

**NEW DISTRIBUTION DATA FOR THE CERAMBYCIDAE AND
CHRYSOMELIDAE (COLEOPTERA: CHRYSOMELOIDEA)
COLLECTED DURING THE MEDITERRANEAN EXPEDITIONS
[RESULTS OF THE “DAKHLA” (2012) AND
“MERZOUGA” (2013) EXPEDITIONS IN MOROCCO]**

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Abstract. This paper presents the results of the study on the Cerambycidae and Chrysomelidae material collected during the “Dakhla” (2012) and “Merzouga” (2013) scientific expeditions, organized by “Grigore Antipa” National Museum of Natural History (Bucharest, Romania) in Morocco. A total of 18 species belonging to 13 genera and 5 subfamilies were recorded. In addition, the general distribution and data about the biology of some species are given. From the strictly Mediterranean species, entered in the collections of “Grigore Antipa” Museum, we mention: *Derolus mauritanicus* (Buquet), *Neoplocaederus caroli* (Leprieur), *Agapanthia annularis* (Olivier), *A. irrorata* (Fabricius), *Macrolenes dentipes* (Olivier), *Chrysolina viridana chloris* (Lucas), *C. bankii* (Fabricius), *Labidostomis hordei* (Fabricius), *L. taxicornis* (Fabricius), *Lachnaia paradoxa* (Olivier), *L. puncticollis* Chevrolat, *Tituboea sexmaculata* (Fabricius) and *Cryptocephalus rugicollis* Olivier. *Lachnaia octomaculata* (Pic) is an endemic species in North-Africa (Algeria, Morocco).

Résumé. Ce travail présente les résultats de l'étude sur le matériel de Cerambycidae et Chrysomelidae collecté au cours des expéditions scientifiques “Dakhla” (2012) et “Merzouga” (2013) organisées par le Muséum National d'Histoire Naturelle “Grigore Antipa” (Bucarest, Roumanie) en Maroc. 18 espèces appartenant aux 13 genres et 5 sous-familles sont présentées. En outre, des données sur la distribution générale et la biologie de certaines espèces sont fournies. Parmi les espèces strictement méditerranéennes entrées dans les collections entomologiques du Muséum National “Grigore Antipa”, on mentionne: *Derolus mauritanicus* (Buquet), *Neoplocaederus caroli* (Leprieur), *Agapanthia annularis* (Olivier), *A. irrorata* (Fabricius), *Macrolenes dentipes* (Olivier), *Chrysolina viridana chloris* (Lucas), *C. bankii* (Fabricius), *Labidostomis hordei* (Fabricius), *L. taxicornis* (Fabricius), *Lachnaia paradoxa* (Olivier), *L. puncticollis* Chevrolat, *Tituboea sexmaculata* (Fabricius) et *Cryptocephalus rugicollis* Olivier. *Lachnaia octomaculata* (Pic) est une espèce endémique en Afrique du Nord (Algérie, Maroc).

Key words: Cerambycidae, Chrysomelidae, “Dakhla” and “Merzouga” expeditions, Morocco, “Grigore Antipa” Museum.

INTRODUCTION

Since 2005, the “Grigore Antipa” National Museum of Natural History (Bucharest) in collaboration with the Oceanographic Exploration and Marine Environment Protection Society “Oceanic Club” (Constanța) have been involved in organizing several expeditions in the Mediterranean area within “*Romanian contributions to the study of the Mediterranean fauna*” research project. General information regarding this research project was published by Pârvu (2007).

Nine scientific expeditions were made between 2005 and 2013 in some areas surrounding the Mediterranean basin, as follows: in Turkey - “Taurus” (2005), “Focida” (2006) and “Bolkar” (2009); in Tunisia - “Punia” (2006); in Morocco - “Atlas” (2007), “Dakhla” (2012) and “Merzouga” (2013); in Syria - “Euphrates” (2008) and “Sabkha” (2010) (Adam & Moscaliuc, 2013).

