

Travaux du Muséum National d'Histoire Naturelle «Grigore Antipa»	Vol. L	pp. 421–429	© Octobre 2007
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**SOME MEDITERRANEAN CHRYSOMELID SPECIES  
(COLEOPTERA: CHRYSOMELIDAE) NEWLY ENTERED IN THE  
COLLECTIONS OF “GRIGORE ANTIPA” NATIONAL MUSEUM  
OF NATURAL HISTORY**

**[Results of the expeditions from Turkey and Tunisia, 2005-2006]**

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Abstract. The paper presents the results of the study on the material of chrysomelid coleopterans collected during the expeditions made in Turkey and Tunisia, within 2005-2006. Systematic presentation of the identified species is accompanied with information on the collecting sites, general distribution, previous reports and on some aspects regarding the biology of these species. From the Mediterranean species, entered in the entomological collections of „Grigore Antipa” National Museum of Natural History, it has to be pointed out: *Lachnaia padillai* Tomov, 1982 – endemic species in the Tunisian fauna, *Oulema hoffmannseggii* (Lacordaire, 1845), *Cryptocephalus rugicollis* Olivier, 1791, *Chrysolina viridana* (Küster, 1844) – West-Mediterranean species, *Diorhabda elongata* (Brullé, 1832) – distributed in the Mediterranean basin, Asia, the Caucasus, Mongolia.

Résumé. On présente les résultats de l'étude du matériel de coleoptères – chrysomélides collecté au cours des expéditions effectuées en Turquie et en Tunisie, au cours de la période 2005-2006. La présentation systématique des espèces identifiées est accompagnée d'informations concernant les sites où elles ont été collectées, leur répartition générale, les signalements antérieurs et leur biologie. On remarque quelques espèces méditerranéennes entrées dans les collections entomologiques du Muséum National d'Histoire Naturelle „Grigore Antipa”: *Lachnaia padillai* Tomov, 1982 – endémique dans la faune de la Tunisie, *Oulema hoffmannseggii* (Lacordaire, 1845), *Cryptocephalus rugicollis* Olivier, 1791 et *Chrysolina viridana* (Küster, 1844) – espèces ouest-méditerranéennes, ainsi que *Diorhabda elongata* (Brullé, 1832) – répandue dans le bassin méditerranéen, en Asie, Caucase et en Mongolie.

Key words: Coleoptera, Chrysomelidae, Mediterranean species, Turkey, Tunisia.

INTRODUCTION

Beginning with 2005, “Grigore Antipa” National Museum of Natural History (Bucharest), in collaboration with the NGO – “Oceanic Club” Society of Oceanographical Exploration and Protection of the Marine Environment of Constanța, has been carrying on studies within the project “*Romanian contributions on the Mediterranean fauna research*”, co-ordinated by Dr. Corneliu Pârnu.

Within these studies, three common expeditions were made, as yet: in Turkey (Expeditions “Taurus” – 2005 and “Focida” – 2006) and Tunisia (Expedition “Punia” – 2006), to which Dr. Corneliu Pârnu, Dr. Dumitru Murariu and Drd. Gabriel Chișamera participated, representing «Grigore Antipa» Museum. Among the material collected during the field trips there were also some coleopteran specimens belonging to the family Chrysomelidae.

English translation by Mihaela Barcan Achim.

*MATERIAL AND METHODS*

Coleopterological material was collected with entomological net from 18 sites from Turkey (13 sites) and Tunisia (4 sites), and on the way back in Bulgaria, at Kaliakra Cape, Black Sea shore.

*Collecting sites:**Turkey:*

- Denizli region: Koruçuk (37°50'41"N, 29°08'29"E); Pamukkale (37°54'57"N, 29°07'15"E); Buharkent (37°54'45"N, 28°43'43"E);
- Izmir region: Bergama, Bakır Çayı River (39°07'12"N, 27°11'27"E);
- Izmir region: Yenifoça, the Aegean Sea (38°43'51"N, 26°44'32"E);
- Çanakkale region: Troy Fortress (39°57'23"N, 26°14'51"E); Burhanlı (40°17'27"N, 26°30'47"E); 33 Km North of Eceabat; 2 Km West of Küçükkuşu; 10 Km West of Küçükkuşu;
- Edirne region: Pehlivanlık;
- Kırklareli region: Kanlı Dere, Koprusu;
- Muğla region: Dalaman Çayı river, near locality Ortaca.

