

## Ripiphoridae (Coleoptera) of Greece and Turkey, with notes on their distribution in the Eastern Mediterranean and some neighbouring countries

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BATELKA J. 2007: Ripiphoridae (Coleoptera) of Greece and Turkey, with notes on their distribution in the Eastern Mediterranean and some neighbouring countries. *Acta Musei Moraviae, Scientiae biologicae* (Brno) 92: 155–175. – Fourteen species of the family Ripiphoridae (Coleoptera) are recorded from Greece, Turkey and some adjacent countries in the Eastern Mediterranean, the Balkan Peninsula and the Middle East (Albania, Armenia, Bulgaria, Cyprus, Iran, Jordan, Romania and Yugoslavia). *Ripiphorus creticus* sp.nov. from Crete is described and illustrated. Lectotypes are designated for *Ripiphorus syriacus* (Pic, 1904) and *Ripiphorus turcicus* (Pic, 1914) and based on their study, both the names are removed from synonymy with *R. subdipterus* Bosc, 1792, and recognized as belonging to two distinct species. The genus *Pterydrias* Reitter, 1895 is transferred from the subfamily Karumiinae (Drilidae/Dascillidae) to Ripiphoridae: Ripidiinae: Eorhipidiini and its systematic position is discussed. Keys are provided for determination of the genera of Ripiphoridae and species of *Macrosiagon* Hentz, 1830 and *Ripiphorus* Bosc, 1791 in the Eastern Mediterranean.

**Key words.** *Clinops*, *Ptilophorus*, *Macrosiagon*, *Metoecus*, *Ripiphorus*, *Ripidius*, *Pterydrias*, *Eorhipidius*, Ripidiinae, distribution, taxonomy, new species, lectotype designation, Palaearctic region, Crete

### Introduction

Ripiphoridae is a small, family of beetles distributed worldwide. It includes 38 genera in six subfamilies with about 400 species, of which around 60 are recorded from the Palaearctic region (BATELKA in press). On the whole, their biology is inadequately known; larval stages are parasitoids on larvae of Coleoptera, Hymenoptera and Blattodea. As the adults of many species are short lived, they are seldom collected and therefore rare in collections.

Until now, only three species of Ripiphoridae have been known to occur in Greece. *Ptilophorus dufourii* (Latreille, 1817) was recorded without further details by SCHILDER (1925). *Macrosiagon pectinata* (Villers, 1790) (a junior synonym of *M. ferruginea* (Fabricius, 1781)) was described from a specimen collected in central Greece, but the species has not been recorded from the country since. Finally, *Scotoscopus carbonarius* Reitter in Brenske et Reitter, 1884 (a junior synonym of *Clinops spectabilis* Schaufuss, 1872) was described from a single specimen collected in the Parnassos Mountains (mainland Greece) (BRENSKE & REITTER 1884). Recently, *C. spectabilis* has also been recorded from Crete, based on material collected by Czech, Danish and German entomologists in the course of the last two decades (BATELKA 2005).

The Turkish fauna of Ripiphoridae has been only poorly investigated. Eight species have been published to date (BOLOGNA 1997; LÓPEZ-COLÓN 1999; PIC, 1904, 1914;

REITTER 1895, 1898; SCHAUFUSS 1872). These records are largely based on single findings and more detailed knowledge on the distribution of individual species in the country is lacking.

A summary of information on general distribution (i.e. country by country), even for some common West Palearctic Ripiphoridae, has never been compiled. From some countries of the Eastern Mediterranean only single records, short accounts or general notices have been published. Although e.g., *Ptilophorus dufourii*, *Macrosiagon bimaculata* (Fabricius, 1787), *M. ferruginea*, *M. praeusta* (Gebler, 1829) or *Ripiphorus subdipterus* Bosc, 1792 are known from the Mediterranean, many records of them are imprecise and there are, in fact, no records at all from many Mediterranean countries.

The purpose of this paper is to summarize extant information and provide new data on the family Ripiphoridae in Greece, Turkey and some adjacent territories. During the study of available material, several taxonomic problems have been recognised. Consequently, the taxonomy of the genus *Ripiphorus* Bosc, 1791 and the systematic position of the genus *Pterydrias* Reitter, 1895 and the species *P. debilis* Reitter, 1895 described from Turkey are discussed below in more detail.

### Material and methods

The following abbreviations identify the depositories of examined material:

BMNH	.....	The Natural History Museum, London, England (Maxwell Barclay)
JBCP	.....	author's collection, Praha, Czech Republic
JHCP	.....	Jan Horák, Praha, Czech Republic
JSCB	.....	Jiří Simandl, České Budějovice, Czech Republic
MHNG	.....	Muséum d'histoire naturelle, Genève, Switzerland (Giulio Cuccodoro)
MNHN	.....	Muséum d'histoire naturelle, Paris, France (Isabelle Bruneau de Miré Gidon)
NHMB	.....	Naturhistorisches Museum, Basel, Switzerland (M. Brancucci, E. Sprecher)
NMEG	.....	Naturkundemuseum, Erfurt, Germany (M. Hartmann)
NMPC	.....	Národní muzeum, Praha, Czech Republic (Vladimír Švihla, Jiří Hájek)
SLCL	.....	Stig Lundberg, Luleå, Sweden
TTCS	.....	Till A. Tolasch, Stuttgart, Germany

Exact label data are cited for unpublished material; lines (where available in my notices) are indicated by a single slash (/); separate labels are indicated by a double slash (/). My comments appear in square brackets: [p] – preceding data are printed, [hw] – preceding data are handwritten.

### Results

#### Key to the genera of Ripiphoridae in the Eastern Mediterranean

1. Elytra fully developed, covering the whole abdomen and wings, always rounded at apex. .... 2.
- Elytra dehiscent, reduced, not fully covering abdomen and wings, or acute at apex. .... 3.

2. Eyes oval, weakly incised, not divided into two separate lobes. Tarsal formula 0–2–2; tarsal claws smoothly irregular on inner side. .... ***Clinops Gerstaecker***
- Eyes strongly divided into dorsal and ventral lobes. Tarsal formula 2–2–2; tarsal claws densely serrate on inner side. .... ***Ptilophorus Dejean***
3. Antennae in males bilabellate, in females pectinate. Mouth parts fully developed, labial palpi present. Eyes with small ommatidia. Females similar to males (Ripiphorinae). .... 4.
- Antennae in males unilabellate or filliform, in females serrate. Mouth parts partly reduced, labial palpi absent. Eyes with very large ommatidia. Females (if known) wingless, larviform (Ripidiinae). .... 6.
4. Elytra extremely abbreviated, much shorter than abdomen, scale-like, rounded or truncate at apex. .... ***Ripiphorus Bosc***
- Elytra at least as long as abdomen, triangular, acute at apex. .... 5.
5. Pronotum with a deep median furrow. .... ***Metoecus Dejean***
- Pronotum convex, without impressions. .... ***Macrosiagon Hentz***
6. Antennae in males unilabellate, in females serrate. Maxillar palpi reduced to button-like processes, mandibulae absent. .... ***Ripidius Thunberg***
- Antennae in males filliform (females unknown). Maxillar palpi and mandibulae fully developed. (Eorhipidiini). .... 7.
7. Elytra short, twice as long as pronotum (Fig. 4). .... ***Pterydrias Reitter***
- Elytra long, 3.5-times as long as pronotum. (Fig. 5A). .... ***Eorhipidius Yablokov-Khnzoryan***

**Fig. 1.** Distribution of Ripiphoridae in Crete: *Clinops spectabilis* (open circles), *Ptilophorus dufourii* (filled circles), *Ripiphorus subdipterus* (open square), *Ripiphorus creticus* sp.nov. (filled square), *Macrosiagon praeusta* (filled triangle) and *Metoecus paradoxus* (open triangle).



## SUBFAMILY PELECOTOMINAE

### Genus *Clinops* Gerstaecker, 1855

= *Scotoscopus* Brenske et Reitter, 1884.

#### *Clinops spectabilis* Schaufuss, 1872

= *Scotoscopus carbonarius* Reitter in Brenske et Reitter, 1884.

**Material examined.** Greece. Crete. 1 ♀ (JBCP), labeled: "Greece, 2003 + 2004 / Crete Isl. occ., Hania env., / Omalos, west of Tourli Mt. / J. Batelka et H. Batelková lgt. [p] // reared from dead branch / of *Quercus coccifera* / emerged on: [p] v. – vi. 2007 [hw]".

**Remarks.** In a previous paper (BATELKA 2005), I synonymized *Scotoscopus* Brenske et Reitter, 1884 and *Scotoscopus carbonarius* Reitter in Brenske et Reitter, 1884 with *Clinops* Gerstaecker, 1855 and *Clinops spectabilis* Schaufuss, 1872 respectively and reported *Isotomus jarmilae* Sláma, 1982 and *Callimellum angulatum glabrescens* Holzschuh, 1989 (Coleoptera: Cerambycidae: Cerambycinae) as the host-species. I also transferred the genus *Clinops* from Micholaeminae to Pelecotominae.

Newly available data indicate that the larva of *C. spectabilis* is well adapted to survive several years inside the larva of the cerambycid host, until the host's full maturity. This assumption is also supported by the observation of pupae of *Clinops* in pupal chambers of *Isotomus jarmilae* (BATELKA 2005). The wood of *Quercus coccifera*, from which the above-cited female was reared, was collected in 12.–15.ix.2003 and in 31.iii.–3.iv.2004 (i.e. after the potential occurrence of last adult *Clinops* in 2003 and before the emergence of first adults in 2004), thus at least a four years development of *Clinops* is confirmed in this case. The wood was infested by the long-horn beetles *Pseudosphegistes bergeri* Sláma, 1982 (6 ex. emerged in 8.vi.–16.vii. 2004, 11 ex. in 25.v.–15.vii.2005, 3 ex. in 2006 or 2007, 2 ex. in 20.–22.vi.2007, 1 ex. in 20.vii.2007) and *Isotomus jarmilae* (1 ex. 12.vi.2007) (both Cerambycinae: Clytini; more specimens of both species can be expected to emerge in future). Apart from these cerambycids, two specimens of *Opilo taeniatus* (Klug, 1842) (Cleridae) were reared. The locality should be identical with the locality in which *Clinops spectabilis* has been collected by Ole Mehl (see BATELKA 2005).

