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TITLE: Türkiye`nin Malachiidae (Coleoptera: Cleroidea) faunasına katkılar

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PAGES: 231-238

ORIGINAL PDF URL: <https://dergipark.org.tr/tr/download/article-file/65169>

Orijinal araştırma (Original article)

A contribution to the knowledge of the Malachiidae (Coleoptera: Cleroidea) fauna of Turkey

Türkiye'nin Malachiidae (Coleoptera: Cleroidea) faunasına katkılar

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Summary

Material of family Malachiidae was collected from different localities in Turkey between 1965 and 2010. As a result, 19 species belonging to 6 genera were recorded. Among them, *Clanoptilus (Clanoptilus) falcifer* (Abeille de Perrin, 1882), *Clanoptilus (Clanoptilus) rufus* (Olivier, 1790), *Clanoptilus (Hypoptilus) dissimilis* (Baudi di Selve, 1873), *Cyrtosus (Oogynes) reitteri* (Abeille de Perrin, 1890), *Malachius labiatus* Brullé, 1832 and *Protopalochrus fedtschenkoi* (Solsky, 1882) are new records for the Turkish fauna. Separately, new localities were found for some species which have already been reported in Turkey.

Key words: Coleoptera, Malachiidae, fauna, new records, Turkey

Özet

Bu çalışmada, Türkiye'nin değişik yörelerinden 1965-2010 yılları arasında toplanan Malachiidae örnekleri değerlendirilmiştir. Sonuçta, 6 cinse bağlı 19 tür saptanmıştır. Bunlar arasında, *Clanoptilus (Clanoptilus) falcifer* (Abeille de Perrin, 1882), *Clanoptilus (Clanoptilus) rufus* (Olivier, 1790), *Clanoptilus (Hypoptilus) dissimilis* (Baudi di Selve, 1873), *Cyrtosus (Oogynes) reitteri* (Abeille de Perrin, 1890), *Malachius labiatus* Brullé, 1832 ve *Protopalochrus fedtschenkoi* (Solsky, 1882) Türkiye faunası için yeni kayıttır. Ayrıca, daha önce Türkiye'de bulunduğu belirtilen bazı türler için yeni lokaliteler tespit edilmiştir.

Anahtar sözcükler: Coleoptera, Malachiidae, fauna, yeni kayıtlar, Türkiye

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Alınış (Received): 05.09.2011 Kabul ediliş (Accepted): 08.12.2011

Introduction

The Malachiidae - the soft-winged flower beetles - are characterized by defensive extrudable vesicles on the sides of the thorax and hind coxa oblique with respect to the sagittal plane of body. They usually have an elongated, rather depressed body shape, often (but not always) covered with setae and/or thin pubescence; smooth, soft, usually shiny and coloured (black or green, more or less spotted with yellow or red) integuments, filiform antennae at times in males, with first segments knotted or dentate; long and thin legs with simple tibia and femora, all tarsi with 5 segments. Size is generally small, body length approximately ranging between 1.5 and 10 mm.

Malachiidae biology is rather poorly known. Larvae are found in soil, leaf litter and under bark, where they are predaceous and feed on arthropod eggs, larvae and soft bodied adults; adults are often predators but they may also be found on vegetation, especially on flowers, where they may feed on pollen. References on this subject can also be found in Constantin & Klausnitzer (1996). This family does not include species very relevant to agriculture; however, a few species, for example *Malachius aeneus* (Linnaeus, 1758) in North America and *Dicranolaius cinctus* (Redtenbacher, 1867) in Australia, are known to cause damage to growing wheat and rice, respectively (Booth et al., 1990).

The systematics accepted here for the family Malachiidae are those proposed by Majer (2002) and Mayor (2007).