*Tunisia:*

- Bou Salem, near Mejerda River, downstream (36°34'21"N, 08°52'19"E), alt. 128 m;
- Bulla Regia, between fortress walls: collecting from ruins, short flowers and Umbelliferae, among thistles, spiny bushes and fleshy plants (36°33'24"N, 08°45'16"E), alt. 163 m;
- Hazoua, cultivated oasis, at 3 km far from the border with Algeria: collecting from date palms, from the grass around the trunks, from minute flowers (33°44'46"N, 07°37'44"E), alt. 35-40 m;
- Mides, 4 km eastwards (34°24'10"N, 07°57'12"E), alt. 332 m.

*Bulgaria:*

- Kaliakra Cape, the Black Sea.

The samples were identified using the identification key given by Mohr (1966), Kippenberg & Döberl (1994) and Warchałowski (2003). The identification was made on the basis of the feature analysis of the external morphology and of the genitalia (aedeagus for males).

The subfamilies are ordered according to Seeno & Wilcox (1982) and the genera, subgenera and species are listed alphabetically. The nomenclature, systematics and information on the general distribution of the species are presented after Warchałowski (2003).

The studied material is preserved in the coleopteran collection of "Grigore Antipa" National Museum of Natural History, of Bucharest.

## Abbreviations:

Names of the collectors: Andreea Sandu – A.S.; Corneliu Pârnu – C.P.; Gabriel Chișamera – G.C.; Răzvan Zaharia - R.Z.; Robert Bojor – R.B.; Sorin Grigore - S.G.  
spec./specs. – specimen/specimens; alt. – altitude.

## RESULTS

Subfamily Criocerinae Latreille, 1807

*Oulema* Gozis, 1886

*Oulema melanopus* (Linnaeus, 1758)

(*Chrysomela melanopa* Linnaeus, 1761)

*Terra typica*: not recorded.

*Studied material*: 3 specs., Tunisia, Bou Salem, Mejerda River (downstream), 27.III.2006, leg. C.P.

*General distribution*: West Palaearctic species, distributed from Morocco, Ireland and southern Norway to Near East, Central Siberia, Mongolia.

According to Warchałowski (2003), this species is distributed in almost all western Palaearctic region, but most of the areas can be populated only by *Oulema duftschmidi* (Redtenbacher, 1874), with which it was synonymized in the past, recently being separated again; the individual variability and the general distribution of the two species requires a critical revision.

*Biological notes*: reported from a variety of Poaceae: *Avena*, *Dactylis*, *Hordeum*, *Lilium*, *Secale*, *Triticum*, *Zea* (Jolivet, 1953); it can generate important damages in *Triticum* cultures.

*Oulema hoffmannseggii* (Lacordaire, 1845)

(*Lema purpuricollis* Reiche, 1861)

*Terra typica*: Portugalia.

*Studied material*: 3 specs., Tunisia, Bou Salem, Mejerda River (downstream), 27.III.2006, leg. C.P.

*General distribution*: West-Mediterranean species, distributed in southern France, Iberian Peninsula, Morocco, Algeria.

*Biological notes*: in northern Africa reported from Poaceae (Poisson, 1941).

Subfamily Clytrinae Kirby, 1837

Tribe Clytrini Clavareau, 1913

*Clytra* Laicharting, 1781

*Clytraria* Semenov, 1903

*Clytra atraphaxidis* (Pallas, 1773)

*Terra typica*: not recorded.

*Studied material*: 2 specs., Turkey, Pamukkale, Hierapolis Fortress, Denizli region, 13.VII.2005, leg. C.P.; 2 specs., Turkey, Bergama, Aydin region, 24.VII.2005, leg. C.P.

*Remarks*: within this species, numerous varieties were described, their systematic and taxonomic value requiring a critical revision.