**Distribution.** Mainland Greece and Crete (BRENSKE & REITTER 1884, BATELKA 2005), Turkey (SCHAUFUSS 1872).

## SUBFAMILY PTILOPHORINAE

### Genus *Ptilophorus* Dejean, 1834

**Note.** The species of the genus *Ptilophorus* in the Palearctic region can be identified using the key by YABLOKOV-KHNZORYAN (1975).

*Ptilophorus dufourii* (Latreille, 1817)

**Material examined.** Greece. Peloponnese. 1 ♂, 2 ♀ (NMPC), labeled: “Graecia (Patra), 12. v., 5 km N Kalavryta, lgt. Jelínek, 1993 [p]”; 1 ♂ (NMPC), labeled: “Kalavryta Pelop. / Mař. et Táb. [Mařan et Táborský lgt.] IV. / 1936 Coll. Bartoň [p]”; 1 ♀ (NMPC), labeled: “Kalavryta Pelop. / lgt. Dr. Pfeffer [p] // ex. coll. Pfeffer / Nat. Mus. Prague [p]”; 1 ♂ (NMEG), labeled: “GR, Peloponnes, / Kernitsa bei / Diakofto, 600 m / 4.V.1998 leg. Gelb / recht & Schwabe [p]”; 4 ♂ (JBCEP), labeled: “16.5.2000 / Grece - Peloponneso, / Kernitsa – 30 km of / Kalavrita - 600 km [sic!] / leg. A. Wrzeczionko [p]”. Crete. 1 ♂ (JBCEP), labeled: “Kreta, Lasithiou - / Ebene, Tzermiado / 17.04.1998, 850 m / NN, leg. A. Kopetz [p] // Evaniocera / dufouri / vid [hw] C. Wurst [p]”; 1 ♀ (JBCEP), labeled: “Kreta, Lasithiou - / Ebene, Tzermiado / 17.04.1998, 850 m / NN, leg. A. Kopetz [p]”; 1 ♂ (JBCEP), labeled: “Creta, Orosira Dikti / Anno Viannos, 7 km NW / Thomadiano SW, / 350 m NN, 21.4.2000 leg. A. Kopetz [p]”; 1 ♂ (TTCS), labeled: “GR: Kreta Plakias / 2.–16.4.1993 / leg. H. Winkelmann [p]”. Lesbos. 1 ♂ (JBCEP), labeled: “Greece, Lesbos isl. / ca 5 km N Kalloni vill. / 39°16,3' N 26°12,7'E, / (terraced fields), 180 m / Jan Schneider leg., 22.4.2007 [p]”. Turkey. 4 ♂ (JBCEP), labeled: “Turkey – vill. [vil. - vilayet = province] Van / Kuskunkiran Gecidi / 12.6.1992, 1900m / M. Bednařík lgt. [p]”; 1 ♂ (MNHN – in coll. Dr. A. Chobaut 1942), labeled: “Syrie / Amanus [now Akma Mts., Turkey] / C. D. 1891 [p]”; 1 ♂ (JBCEP), labeled: “TR vill. Bingöl 1125m / Bingöl 20.6.1986 / Kadlec + Voříšek leg. [p]”. Armenia. 2 ♂ (NMPC), labeled: “USSR Armenia 1979/ Gekhard 15.vi. / V. Kubáň leg. [p]”; 2 ♂ (JBCEP), labeled: “USSR Armenia / Gekhard 24.5.1975 / Jerevan [env.] / Fr. Navrátil lgt. [p]”; 1 ♂ (JBCEP), labeled: “Gegard 15. 6. / Armenia / A. Olexa [lgt.] 1979 [p]”; 3 ♂ (JBCEP), labeled: “Gekhard / Armenia / A. Olexa 6.73 [p] // J. Batelka, Praha / Purchase 2005 / coll. Aldo Olexa [p]”; 1 ♂ (JBCEP), labeled: “Gegard 22.6. / Armenia / A. Olexa 1979 [p] // J. Batelka, Praha / Purchase 2005 / coll. Aldo Olexa [p]”; 1 ♂ (JBCEP), labeled: “Atis Mt. (Jerevan) / Armenia 24.5. / A. Olexa 1975 [p] // J. Batelka, Praha / Purchase 2005 / coll. Aldo Olexa [p]”; 1 ♂ (JBCEP), labeled: “USSR Armenia / Parpi 1600m / 11.5.1973 / J. Kohoušek lgt. [p] // J. Batelka, Praha / Purchase 2005 / coll. Aldo Olexa [p]”; 1 ♂ (JBCEP), labeled: “USSR - Armenia / Gekhard / 15.6.1988 / lgt. Netušil [p]”; 1 ♀ (JBCEP), labeled: “Armenia 1988 / Gekhard 10.6. / lgt. S. Bečvář [p]”; 1 ♂ (JBCEP), labeled: “SU, Armenie 89 [1989] / Gocht, pr. Garni / 4.–5.6., 1000m / Z. Kejval lgt. [p]”; 1 ♂ (JBCEP), labeled: “Armenien / Garni Umgeb. / 1300–1500m / 25.5.1971 / leg. H. Muehe [p] // W.H.Muehe / Radeberg, Ankauf [p] // Staatl. Museum für / Tierkunde Dresden [p]”; 2 ♂ (JBCEP), labeled: “USSR, Armenia / Gokh-Guekhard / 1500 [p] // 30 km E / from Yerevan [hw] // No. 128 / 29. V. 1980 / leg. J. Papp [p]”. Bulgaria. 1 ♀ (JBCEP), labeled: “Bulgaria or. / Nesebar – Sl. Brjag / J. Strejček lgt. / [reverse side of the label] 4.6.1964 [hw] mořský náplav [= sea alluvion] [p]”; 1 ♂ (JBCEP), labeled: “Bulgaria or. / Nesebar – Sl. Brjag / J. Strejček lgt. / [reverse side of the label] 30.5.1964 [hw] lesostep [= wooden steppe] [p]”; 2 ♂ 1 ♀ (JBCEP), labeled: “Bulgaria mer. or. / Stomopolo VI. 67 / Z. + J. Novotný lgt. [p]”; 1 ♂ (JBCEP), labeled: “Bulgaria / Slancev Brjag / 5.6.–15.6.1977 / lgt. Dr. Z. Pádr [p]”; 1 ♂ (JBCEP), labeled: “Arkutino 7.69 / Bulgaria / A. Olexa [lgt] [p]”; 7 ♂ 4 ♀ (JBCEP), labeled: “Arkutino 6.70 / Bulgaria / A. Olexa [p] // J. Batelka, Praha / Purchase 2005 / coll. Aldo Olexa [p]”; 2 ♂ (JBCEP), labeled: “Arkutino 7.69 / Bulgaria / A. Olexa [p] // J. Batelka, Praha / Purchase 2005 / coll. Aldo Olexa [p]”; 3 ♂ (NMPC), labeled: “Zeitiburun / Bulg. orient. / VI. 33 [1933] Mař. [Mařan] Táb. [Táborský] [p]”; 1 ♂, 1 ♀ (NMPC), labeled: “Sozopol Bulg. / or. 15.v.39 / Hlisenikowski [p]”; 1 ♀ (NMPC), labeled: “9.–13.6.1971 / Bulg. or. Arkutino / Sv. Bílý lgt. [p]”; 1 ♂ (NMPC), labeled: “Bulgaria or. / Slančev Brjag / Zd. Černý lgt. / 16.6.1971 [p]”. Iran. 1 ♂ (JBCEP), labeled: “Iran, prov. Zanjan, 8.5.1996 / ca 1800 m, 50 km NNE of Avaj / by road to Takestan / David Král lgt. [p]”; 1 ♂ (JBCEP), labeled: “Iran – Elburz Mts. / Tehran prov. Chur / 2400–2800 m, 7.–12.6. / 2005 V. Major leg. [p]”. Jordan. 1 ♂ (JBCEP), labeled: “Jordan W / 10 km N Petra / 3.5.1996 / lgt. Marek Halada [p]”; 1 ♀ (JBCEP), labeled: “Jordanien, SW / 10 km E of Petra / SE of Adhruh / 17.4.2002 / lgt. M. Snižek [p]”. Rumania. 2 ♂ (NMPC), labeled: “Roumanie / Comana Vlasca / A. L. Montandon [p]”.

**Distribution.** A West Palaearctic species; known from Morocco (KOCHER 1956), Algeria (CROS 1920, 1921), Tunisia (NORMAND 1936), Spain and Portugal (LÓPEZ-COLÓN & BAHILLO 2000), France (BÉTIS 1912, CAILLOL 1914), Italy (incl. Sardinia) (PORTA 1934), “Dalmatía”, Greece (SCHILDER 1925), Hungary (KASZAB 1956; currently considered extinct, O. Merkl, pers. comm), Rumania (SCHILDER 1925), Turkey (European and Asian part) (BOLOGNA 1997), Israel (SAHLBERG 1912–1913b, ARGAMAN & MENDEL 1988), Russia (South European Territory, Crimea) (SCHILDER 1925, YABLOKOV-KHNZORYAN

1975), “Caucasus” (SCHILDER 1925), Iran (YABLOKOV-KHNZORYAN 1975). New species for the fauna of Jordan. These are the first precise records from Greece, Bulgaria, Armenia and Iran. The species is remarkably common in some localities in the northern Peloponnese, southern Bulgaria and Armenia.