The Malachiidae fauna of Turkey is still rather little known and one of the most interesting in the West Palaearctic region: nearly 70 Malachiini Fleming, 1821 species were reported by Mayor (2007) from Turkey but many more are reported from nearby countries. No comprehensive studies have been published recently on the Turkish Malachiidae; the most inclusive ones are still the old Abeille de Perrin studies (1890b, 1890c, 1891b). Švihla (1998) recorded several new species for Turkish fauna and compiled a preliminary list of the Malachiidae fauna of Turkey. In that paper, 104 species and subspecies were recorded for Turkey. Separately, Peyron (1877), Krauss (1902), Grainer (1937), Evers (1985), Švihla (1990, 1998), Wittmer (1992, 1994), Švihla & Hájek (2009) and Tshernyshev (2009) recorded several species from Turkey.

Materials and Methods

The material of the Malachiidae was collected from different localities of Turkey between 1965 and 2010. Provinces of the collected specimens are given in alphabetical order in the following list. The material is deposited in the Entomology Museum, Erzurum, Turkey (EMET).

In the short bibliographic account supplied for each species, reference is given only to original description and to a few important papers used for determination. For a complete bibliographic reference, please refer to the Grainer Catalog (1937).

Results

A total of 19 Malachiidae species, belonging to 6 genera, mainly included in Malachiinae Fleming 1821, are here recorded from Turkey. Six of them are the new to the country fauna.

Anthocomus fasciatus (Linnaeus, 1758)

Cantharis fasciata Linnaeus, 1758: 402; *Anthocomus* (*Paremballus*) *fasciatus* Abeille de Perrin, 1891b: 187.

Material examined: Diyarbakır: Silvan, 836 m, 17.VI.1995, 1 ex.

Distribution: wide European distribution; in Asia, Syria, Turkey.

Anthocomus pupillatus Abeille de Perrin, 1890

Anthocomus pupillatus Abeille de Perrin, 1890a: 44; *Anthocomus (Neotrotus) pupillatus*: Abeille de Perrin, 1891b: 188, 191-192.

Material examined: Erzurum: Çat road, 1894 m, 29.VI.2009, 1 ex., İspir, Madenköprübaşı, 17.VII.1992, 1 ex.

Distribution: Syria, Turkey.

Anthomalachius pseudospinosus (Medvedev, 1964)

Malachius foveatus Medvedev, 1964: 156; 1980: 117; *Anthomalachius pseudospinosus* (Medvedev, 1964): *Clanoptilus strangulatus*: Evers, 1985: 40; *Anthomalachius pseudospinosus* (Medvedev, 1964): Tshernyshev, 2009: 26, 28-29, 31, 33-34.

Material examined: Erzurum: Palandöken, 2200 m, 18.VII.1979, 1 ex., Pasinler, 1660 m, 19.VII.1979, 1 ex., 18.VI.1980, 5 exs.

Distribution: Kazakhstan, Turkey (Erzurum).

Anthomalachius strangulatus (Abeille de Perrin, 1885)

Cyrtosus strangulatus Abeille de Perrin, 1885: 143; *Malachius strangulatus*: Abeille de Perrin, 1891a: 620, 621; 1891b: 126, 134-135; *Clanoptilus strangulatus*: Evers, 1985: 31, 36, 37 = *Malachius strangulatus* var. *vulneratus* Abeille de Perrin, 1891b: 135 = *Malachius schelkownikowi* Pic, 1911: 113-114; *Anthomalachius strangulatus* (Abeille de Perrin, 1885): Tshernyshev, 2009: 26, 28-29, 33.

Material examined: Erzurum: 1850 m, 18.VI.1980, 1 ex., Horasan, 1530 m, 14.VI.2009, 1 ex.

Distribution: wide European distribution; in Asia, Iran, Kazakhstan, Kyrgyzstan, Turkey, Uzbekistan.

Clanoptilus (Clanoptilus) falcifer (Abeille de Perrin, 1882)

Malachius falcifer Abeille de Perrin, 1882: 114; 1891b: 122; *Clanoptilus falcifer* Evers, 1985: 30.

Material examined: Erzurum: University field, 1850 m, 01.VII.1992, 1 ex., Aziziye, 1900 m, 14.VI.1988, 1 ex., Oltu, 1300 m, 15.V.1989, 1 ex., Pasinler, 1700 m, 18.VII.1979, 1 ex., Şenkaya, 02.VI.1988, 1 ex.

