21. Philonthus concinnus; Smetana, 1958, Ent. B1. 54: 157. Philonthus ochropus; Coiffait, 1974, Col. Staph, rég. pal. occ. II: 261.

Material examined: Galilee, au-dessous Safad (500 m), 14.VI.73 (1); Galilee, Mt. Meron (1100 m), 27.V.73 (2); Little Switzerland, Mt. Carmel, 28.V.73 (4).

The specimens were collected by sifting wet leaf-litter in a forest, under Oleandertrees, and in a deep ravine.

The species is widely distributed throughout the palaearctic region.

Philonthus (Philonthus) debilis (Gr.)

Staphylinus debilis Gravenhorst, 1802, Col. Micr. Brunsv.: 35. Philonthus debilis; Coiffait, 1974, Col. Staph, rég. pal. occ. II: 265.

Material examined: Galilee, Ginosar (-210 m), 20. -21.V.73 (1); Galilee, au-dessous Safad, (500), 13.V.73, 14.VI.73 (5).

The specimens were collected among tufts of grass at the edges of a creek near where it empties into the Sea of Galilee, and by sifting deep layers of wet fallen leaves in a deep ravine.

The species is widely distributed throughout the palaearctic region; known also from North America (probably introduced).

Philonthus (Philonthus) bimaculatus (Gr.)

Staphylinus bimaculatus Gravenhorst, 1802, Col. Micr. Brunsv.: 38. Philonthus bimaculatus; Smetana, 1958, Ent. B1. 54: 151. Philonthus nitidicollis; Coiffait, 1974, Col. Staph. rég. pal. occ. II: 250.

Material examined: Galilee, Mt. Meron (900 m and 1100 m), 27.V.73 (10).

The specimens were collected by sifting deep layers of rotting fallen leaves in a forest.

The species is widely distributed throughout Europe (except for northern parts) and the mediterranean subregion; eastwards to Israel, Lebanon, Asia Minor, Iran, the Caucasus and Transcaspia.

Philonthus (Philonthus) sordidus (Gr.)

Staphylinus sordidus Gravenhorst, 1802, Col. Micr. Brunsv.: 176. Philonthus sordidus; Smetana, 1958. Ent., B1. 54: 154. Philonthus pachycephalus; Coiffait, 1974, Col. Staph. rég. pal. occ. II: 239. Philonthus sordidus; Brunne, 1976, Ent. B1. 72: 87.

Material examined: Mt. Carmel, Little Switzerland, 28.V.73 (1 3). The specimen was taken by sifting wet leaf-litter under Oleander-trees.

An almost cosmopolitan species; widely distributed throughout the palaearctic region.

Philonthus (Philonthus) ventralis (Gr.)

Staphylinus ventralis Gravenhorst, 1802, Col. Micr. Brunsv.: 174. Philonthus ventralis; Coiffait, 1974, Col. Staph. rég. pal. occ. II: 217.

Material examined: Galilee, près de Maghar, 25.V.73 (2). The specimens were taken from under a goat-carrion.

Philonthus (Philonthus) discoideus (Gr.)

Staphylinus discoideus Gravenhorst, 1802, Col. Micr. Brunsv.: 38. Philonthus discoideus; Coiffait, 1974, Col. Staph. rég. pal. occ. II: 195.

Material examined: Galilee, près de Maghar, 25.V.73 (15); Galilee, Mt. Arbel, près de Migdal (150 m), 23.V.73 (1).

The specimens were taken from under a goat-carrion.

A cosmopolitan species; widely distributed throughout the palaearctic region.

Philonthus (Philonthus) rufimanus Er.

Philonthus rufimanus Erichson, 1840, Gen. Spec. Staph.: 476. Philonthus rufimanus; Coiffait, 1974, Col. Staph. rég. pal. occ. II: 205.

Material examined: Golan, 2 km E Banias, 2.VI.72 (2).

The specimens were collected under stones near a creek in a ravine.