***Ptilophorus plumicornis* (Reitter, 1898)**

**Distribution.** Described and known to date from only two males collected in Mardin, SE Turkey (REITTER 1898).

**SUBFAMILY RIPIPHORINAE**

**Genus *Macrosiagon* Hentz, 1830**

**Key to species of *Macrosiagon* in the Eastern Mediterranean**

1. Median lobe of pronotum without a short elevated process at apex. .... 2.
- Median lobe of pronotum with a short, elevated process at apex. ....  
..... *M. bimaculata* (Fabricius)
2. Head, pronotum and apex of elytra orange or rusty red. ....  
..... *M. ferruginea* (Fabricius)
- Head, pronotum and apex of elytra black. .... *M. praeusta* (Gebler)

***Macrosiagon bimaculata* (Fabricius, 1787)**

**Material examined.** Greece. 4 ♀ (NMPC), labeled: “Graecia [p]”. Peloponnese. 1 ♀ (JBCP), labeled: “Grece 4.7. / Kardamili [env. Kalamata] / P. Petrás [lgt.] 95 [1995] [hw]”. Turkey. 1 ♀ (JBCP), labeled: “TR – Burdur / 5km NE Yesilova / N37°35' E29°55' / 1060m, 6.7.2006 / J. Halada leg. [p]”; 1 ♀ (JBCP), labeled: “TR – Canakale / 6km N Ezine / N39°51' E26°19' / 35m, 27.6.2006 / J. Halada leg. [p]”; 1 ♀ (JBCP), labeled: “Avanos env. 7.–10.7. / Cappadocia, Turkey / A. Olexa 1983 [p] // J. Batelka, Praha / Purchase 2005 / coll. Aldo Olexa [p]”; 1 ♂ (NMPC), labeled: “Turkey, 10.7.83 / Cappadocia / Avanos, Bílý leg. [p]”; 2 ♀ (NMPC), labeled: “Turcia / Reitter [p]”; 1 ♀ (JBCP), labeled: “Turkey / Prov. Erzurum / Ispir env. 6.vii.1998 / lgt. M. Kalabza [p]”. Bulgaria. 2 ♀ (JBCP), labeled: “Bulgaria mer. [p] / 21.7.1981 / Lozenec [hw] / David Král lgt. [p]”; 1 ♂ (JBCP), labeled: “Bulg. or. / Kranevo env. / 9.–12.7.1981 / David Král lgt. [p]”; 1 ♂ (JBCP), labeled: “Bulgaria or. / Albena (Varna) / 10.–23.7.1998 / P. Bulirsch lgt. [p]”; 1 ♀ (JBCP), labeled: “Bulgaria / Kiten (100 m.n.m) / 10.7.1986 / lgt. Mašek [hw]”; 1 ♀ (JBCP), labeled: “Ing. J. Mašek [lgt.] / Primorsko / Bulgaria [p], [reverse side of the label]: 5.7.76 [hw]”; 1 ♀ (JBCP), labeled: “Bulg. 28.6.1995 / Primorsko / Rejzek lgt. [p]”; 2 ♀ (JBCP), labeled: “Bulgaria m.or. / Arkutino 10. VII. / J. Kaláb lgt. 1982 [p]”; 2 ♂, 1 ♀ (JBCP), labeled: “Arkutino 7.69 / Bulgaria / A. Olexa [p] // J. Batelka, Praha / Purchase 2005 / coll. Aldo Olexa [p]”; 1 ♀ (JBCP), labeled: “Arkutino 6.69 / Bulgaria / A. Olexa [p] // J. Batelka, Praha / Purchase 2005 / coll. Aldo Olexa [p]”; 1 ♀ (JBCP), labeled: “Arkutino 7.70 / Bulgaria / A. Olexa [p] // J. Batelka, Praha / Purchase 2005 / coll. Aldo Olexa [p]”; 1 ♀ (JBCP), labeled: “Sozopol 7. / Bulgaria / A. Olexa 1967 [p] // J. Batelka, Praha / Purchase 2005 / coll. Aldo Olexa [p]”; 1 ♀ (JBCP), labeled: “Arkutino 7. / Bulgaria / A. Olexa 1967 [p] // J. Batelka, Praha / Purchase 2005 / coll. Aldo Olexa [p]”; 8 ♂, 20 ♀ (JBCP), labeled: “Sozopol 7.69 / Bulgaria / A. Olexa [p] // J. Batelka, Praha / Purchase 2005 / coll. Aldo Olexa [p]”; 1 ♀ (JBCP), labeled: “Mičurin 7. / Bulgaria / A. Olexa 1967 [p] // J. Batelka, Praha / Purchase 2005 / coll. Aldo Olexa [p]”; 1 ♂, 7 ♀ (JBCP),

labeled: "Sozopol / Bulgaria / A. Olexa 7. 73 [p] // J. Batelka, Praha / Purchase 2005 / coll. Aldo Olexa [p]"; 3 ♀ (JBCP), labeled: "Sozopol 6.69 / Bulgaria / A. Olexa [p] // J. Batelka, Praha / Purchase 2005 / coll. Aldo Olexa [p]". **Iran.** 1 ♀ (MHNG), labeled: "Iran Guilan, Galúgáh, Bandar Pahlevi, 37°31'N 49°19'E, 4. 7. 1973, A. Seuglet [lgt.] [p, exact label lines not given]"; 4 ♂, 13 ♀ (NMPC), 2 ♀ (JBCP), labeled: "N. Iran, 7 km / E Istagh-e-Galugah [36°45', 53°51'E] / 23.6.1977 [p] // Loc. No. 379 [for more details see HOBERLANDT (1983), p. 21] / Exped. Nat. Mus. / Praha [p]". **Rumania.** 1 ♀ (NMPC), labeled: "Carmen Sylva / Romania / Dr. Jureček 1935 [p]". **Yugoslavia.** 1 ♂, 2 ♀ (JBCP), labeled: "Yugoslavia / Crna Gora – Ulcinj / 15.–20.7.1967 / lgt. Dr. Zdeněk Pádr [p]".

**Distribution.** A West Palaearctic species; known from Morocco (KOCHER 1956), Algeria (CROS 1920), Egypt (ALFIERI 1976), Spain (incl. Mallorca), Portugal (LÓPEZ-COLÓN 1999), France (incl. Corsica) (BÉTIS 1912, CAILLOL 1914, SCHAEFER 1964), Italy (incl. Sardinia) (PORTA 1934), Hungary (KASZAB 1956), Bulgaria (HEITMANS et al. 1994), Turkey (LÓPEZ-COLÓN 1999), Israel (BODENHEIMER 1937), Ukraine, Russia (Volga region, southern Urals), "Caucasus", Kazakhstan (YABLOKOV-KHNZORYAN 1976), "Persia" (BAUDI A SELVE 1878), Turkestan (BEDEL & CHOBOUT 1895). Occurrence in Germany and Austria is questioned by HEITMANS et al. (1994). Recorded also from Poland (BOROWIEC & TARNAWSKI 1983), probably based on an ancient record of doubtful probability. New species for the fauna of Greece and Iran. First precise records from Bulgaria, Yugoslavia and Turkey.

### *Macrosiagon ferruginea* (Fabricius, 1781)

= *Macrosiagon pectinata* (Villers, 1790)

**Material examined.** Turkey. 1 ♂ (NMPC), labeled: "Gyaur dag or. / Anat. 17.viii.47 / Exp. N. Mus. ČSR [p]".

**Remarks.** *Macrosiagon pectinata* (Villers, 1790) (a junior synonym of *M. ferruginea*) was described from the type locality "Cambonium" (probably the Cambunii Mts., now Voluzza Mts. between Macedonia and Thessalia in central Greece). Even though *M. ferruginea* has not been reported from the country since, its occurrence in Greece is highly probable.

**Distribution.** Widely distributed in the Palaearctic, Oriental and Afrotropical regions; in the Palaearctic region recorded from Morocco (KOCHER 1956), Egypt (ALFIERI 1976), Spain (incl. Mallorca) (LÓPEZ-COLÓN 1999), France (incl. Corsica) (BÉTIS 1912, CAILLOL 1914, SCHAEFER 1964), Italy (incl. Sardinia and Sicily) (BEDEL & CHOBOUT 1895, PORTA 1934), Malta (PORTA 1934), Greece (VILLERS 1790), Cyprus (UNGER & KOTSCHY 1865), Israel (BODENHEIMER 1937), Japan (KÔNO 1936), China (GRESSITT 1941) and Taiwan (SCHILDER 1923). New species for the fauna of Turkey.

### *Macrosiagon praeusta* (Gebler, 1829)

**Material examined.** Greece. Mainland. 1 ♂ (JBCP), labeled: "Graecia, Pieria, 16.9.1991 / Kato Olymbos mts. / Anno Skotina vill. / D. Král lgt. [p]"; 1 ♀ (JBCP), labeled: "Greece occ. 25.v. / Gliki, Acherón riv. / 20 km E of Parga / lgt. F. Kantner 2000 [p]"; 1 ♀ (JBCP), labeled: "Greece occ. / Sivota 20.–27.v.2000 / 85 km S of Igoumenitsa / lgt. Ing. F. Kantner [p]". Peloponnese. 1 ♀ (JHCP), labeled: "Greece - Pelopones, Taigetos mts. – Goynari, 11.–12.6.1974, Horák et Švihla lgt. [p, exact label lines not given]". Crete. 1 ♀ (JBCP), labeled: "Kreta / Paganetti [p]"; 1 ♂ (NMPC), labeled: "Creta 3.–5.6.80 / Kisamos env. / Brodský, Bílý leg.

[p]”. **Turkey.** 2 ♀ (JBCP), labeled: “Turkey 7.7.1993 / Caglayan - Selale [Selale = waterfall, North Turkey, Yusufeli env.] / M. Šárovec [lgt.] [p]”. **Armenia.** 1 ♂ (JBCP), labeled: “USSR Armenia / Chozrovskij les / 1200m 18.6.79 / VI. Švihla lgt. [p] // J. Batelka, Praha / Purchase 2005 / coll. Aldo Olexa [p]”; 1 ♀ (JBCP), labeled: “Armenia 18.6.79 / Chozrovskij les / (vedi) 1200m / VI. Švihla lgt. [hw] // J. Batelka, Praha / Purchase 2005 / coll. Aldo Olexa [p]”. **Bulgaria.** 1 ♂ (JBCP), labeled: “Bulgaria m. occ. / Melnik 23.–26.5. / leg. J. Halada 1983 [p]”; 1 ♀ (NMPC), labeled: “Bulg. vii. 1966 / Sandanski / lgt. Kocourek [p]”.