Distribution: Central Europe (Mirutenko, 1998, 2010), Italy, Balcanic Peninsula, Caucasus.

New for the Turkish fauna.

Clanoptilus (Clanoptilus) geniculatus (Germar, 1824)

Malachius geniculatus Germar, 1824: 73; Abeille de Perrin, 1891b: 122; *Clanoptilus geniculatus* Evers, 1985: 30.

Material examined: Artvin: Ardanuç, Ferhatlı, 573 m, 15.VI.2009, 4 exs., Hopa, Kemalpaşa, 02.IX.1994, 1 ex., Şavşat, 400 m, 16.VI.2010, 1 ex., Yusufeli, Darıca, 670 m, 16.VI.2010, 1 ex., Işhan, 600 m, 16.VI.2010, 2 exs., Morkaya, 700 m, 15.VI.2010, 6 exs., Pamukçular, 700 m, 16.VI.2010, 5 exs.; Bayburt: 1400 m, 17.VI.2010, 4 exs., 22.VI.2009, 2 exs., 1550 m, 12.VII.2009, 1 ex., 1650 m, Kop Dağı, 2400 m, 17.VI.2010, 2 exs., 13.VIII.2009, 2 exs., Aydıntepe, Arpalı, 1550 m, 17.VI.2010, 7 exs., Çalidere, 1700 m, 17.VI.2010, 13 exs., Demirözü, 1650 m, 17.VI.2010, 9 exs.; Diyarbakır: Silvan, 836 m, 17.IV.1995, 1 ex.; Erzincan: 1185 m, 10.VI.2010, 3 exs., Akyazı, 1202m, 11.VI.2010, 4 exs., Geyikli, 1160 m, 11.VI.2010, 4 exs., Mercan, 1381 m, 10.VI.2010, 5 exs., Refahiye, 1500 m, 20.VI.2009, 1 ex., Tercan, 1408 m, 10.VI.2010, 3 exs., Üzümlü, 1518 m, 10.VI.2010, 4 exs.; Erzurum: 1850 m, 07.VI.1983, 1 ex.,