The species is distributed from the central portions of Southern Europe, through the southeastern portions of Central Europe and Southeastern Europe to Israel, Lebabon, Asia Minor and the Caucasus.

Staphylinus (Abemus) hebraeus spec. nov.

Holotype (female) and paratype (female): "Israel Galilee Tel Dan 29.V.73 Löbl." Holotype in the collection of the Muséum d'Histoire Naturelle, Genève, Switzerland; paratype in the Canadian National Collection, Ottawa (CNC No. 15344).

Closely related and externally very similar to chloropterus Pnz., but differing as follows: head, pronotum and elytra metallic green with variable dark metallic bluish spots, abdomen pale rufotestaceous with darkened bases of first four visible tergites; mouthparts, legs and antennae yellowish, latter only very slightly infuscate towards apex. Head slightly more angular and transverse (index 1/w = 0.64), temples slightly concave behind eyes and with posterior angles more prominent, punctation of head denser and more rugose; golden pubescence of head somewhat denser, especially in posterior half, two indistinct paramedian spots at base formed by slightly darkened hairs. Punctation of pronotum denser and more rugose; golden pubescence of pronotum denser, with indistinct darker spots formed by slightly darkened hairs, especially anteromedially and posterolaterally. Scutellum with basically same tomentose pubescence, however, pubescence slightly denser and more velvety, with yellow spots more pronounced. Golden pubescence of elytra slightly denser, with variable darker spots formed by darkened hairs. Abdomen with a pair of similar median dark tomentose spots on first four visible tergites, however, spots more pronounced due to more distinct silverish pubescence around them.

Male unknown.

Length 12.0-12.5 mm (abdomen slightly extended).

Distribution. The species is known only from the type locality, which is an ancient site in the northwestern corner of Israel.

Bionomics. The specimens were collected by sifting floor leaf-litter in a forest near the river Jordan.

Discussion. Although no males of this species are available, there is no doubt in my mind about its distinctness. The different ground colour of the head, pronotum and elytra, the different shape of the head, the denser and more rugose punctation of the head and pronotum and the different pubescence of the dorsal surface, will distinguish this species from *chloropterus* at once. Also, the species is completely geographically isolated from *chloropterus*, which is absent from the areas around the Mediterranean Sea. The more transverse and angular head, combined with the variegated pubescence of the dorsal side, gives the species a rather *Ontholestes*-like general appearance.

Etymology: the specific name is the Latin adjective *Hebraeus*, -a, -um (Jewish). It refers to the occurrence of this species in Israel.

Ocypus (Pseudocypus) mus mus (Brullé)

Staphylinus mus Brullé, 1832, Exp. sc. Morée. Vol. 3, pars 2, Ins: 130. Staphylinus mus tauricus J. Müller, 1932, Boll. Soc. ent. Ital. 58: 80. Ocypus mus mus; Smetana, 1971, Acta ent. bohemoslov. 68: 268.

Material examined: Galilee, 3 km O Ginosar (-180 m), 24.V.73; Galilee, au-dessus Safad (500 m), 30.V.73, 14.VI.73, (10); Mt. Carmel, Little Switzerland, 28.V.73 (5).

The specimens were collected by sifting leaf-litter under Eucalyptus- and Oleandertrees, and by sifting deep layers of wet fallen leaves in a deep ravine.

The species is widely distributed from Southern Europe, the southeastern portions of Middle Europe and the Balkan Peninsula throughout the eastern portion of the mediterranean subregion to Asia Minor, Iran, the Caucasus and Transcaucasia.

Ocypus (Pseudocypus) orientalis (Brnh. et Schub.)

Staphylinus tomentosus Baudi, 1869, Berl. ent. Z. 13: 384 (nec Gravenhorst, 1802). Staphylinus orientalis Bernhauer et Schubert, 1914, Col. Cat., pars 57:389 (nom. nov.). Pseudocypus orientalis; Coiffait, 1974, Col. Staph. rég. pal. occ. II: 511.