*Distribution in Turkey*: Ankara, Edirne (Tomov & Gruev, 1975); Aydin, Izmir, Manisa (Aydin & Kismali, 1990); Artvin, Erzincan, Erzurum (Aslan & Özbek, 1998); Aksu, Koçular village, 1330 m, Aksu, Yakaköy, 1325 m (Dedegöl Mountains, Isparta) (Gök, 2003).

*General distribution*: distributed from Spain, Corsica, Sicily, southern Italy and Greece to Central Asia, Mongolia and Korea.

*Biological notes*: species occurred especially on *Salix* sp. (Salicaceae).

*Coptocephala* Chevrolat, 1837*Coptocephala* s. str.*Coptocephala gebleri* Gebler, 1841(*Cryptocephalus 4-maculatus* Fabricius, 1792, nec Linnaeus, 1767)*Terra typica*: Zajsan (Kazachstan).*Studied material*: 2 ♂♂, Bulgaria, Kaliakra Cape (the Black Sea), 29.VII.2005, leg. G.C.; 10 specs., Turkey, Troy Fortress, Çanakkale region, 7.VIII.2006, leg. C.P.*Distribution in Turkey*: Rize, Rize region; Tarsus, Mersin region (Warchałowski, 1991).*General distribution*: Pontic species, distributed in the Balkan Peninsula, Asia Minor, Crimea, the Caucasus, Iran, Central Asia and South-West Siberia till the Altai Mountains.*Coptocephala unifasciata destinoi* Fairmaire, 1884(*Coptocephala destinoi* Fairmaire, 1884; *Coptocephala intermedia* Reineck, 1908)*Studied material*: 1 ♂, Turkey, 33 km North of Eceabat, Çanakkale region, 28.VII.2005, leg. C.P.; 14 specs., Turkey, Pehlivan köyü, Edirne region, 28.VII.2005, leg. G.C., C.P.; 9 specs., Turkey, 2 km West of Küçükuyu, Çanakkale region, 11.VII.2005, leg. C.P.; 8 specs., Turkey, 33 km North of Eceabat, Çanakkale region, 28.VII.2005, leg. C.P.; 7 specs., Turkey, 10 km West of Küçükuyu, Çanakkale region, 10.VII.2005, leg. C.P.; 2 specs., Turkey, Burhanlı, Çanakkale region, 7.VIII.2006, leg. C.P.*Distribution in Turkey*: Ankara, Hatay, Mersin (Weise, 1884); Ankara, Kayseri, Sivas (Kasap, 1987); Aydın, Balıkesir, Çanakkale, İzmir, Muğla (Aydın & Kismali, op. cit.); Eskişehir region, Burdur region, Antalya region (Alanya), Finike, Adana region (Adana) (Warchałowski, 1991); Erzurum (Aslan & Özbek, 1998); Aksu, Anamas plateau, 1500 m (Dedegöl Mountains, Isparta) (Gök, 2003).*General distribution*: species which presents a large geographical variability, within several geographical forms being described: *Coptocephala unifasciata* s. str. – distributed in central and western Europe; ab. *phenax* Jacobson – East-european form; ssp. *destinoi* Fairmaire – distributed in the eastern side of the Mediterranean region, Minor Asia, South-West Asia, ssp. *australis* Medvedev – from Central Asia.*Biological notes*: occurred both in the plain and in the mountains, especially on the limy terrain; host plants are species of *Pastinaca*, *Daucus*, *Peucedanum*, *Pimpinella*, *Ferulago*, *Echinophora* (Apiaceae), *Sarothamnus* (Fabaceae).*Lachnaia* Chevrolat, 1837*Barathraea* Lacordaire, 1848*Lachnaia padillai* Tomov, 1982*Terra typica*: Tunisia.*Studied material*: 1 ♂, Tunisia, Bulla Regia, 28.III.2006, leg. R.Z.; 7 specs., Tunisia, Bulla Regia, 28.III.2006, leg. C.P.*General distribution*: endemic species from Tunisia.