The most recent expeditions, “Dakhla” and “Merzouga”, were organized in Morocco in the period March - April 2012 and May - June 2013, by “Grigore Antipa”

National Museum in partnership with “Oceanic Club” Society, SEO/BirdLife, Morocco programme: the Research Group for Bird Protection of Morocco and the Scientific Institute of Mohammed V University at Agdal (Rabat, Morocco) (Moscaliuc, 2014).

MATERIAL AND METHODS

The paper presents new data on the distribution of Cerambycidae and Chrysomelidae from Morocco, based on the material collected during “Dakhla” (2012) and “Merzouga” (2013) scientific expeditions.

A number of 2.876 beetle specimens were collected during these expeditions, 152 (5.24%) belonging to Cerambycidae and Chrysomelidae. The most abundant families were Scarabaeidae, Tenebrionidae, Carabidae, Meloidae and Buprestidae.

The Chrysomelidae material was identified using the keys of Warchałowski (2010). The nomenclature and systematics of the Chrysomeloidea are in accordance with the *Catalogue of the Palaearctic Coleoptera* (Löbl & Smetana, 2010).

The general distribution of species follows Kippenberg (2010), Beenen (2010), Regalin & Medvedev (2010), Lopatin & Smetana (2010) and Sama & Löbl (2010).

For each recorded species, the number of specimens, collecting sites (including the GPS coordinates), collecting data, name of the collectors and data on the general distributions are given. In addition, information on the biology and host plants for some species are presented.

The studied material is preserved in the “Grigore Antipa” National Museum of Natural History collections.

Abbreviations: m a.s.l. - meters above sea level; spec./specs. - specimen/specimens.

RESULTS

This study completes the data published by Maican (2007) and Maican & Serafim (2009) with new information, based on the material of Cerambycidae and Chrysomelidae collected in Morocco, in 2012 and 2013. Thus, 18 species from 13 genera belonging to the Cerambycinae, Lamiinae, Chrysomelinae, Galerucinae and Cryptocephalinae subfamilies were identified.

Family Cerambycidae Latreille, 1802
 Subfamily Cerambycinae Latreille, 1802
 Tribe Cerambycini Latreille, 1802
 Genus *Derolus* Gahan, 1891
Derolus mauritanicus (Buquet, 1840)

Examined material: 2 specs., Oued el Maleh (29°49'25"N, 007°11'53"W), 500 m a.s.l., 6.04.2012, leg. C. Stanciu.

Distribution: North Africa: Algeria, Libya, Morocco (including Western Sahara), Tunisia (Sama & Löbl, op. cit.).

Biology: native species of North Africa, phytophagous; host plants: *Nerium oleander*, *Rhus* sp. and *Calotropis procera* (Sama, Ringenbach, Rejzek, 2005). In Central Sahara, it can develop on other plants and has been reported from the fig trees (*Ficus carica*) and on Asclepiadaceae (Villiers, 1946). It is an alien species in Europe: *D. mauritanicus* was part of the fauna of France following accidental introduction (1884) and a brief local acclimatization (Var: Hyères, Alpes-Maritimes: Nice) (Villiers, 1978). Currently it seems to have disappeared from France (Brustel et al., 2002). Recently, it invaded Spain (Cocquempot & Lindelöw, 2010).

Genus *Neoplocaederus* Sama, 1991*Neoplocaederus caroli* (Leprieur, 1876) (Fig. 1 A, B)

Examined material: 3 specs., Errachidia (31°05'49"N, 004°04'01"W), 22.05.2013, leg. G. Chişamera.

Distribution: North Africa: Algeria, Libya, Morocco (including Western Sahara), Tunisia; Afrotropical Region (Sama & Löbl, op. cit.).

Biology: it develops in *Calligonum comosum* (Villiers, 1946) and *Tamarix* (Sama et al., op. cit.).

Tribe Certallini Fairmaire, 1864

Genus *Certallum* Dejean, 1821*Certallum ebulinum* (Linnaeus, 1767)

Examined material: 1 spec., Merzouga (31°05'808"N, 004°04'020"W), 24.05.2013, leg. L. Moscaliuc.