Material examined: Galilee, Mt. Meron (1100 m), 27.V.73 (2). The specimens were collected by sifting wet leaf-litter in a forest.

This is an east-mediterranean species known from the island of Cyprus, Asia Minor, Syria, Lebanon, Israel and Palestine.

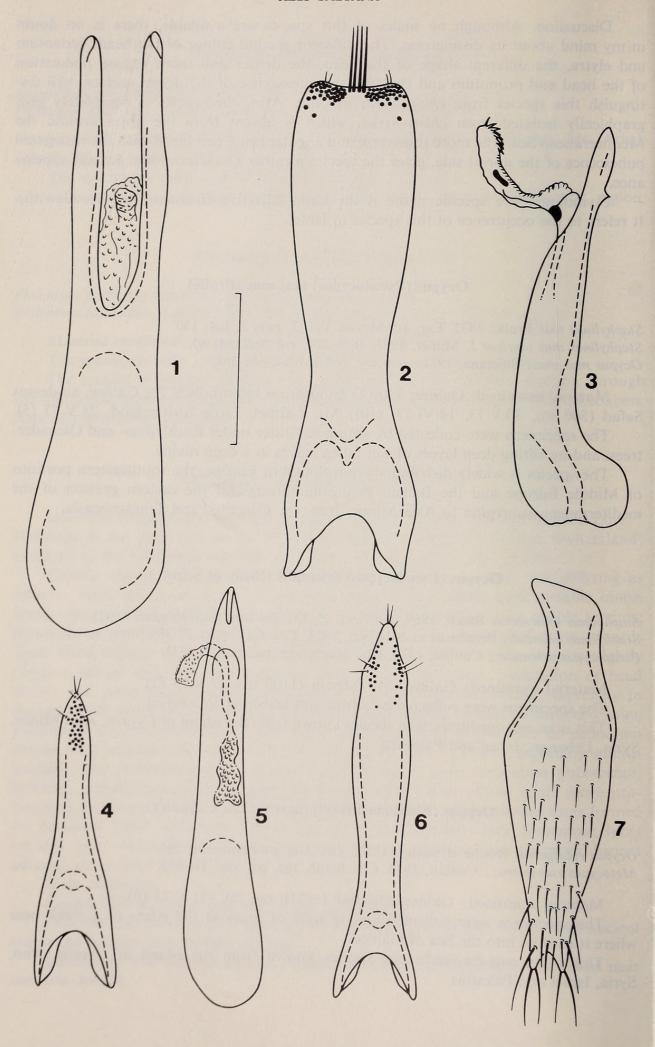
Ocypus (Alapsodus) rubripennis Reiche et Saulcy

Ocypus rubripennis Reiche et Saulcy, 1856, Ann. Soc. ent. France 4: 365. Metocypus rubripennis; Coiffait, 1974, Col. Staph. rég. pal. occ. II: 555.

Material examined: Galilee, Ginosar (-210 m), 20. -21.V.73 (6).

The specimens were collected among tufts of grass at the edges of a creek near where it empties into the Sea of Galilee.

This is an east-mediterranean species known from the island of Cyprus, Iran, Syria, Israel and Palestine.



TRIBE QUEDIINI

Heterothops spec.

Material examined: Galilee, Ginosar (-210 m), 20. -21.V.73 (11); Galilee, 3 km O Ginosar (-180 m), 24.V.73 (1); Mt. Carmel, Little Switzerland, 28.V.73 (2); Dead Sea, Reg. 3 km S Natal Kalya (-370 m), 1.VI.73 (2).

The specimens were collected by sifting wet leaf-litter under Oleander-trees, under stones or among low vegetation at a creek, by sifting wet leaf-litter under Eucalyptus-trees, and by sifting wet rotting reeds in a swamp at the edge of Dead Sea.

I am unable to put specific name on these specimens. They are identical with one specimen in my collection from Haifa, named as *sericans* Muls. Rey by Bernhauer, however, I do not think they belong to this species. A modern taxonomic revision of the genus for the palaearctic region is needed before a positive identification can be made.