**Remarks.** The description of *Macrosiagon praeusta* was published twice, firstly in GEBLER (1829); a copy of this first edition is deposited in the Deutsches Entomologisches Institut in Münchenberg. One year later the book was republished with a small change in the text of title page (with the added wording in the subtitle “...*Inhabers des Shrenzeichens für untabelhaften Dienst...*”), but the part with the descriptions and pagination remained unchanged (GEBLER 1830). A copy of this second edition is deposited in the library of the Laboratoire d’entomologie in the Muséum d’histoire naturelle in Paris. All previous papers dealing with Ripiphoridae (e.g., BEDEL & CHOBAUT 1895, CSIKI 1913, YABLOKOV-KHNZORYAN 1976, LÓPEZ-COLÓN 1999) referred to the latter book (i.e. year of description 1830). However, all the scientific names from the second edition must be regarded as junior homonyms of the names published in GEBLER (1829).

**Distribution.** A Palaearctic species; known from Algeria, Spain, France (incl. Corsica), Italy (incl. Sicily), Croatia, Syria, Turkmenistan (BEDEL & CHOBAUT 1895), “Caucasus”, Kazakhstan (type locality Ust Kamenogorsk, GEBLER 1829), Armenia (YABLOKOV-KHNZORYAN 1976), Israel (CHIKATUNOV et al. 2006). New species for the fauna of Greece, Bulgaria and Turkey.

### Genus *Metoecus* Dejean, 1834

#### *Metoecus paradoxus* (Linnaeus, 1761)

**Material examined.** Greece. Crete. 1 ♀ (JBCP, in ethanol), labeled: “Crete / Iraklion Pref. / Zaros, 3. X.06 [2006] // L. Masner [lgt.] / by hand near / *Vespula* spp. [on meat traps, personal comm.], [hw]”.

**Distribution.** A Palaearctic species; recorded from Austria (CARL & WAGNER 1982), Azerbaijan (Araks valley) (YABLOKOV-KHNZORYAN 1976), Belgium (DECELLE 1972), Czech Republic (ŠVÁCHA 1994), Denmark (SUENSON 1921), Germany (KUFF 1993, POLENTZ 1955), Finland (CLAYHILLS & LINNALUOTO 1983), France (CAILLOL 1914), Great Britain, Ireland (JOY 1976), Bosnia Herzegovina (SAHLBERG 1912–13a), Hungary (KASZAB 1956), Italy (PORTA 1934), Latvia (TELNOV et al. 1997), Netherland (HEITMANS & PEETERS 1996), Poland (BOROWIEC & TARNAWSKI 1983), Portugal and Spain (LÓPEZ-COLÓN 1999), Slovakia (ROUBAL 1936), Switzerland (CARL & WAGNER 1982), Sweden (type locality “Calmariae”) (LINNAEUS 1761). First record from Greece. I failed to find any data from Syria and Turkey in references given by LÓPEZ-COLÓN (1999).

I have seen no specimen of *M. paradoxus* from Japan (KÔNO 1929), or North and South Korea (ANONYMOUS 1994). The occurrence of the species in these countries is unlikely. Farther to the east in continental Asia, *M. paradoxus* is replaced by *M. morawitzi* (Semenov, 1891) (Afghanistan, China: Xinjiang), *M. satanas* Schilder, 1924 (China, Japan, ?Nepal, Russia: Far East) and *M. vespae* Kôno, 1927 (Japan). Another



species, *M. javanus* (Pic, 1913), is known from South-East Asia. The genus is in need of revision.

### Genus *Ripiphorus* Bosc, 1791

**Note.** The genus *Ripiphorus* is represented in Greece (Crete) by two species: *R. creticus* sp.nov., described below, and *R. subdipterus* Bosc, 1792. In Turkey, two species are also known, which are, however, different from those from Crete. Both species have already been described, but treated as synonyms of *R. subdipterus*. Hereinafter I remove *R. syriacus* (Pic, 1904) and *R. turcicus* (Pic, 1914) from synonymy and recognize both names as valid. The taxonomy of the genus is critical (see remarks under *R. subdipterus*) and a careful revision, based on more representative material including all relevant types, is still needed.

#### Key to species of *Ripiphorus* in the Eastern Mediterranean

1. Antennal rami mostly bilabellate; pygidium rounded, as long as broad; tarsal claws with numerous thin and hardly distinguishable teeth (males). ..... 2.
  - Antennal rami strictly unilabellate; pygidium protruded, longer than broad; tarsal claws each with only about ten robust teeth (females). ..... 4.
2. Thorax bicoloured, upper part of mesonotum yellow, lower part brown, metepisternum and metepimeron brown; pronotum yellow with black spot in anterior part. .... ***R. syriacus* (Pic)**
  - Thorax completely black. .... 3.
3. Abdominal sternites and tergites completely black or orange with small median black spots on tergites. Pronotum black. Inner edge of hind tibia apically narrow. .... ***R. subdipterus* Bosc**
  - First abdominal sternite yellow, other sternites yellow with black strip posteriorly, abdominal tergites dull black, except for the last tergite which is completely yellow. Pronotum sometimes with two yellow spots in posterior part. Inner edge of hind tibia apically deeply emarginated. .... ***R. turcicus* (Pic)**
4. Posterior edge of hind tibia with several blunt teeth (Fig. 2C). .... ***R. turcicus* (Pic)**
  - Posterior edge of hind tibia smooth. .... 5.
5. First metatarsomere short and robust, 3.6 times as long as wide (Fig. 2A). Abdominal segments black. .... ***R. creticus* sp.nov.**
  - First metatarsomere long and slender, 6 times as long as wide (Fig. 2B). Abdominal segments yellow or brown. .... ***R. subdipterus* Bosc**

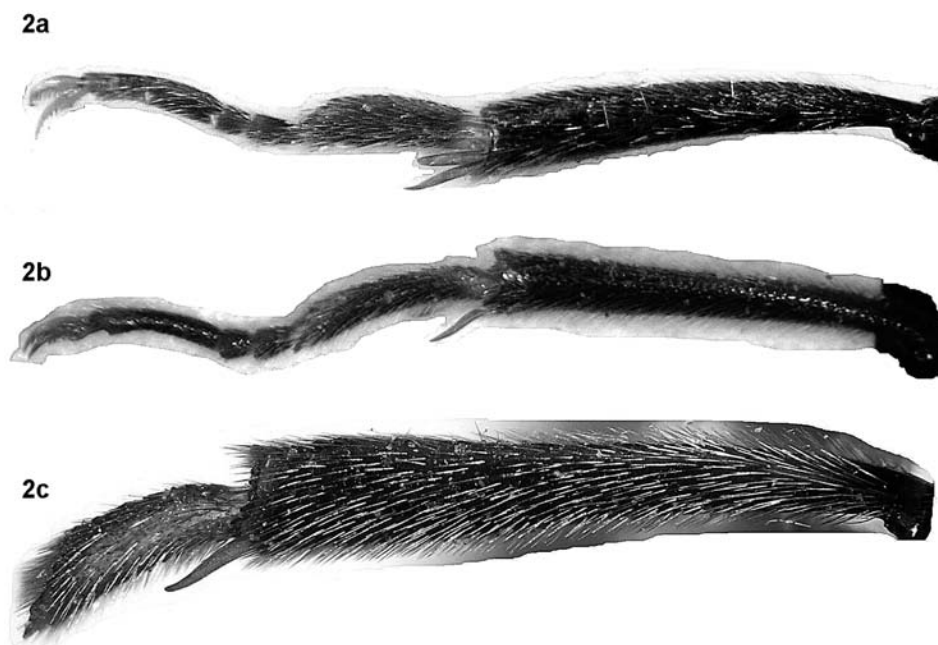


Fig. 2. a – Hind leg of *Ripiphorus creticus* sp.nov. (female, holotypus) from Giorgiopoly (Crete). b – Hind leg of *Ripiphorus subdipterus* (female) from Plakias (Crete). c – Hind tibia and 1st metatarsomere of *Ripiphorus turcicus* (female) from Dortyol (Turkey).

***Ripiphorus creticus* sp.nov.** (Figs 2a, 3)

**Type material.** Greece. Crete. Holotype. 1 ♀ (NMPC), labeled: “Gr-Crete 22.5. / Giorgio Poli / Sea NW 2004 / M. Šárovec [lgt.] [p] // *Ripiphorus creticus* sp. n. / HOLOTYPUS / Jan Batelka det. 2006 [p – red label]”; Paratype. 1 ♀ (JBCP), labeled: “Gr-Crete, 15.6.2004 / Skaleta [10 km E of Rethimno] / [Z.] Švec lgt. [p] // *Ripiphorus creticus* sp. n. / PARATYPUS / Jan Batelka det. 2006 [p – red label]”.

**Description.** Female. Body pubescent. Head black, with rounded vertex, densely punctate. Antennae 9-segmented, dark brown with black tips. Pronotum with lateral carina. Thorax black, glabrous, sparsely punctate. Fore-tarsus yellow, fore-tibia yellow with brown spots on outer side apically, outer edge of mid-tibia yellow, remaining parts of legs black. First metatarsomere short and robust, 3.6 times as long as wide (Fig. 2a). Elytra amber-yellow, darker basally, apical two-thirds of wings fumous. Abdomen black, last tergite with two yellow spots, one on each side of the midline.

Length: 7.0– 8.0 mm.

Male unknown.