Distribution: Europe: Azerbaijan, Armenia, Bulgaria, France (including Corsica), Monaco, Georgia, Greece (including Crete), Malta, Portugal, Spain (including Gibraltar), Russia (South European territory), Turkey, Ukraine; North Africa: Algeria, Egypt, Libya, Morocco, Tunisia; Asia: Cyprus, Iran, Iraq, Israel, Jordan, Lebanon, Syria, Turkey (Sama & Löbl, op. cit.).

Biology: the larval stage of this species grows in the herbaceous Brassicaceae (*Raphanus raphanistrum*, *R. arvensis*) (Bense, 1995). It has been reported in North Africa on *Psychine stylosa*, *Erysimum grandiflorum* and *Sisymbrium crassifolium* (Sama et al., op. cit.). The adults occur on the flowers of Brassicaceae, Malvaceae, Carduaceae, etc. (Villiers, 1946) from April to May.

Tribe Stenopterini Gistel, 1848

Genus *Stenopterus* Illiger, 1804*Stenopterus ater* (Linnaeus, 1767)

Examined material: 1 spec., Rabat, toward Volubilis (33°50'52"N, 005°36'55"W), 652 m a.s.l., 10.05.2013, leg. C. Stanciu.

Distribution: Europe: Bosnia Herzegovina, Croatia, France (including Corsica, Monaco), Georgia, Greece (including Crete), Italy (including Sardinia, Sicily, San Marino), Macedonia, Portugal, Slovakia, Slovenia, Spain (including Gibraltar), Ukraine, Serbia and Montenegro; North Africa: Algeria, Libya, Morocco, Tunisia (Sama & Löbl, op. cit.).

Biology: polyphagous species, mostly on deciduous trees: *Pistacia*, *Ceratonia*, *Ostrya*, *Carpinus*, *Ulmus*, *Robinia*, *Prunus*, *Acacia* (Hoskovec & Rejzek, 2009), sometimes on conifers (*Pinus halepensis*, *Thuya*) (Sama et al., op. cit.).

Subfamily Lamiinae Latreille, 1825

Tribe Agapanthiini Mulsant, 1839

Genus *Agapanthia* Audinet-Serville, 1835Subgenus *Epoptes* Gistel, 1857*Agapanthia annularis* (Olivier, 1795)

Examined material: 3 specs., Dchar, Beni Mtir, Oued el Abiod (34°08'54"N, 004°21'19"W), 264 m a.s.l., 12.05.2013, leg. C. Stanciu.

Distribution: Europe: Portugal, Spain (including Gibraltar); North Africa: Algeria, Egypt, Libya, Morocco, Tunisia (Sama & Löbl, op. cit.).

Biology: phytophagous species; host plants: *Cynara*, *Scolimus*, *Carduus* (Asteraceae) (Hoskovec & Rejzek, op. cit.).