Subfamily Cryptocephalinae Gyllenhal, 1813

Tribe Cryptocephalini Gyllenhal, 1813

*Cryptocephalus* Müller, 1764

*Burlinius* Lopatin, 1965

*Cryptocephalus fulvus* (Goeze, 1777)

(*Cryptocephalus minutus* Fabricius, 1792; *Cryptocephalus signaticollis* Suffrian, 1848)

*Terra typica*: not recorded.

*Studied material*: 1 ♂, Turkey, Buharkent, Menderes River, Denizli region, 4.VIII.2006, leg. A.S.; ab. *weiseanus* Breit, 1918 - 2 specs., Turkey, Kanli Dere, Koprusu, Kirklareli region, 29.VII.2005, leg. C.P.; ab. *weiseanus* Breit, 1918 - 1 spec., Turkey, Pehlivan köy, Edirne region, 28.VII.2005, leg. G.C.; 2 specs., Turkey, Koruçuk, Denizli region, 3.VIII.2006, leg. R.B.; ab. *weiseanus* Breit, 1918 - 2 specs., Turkey, Yenifoça, the Aegean Sea, Izmir region, 5.VIII.2006, leg. C.P.; 2 specs., Turkey, Pehlivan köy, Edirne region, 28.VII.2005, leg. C.P.; 1 ♂, Turkey, Kanli Dere, Koprusu, Kirklareli region, 29.VII.2005, leg. C.P.; 1 spec., Turkey, 2 km West of Küçükkuyu, Çanakkale region, 11.VII.2005, leg. C.P.; 3 specs., Turkey, Pehlivan köy, Edirne region, 28.VII.2005, leg. G.C., C.P.; 1 spec., Turkey, Bergama, Bakır Çayı River, Izmir region, 1.VIII.2006, leg. S.G.; 1 ♂, Turkey, Troy Fortress, Çanakkale region, 7.VIII.2006, leg. C.P.

*Distribution in Turkey*: Izmir, Mersin (Medvedev, 1975); Gümüşhane, Erzincan, Erzurum (Aslan & Özbek, 1997); Antalya, Erzincan, Erzurum, Izmir, Gümüşhane, Mersin, Ankara, Ayas, Kozak, Manisa, Salihli, Silifke, Mamli, Muğla, Marmaris (Sassi & Kismali, 2000); Aksu, Anamas plateau, 1450 m (Dedegöl Mountains, Isparta) (Gök, 2002).

*General distribution*: widely distributed Palaearctic species (Europe, Ukraine, the Caucasus, Israel, Jordan, Saudi Arabia, western Siberia, northern Africa, Turkey).

*Biological notes*: mesophilous species, polyphagous; host plants belong to the families: Fabaceae, Asteraceae, Fagaceae, Salicaceae, Cistaceae and Labiatae (Sassi & Kismali, op. cit.).

*Cryptocephalus* s. str.

*Cryptocephalus rugicollis* Olivier, 1791

(*Cryptocephalus virgatus* Suffrian, 1847)

*Terra typica*: Var (France).

*Studied material*: 33 specs., Tunisia, Hazoua Oasis (at 3 km far from the border with Algeria), 17.III.2006, leg. C.P., R.Z.

*Remarks*: this species forms numerous colour variations, eleven variations being described; the specimens analyzed in this paper belong to the *typical form* (each elytron with three spots).

*General distribution*: in western part of Mediterranean area, from Morocco and Portugal to North-eastern Italy (Warchałowski, 2003); southern Europe, Jordan, Northern Africa, Turkey (Sassi & Kismali, op. cit.); it is a very common species, appearing sometimes in mass, collected very often in Morocco, Algeria and Tunisia (Warchałowski, in litt.).

*Biological notes:* xerophilous species, strictly associated with the Mediterranean belt; oligophagous, it feeds on various genera of Asteraceae (Sassi & Kismali, op. cit.).

Subfamily Chrysomelinae Latreille, 1802

Tribe Chrysomelini Latreille, 1802

*Chrysolina* Motschulsky, 1860

*Synerga* Weise, 1900

*Chrysolina coeruleans* (Scriba, 1791)

(*Chrysomela violacea* Panzer, 1797)

*Terra typica:* Darmstadt (Hesja).