18.VI.1980, 16 exs., 20.VI.1966, 1 ex., 11.VII.1967, 1 ex., 13.VII.1969, 7 exs., 17.VII.1979, 2 exs., 18.VII.1979, 1 ex., 31.VII.1979, 1 ex., 04.VIII.1997, 1 ex., 08.VIII.1979, 2 exs., Abdurrahmangazi, 2197 m, 01.VIII.2010, 1 ex., Dumlu, 27.VII.1979, 6 exs., Güngörmez, 2000 m, 19.VIII.2009, 7 exs., Dumlubaba, 2500 m, 01.VII.2010, 17 exs., Güzelova, 1760 m, 15.VI.2010, 3 exs., Karagöbek, 1977 m, 31.VII.2010, 6 exs., Kirkgozeler, 1800 m, 15.VI.2009, 8 exs., 29.VII.2010, 2 exs., Palandöken, 2300 m, 18.VII.1979, 6 exs., 21.VII.2010, 4 exs., 2400 m, 06.IX.1988, 1 ex., University field, 1850 m, 10.VI.2009, 3 exs., 24.VI.2009, 8 exs., 25.VI.2009, 6 exs., 30.VI.2009, 1 ex., 01.VII.1992, 1 ex., 20.VII.2009, 26 exs., 23.VII.1994, 1 ex., 20.VIII.2009, 1 ex., Yeşildere, 200 m, 19.VIII.2009, 1 ex., Yeşilyayla, 1950 m, 01.VII.2010, 8 exs., Yoncalık, 1700 m, 04.VII.2009, 3 exs., Aşkale, 1650 m, 14.VII.1988, 1 ex., 08.VI.2009, 27 exs., 06.VII.2009, 3 exs., 08.VII.2009, 2 exs., Çayköy, 1600 m, 03.VI.2010, 5 exs., Çiftlik, 1620 m, 03.VI.2010, 3 exs., Kandilli, Abdalcık, 1756 m, 01.VIII.2010, 2 exs., Karayazı, Yukarı Söylemez, 1896 m, 02.VII.2010, 4 exs., Aziziye, Dadaşkent, 1850 m, 03.VI.2010, 2 exs., Eski Polat, 1857 m, 30.VII.2010, 1 ex., Kayapa, 1750 m, 03.VI.2010, 4 exs., Paşayurdu, 1710 m, 03.VI.2010, 1 ex., Rizekent, 2070 m, 30.VII.2010, 3 exs., Çat, 1810 m, 03.VI.2010, 4 exs., 1890 m, 29.VI.2009, 1 ex., Çat yolu, 1710 m, 03.VI.2010, 5 exs., Taşlıgüney, 2030 m, 29.VI.2009, 3 exs., Yaylasuyu Pass, 2322 m, 09.VI.2009, 7 exs., 1890 m, 29.VI.2009, 1 ex., Hınıs, 1742 m, 02.VII.2010, 1 ex., Horasan, 1530 m, 14.VI.2009, 20 exs., 02.VII.2010, 1 ex., 20.VII.2009, 30 exs., 1588 m, İspir, Kirazlı, 06.VI.1980, 1 ex., 20.VIII.2009, 2 exs., Madenköprübaşı, 10.VI.1994, 1 ex., Köprüköy, Güzelhisar, 1930 m, 02.VII.2010, 2 exs., Örentaş, 2038 m, 29.VII.2010, 1 exs., Topyolu, Ilicasu, 2380 m, 17.VII.2010, 2 exs., Narman, 1640 m, 24.VII.2009, 3 exs., 1565 m, 21.VII.2010, 3 exs., Kireçli Pass, 2400 m, 31.VII.2010, 1 ex., Oltu, 1455 m, 30.VI.1989, 2 exs., 1400 m, 03.VII.2009, 3 exs., 17.VII.2010, 4 exs., Çamlıbel, 1135 m, 21.VII.2010, 3 exs., Olur, Ormanağzı, 28.VIII.1988, 1 ex., Süngübayır, 26.VII.1992, 1 ex., Yeşilbağlar, 1000 m, 16.VI.2010, 3 exs., Pasinler, 1660 m, 14.VI.2009, 4 exs., 02.VII.1983, 1 ex., 18.VII.1979, 2 exs., 19.VII.1979, 4 exs., Büyük Tüy, 02.VII.2010, 4 exs., Çöğender, 1737 m, 29.VII.2010, 2 exs., Demirdöven, 1727 m, 29.VII.2010, 3 exs., Ovaköy, 1782 m, 29.VII.2010, 2 exs., Pazaryolu, 1458 m, 07.VIII.2009, 1 ex., 1453 m, 30.VII.2010, 1 ex., Şenkaya, 10.VII.1989, 3 exs., Sındıran, 1491 m, 31.VII.2010, 2 exs., Taht, 1232 m, 17.VII.2010, 2 exs., Turnalı, 29.VI.1989, 3 exs., Tekman, 02.VII.1997, 1 ex., Körsu, 1940 m, 02.VII.2010, 3 exs., Tortum, Derekapı, 1400 m, 15.VI.2010, 2 exs., Pehlivanlı, 29.VI.1990, 4 exs., Söğütlü, 1700 m, 18.VI.1980, 1 ex., 09.VI.1997, 3 exs., Uzundere, Şelale, 2000 m, 27.V.2010, 12 exs., Yaylageçidi, 2300 m, 21.VII.2010, 1 ex.; Iğdır: 825 m, 25.VI.1979, 1 ex., 20.VI.2009, 5 exs., Bayraktar, 850 m, 23.VI.2010, 1 ex., Tuzluca, 900 m, 18.VI.2009, 9 exs., Menderes, 1100 m, 23.VI.2010, 5 exs.; Kars: Kağızman, 1750 m, 22.VI.2010, 11 exs., Sarıkamış, 1900 m, 13.VII.1973, 6 exs., 13.VIII.2009, 1 ex., 1470 m, 29.VII.2010, 1 ex., Akkurt, 1525 m, 22.VI.2010, 3 exs.; Tunceli: Malazgirt, Kalaycı, 950 m, 25.V.2010, 4 exs.