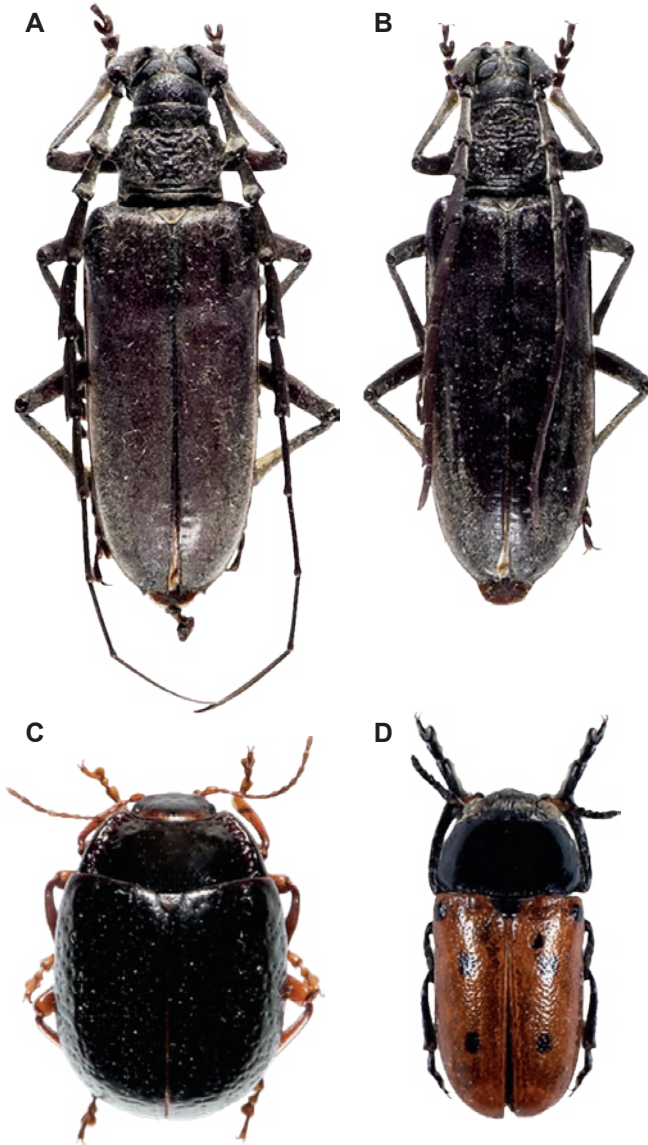


Fig. 1 - A, *Neoplocaederus caroli* (Leprieur) ♂; B, *Neoplocaederus caroli* (Leprieur) ♀; C, *Chrysolina bankii* (Fabricius); D, *Lachnaia octomaculata* (Pic) (photos: George Năzăreanu).

Agapanthia irrorata (Fabricius, 1787)

Examined material: 4 specs., Volubilis (34°04'19"N, 005°33'08"W), 390 m a.s.l., 10.05.2013, leg. G. Chișamera, C. Stanciu, R. Zaharia; 3 specs., Moulay Idriss (34°02'59"N, 005°32'35"W), 438 m a.s.l., 11.05.2013, leg. C. Stanciu; 55 specs., Dchar, Beni Mtir, Oued el Abiod (34°08'54"N, 004°21'19"W), 264 m a.s.l., 12.05.2013, leg. G. Chișamera, C. Stanciu, R. Zaharia.

Distribution: Europe: France (Corse), Italy (including Sardinia, Sicily, San Marino), Portugal, Spain (including Gibraltar); North Africa: Algeria, Morocco, Tunisia (Sama & Löbl, 2010).

Biology: polyphagous species, it feeds on various herbaceous plants: *Thapsia villosa*, *Onopordum illyricum*, *Salvia bicolor* (Villiers, 1946), *Carduus*, *Daucus*, *Ferula* (Hoskovec & Rejzek, op. cit.), *Phoeniculum*, *Chrysanthemum*, *Verbascum*, *Asphodelus* (Sama et al., op. cit.).

Genus *Phytoecia* Dejean, 1835

Subgenus *Phytoecia* Dejean, 1835

Phytoecia rufipes rufipes Olivier, 1795

Examined material: 3 specs., Dchar, Beni Mtir, bank of Oued el Abiod river (34°08'54"N, 004°21'19" W), 264 m a.s.l., 12.05.2013, leg. C. Stanciu.

Distribution: Creta, Croatia, France (including Corsica), Italy (including Sicily), Portugal, Slovenia, Spain, East Palaearctic, Near East, North Africa (Sama, 2014).

Biology: oligophagous species; host plants: *Foeniculum vulgare*, *Ferula galbanifera* and other Apiaceae (Hoskovec & Rejzek, op. cit.; Bense, op. cit.).