*Studied material:* 6 specs., Turkey, Bergama, Bakır Çayı River, Izmir region, 1.VIII.2006, leg. C.P., S.G.

*General distribution:* distributed from central France, Balkan Peninsula, northern parts of Germany and Poland to Central Asia.

*Biological notes:* species which populates the mountain and hilly regions; occurred in the antesteppic and oak area, but it can reach the coniferous area; host plants are *Mentha aquatica* L., *Mentha longifolia* (L.) Hudson (Lamiaceae).

*Chrysolina viridana* (Küster, 1844)

*Terra typica:* not recorded.

*Studied material:* 4 specs. (1 ♂, 3 ♀♀), Tunisia, Bulla Regia, 28.III.2006, leg. C.P.

*General distribution:* northern Africa, southern Spain, Corsica, Sardinia, Sicily, Southern Italy.

*Biological notes:* host plants are species of *Mentha* and other aromatic Lamiaceae.

*Gastrophysa* Chevrolat, 1837

*Gastrophysa* s. str.

*Gastrophysa polygoni* (Linnaeus, 1758)

(*Chrysomela obtusa* Müller, 1776)

*Terra typica:* not recorded.

*Studied material:* 1 spec., Turkey, Pehlivan köy, Edirne region, 28.VII.2005, leg. C.P.; 4 specs., Turkey, Buharkent, Denizli region, 4.VIII.2006, leg. C.P.; 11 specs., Turkey, Koruçuk, Denizli region, 3.VIII.2006, leg. R.Z., S.G.

*Distribution in Turkey:* Erzincan, Erzurum and Artvin provinces (Aslan & Özbek, 1999).

*General distribution:* Europe, Asia Minor, the Caucasian countries, Central Asia.

*Biological notes:* host plants are different species belonging to the family Polygonaceae: *Rumex* sp., *Polygonum aviculare* L., *P. convolvulus* L., *Fagopyrum sagittatum* Gilib.

Subfamily Galerucinae Latreille, 1802  
Tribe Galerucini Latreille, 1802  
*Diorhabda* Weise, 1883  
*Diorhabda elongata* (Brullé, 1832)  
(*Galeruca elongata* Brullé, 1832)  
*D. elongata* ab. *carinata* Faldermann, 1837

*Terra typica*: Peloponnese (Greece).

*Studied material*: 4 specs., Tunisia, Mides, 4 km eastwards, 16.III.2006, leg. C.P., G.C.

*General distribution*: distributed in the whole basin of the Mediterranean Sea, Asia Minor, the Caucasian countries, Central Asia, Mongolia.

*Biological notes*: common species on *Tamarix* in the Sakhalin region and in Asia. During the adult and the larval stages, this species feeds on the plant foliage. It has been introduced as a biological control agent for saltcedars, *Tamarix* sp., an exotic invasive weedy tree in the western United State.

*Xanthogaleruca* Laboissière, 1934  
*Xanthogaleruca luteola* (Müller, 1766)  
(*Chrysomela xanthomelaena* Schrank, 1781)

*Terra typica*: Turin (Piemont, Italy).

*Studied material*: 1 spec., Turkey, Dalaman Çayı River (near locality Ortaca), Muğla region, 18.VII.2005, leg. C.P.

*Distribution in Turkey*: Aydin, Samsun, Trabzon (Tomov & Gruev, op. cit.); Turkey (Warchałowski, 1976); Ankara (Gruev & Tomov, 1979); Erzurum (Aslan, 1998); Iğdir, 800 m, Bilecik, 1100 m (Aslan et al., 2000).

*General distribution*: distributed from Portugal, western France and Denmark to the Caucasian countries and Central Asia.

*Biological notes*: occurred on *Ulmus campestris* auct. non L. (Ulmaceae).

Subfamily Halticinae Newman, 1834  
*Chaetocnema* Stephens, 1831  
*Chaetocnema* s. str.  
*Chaetocnema hortensis* (Geoffroy, 1785)  
(*Altica hortensis* Geoffroy, 1785; *Galeruca aridella* Paykull, 1799)

*Terra typica*: not recorded.

