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Contribution to the knowledge of the Cantharidae (Coleoptera) fauna of Turkey

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A b s t r a c t : This study is based upon material of family Cantharidae collected from different localities of Turkey between 1968 and 2010. As a result, 22 species from 6 genera belonging to the subfamily Cantharinae of the family Cantharidae were recorded from Turkey. Among them, *Cantharis (Cantharis) livida* LINNAEUS 1758, *Cantharis (Cantharis) melaspis* (CHEVROLAT 1854) and *Rhagonycha aliena* DAHLGREN 1972 has been found the most intense and widespread species. One new species of *Rhagonycha* from Turkey will be described by Švihla on another occasion. In addition, new localities were found for some species which have already been reported in Turkey.

K e y w o r d s : Coleoptera, Cantharidae, Cantharinae, fauna, Turkey.

Introduction

Cantharidae is a moderate-sized family of about 130 genera and 5000 species commonly called soldier beetles. They are soft bodied, usually pubescent, parallel-sided beetles, characterized by the shape of the metasternal-metepisternal suture. They are generally coloured yellow, red and black, although a few are metallic. The body length is 2-30 mm. Most adult cantharids are predacious towards other insects, but some may also feed on nectar and pollen. They are commonly found on flowers and plant foliage. Their larvae live in soil, leaf litter, or in rotten wood, where they are usually predators of other invertebrates, but some may feed on plant material (BOOTH et al. 1990).

Turkey is one of the most interesting countries located in the West Palaearctic region, where most of the insect families including Cantharidae exist. Thus, some faunistic studies about the family Cantharidae have been conducted by foreign and native researchers in Turkey.

Faunistical studies on the cantharids of Turkey have performed especially by Švihla and Wittmer who recorded and described several new species and subspecies from Turkey and also revised particular groups, i.e. genus *Cantharis* and related genera (ŠVIHLA 1999) and genus *Malthodes* (WITTMER 1970).

Materials and Methods

The material of the Cantharidae was collected from different localities of Turkey between 1968 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).

Results

In this study, a total of 22 species and subspecies belonged to 6 genera from family Cantharidae were recorded from Turkey.

Subfamily *C a n t h a r i n a e*

Boveycanthis rufimana (MENETRIEZ 1832)

M a t e r i a l e x a m i n e d : Ardahan: Posof, 30.V.1973, ♀; Erzurum: Güngörmez, Dumlubaba, 40° 09' 95 N, 41° 20' 68 E, 2500 m, 01.VII.2010, on *Conium maculatum* L., ♂.

D i s t r i b u t i o n : Southern parts of European Russia, Azerbaijan, Armenia, Georgia, Turkey.

Boveycanthis tokatensis (PIC 1898)

M a t e r i a l e x a m i n e d : Bayburt: Demirözü, 1650 m, 17.VI.2010, ♂; Erzurum: Çat Yolu, 3.VI.2010, ♂, Güngörmez, Dumlubaba, 40° 09' 95 N, 41° 20' 68 E, 2500 m, 01.VII.2010, on *Conium maculatum* L., ♂, İspir, Madenköprübaşı, 1100 m, 6.VI.1980, ♂, Narman, Beyler, 12.VI.1996, ♂.

D i s t r i b u t i o n : Turkey.

Cantharis (Cantharis) annularis MÈNÈTRIÈS 1836

M a t e r i a l e x a m i n e d : Adana: 7.VII.1983, ♀; Bayburt: Demirözü, 1650 m, 17.VI.2010, ♀; Erzurum: Kırkgözeler, 1800 m, 15.VI.2010, 4 ♀ ♀, Yeşilyayla, 1950, 1.VII.2010, 2 ♀ ♀, Aşkale, Çayköy, 3.VI.2010, ♀, Pasinler, 14.VI.2009, 2 ♀ ♀, 15.VI.1983, ♀, Tortum, 2.VI.1979, ♀, Derekapı, 1400 m, 15.VI.2010, ♂.

D i s t r i b u t i o n : Central and Southern parts of Europe and European Russia, West Siberia, East Siberia, Ukraine, Kazakhstan, Turkey, Iran, Mongolia.

Cantharis (Cantharis) bilunata (MARSEUL 1864)

M a t e r i a l e x a m i n e d : Bingöl: İlicalar, İçpınar, Derik Mezrası, Paşa Çeşmesi, 1100 m, 28.V.2006, 2 ♀ ♀; Tunceli: Mazgirt, Kalaycı, 950 m, 25.V.2010, ♀.