**Etymology.** The species name refers to the island of Crete, where both type specimens were collected.

**Differential diagnosis.** *Ripiphorus creticus* sp.nov. differs from all *Ripiphorus* species described from the West Palaearctic region in having the first metatarsomere short and robust, not long and slender as in all other species.

**Remarks.** The small number of specimens of *Ripiphorus creticus* sp.nov. available for the description makes it difficult to discuss its variability. However, in my opinion, the set of characters presented undoubtedly has specific value. The shapes of the hind legs and especially the metatarsomeres were used by RIVNAY (1929) and BRUCH (1940, 1942) as significant diagnostic characters for the species of *Ripiphorus* occurring in North, Central and South America. The shape of the second metatarsomere is sometimes also serves as a key character for certain species in the closely related genus *Macrosiagon* (BATELKA 2004, FALIN 2004). The colour of the abdominal segments is also species-specific within the genus and there are stable colour differences between the sexes in some species (RIVNAY 1929; my observation on a sample of several tens of specimens, both males and females of an undetermined *Ripiphorus* species collected in Uzbekistan in one day and at one locality).



Fig. 3. *Ripiphorus creticus* sp.nov., holotypus, dorsal view.

***Ripiphorus subdipterus* Bosc, 1792** (Fig. 2b)

*Ripiphorus subdipterus* Bosc, 1792: 293.

= *Mordella ambigua* Giorna, 1804: 216.

= *Myiodes antoniae* Pic, 1905: 165 [junior homonym of *Myiodes antoniae* Reitter, 1895].

= *Myiodes babadjanidesi* Reitter, 1912: 43.

= *Rhipiphorus caucasicus* Reitter in Heyden, Reitter & Weise, 1906: 453 [replacement name for *Myiodes antoniae* Pic, 1905].

= *Myiodes subdipterus* var. *clermonti* Chobaut, 1906: 224 [replacement name for *Myiodes antoniae* Pic, 1905].

= *Myodes dorthesii* Latreille, 1818: 131.

= *Rhipidophorus pallescens* Solsky, 1881: 57.

= *Ripiphorus subdipterus* Fabricius, 1792: 109 [junior homonym of *Ripiphorus subdipterus* Bosc, 1792].

**Material examined.** **Greece.** Crete. 2 ♀ (JBCP, JSCB), labeled: “Gr – Kreta Is. mer. / Plakias env. / 5.–12.vii.2001 / J. Simandl lgt. [p]”; 2 ♀ (JSCB), labeled: “Gr – Crete c. 11.7. / Idi Oros occ. 2005 / Platania env. / J. Simandl lgt. [p]”. 1 ♀ (JBCP), labeled: “Gr – Crete Is. c. / Rethym[no] pref. / Armeni 7. 2003 / J. Simandl lgt. [p]”. **Albania.** 1 ♀ (BMNH), labeled: “Albania [p] / Durres / 30.viii.1936 [hw] / A. G. H. Alston [lgt.] / B. M. 1935-431 [p]”. **Bulgaria.** 1 ♂ (JBCP), labeled: “Bulgaria m. vi. 85 / Melnik / J. Macek lgt. [hw] // Rhipiphorus / subdipterus ? / Bosc. [hw] / det. Sv. Bílý [p] // Bulgaria merid. / Melnik, env. / 26.5.–5.6.1985 / Macek lgt. [p]”. **Croatia.** 1 ♂, 5 ♀ (JBCP), labeled: “HR – Istrie / 10 KM N of Pula / 25.–27.8.1998 / leg. J. Halada [p]”. **Cyprus.** 1 ♀ (BMNH), labeled: “Cyprus: Cherkes. [= Tserkezoi, env. Limassol] [p] / 10.viii.1934 [hw] / G. A. Mavromoustakis [lgt.] [p] / B. M.1935-55 [p]”; 1 ♀ (BMNH), 2 ♀ (JBCP), labeled: “Cyprus: / Episcopi, / 14.viii.1937. / G. A. Mavromoustakis [lgt.] / B. M.1937-808 [p] // Pera Pedi / 14.8.37 [hw]”; 2 ♀ (BMNH), labeled: “Cyprus. / Limassol [p] / 28.v.24 [hw] / G. A. Mavromoustakis [lgt.] [p] // Pres. by / Imp. Bur. Ent. / Brit. Mus. 1925-102 [p]”; 1 ♀ (BMNH), labeled: “Cyprus: / Moni. / 3.vi.1952. [p] // G. A. Mavromoustakis [lgt.] / B. M.1952-527 [p]”. **Yugoslavia.** 1 ♂, 1 ♀ (JBCP), labeled: “Jugoslavia / Crna Gora - Budva / Bečići 22.vii.1967 / lgt. Dr. Zdeněk Pádr [p]”.

**Descriptive notes.** Female. Body pubescent. Head black, with rounded vertex, densely punctate. Antennae 9-segmented, light brown with darker tips. Pronotum black without distinct carina. Thorax black, roughly punctate. Legs more or less uniformly dark brown. First metatarsomere long and slender, six times as long as wide (Fig. 2b). Elytra pale yellow with dark brown humeral part, wings almost completely fumous. Abdomen orange except for apex of last tergite, which is black.

Length: 5.0 – 8.0 mm.

**Distribution.** West Palaearctic region: Azerbaijan, Armenia, Kazakhstan (YABLOKOV-KHNZORYAN 1976), Uzbekistan (as *R. pallescens* Solsky, 1881, see Remarks) (SOLSKY 1881), France (CAILLOL 1914), Italy (incl. Sicily and Sardinia) (PORTA 1934), Portugal (GROSSO-SILVA & LÓPEZ-COLÓN 1998), Spain (incl. Balearic islands) (BAENA & LÓPEZ-COLÓN 1998), Morocco (KOCHER 1956), Algeria (CROS 1920), Tunisia (NORMAND 1936), Israel (CHIKATUNOV et al. 2006).

First records for Albania, Bulgaria, Croatia, Crete, Cyprus, Yugoslavia. So far not confirmed from Turkey. The examined specimens published as *R. subdipterus* from Turkey belong to *R. turcicus* (see below).

**Remarks.** Since CHOBOUT (1907) all the *Ripiphorus* species or varieties described from the West Palaearctic region have been considered to be synonyms of *R. subdipterus* Bosc, 1792. Later, only *R. spalatensis* (OBENBERGER 1917) was described from a single female collected in Split (Croatia) but its validity and taxonomic position have never been discussed. In the proportions of the posterior leg it is similar to *R. subdipterus*, from which it differs only in having the abdominal segments almost completely dark (type examined in NMPC).

Females of *R. subdipterus* from Albania, Azerbaijan, Crete, Croatia, Cyprus, France, Spain and Yugoslavia that I have examined resemble each other, including the coloration and proportions of the first metatarsomere. However, two distinct colour forms of males are known to me from southern Europe. One has completely black abdominal sternites and tergites (I saw specimens from Bulgaria, Croatia, France and Sicily), the other has orange abdominal segments with small median black spots on tergites (Sicily and Yugoslavia). Although I failed to find any other significant difference between the two

forms, it is possible that “*R. subdipterus*” is represented in the Mediterranean by two different species.

*R. pallescens* Solsky, 1881 from Uzbekistan, type locality Dschisak (= Jizzakh 40°06' N, 67°51' E) has recently been regarded as a synonym of *R. subdipterus* (LÓPEZ-COLÓN 1998). However, the original description suggests that it might be a valid species. An examination of the type specimen is needed.

PIC (1905) described two specimens (male and female) of *Ripiphorus* from Azerbaijan, env. Elisabetpol (= Găncă) under the name *Myiodes antoniae* Reitter, 1895, but this name is in fact a junior synonym for *Metoecus paradoxus*. One year later, two replacement names were simultaneously published for Pic's taxon: *R. caucasicus* Reitter, 1906 (HEYDEN, REITTER & WEISE 1906) and *R. subdipterus* var. *clermonti* Chobaut, 1906. According to CHOBOUT (1906) the male of var. *clermonti* differs only by “*le prothorax maculé d'une bande jaune sinuée, irrégulière, transversale, au devant de la base*”. However, the coloration of pronotum seems to be species-specific for all males of the West Palaearctic *Ripiphorus* species (*R. subdipterus*, *R. turcicus* and *R. syriacus*) and the specimens in question might therefore belong to some other species cohabited with *R. subdipterus*. An examination of these specimens is also necessary.

SCHAWALLER (1987) determined a specimen taken by J. Martens and B. Daams in Nepal as *R. subdipterus*. I have had the opportunity to check that specimen, and it belongs to a different, possibly undescribed species characterised by very long tibial spurs reaching almost half of the length of the first metatarsomere.

### ***Ripiphorus syriacus* (Pic, 1904) species revocata**

*Myiodes syriacus* Pic, 1904: 90.

*Myiodes subdipterus* var. *syriacus*: CHOBOUT (1906): 224.

*Rhipiphorus subdipterus* var. *syriacus*: CSIKI (1913): 22.

**Material examined.** Lectotype (male), present designation. **Turkey.** 1 ♂ (MNHN), right antenna is almost broken-off except of the first 3 segments, labeled: “Amanus / Syrie [hw] // type [hw] // type [p – red label] // *Myiodes* ♂ / *syriacus* Pic [hw] // LECTOTYPE [p – red label] // *Myiodes syriacus* / Pic, 1904 / Lectotype / Jan Batelka design. 2005 [p]”.

**Remarks.** *R. syriacus* has been described from “Monts Amanus” (currently situated in Turkey). In the original description, PIC (1904) placed a female symbol after the name of the new species. His description, however, clearly refers to a male (“*antennes relativement longues et à double rameaux*”). In the Pic collection in MNHN I found a single male specimen corresponding to the description and bearing the original type and handwritten Pic identification label. Pic did not state the number of specimens upon which he based his description. Since the existence of other syntypes cannot be excluded, I prefer to designate a lectotype to stabilize the nomenclature in the group (Article 74.7. and Recommendation 73F of the ICZN 1999).