Distribution: wide European distribution; in Asia, Iran, Mongolia, Syria, Turkey, Turkmenistan.

Clanoptilus (Clanoptilus) heliophilus heliophilus (Peyron, 1877)

Malachius heliophilus Peyron, 1877: 37; Abeille de Perrin, 1891a: 624, 626, 636; *Clanoptilus heliophilus*: Evers, 1985: 29, 35.

Material examined: Erzurum: Oltu, Sarısaz, 1400 m, 16.V.1997, 1 ex.

Distribution: Iran, Iraq, Syria, Turkey.

Clanoptilus (Clanoptilus) marginellus (Olivier, 1790)

Malachius marginellus Olivier, 1790: 6-7; Abeille de Perrin, 1891a: 653, 654, 670-671; *Clanoptilus marginellus* Evers, 1985: 30, 36, 37.

Material examined: Artvin: Yusufeli, Morkaya, 700 m, 15.VI.2010, 1 ex.; Erzurum: Horasan, 1530 m, 20.VII.2009, 35 exs., Oltu, Ayvalı, 700 m, 16.VI.2010, 1 ex., Olur, Taşlıköy, 862 m, 16.VI.2010, 1 ex.; Iğdır: Karakoyunlu, Alican, 850 m, 23.VI.2010, 1 ex., Tuzluca, 1100 m, 23.VI.2010, 1 ex., Menderes, 1100 m, 23.VI.2010, 1 ex.; Kars: Kağızman, 1750 m, 22.VI.2010, 1 ex.

Distribution: wide European distribution, North Africa, Turkey.

Clanoptilus (Clanoptilus) rufus (Olivier, 1790)

Malachius rufus Olivier, 1790: 4; Abeille de Perrin, 1891a: 627; Evers, 1985: 29, 36.

Material examined: Diyarbakır: Silvan, 900 m, 17.IV.1995, 1 ex.

Distribution: southern France, Corse and Sardinia, Spain, Morocco, Algeria.

New for the Turkish fauna.

Remarks: It is however worth noting here the apparent similarity between females of *C. rufus* and *C. erythropterus* (Erichson, 1840) (Svihla, 2009: 218).

Clanoptilus (Clanoptilus) spinipennis (Germar, 1824)

Malachius spinipennis Germar, 1824: 75; Abeille de Perrin, 1883: 53; 1891b: 123, 127, 146; *Clanoptilus spinipennis*: Evers, 1985: 30, 36, 37.

Material examined: Erzurum: 1850 m, 08.VIII.1979, 1 ex.

Distribution: Central Europe (Mirutenko, 1998, 2010), Italy, Balcanic Peninsula, Caucasus; in Asia Syria, Turkey.

Clanoptilus (Hypoptilus) dissimilis (Baudi di Selve, 1873)

Malachius viridis var. *dissimilis* Baudi, 1873: 241; *Malachius dissimilis* Abeille de Perrin, 1883: 50; 1891b: 121; *Clanoptilus (Hypoptilus) dissimilis*: Evers, 1985: 5.

Material examined: Artvin: Ardanuç, Serhatlı, 573 m, 15.VI.2010, 1 ex.; Bayburt: 1369 m, 22.VI.2009, 2 exs.; Erzurum: Dumlulu, 1800 m, 28.VI.1994, 1 ex., Palandöken, 2400 m, 06.IX.1988, 1 ex., University field, 1850 m, 10.VI.2009, 1 ex., 25.VI.2009, 2 exs., Aşkale, 1650 m, 08.VII.2009, 1 ex., Pasinler, 1660 m, 14.VI.2009, 1 ex., Tekman, 10.VII.1997, 1 ex.; Iğdır: 825 m, 20.VI.2009, 5 exs., Tuzluca, Menderes, 1100 m, 23.VI.2010, 1 ex.; Tunceli: Malazgirt, Kalaycı, 950 m, 25.V.2010, 1 ex.