D i s t r i b u t i o n : Israel, Syria, Turkey.

***Cantharis (Cantharis) ciliciensis* BOURGEOIS 1900**

M a t e r i a l e x a m i n e d : Ardahan: Posof, 30.V.1973, 3♂♂; Bayburt: Kopdağı, Şehitler Çeşmesi, 2400 m, 17.VI.2010, 14♀♀, 4♂♂; Erzurum: İspir, Madenköprübaşı, 1100 m, 6.VI.1980, 2♂♂.

D i s t r i b u t i o n : Azarbaijan, Turkey, Iran.

***Cantharis (Cantharis) livida* LINNAEUS 1758**

M a t e r i a l e x a m i n e d : Amasya: 7.VIII.1983, ♀; Ardahan: Posof, 23.V.1971, 2♀♀; Artvin: Ardanuç, Ferhatlı, 573 m, 15.VI.2010, 2♀♀, Yusufeli, Altıparmak, 1900 m, 12.VI.1997, ♀; Bayburt: Çaldıere, 1700 m, 17.VI.2010, 6♀♀, 2♂♂, Kopdağı, Şehitler Çeşmesi, 2400 m, 17.VI.2010, ♀, ♂, Aydıntepe, Arpalı, 1550 m, 17.VI.2010, 7♀♀, Demirözü, 1650 m, 17.VI.2010, 12♀♀, ♂; Bitlis: 21.V.1989, 2♀♀; Corum: Osmancık, 6.VII.1984, ♀, ♂; Diyarbakır: Silvan, 900 m, 17.IV.1995, 2♀♀; Erzincan: 1185 m, 10.VI.2010, ♀, Akyazı, 1200 m, 11.VI.2010, ♀, Geyikli, 1160 m, 11.VI.2010, 2♀♀, Kabataş, 14.VI.1984, 3♀♀, Refahiye, 18.VI.1983, 4♀♀, ♂, 20.VI.2009, 4♀♀, Tercan, 1400 m, 10.VI.2010, 2♀♀; Erzurum: 21.V.1979, ♀, 6.VI.1968, ♀, Çatıyolu, 1810 m, 3.VI.2010, 3♀♀, Güngörmez, Dumlubaba, 40° 09' 95 N, 41° 20' 68 E, 2500 m, 01.VII.2010, on *Conium maculatum* L., 2♀♀, Güzelova, 1900 m, 15.VI.2010, ♀, Kırkgözeler, 1800 m, 15.VI.2010, 7♀♀, University field, 1850, 1.VI.2009, 2♀♀, 21.VI.2009, ♀, 23.VI.2009, ♀, 24.VI.2009, ♀, 25.VI.2009, ♀, 30.VI.2009, 2♀♀, Yeşilyayla, 1950, 1.VII.2010, 13♀♀, Aşkale, 1650 m, 8.VII.2009, ♀, Çayköy, 1600 m, 3.VI.2010, ♀, Çat, 1800 m, 3.VI.2010, 3♀♀, Hıms, 1742 m, 2.VII.2010, ♀, Ilıca, 8.VII.1997, 2♀♀, Atlıkonak, 7.VII.1994, ♀, İspir, 15.VI.1971, 5♀♀, 2♂♂, Narman, 1640 m, 24.VII.2004, ♀, Oltu, 3.VI.1988, 2♀♀, 25.VI.1971, ♀, 28.VI.1988, 4♀♀, 30.VI.1989, ♂, 10.VII.1989, ♀, Pasinler, 14.VI.2009, ♀, Şenkaya, 8.VI.1988, ♀, Turmalı, 1750 m, 29.VI.1989, 2♀♀, Tortum, 2.VI.1979, 4♀♀, ♂, 12.VI.1971, ♀, Derekapı, 1400 m, 15.VI.2010, ♀, Pehlivanlı, 1250 m, 29.VI.1990, 2♀♀, Söğütlü, 1700 m, 9.VII.1997, ♀, Uzundere, Şelale, 850 m, 27.V.2010, 6♀♀; Hatay: Dörtiyol, Amanos Mountains, Küşne Yaylası, 1400 m, 19.VII.2009, ♀; Iğdır: 825 m, 20.VI.2009, 8♀♀, 25.VI.1971, ♀, Tuzluca, 900 m, 18.VI.2009, 2♀♀; Kars: Kağızman, 1750 m, 22.VI.2010, ♀, Sarıkamış, Akkurt, 1525 m, 22.VI.2010, ♀, Karakurt, 1500 m, 22.VI.2010, ♀, Konya: Halkapınar, 1250 m, 20.VI.2010, ♀, Beyşehir, Gökçimen, 3.VII.1997, 2♀♀; Malatya: 22.VI.1976, ♀; Rize: Pazar, 28.VI.1984, ♀; Tokat: 15.VII.1983, ♀; Tunceli: Mazgirt, Kalaycı, 950 m, 25.V.2010, 8♀♀.