*Ripiphorus syriacus* was considered by CHOBOUT (1907) and CSIKI (1913) as a synonym of *R. subdipterus*. Having had the opportunity to examine the type specimen, I

found *R. syriacus* quite distinct from *R. subdipterus*, as well as from *R. turcicus* (Pic, 1914), and consider it as a valid species.

**Descriptive notes.** Male. Head dark brown with yellow spot between eyes; clypeus divided into two lobes. Antennae yellow with fuscous tips. Pronotum yellow with black spot in anterior part. Upper part of mesonotum yellow, lower part brown. Metepisternum and metepimeron brown. Legs and elytra entirely yellow. Abdominal sternites completely yellow; abdominal tergites yellow, tergite 1–4 each with a median black spot.

Length: 8 mm.

**Distribution.** Turkey, known only from the type specimen.

***Rhipiphorus turcicus* (Pic, 1914) species revocata** (Fig. 2c)

*Myodites* (*Rhipiphorus*) *syriacus* var. *turcicus* Pic, 1914: 42.

*Rhipiphorus subdipterus* var. *turcicus*: WINKLER (1924–1932): 882.

**Material examined.** Type material: Lectotype, present designation. **Turkey.** 1 ♂ (MNHN), labeled: “Constantinople / tinopol [p] // syriacus / v. turcicus Pic / type [hw] // LECTOTYPE [p – red label] // Myodites syriacus / var. turcicus Pic, 1914 / Lectotype / Jan Batelka design. 2005 [p]”.

Additional material: **Turkey.** 1 ♂ (JBCP) labeled: “Avanos env. 7.–10.7. / Cappadocia, Turkey / A. Olexa [lgt.] 1983 [p] // J. Batelka, Praha / Purchase 2005 / coll. Aldo Olexa [p]”; 1 ♂ (BMNH), labeled: “W. Turkey / Didim Area / 21.–26.v. '86 / K. Guichard [lgt.] // BMNH (E) / 2002 – 69 / K. M. Guichard [p]”; 1 ♀ (BMNH), labeled: “Turkey: Hatay / Dortyol / 9.vi.1960. 150' / Guichard & Harvey [lgt.] [p]”.

**Remarks.** *R. syriacus* has been described from “Constantinople (coll. Pic)”. In the original description, PIC (1914) did not state the number of specimens upon which he based the description. In the Pic collection in MNHN I found a single male specimen corresponding to the description and bearing the original type and identification label handwritten by Pic. Since the existence of other syntypes cannot be excluded, I prefer to designate a lectotype to stabilize the nomenclature in the group (Article 74.7. and Recommendation 73F of the ICZN 1999).

**Descriptive notes.** Male. Pronotum sometimes with two yellow spots in posterior part. Tergites dull black, except for the last tergite, which is yellow. Sternites yellow, each with a black strip posteriorly, except for the first and last sternite which are entirely yellow. The inner edge of hind tibia apically deeply emarginated.

Female. Colour similar to that of females of *R. subdipterus*. Posterior edge of hind tibia with several blunt teeth (Fig. 2c).

Length: 8 mm.

**Distribution.** Known only from Turkey from the above-listed specimens. The female from Dortyol is tentatively attributed to this species; however, material of both sexes from the same locality is not available for an exact comparison.

**SUBFAMILY RIPIDIINAE**

**Genus *Pterydrias* Reitter, 1895**

***Pterydrias debilis* Reitter, 1895**

(Fig. 4)

**Material examined.** 1 ♂, labeled “Palestine” (NHMB). Examined from a colour picture taken by L. Bocák (Fig. 4).

**Remarks.** The monotypic genus *Pterydrias* Reitter, 1895 was described from a single male in “Drillidarum” (REITTER 1895). WINKLER (1924–1932, c. 524) lists the genus in Drilidae: Karumiinae (currently Dascillidae). Here I transfer it to Ripiphoridae: Ripidiinae: Eorhipidiini.

The specimen in NHMB fits the original description of *P. debilis* well. Judging by its external features, it might be a senior synonym of the genus *Eorhipidius*. Elytra are only twice as long as pronotum (Fig. 4), while in *Eorhipidius* the length ratio is 1:3.5 but otherwise the both genera are similar. For the purposes of this paper I retain the validity of the both genera.

**Distribution.** Described from “Akbes, in Syrien” (REITTER 1895) which is now situated in Turkey, Hatay province (BEZDĚK 2006). PIC (1927) reported another specimen of *P. debilis* from Palestine, Ben Schemen [= Israel, Ben Shemen, 31°57'N, 34°55'E].



**Fig. 4.** *Pterydrias debilis* (male from Palestine) (Foto L. Bocák).

**Genus *Eorhipidius* Yablokov-Khinzoryan, 1986**

***Eorhipidius januschevi* Yablokov-Khinzoryan, 1986** (Figs 5a, b, c)

**Material examined.** Iran. 1 ♂ (NMPC), labeled: “W Iran, Prov. Lorestán / Lenje Ábad, 10 km SW Dorúd / 33 27N 49 01E / 8.–10.10.1998 [P.] Chvojka lgt. [p]”.

**Distribution.** Tajikistan (YABLOKOV-KHINZORYAN 1986). The species is reported from Iran for the first time.

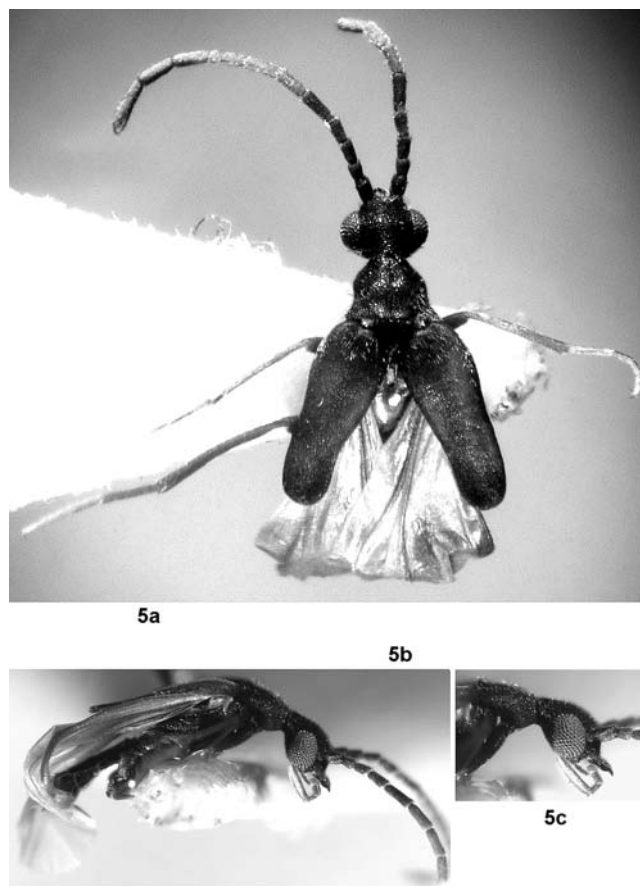


Fig. 5. a – *Eorhipidius januschevi* (male from Iran), dorsal view. b – ditto, lateral view. c – ditto, detail of head, lateral view.

### Genus *Ripidius* Thunberg, 1806

#### *Ripidius* sp.

**Material examined.** Turkey. 1 ♀ (SLCL), labeled: “Antalya, Akseki, 3.6.1999 [on *Quercus* sp. – S. Lundberg pers. comm.], leg. S. Lundberg [p]”. Armenia. 1 ♂ (JHCP), labeled: “Armenia USSR, Gachkadzor, 6.8.87, S. Bečvář lgt. [p, exact label lines not given]”.

**Remarks.** Three species of *Ripidius* are known from the Palaearctic region. *Ripidius quadriceps* Abeille de Perrin, 1872 is reported by YABLOKOV-KHNZORYAN (1957) under



DISTRIBUTION SPECIES	Greece (mainland)	Peloponnese Peninsula	Crete Island	Turkey
<i>Clinops spectabilis</i> Schaufuss	+	–	+	+
<i>Ptilophorus dufourii</i> (Latreille)	–	*	*	+
<i>Ptilophorus plumicornis</i> (Reitter)	–	–	–	+
<i>Macrosiagon bimaculata</i> (Fabricius)	–	*	–	+
<i>Macrosiagon ferruginea</i> (Fabricius)	+	–	–	*
<i>Macrosiagon praeusta</i> (Gebler)	*	*	*	*
<i>Metoecus paradoxus</i> (Linnaeus)	–	–	*	?
<i>Ripiphorus creticus</i> sp.nov.	–	–	*	–
<i>Ripiphorus subdipterus</i> Bosc	–	–	*	–
<i>Ripiphorus syriacus</i> (Pic)	–	–	–	+
<i>Ripiphorus turcicus</i> (Pic)	–	–	–	+
<i>Ripidius</i> sp.	–	–	–	*
<i>Pterydrias debilis</i> Reitter	–	–	–	+

Table 1. Distribution of Ripiphoridae in Greece and Turkey; published records (+), new records (\*), doubtful and unverified records (?).

the junior synonym *R. tigrani* Yablokov-Khinzoryan, 1957 from Armenia. *R. abeillei* Chobaut, 1891 (= *R. vaulogeri* Chobaut, 1893) is reported by ARGAMAN & MENDEL (1988) from Israel. *R. pectinicornis* has a cosmopolitan distribution, together with its cockroach host *Blattella germanica*. Due to the insufficient material available and great variability of individual *Ripidius* species I do not provide a more exact identification of the above-mentioned material here. The genus *Ripidius* is reported from Turkey for the first time. Its occurrence in Greece is also probable.

### Discussion and Conclusions

Altogether thirteen species of Ripiphoridae are currently known from Greece and Turkey (Greece eight, Turkey eleven, Table I). However, the distribution of the family in the area still remains inadequately known (e.g. more species may be expected in various parts of Greece and additional species could also be found in Turkey).