Quedius (Quedius) tristis (Gr.)

Staphylinus tristis Gravenhorst, 1802, Col. Micr. Brunsv.: 34. Quedius tristis; Smetana, 1962, Ent. B1. 58: 134.

Material examined: Galilee, Mt. Meron (900-1100 m), 27.V.73 (15), Galilee, audessous Safad (500 m), 14.VI.73 (3); Mt. Carmel, Little Switzerland, 28.V.73 (1).

The specimens were collected by sifting wet leaf-litter in a forest and under Oleandertrees, and by sifting deep layers of wet fallen leaves in a deep ravine.

The species is widely distributed throughout the western portion of the palaearctic region, eastwards to the Caucasus and Transcaucasia.

Quedius (Distichalius) loebli spec. nov.

Holotype (male) and allotype (female): "Israel Galilee au-dessus Safad (500 m), 14.VI.73 Löbl". Paratypes: same data as holotype (7); same data as holotype but

Figs. 1-7.

Quedius loebli (paratype).

1. Aedoeagus, paramere removed. 2. Underside of paramere.

Quedius coloratus (lectotype).

Aedoeagus (paramere removed) in lateral view, internal sac evaginated.
 Underside of paramere.

Quedius inflatus.

5. Aedoeagus (paramere removed), internal sac partially evaginated.
6. Underside of paramere. 7. Sternite of male genital segment. (Scale = 0.5 mm). date 30.V.73 (2); "Israel Galilee Mt Meron, (900 or 1100 m) 27.V.73, Löbl" (8). Holotype and allotype in the Muséum d'Histoire naturelle, Genève, Switzerland; paratypes in the same institution and in the Canadian National Collection, Ottawa (CNC No. 15345).

Piceous-black to black, abdomen irridescent; palpi and antennae rufotestaceous to rufobrunneous, legs rufobrunneous with more or less paler tarsi, middle and especially posterior femora distinctly darkened and irridescent on inner surface. Head of rounded quadrangular shape, tranverse (1/w index = 0.76); eyes moderately large, temples distinctly shorter than length of eyes seen from above (index 0.74); no additional setiferous punctures between anterior frontal punctures; posterior frontal puncture situated much closer to posterior margin of eye than to posterior margin of head, one puncture between it and posterior margin of head; tempora with numerous very fine punctures in irregular arcuate line. Surface of head with microsculpture of dense and very fine transverse waves, changing gradually in more or less distinct meshes on small area in middle of frons. Labrum deeply emarginate in middle. Underside of head smooth (except for some large setiferous punctures), surface with microsculpture of very dense and fine, transverse and oblique waves; infraorbital ridge complete and strongly developed. Antennae moderately long, third segment distinctly longer than second, middle segments longer than wide, gradually becoming shorter and wider apically, outer segments about as long as wide, last segment slightly shorter than two preceding segments combined. Pronotum broadly arcuate basally, arcuately narrowed in front, slightly wider than long (index 1.13); dorsal rows each with three fine puntures; sublateral rows each with only two punctures close to anterior margin; large lateral puncture situated far behind level of posterior puncture of sublateral rows; surface of pronotum with microsculpture similar to that of head. Scutellum impunctate, with microsculpture of fine and dense transverse waves. Elytra moderately long, at suture slightly shorter to about as long as, at sides slightly longer (index 1.15) than pronotum at midline; punctation fine and rather sparse, slightly unequal and not quite evenly spaced; in addition, each elytron with one sutural row of five or six very coarse punctures, several coarse punctures on subhumeral region and numerous coarse punctures on posterolateral portion, latter often extended far towards elytral base and connected with subhumeral group; surface between punctures without microsculpture. Abdomen with fifth visible tergite bearing distinct whitish apical seam; punctation of tergites rather fine and not dense, evenly distributed; surface between punctures without recognizable microsculpture. First four segments of protarsi strongly dilated in both sexes.