D i s t r i b u t i o n : Holarctic region.

***Cantharis (Cantharis) melaspis* (CHEVROLAT 1854)**

M a t e r i a l e x a m i n e d : Bayburt: Çaldıere, 1700 m, 17.VI.2010, 5♂♂, Aydıntepe, Arpalı, 1550 m, 17.VI.2010, 7♂♂, Demirözü, 1650 m, 17.VI.2010, 11♂♂; Erzurum: Çatıyolu, 2000, 3.VI.2010, ♂, Kırkgözeler, 1800 m, 15.VI.2010, ♂, University field, 24.VI.2009, 3♂♂, 30.VI.2009, 4♂♂, Yeşilyayla, 1950, 1.VII.2010, 6♂♂, Aşkale, Çayköy, 1600 m, 3.VI.2010, 2♂♂, Aziziye, 8.VII.1997, ♂, Kayapa, 1750 m, 3.VI.2010, 3♂♂, Paşayurdu, 1750 m, 3.VI.2010, ♂, Horasan, 1588, 2.VII.2010, ♂, Köprüköy, 1720 m, 2.VII.2010, ♂, Pasinler, 14.VI.2009, 3♂♂, Büyükdere, 1800 m, 2.VII.2010, ♂, Tortum, 2.VI.1979, ♂, 21.VI.1971, ♂, Uzundere, 1000, 27.V.2010, 2♂♂; Erzincan: 1200 m, 10.VI.2010, 2♂♂, Akyazı, 1200, 11.VI.2010, 2♂♂, Refahiye, 1500 m, 18.VI.1983, 4♂♂, 20.VI.2009, 37♂♂; Iğdır: 20.VI.2009, 3♂♂, 25.VI.1971, 6♂♂, Tuzluca, 18.VI.2009, 5♂♂.

D i s t r i b u t i o n : Armenia, Georgia, Turkey, Iran, Iraq, Lebanon, Turkey.

***Cantharis (Cantharis) terminata* FALDERMANN 1835**

M a t e r i a l e x a m i n e d : Bayburt: 1369 m, 22.VI.2009, ♂, Kopdağı, Şehitler Çeşmesi, 2400 m, 17.VI.2010, 4♀♀, 4♂♂.

Distribution: Central and Southern parts of Europe and European Russia, Ukraine, Georgia, Armenia, Azarbaijan, Iran, Turkey, Lebanon.

***Cantharis (Cyrtomoptila) lateralis* LINNAEUS 1758**

Material examined: Bayburt: 1369 m, 22.VI.2009, ♀; Erzurum: Güzelova, 1900 m, 15.VI.2010, 2♂♂, Aşkale, 22.VI.2009, ♀, Çayköy, 3.VI.2010, 2♂♂, Olur, Yeşilbağlar, 1000 m, 16.VI.2010, ♀, Tortum, Derekapı, 1400 m, 15.VI.2010, ♀, 2♂♂, Kireçliadağı, 2.VI.1996, ♀.

Distribution: Central, Southern and Eastern parts of Europe, Central and Southern parts of European Russia, Great Britain, Finland, Georgia, Turkey, Afghanistan, Kazakhstan, Kyrgyzstan, Mongolia, Morocco.

***Cordicantharis bodemeyeri* (BOURGEOIS 1900)**

Material examined: Tunceli: Mazgirt, Kalaycı, 950 m, 25.V.2010, ♂.

Distribution: Turkey.

***Islamocantharis orientalis* WITTMER & MAGIS 1978**

Material examined: Erzurum: Tortum, 1650 m, 29.VII.2009, ♂.

Distribution: Armenia, Iran, Turkey.

***Metacantharis araxicola* (REITTER 1891)**

Material examined: Erzurum: Çat, 1810 m, 3.VI.2010, ♂.

Distribution: Armenia, Iran, Turkey.

***Metacantharis clypeata* (ILLIGER 1798)**

Material examined: Bayburt: Kopdağı, Şehitler Çeşmesi, 2400 m, 17.VI.2010, ♀, 3♂♂; Erzurum: Güngörmez, Dumlubaba, 40° 09' 95 N, 41° 20' 68 E, 2500 m, 01.VII.2010, on *Conium maculatum* L., ♂, Pasinler, Rabat, 2400 m, 13.VI.1996, 7♂♂.