A relatively large quantity of material was available from Crete. Crete is an island of continental origin with a significant proportion of endemic taxa in some groups of Coleoptera (e.g., 20 out of 63 species-group taxa of Cerambycidae in Crete are assumed to be endemic: Batelka, unpublished). The presence of six species of Ripiphoridae,

among which *Ripiphorus creticus* sp.nov. appears to be endemic to the island, matches such a picture very well. Five other species recorded from Crete are widely distributed, or are known at least from mainland Greece and Turkey as well. The distribution of Ripiphoridae in Crete is mapped in Fig. 1.

New and previously published records for *Eorhipidius* and *Pterydrias* from the Middle East complete our knowledge of this group of Ripiphoridae, in which males have filiform antennae, in notable fashion. YABLOKOV-KHNZORYAN (1986) established the tribe Eorhipidiini for the monotypic genus *Eorhipidius* from Tajikistan. LAWRENCE (2001) reported an undescribed genus of Ripidiinae with filiform antennae in males and developed maxillary palpi from Mexico, Brazil and Bolivia. This undescribed genus, currently being worked upon by Zack Falin (FALIN in prep.), should be placed in Ripidiinae: Eorhipidiini together with *Eorhipidius* and *Pterydrias*, while the other described extant and fossil genera of Ripidiinae should be placed in Ripidiini. The tribe Eorhipidiini shares with Ripidiini roughly faceted eyes (i.e., with large and well separated ommatidia) and shortened dehiscent elytra and unfolded wings which are longer than abdomen. It differs from Ripidiini in having developed mandibulae and maxillary palpi, oval eyes, and 11-segmented filiform antennae. The general body form resembles that of Ripidiini. Some undescribed representatives of Eorhipidiini are also reported from South Africa (FALIN 2002, p. 438); detailed data, however, have not yet been published.

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#### References

- ALFIERI A. 1976: The Coleoptera of Egypt. *Mémoires de la Societe Entomologique d'Egypte* **5**: xvi, 1–308.
- ANONYMOUS 1994: Check List of Insects from Korea. Seoul: Kon-Kuk University Press, 744 pp.
- ARGAMAN Q. & MENDEL Z. 1988: Two new species of Rhipiphoridae (Insecta: Coleoptera) in Israel. *Phytoparasitica* **16**: 63.
- BAENA M. & LÓPEZ-COLÓN J. I. 1998: Rhipiphorus subdipterus Bosc, 1792: presencia en Andalucía occidental. *Boletín de la Sociedad Entomológica Aragonesa* **23**: 31.
- BATELKA J. 2004: Contribution on the synonymy of Palaearctic and Oriental species of Macrosiagon. (Coleoptera: Ripiphoridae). Part II. *Acta Societatis Zoologicae Bohemicae* **68**: 9–13.
- BATELKA J. 2005: New synonym of the genus Clinops (Coleoptera: Ripiphoridae), with biological and distributional notes on *C. spectabilis*. *Folia Heyrovskyana, Serie A* **13**: 27–34.

- BATELKA J. (in press): Family Ripiphoridae Gemminger & Harold, 1870. In: LÖBL I. & SMETANA A. (eds): Catalogue of Palaearctic Coleoptera, Volume 5, Tenebrionoidea. Apollo Books, Stenstrup.
- BAUDI A SELVE F. 1878: Europeae et circummediterraneae Faunae Heteromerum specierum, quae Comes Dejean in suo Catalogo, editio 3a, consignavit, ex ejusdem collectione in R. Taurinensi Musaeo asservata, cum auctorum hodiernae recepta denominatione collatio. Pars sexta. *Deutsche Entomologische Zeitschrift* **22**: 337–376.
- BEDÉL L. & CHABAUT A. 1895: Étude sur les Macroasiagon Hentz (Emenadia Lap.-Cast.) de la région méditerranéenne. *L'Abeille* **28**: 181–192.
- BÉTIS L. 1912: Les rhipiphorides Gallo-Rhénans. *Annales de la Société d'Histoire Naturelle de Toulon* **3**: 125–155.
- BEZDĚK J. 2006: Calomicrus atrocephalus (Reitter, 1895), a new synonym of Calomicrus apicalis Demaison, 1891 (Coleoptera: Chrysomelidae: Galerucinae). *Genus* **17**: 359–362.
- BODENHEIMER F. S. 1937: Prodrum Faunae Palaestinae. *Mémoires de l'Institut d'Égypte* **33**: 1–286.
- BOLOGNA M. A. 1997: Ricerche sulla Valle Peligna (Italia centrale, Abruzzo) 22. Coleoptera Lagriidae, Ripiphoridae, Meloidae, Oedemeridae (Insecta). Quaderni di provinciaogii L'Aquila **23**: 405–416.
- BOROWIEC L. & TARNAWSKI D. 1983: Wachlarzykowane – Rhipiphoridae. Klucze do oznaczania owadów Polski, część XIX, Chrząszcze – Coleoptera, zeszyt 83. Państwowe Wydawnictwo Naukowe, Warszawa, 16 pp. (in Polish).
- BRENSKE E. & REITTER E. 1884: Neuer Beitrag zur Käferfauna Griechenlands. *Deutsche Entomologische Zeitschrift* **28**: 17–100, 2 pls.
- BRUCH C. 1940: Misceláneas Entomológicas IV. Especies Argentinas y Chilena del Género „Rhipiphorus“ Bosq. *Notas del Museo de la Plata* **5**: 193–206, 1 pl.
- BRUCH C. 1942: Misceláneas Entomológicas X. Descripción de un nuevo „Rhipiphorus“ (Col.). *Notas del Museo de la Plata* **7**: 129–151, pl. 1–3.
- CAILLOL H. 1914: Catalogue des Coléoptères de Provence 3. *Mémoires de la Société Linnéenne de Provence* (1914): 1–594.
- CARL K. P. & WAGNER A. 1982: Investigations on Sphecophaga vesparum Curtis (Ichneumonidae) and Metoecus paradoxus L. (Rhipiphoridae) for the biological control of Vespula germanica F. (Vespidae) in New Zealand. Commonwealth Institute of Biological control, Silwood Park, UK. Working Report, 15 pp., 4 figs.
- CHIKATUNOV V., KRAVCHENKO V. D. & MÜLLER G. C. 2006: The Tenebrionoidea [*sic!*] beetles (Mycetophagidae, Oedemeridae, Aderidae, Scaptiidae, Mordellidae, Ripiphoridae, Melioidae [*sic!*], Anthicidae, Tenebrionidae) collected in the Israeli light trap survey and their association with the major phytogeographical zones of Israel. *Esperiana* **12**: 299–305.
- CHABAUT A. 1906: Note sur le Myiodes subdipterus Bosc (Col.). *Bulletin de la Société entomologique de France* **1906**: 223–224.
- CHABAUT A. 1907: Note complémentaire sur le Rhipiphorus (Myiodes) subdipterus Bosc. (Col.). *Bulletin de la Société Entomologique de France* (1907): 154–155.
- CLAYHILLS T. & LINNALUOTO E. T. 1983: Two observations of Metoecus paradoxus (L.) (Rhipiphoridae) from Turku. *Notulae Entomologicae* **63**: 214 (in Finnish).
- CROS A. 1920: Contribution à l'Étude des Rhipiphorides Algériens. *Bulletin de la Société d'Histoire Naturelle de l'Afrique du Nord* **11**: 56–68, 70–75.
- CROS A. 1921: Contribution à l'Étude des Rhipiphorides Algériens. (Addenda et Corrigenda). *Bulletin de la Société d'Histoire Naturelle de l'Afrique du Nord* **12**: 19–20.
- CSIKI E. 1913: Coleopterorum Catalogus auspiciis et auxilio W. Junk editus a S. Schenkling 54. Berlin: W. Junk, 29 pp.
- DECELLE M. J. 1972: Communications (6.). *Bulletin et Annales de la Société Royale Belge d'Entomologie* **108**: 226.
- FALIN Z. H. 2002: 102. Ripiphoridae Gemminger & Harold 1870 (1853). Pp. 431–444. In: ARNET R. H., THOMAS M. C., SKELLEY P. E. & FRANK J. H. (eds): American beetles, Volume 2: Polyphaga: Scarabaeoidea through Curculionoidea. CRC Press, Boca Raton, London, New York, Washington, 861 pp.
- FALIN Z. H. 2004: Revision of Three New World Macroasiagon Hentz Species (Coleoptera: Ripiphoridae: Ripiphorinae) with a Discussion of Phylogenetic Relationships within the Macroasiagonini. *The Coleopterists Bulletin* **58**: 1–19.