Male. First four segments of protarsi slightly more dilated than in female. Apical margin of fifth sternite shallowly and rather indistinctly emarginate in middle; apical margin of sixth sternite with moderately wide and rather deep, obtusely triangular emargination in middle, small area before emargination impressed and smooth. Aedoeagus elongate, of very distinct shape, median lobe split into two widely separated, apically subdentate rod-like structures; paramere wide, completely covering median lobe; apical margin wide, subemarginate, with four long and strong close set median bristles and one pair of minute lateral bristles on each side; sensory tubercles on underside of paramere very numerous, forming two lateral groups close to apical margin (see Figs. 1, 2 for details).

Length 10.2-12.3 mm.

Distribution. The species is known only from the two type localities in northern Israel.

Bionomics. The specimens were collected by sifting deep layers of wet fallen leaves in a deep ravine near Safad, and by sifting deep layers of rotting fallen leaves in a forest at Mt. Meron.

Discussion. This is a very conspicuous species due to the peculiar punctation of the elytra and the shape of the male aedoeagus, in combination with the large size and stout form. I am unable to relate it to any other palaearctic *Quedius* species known to me. The complete splitting of the median lobe of the aedoeagus is a very specialized character, that occurs elsewhere within the genus *Quedius* only in *Q. fissus* Grid. and in this case the median lobe is only partially split. However, this is only a convergence since the two species are not related.

Etymology. The species was named in honour of Dr. I. Löbl, Muséum d'histoire naturelle, Genève, Switzerland, who collected the original specimens.

Quedius (Distichalius) cinctus (Payk.)

Staphylinus cinctus Paykull, 1970, Mon. Carab. App.: 137. Quedius cinctus; Smetana, 1971, Mem. Ent. Soc. Canada 79: 165.

Material examined: Galilee, Mt. Meron (900 m), 27.V.73(1).

The specimen was found by sifting deep layers of rotting fallen leaves in a forest. The species is widely distributed throughout most of Europe and the mediterranean subregion, eastwards to Iran and the Caucasus.

Quedius (Raphirus) scintillans (Gr.)

Staphylinus scintillans Gravenhorst, 1806, Mon. Col. Micr.: 70. Quedius scintillans; Smetana, 1962, Ent. B1. 58: 148.

Material examined: Galilee, Mt. Meron (900-1100 m), 27.V.73 (12); Galilee, au-dessus Safad (500 m), 14.VI.73 (21).

The specimens were collected by sifting deep wet layers of fallen leaves in a forest, and in a deep ravine.

The species is widely distributed throughout most of Europe and the mediterranean subregion, eastwards to the Caucasus, Iran and Afghanistan.

Quedius (Raphirus) coloratus Fauv.

Quedius coloratus Fauvel, 1875, Fn. gallo-rhén. III, Cat. syst.: XXXIII. Quedius coloratus; Coiffait, 1963, Bull. Soc. hist. nat. Toulouse 98: 378, 398, 380, fig. 2a.

Material examined: Galilee, Mt. Meron (900-1100 m), 27.V.73 (4).

The specimens were collected by sifting deep layers of rotting fallen leaves in a forest.

The species is widely distributed from southeastern Europe (Balkan Peninsula) to Israel, Palestine, Lebanon and Asia Minor.

Type material. The Fauvel collection in the Institut Royal des sciences naturelles de Belgique, Bruxelles, consists of three conspecific specimens, which are labelled as follows: Spec. Nr. 1: "Coll. R.I. Sc. N.B. Palestine Naplouse ex coll. Fauvel" (the original label "Naplouse" glued to large label with rest of text)/"coloratus Fauv."/
"R.I. Sc. N.B. 17.479 Quedius Coll. et det. A. Fauvel"/"Syntype". Spec. Nr. 2 and 3: "Coll. R.I. Sc. N. B. Akbis Syrie ex coll. Fauvel" (the original label "Akbis Syrie" glued to large label with rest of text)/"Coll. et det. A. Fauvel Quedius coloratus Fauv. R. I. Sc. N.B. 17.479". Only the first (male) specimen can be considered as belonging

to the original material (see Fauvel, 1875: XXXIII). The specimen was dissected and the aedoeagus was mounted (See Figs. 3, 4). It is hereby designated as lectotype of *coloratus*; the label "Lectotype Quedius coloratus Fauvel A. Smetana des. 1977" was attached to it.