Distribution: Central and Southern parts of Europe and European Russia, Great Britain, Lithuania, Ukraine, Armenia, Turkey, Iran, Algeria.

***Metacantharis rosinae* (PIC 1902)**

Material examined: Bayburt: 1369 m, 22.VI.2009, ♂; Erzurum: Çat Yolu, 3.VI.2010, 3♂♂, Aziziye, Kayapa, 3.VI.2010, ♂, Aşkale, Çiftlik, 1620 m, 3.VI.2010, ♂, Çat, 1810 m, 3.VI.2010, 4♂♂, Tortum, Derekapı, 1400 m, 15.VI.2010, ♂; Iğdır: Tuzluca, 900 m, 18.VI.2009, ♂.

Distribution: Turkey.

***Metacantharis taurigrada* BOURGEOIS 1900**

Material examined: Tunceli: Mazgirt, Kalaycı, 950 m, 25.V.2010, ♀, 4♂♂.

Distribution: Syria, Turkey.

***Metacantharis walteri* ŠVIHLA 1999**

Material examined: Erzurum: Tortum, Söğütlü, 1700 m, 9.VI.1997, ♀.

Distribution: Turkey.

***Rhagonycha aliena* DAHLGREN 1972**

Material examined: Bayburt: 1600 m, 12.VIII.2009, 3♀♀, ♂; Bilecik: Gölpazarı, Dereli, 490 m, 25.VI.2010, 2♂♂; Erzincan: 18.VII.1997, ♂, Akyazi, 1202 m, 11.VI.2010, ♂, Mercan, 1381, 10.VI.2010, 2♂♂, Refahiye, 1500 m, 20.VI.2009, ♂; Erzurum: İspir, 1259 m, 30.VI.2010, ♂, Oltu, 1400 m, 24.VII.2009, 2♀♀; Hatay: Dört Yol, Amanos Mountains, Küşne Yaylası, 1400 m, 19.VII.2009, 2♂♂; Konya: Halkapınar, 1250 m, 20.VI.2010, ♂; Sanlıurfa: Suruç, 12.VII.1990, 2♀♀, 3♂♂.

Distribution: Greece, Cyprus, Iraq, Lebanon, Syria, Turkey, Algeria.

***Rhagonycha delagrauei* (PIC 1898)**

Material examined: Erzurum: Güngörmez, Dumlubaba, 40° 09' 95 N, 41° 20' 68 E, 2500 m, 01.VII.2010, on *Conium maculatum* L., 6♀♀, 2♂♂, Karaköbek Mountain, 5.VII.1989, ♂, Yeşilyayla, 1950 m, 1.VII.2010, 3♀♀.

Distribution: Iraq, Syria, Turkey.

***Rhagonycha fulva* (SCOPOLI 1763)**

Material examined: Erzurum: Oltu, 1400 m, 24.VII.2009, 4♂♂.

Distribution: Central, Southern and Eastern part of Europe and European Russia, Great Britain, Ireland, Sweden, Ukraine, Turkey, Azerbaijan, Georgia, Iran, Syria, Turkmenistan, Morocco.

***Rhagonycha fulvaliena* ŠVIHLA 1995**

Material examined: Antalya: 7.VIII.1984, ♀; Eskişehir: 26.VII.1984, ♀; Giresun: 4.VIII.1984, 4♀♀, 2♂♂; Konya: Beyşehir, Gökçimen, 26.VII.1997, 3♀♀, 10♂♂.

Distribution: Greece, Turkey.

***Rhagonycha kronbladi* ŠVIHLA 1993**

Material examined: Erzurum: Güngörmez, Dumlubaba, 40° 09' 95 N, 41° 20' 68 E, 2500 m, 01.VII.2010, on *Conium maculatum* L., ♂.

Distribution: Turkey.

***Rhagonycha ruzickai* ŠVIHLA 2002**

Material examined: Erzurum: Güngörmez, Dumlubaba, 40° 09' 95 N, 41° 20' 68 E, 2500 m, 01.VII.2010, on *Conium maculatum* L., 46♀♀, 28♂♂.

Distribution: Syria, Turkey.

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Zusammenfassung

Vorliegende Arbeit behandelt die Cantharidae-Fauna verschiedener Regionen der Türkei, aus Aufsammlungen des Zeitraumes 1968 bis 2010. 22 Arten aus 6 Gattungen konnten nachgewiesen werden.

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