- FALIN Z. H. in prep.: Walstibia, a new Neotropical genus of Ripidiinae (Coleoptera: Ripiphoridae) with description of three new species.
- GEBLER F. A. von. 1829: Bemerkungen über die Insekten Sibiriens vorzüglich des Altai. Pp. 1–228. In: LEDEBOUR C. F. von.: Reise durch das Altai-Gebirge und die soongorische Kirgisen-Steppe 2: Berlin, S. Reimer, 427 pp.
- GEBLER F. A. von. 1830: Bemerkungen über die Insekten Sibiriens vorzüglich des Altai. Pp. 1–228. In: LEDEBOUR C. F. von.: Reise durch das Altai-Gebirge und die soongorische Kirgisen-Steppe 2. Berlin, S. Reimer, 427 pp.
- GRESSITT J. L. 1941: Rhipiphoridae from south China (Coleoptera). *Annals of the Entomological Society of America* **34**: 525–536.
- GROSSO-SILVA J. M. & LÓPEZ-COLÓN J. I. 1998: Rhipiphorus subdipterus Bosc, 1792, nova espécie para a fauna de Portugal (Coleoptera, Rhipiphoridae). *Boletín de la Sociedad Entomológica Aragonesa* **21**: 5–6.
- HEYDEN L., REITTER E. & WEISE J. 1906: Catalogus Coleopterorum Europae, Caucasi et Armeniae rossicae, Berlin, R. Frielländer & Sohn; Paskau, E. Reitter; Caen, Revue d'Entomologie, 774 columns.
- HEITMANS W. R. B. & PEETERS T. M. J. 1996: Metoecus paradoxus in The Netherlands (Coleoptera Rhipiphoridae). *Entomologische Berichten* (Amsterdam) **56**: 109–117.
- HEITMANS W. R. B., PEETERS J., ROND J. DE, & SMIT J. 1994: A survey of the Western European Rhipiphoridae including the first record of a Macrosiagon species in The Netherlands (Coleoptera). *Entomologische Berichten* (Amsterdam) **54**: 201–211.
- HOBERLANDT L. 1983: Results of the Czechoslovak-Iran Entomological expeditions to Iran. Introduction to the third expedition 1977. *Acta Entomologica Musei Nationalis Pragae* **41**: 5–24, photo 1–31.
- ICZN 1999: International Code of Zoological Nomenclature, Fourth Edition, adopted by the International Union of Biological Sciences. London: International Trust for Zoological Nomenclature, xxix + 305 pp.
- JOY N. H. 1976: A Practical Handbook of British Beetles. Volume I (Text). Faringdon, E. W. Classey, 622 pp.
- KASZAB Z. 1956: Felemás lábfejizes bogarak III. Heteromera III. – In: Magyarország állatvilága (Fauna Hungariae) 4, 3. Budapest: Akadémiai Kiadó, 108 pp.
- KOCHER L. 1956: Catalogue commenté des Coléoptères du Maroc. Fasc. V. Hétéromères (Tenebrionides exceptés). *Travaux de l'Institut Scientifique Chérifien, Sér. Zoologie* **10**: 1–107.
- KÓNO H. 1929: Study on Rhipiphoridae of Japan. *Dōbutsugaku Zasshi* **41**: 129–138.
- KÓNO H. 1936: Family Ripiphoridae, Family Meloidae. *Fauna Nipponica* **10**(8): 1–87.
- KUFF T. L. 1993: Der Wespenfächerkäfer Metoecus paradoxus (L.) im Rheinland (Col. Rhipiphoridae). *Mitteilungen der Arbeitsgemeinschaft Rheinischer Koleopterologen* **3**: 95–98.
- LAWRENCE J. F. 2001: Coleoptera. Rhipiphoridae. <http://www.inbio.ac.cr/papers/coleoptera/Rhipipin.html> (Accessed 16.v.2006).
- LINNAEUS C. 1761: *Fauna suecica*. Stockholmiae: Sumtu et Literis Direct Laurentii Salvi, 556 pp. 1 pl.
- LÓPEZ-COLÓN J. I. 1998: Los Rhipiphoridae Gemminger & Harold, 1870 de la fauna de la Península Iberica e Islas Baleares (I) (Coleoptera). *Lambillionea* **98**: 642–650.
- LÓPEZ-COLÓN J. I. 1999: Los Rhipiphoridae Gemminger & Harold, 1870 de la fauna de la Península Iberica e Islas Baleares (II) (Coleoptera). *Lambillionea* **99**: 132–138.
- LÓPEZ-COLÓN J. I. & BAHILLO DE LA PUEBLA P. 2000: Primera cita del Ptilophorus dufouri (Latreille, 1817) para el cuadrante noroccidental ibérico (Coleoptera: Rhipiphoridae). *Boletín de la Sociedad Entomológica Aragonesa* **27**: 35–37.
- NORMAND H. 1936: Contribution au Catalogue des Coléoptères de la Tunisie (9e fascicule). *Bulletin de la Société d'Histoire Naturelle de l'Afrique du Nord* **27**: 144–164.
- OBERBERGER J. 1917: II. Beitrag zur Kenntnis der palaearktischen Käfer-fauna. *Archiv für Naturgeschichte* **82A**(1916) (4): 9–45, 2pls.
- PIC M. 1904: Diagnoses ou descriptions abrégées de coléoptères paléarctiques. *L'Échange, Revue Linnéenne* **20**: 89–94.
- PIC M. 1905: Petite contribution à l'étude des Myiodes ou Myodites Latr. paléarctiques. *L'Échange, Revue Linnéenne* **21**: 165–166.
- PIC M. 1914: Notes diverses, descriptions et diagnoses. *L'Échange, Revue Linnéenne* **30**: 41–42.
- PIC M. 1927: Sur divers Coléoptères. *Entomologisches Nachrichtenblatt* (Troppau) **1**: 68–71.
- POLENTZ G. 1955: Kleine Mitteilungen. 1523. Metoecus paradoxus L. *Entomologische Blätter* **51**: 93.

Rhipiphoridae of Greece and Turkey (Coleoptera)

- PORTA A. 1934: Fauna Coleopterorum Italica. IV. Heteromera – Phytophaga. Piacenza: Stabilimento tipografico Piacentino, 415 pp.
- REITTER E. 1895: Sechster Beitrag zur Coleopteren-Fauna von Europa und den angrenzenden Ländern. *Wiener Entomologische Zeitung* **14**: 199–204.
- REITTER E. 1898: Neue Coleopteren aus Europa und den angrenzenden Ländern. *Deutsche Entomologische Zeitschrift* **42**: 337–360.
- RIVNAY E. 1929: Revision of the Rhipiphoridae of North and Central America (Coleoptera). *Memoirs of the American Entomological Society* **6**: 1–68, 4 pl.
- ROUBAL J. 1936: Katalog Coleopter (brouků) Slovenska a Podkarpatské Rusi na základě bionomickém a zoogeografickém a spolu systematickým doplněk Ganglbauerových “Die Käfer von Mitteleuropa” a Reitterovy “Fauna germanica”. Dil. II. Učená společnost Šafaříkova v Bratislavě, Bratislava, 434 pp.
- SAHLBERG J. 1912–1913a: Coleoptera balcanica quae mensibus Octobri et Decembri 1903 atque Martis et Aprili 1906 in peninsula balcanica collegerunt John Sahlberg et Unio Saalas. *Öfversigt af Finska Vetenskaps – Societetens Förhandlingar* **55(15)**: 1–108.
- SAHLBERG J. 1912–1913b: Coleoptera mediterranea orientalia, quae in Aegypto, Palaestina, Syria, Caramania atque in Anatolia occidentali anno 1904 collegerunt John Sahlberg et Unio Saalas. *Öfversigt af Finska Vetenskaps – Societetens Förhandlingar* **55(19)**: 1–272.
- SCHAEFER L. 1964: Dix voyages entomologiques en Corse (cont.). *Annales de la Société d'Horticulture et d'Histoire Naturelle de l'Hérault* **104**: 269–286.
- SCHAUFUSS L. W. 1872: Beschreibung einiger Käfer. *Nunquam Otiosus. Zoologische Mittheilungen* **2**: 275–278.
- SCHAWALLER W. 1987: Rhipiphoridae aus dem Nepal-Himalaya (Insecta: Coleoptera). *Courier Forschungsinstitut Senckenberg* **93**: 477–479.
- SCHILDER F. A. 1923: Sauter's Formosa-Ausbeute: Rhipiphoridae (Col.), (Zugleich: Rhipiphoriden-Studien III.). *Entomologische Mitteilungen* **12**: 202–204.
- SCHILDER F. A. 1925: Rhipiphoriden – Studien. VII. Monographie des genus Ptilophorus Dejean (1833). *Deutsche Entomologische Zeitschrift* **1925**: 129–146.
- SOLSKY S. M. 1881: Novyya ili maloizv'stnyya zhestokrylyya okrain' Rossiyskoy Imperii i prilegayushchikh' k'ney stran. Coléoptères nouveaux ou peu connus de l'Empire Russe et des pays limitrophes. *Trudy Russkago Entomologicheskago obshchestva v S. Peterburg'* **13**: 31–84.
- SUENSON E. 1921: Om klaekningen af *Metoecus paradoxus* L. *Entomologiske Meddelelser* **13**: 17–22.
- ŠVÁCHA P. 1994: Bionomics, behaviour and immature stages of *Pelecotoma fennica* (Paykull) (Coleoptera: Rhipiphoridae). *Journal of Natural History* **28**: 585–618.
- TELNOV D., BARSEVSKIS A, SAVICH F., KOVALEVSKY F., BERDNIKOV S., DORONIN M., CIBULSKIS R. & RATNIECE D. 1997: Check – List of Latvian Beetles (Insecta: Coleoptera). *Mitteilungen des Internationalen Entomologischen Vereins, Supplement V*: 1–141.
- UNGER F. & KOTSCHY T. 1865: Die Insel Cypem ihrer physischen und organischen Natur nach mit Rücksicht auf ihre frühere Geschichte. Wien, Wilhelm Braumüller, 598 pp, 1 map.
- VILLERS C. J. de 1790: Caroli Linnaei Entomologica, faunae suecicae descriptionibus aucta I. Lugduni: Piestre et Delamolliere, xvi + 765 pp., pl. I–III of Nomenclator Iconum Entomologiae Linneanae.
- WINKLER A. 1924–1932: Catalogus Coleopterorum regionis palaearticae. Wien, Albert Winkler, 1698 columns.
- YABLOKOV-KHNZORYAN S. M. 1957: Novyi veeronosets iz Armyanskoi SSR (Coleoptera, Rhipiphoridae). *Doklady Akademii Nauk Armyanskoi SSR* **24**: 231–233.
- YABLOKOV-KHNZORYAN S. M. 1975: Beetles of the family Rhipiphoridae (Coleoptera) in the USSR. I. *Entomological Review* (Washington) **54(4)**: 95–100.
- YABLOKOV-KHNZORYAN S. M. 1976: Beetles of the family Rhipiphoridae (Coleoptera) in the USSR. II. *Entomological Review* (Washington) **55(2)**: 104–113.
- YABLOKOV-KHNZORYAN S. M. 1986: Novyi rod i vid zhukov-veeronostsev iz Tadzhikistana (Coleoptera, Rhipiphoridae). *Doklady Akademii Nauk Armyanskoi SSR* **82**: 89–92.