Quedius (Raphirus) problematicus Fagel

Quedius problematicus Fagel, 1968, Bull. Inst. r. Sci. nat. Belg. 44 (12): 9.

Material examined: Galilee, Mt. Meron (900-1100 m), 27.V.73 (4); Galilee, audessous Safad (500 m), 30.V.73 (1); Dead Sea, Reg. 3 km S Natal Kalya (-375 m), 1.VI.73 (1).

The specimens were collected by sifting deep wet layers of fallen leaves in a forest and in a ravine, and by sifting wet rotting reeds in a swamp at the edge of Dead Sea.

The species is known only from Lebanon and Israel.

Quedius (Raphirus) hermonensis Coiff.

Quedius hermonensis Coiffait, 1963, Bull. Soc. hist.-nat. Toulouse 98: 403, 408 (Fig. 9g, h, i), 417.

Material examined: Galilee, Ginosar (-210 m), 20.-21.V.73 (62); Mt. Carmel, Little Switzerland, 28.V.73 (6).

The specimens were collected at Ginosar among tufts of grass at the edges of a creek near where it empties into the Sea of Galilee, and at Mt. Carmel by sifting wet leaf-litter under Oleander-trees.

The species is known only from Lebanon and Israel.

The shape of the aedoeagi of the specimens studied does not quite agree with the drawings given by Coiffait (l.c.); it is possible that the specimens belong to another, closely related species.

Quedius (Raphirus) inflatus Fauv.

Quedius inflatus Fauvel, 1875, Fn. gallo-rhén. III, Cat. Syst.: XXXIII. Quedius inflatus; Gridelli, 1924, Mem. Soc. ent. Ital. 3: 167.

Material examined: Galilee, au-dessous Safad (500 m), 30.V.73 (4).

The specimens were collected by sifting deep layers of fallen leaves in a deep ravine. The species is known from Palestine, Israel and Lebanon.

This is a conspicuous species, that can be easily recognized among the *Raphirus* species with the punctate scutellum by its large size (8.2-9.5 mm) and the reddish elytra. To the best of my knowledge, the aedoeagus of this species has not been described; it is therefore figured here, together with the sternite of the male genital segment (see Figs. 5-7 for details).

Type material. The species was described from specimens from "Naplouse, Wadiel-Melek" (Fauvel, 1875: XXXIII). The original series is not deposited in the collection Fauvel in the Institut Royal des sciences naturelles, Bruxelles. According to some data in the correspondence between G. Fagel, Bruxelles, and H. Coiffait, Toulouse, specimens considered as being the types are deposited in the collection Coiffait, Toulouse, France (L. Baert, Bruxelles, personal communication).

There is some inconsistency in the original locality given by Fauvel (1.c.). "Naplouse" (= Nabulus) is in Jordan and "Wadi-el-Melek" can be found on some maps near Haifa in Israel.

Quedius (Raphirus) nitipennis (Steph.)

Raphirus nitipennis Stephens, 1832, III. Brit. Ent. Mandib. V: 242.

Quedius nitipennis; Tottenham, 1948, Ent. mon. Mag. 84: 249.

Staphylinus attenuatus Gyllenhal, 1810, Ins. Suec. I, 2: 311 (nec Gravenhorst, 1806).

phylinus alternatius Gyneimai, 1010, 1115. Succ. 1, 2. 311 (nec Gravennotst, 1000)

Material examined. Golan, Banias, 2.VI.73 (4). No habitat data.

The species is widely distributed throughout Europe, the mediterranean subregion to Asia Minor and the Caucasus, and farther east to Middle-Siberia.

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