Distribution: Caucasus, Syria, Turkmenistan.

New for the Turkish fauna.

Clanoptilus (Hypoptilus) viridanus (Mulsant & Wachanru, 1852)

Malachius viridanus Mulsant & Wachanru, 1852: 4; Abeille de Perrin, 1891b: 123; *Clanoptilus (Hypoptilus) viridanus* Evers, 1985: 27.

Material examined: Artvin: Şavşat, 400 m, 16.VI.2010, 1 ex., Yusufeli, Işhan, 600 m, 16.VI.2010, 4 exs., Pamukçular, 700 m, 16.VI.2010, 1 ex.; Bayburt: Demiröz, 1650 m, 17.VI.2010, 1 ex.; Erzurum: Güngörmez, 2500 m, 01.VII.2010, 2 exs., Dumlubaba, 2400 m, 01.VI.2010, 1 ex., Aşkale, 1650 m, 08.VII.2009, 1 ex., Çayköy, 1600 m, 03.VI.2010, 2 exs., Horasan, 1588 m, 02.VII.2010, 1 ex., Karayazı, Kırğındere, 2215 m, 02.VII.2010, 1 ex., Oltu, Ayvalı, 700 m, 16.VI.2010, 3 exs., Şenkaya, Taht, 1232 m, 17.VI.2010, 1 ex., Tekman, 02.VII.1997, 2 exs., Tortum, Derekapı, 950 m, 15.VI.2010, 1 ex., Uzundere, Şelale, 900 m, 27.V.2010, 1 ex.; Iğdır: 825 m, 20.VI.2009, 1 ex.; Kars: Kağızman, 1750 m, 22.VI.2010, 1 ex.

Distribution: Lebanon, Syria, Turkey.

Cyrtosus (Oogynes) reitteri (Abeille de Perrin, 1890)

Cyrtosus (Malachius) reitteri Abeille de Perrin, 1890a: 35; *Cyrtosus (Oogynes) reitteri* Abeille de Perrin, 1891b: 158.

Material examined: Erzurum: 1850 m, 18.VI.1980, 1 ex.

Distribution: Caucasus.

New for the Turkish fauna.

Malachius aeneus (Linnaeus, 1758)

Cantharis aenea Linnaeus, 1758: 402; Abeille de Perrin, 1891a: 625; Evers, 1985: 25.

Material examined: Artvin: 560 m, 15.VII.1997, 1 ex.; Erzurum: 1850 m, 20.V.1970, 1 ex., Palandöken, 06.IV.1989, 1 ex., Aziziye, Atlikonak, 1900 m, 07.VII.1994, 1 ex., Şenkaya: Turnalı, 1750 m, 08.VI.1988, 1 ex., 29.VI.1989, 2 exs., Tekman, 10.VII.1997, 1 ex., Tortum, 02.VI.1979, 1 ex.; Iğdır: 825 m, 06.V.1969, 1 ex., 20.VI.2009, 1 ex.

Distribution: wide European distribution, North America; in Asia, Iran, Turkey.

Malachius coccineus Walzl, 1838

Malachius coccineus Walzl, 1838: 445; Abeille de Perrin, 1891a: 623; Evers, 1985: 23.

Material examined: Iğdır: 825 m, 20.VI.2009, 3 exs., Tuzluca, 1100 m, 23.VI.2010, 2 exs., Menderes, 1100 m, 23.VI.2010, 6 exs.

Distribution: Asia: Israel, Lebanon, Syria, Turkey. Africa: Egypt. Europe: Greece, Cyprus.

Malachius faldermanni Faldermann, 1836

Malachius faldermanni Faldermann, 1836: 196; Abeille de Perrin, 1891a: 625; 1891b: Evers, 1985: 6.