*Studied material*: 1 ♂, Turkey, Pehlivan köyü, Edirne region, 28.VII.2005, leg. C.P.

*Distribution in Turkey*: Bayburt: Kopdağı; Erzurum: Aşkale, 1500 m; Ilica Kandilli, 1600 m; Ispir, Alacabük, 1900 m; Oltu, Anzavderesi, 950 m; Çamlıbel, 1750 m; Uzunoluk, 1450 m; Olur, Güngöründü, 1950 m; Sungübayır, 1850 m; Pasinler; Büyükdere, 1900 m; Rabat, 2300 m; Ilica, Söğütlii, 1800 m; Tortum, Karli, 2200 m; Üniversite, 1850 m etc. (Aslan et al., 1999).

*General distribution*: Palaearctic species, widely distributed from Azores and England to Far East. Reported also from Sudan.

*Biological notes*: it lives on different species of Poaceae: *Sesleria coerulea* (L.) Ard., *Arrhenatherum elatius* (L.); pest of cereals.

*Tlanoma* Motschulsky, 1845  
*Chaetocnema coyeyi* (Allard, 1863)

(*Plectroscelis coyeyi* Allard, 1863; *Chaetocnema delagrangei* Pic, 1909)

*Terra typica*: Kab-Elias, Israel.

*Studied material*: 4 specs., Turkey, Yenifoça (the Aegean Sea), Izmir region, 5.VIII.2006, leg. C.P.

*Distribution in Turkey*: Yeşilköy, Kirklareli region (Apfelbeck, 1901, 1916); Akbaş (Pic, 1909); Eskişehir Çiftlik, Pursak Çayı, Akdağ (Tölg, 1938); Beyşehir Lake (Konya), Beynam, Mogan Lake (Ankara), Bürücek (Mountain Tauros), Yeniköy (Adana) (Kral, 1967); Erzurum: Ilica, Atlikonak, 1750 m; Ispir, Madenkoprubaşı, 1400 m (Aslan et al., 1999).

*General distribution*: distributed in the Balkan Peninsula, southern Russia, Cyprus, Asia Minor, the Eastern Mediterranean, the Caucasus, Irak, Iran.

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#### CÂTEVA SPECII DE CRISOMELIDE (COLEOPTERA: CHRYSOMELIDAE) MEDITERANEENE INTRATE ÎN COLECȚIILE MUZEULUI NAȚIONAL DE ISTORIE NATURALĂ “GRIGORE ANTIPA”

[Rezultatele expedițiilor din Turcia și Tunisia, 2005-2006]

#### REZUMAT

Lucrarea prezintă rezultatele studiului materialului de coleoptere-crisomelide colectat în cursul expedițiilor “Taurus”, “Focida” și “Punia”, efectuate în Turcia și Tunisia, în perioada 2005-2006. Cercetările s-au desfășurat în cadrul proiectului “*Contribuții românești la cercetarea faunei mediteraneene*”, inițiat de Muzeul Național de Istorie Naturală “Grigore Antipa”, în colaborare cu Societatea de explorări oceanografice și protecția mediului marin “Oceanic Club” din Constanța.

Sunt prezentate noi date corologice referitoare la prezența speciilor de crisomelide în zonele studiate, informații privind distribuția generală și semnalările anterioare, precum și unele aspecte legate de biologia acestor specii.

Dintre speciile mediteraneene care îmbogățesc valoarea științifică a colecțiilor entomologice aparținând muzeului “Grigore Antipa” se remarcă: *Lachnaia padillai* Tomov, 1982 – endemică în fauna Tunisiei, *Oulema hoffmannseggii* (Lacordaire, 1845), *Cryptocephalus rugicollis* Olivier, 1791, *Chrysolina viridana* (Küster, 1844) – specii vest-mediteraneene, *Diorhabda elongata* (Brullé, 1832) – răspândită în bazinul mediteranean, Asia, Caucaz, Mongolia.

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