Material examined: Diyarbakır: Silvan, 900 m, 17.IV.1995, 1 ex.; Erzurum: Oltu, Sarısaz, 1400 m, 16.V.1997, 1 ex., Tortum, Söğütlü, 1700 m, 09.VI.1997, 3 exs.

Distribution: Caucasic region, in Asia, Iran, Iraq, Turkey.

Malachius labiatus Brullé, 1832

Malachius labiatus Brullé, 1832: 149; Abeille de Perrin, 1891a: 674, 1891b: 120; Evers, 1985: 23.

Material examined: Erzurum: 1850 m, 18.VI.1980, 1 ex., Palandöken, 18.VII.1979, 2 exs., Pasinler, 1660 m, 23.VI.1989, 1 ex.

Distribution: Greece; in Asia, Lebanon.

New for the Turkish fauna.

Remarks: It is however worth noting, the similarity between *M. labiatus* and *M. fucatus* Peyron, 1877, and particularly so for females. These species, as well as several others in this family, are in need of a revision.

Malachius semiaeneus Abeille de Perrin, 1891

Malachius semiaeneus Abeille de Perrin, 1891a: 624; Evers, 1985: 24.

Material examined: Artvin: Ardanuç, Ferhatlı, 15.VI.2010, 1 ex., Yusufeli, Sebzeciler, 560 m, 16.VI.2010, 2 exs.; Bayburt: Demirözü, 1650 m, 17.VI.2010, 1 ex.; Diyarbakır: Silvan, 900 m, 17.IV.1995, 2 exs.; Erzincan: Mercan, 1381 m, 10.VI.2010, 1 ex., Refahiye, 1500 m, 20.VI.2009, 2 exs.; Erzurum: 1850 m, 20.V.1970, 1 ex., 01.VI.2009, 4 exs., Çat road, 1710 m, 2 exs., 03.VI.2010, Yeşilyayla, 1950 m, 01.VII.2010, 1 ex., Aşkale, Çiftlik, 03.VI.2010, 2 exs., İspir, Kirazlı, 06.VI.1980, 2 exs., 18.VI.1994, 4 exs., Köprübaşı, 06.VI.1980, 1 ex., Oltu, 17.V.1970, 6 exs., Tortum, 1550 m, 02.VI.1979, 176 exs., 02.VII.1979, 2 exs., Pehlivanlı, 1250 m, 29.VI.1990, 1 ex., Söğütlü, 1700 m, 09.VI.1997, 1 ex., Uzundere, Şelale, 850 m, 27.V.2010, 6 exs.; Iğdır: Tuzluca, 900 m, 18.VI.2009, 1 ex., Menderes, 1100 m, 23.VI.2010, 1 ex.;

Kars: Kağızman, 1750 m, 22.VI.2010, 1 ex., Sarıkamış, Akkurt, 1525 m, 22.VI.2010, 1 ex.; Tunceli: Mazgirt, Kalaycı, 1000 m, 28.IV.2010, 2 exs., 25.V.2010, 2 exs.

Distribution: Caucasus region, Iran, Turkey.

Protapalochrus fedtschenkoi (Solsky, 1882)

Apalochrus Fedtschenkoi Solsky, 1882: 39; *Hapalochrous Fedtschenkoi*: Abeille de Perrin, 1891b: 214; *Protapalochrus fedtschenkoi* Evers, 1969: 188.

Material examined: Antalya: 02.VIII.1984, 1 ex.

Distribution: Afganistan, Uzbekistan, Mongolia.

New for the Turkish fauna.

Acknowledgement

The authors wish to thank Dr. Sergei E. Tshernyshev (Russia) and Dr. Gianfranco Liberti (Italy) for determining some of the reference material. The latter colleague also revised the text giving useful suggestions. Thanks are also due to H. Özbek, H. Özışık, L. Gültekin, G. Külekçi, E. Karatoprak, A. Turan and C. Sarı for collecting some of the material studied.

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