Family Chrysomelidae Latreille, 1802

Subfamily Chrysomelinae Latreille, 1802

Tribe Doryphorini Motschulsky, 1860

Subtribe Chrysolina S.-H. Chen, 1936

Genus *Chrysolina* Motschulsky, 1860

Subgenus *Chrysolina* Motschulsky, 1860

Chrysolina bankii (Fabricius, 1775)

(Fig. 1 C)

Examined material: 2 specs., Mouley Idriss (34°02'59"N, 005°32'35"W), 438 m a.s.l., 11.05.2013, leg. C. Stanciu; 2 specs., Dchar, Beni Mtir, bank of Oued el Abiod river (34°08'54"N, 004°21'19"W), 264 m a.s.l., 12.05.2013, leg. C. Pârvu, C. Stanciu; 1 spec., Berkane Delta, 14.05.2013, leg. R. Popescu-Mirceni; 6 specs., Valley of Moulouya river, 20 km west of Saidia (35°07'20"N, 002°20'38"W), 14.05.2013, leg. C. Stanciu; 1 spec., Ksabi, Moulouya, Valley of Moulouya river (35°51'53"N, 004°16'43"W), 1004 m a.s.l., 22.05.2013, leg. G. Chişamera.

Distribution: the native range of *C. bankii* is the Mediterranean region (North Africa: Algeria, Canary Islands, Morocco, Tunisia); in Europe it is distributed in France, Great Britain, Italy, Malta, Madeira Archipelago, Portugal, Spain, Switzerland (Kippenberg, op. cit.); according to Cox (2007) and Beenen & Roques (2010), *C. bankii* is an alien species in Europe.

Biology: phytophagous species; host plants: *Plantago lanceolata*, *Ballota nigra*, *Mentha* and other Lamiaceae (Beenen & Roques, op. cit.).

Subgenus *Synerga* Weise, 1900

Chrysolina viridana chloris (Lucas, 1849)

Examined material: 1 spec., Volubilis, archaeological site (34°04'19"N, 005°33'08"W), 390 m a.s.l., 10.05.2013, leg. G. Chişamera.

Distribution: Europe: Portugal, Spain; North Africa: Algeria, Morocco, Tunisia (Kippenberg, op. cit.).

Biology: the host plants are represented by aromatic Lamiaceae (*Mentha*, *Salvia*).

Subfamily Galerucinae Latreille, 1802
 Subtribe Luperina Gistel, 1848
 Genus *Exosoma* Jacoby, 1903

Exosoma lusitanicum (Linnaeus, 1767)

Examined material: 5 specs., Volubilis, archaeological site (34°04'19"N, 005°33'08"W), 390 m a.s.l., 10.05.2013, leg. C. Constantinescu, C. Stanciu, R. Zaharia; 1 spec., Dchar, Beni Mtir, bank of Oued el Abiod river (34°08'54"N, 004°21'19"W), 264 m a.s.l., 12.05.2013, leg. G. Chişamera.

Distribution: Europe: France, Italy, Portugal, Spain, Switzerland; North Africa: Morocco, Tunisia; Asia: Iran (Beenen, op. cit.).

Biology: polyphagous species, anthophagous; host plants are species of *Leucanthemum*, *Quercus*, *Narcissus*, *Matricaria*, *Taraxacum*, *Anthemis*, *Cichorium*, *Eryngium*, *Tragopogon*, *Muscari* etc. (García-Ocejo & Gurrea, 1991).

Subfamily Cryptocephalinae Gyllenhal, 1813

Tribe Clytrini Kirby, 1837

Subtribe Clytrina Kirby, 1837

Genus *Labidostomis* Chevrolat, 1836

Subgenus *Chlorostola* Weise, 1881

Labidostomis hordei (Fabricius, 1787)

Examined material: 1 spec., Mouley Idriss (34°02'59"N, 005°32'35"W), 438 m a.s.l., 11.05.2013, leg. C. Stanciu; 1 spec., Valley of Moulouya river, about 20 km west of Saidia (35°07'20"N, 002°20'38"W), 14.05.2013, leg. G. Chişamera.

Distribution: Europe: Portugal, Spain; North Africa: Algeria, Morocco, Tunisia (Regalin & Medvedev, op. cit.).

Subgenus *Labidostomis* Chevrolat, 1836

Labidostomis taxicornis (Fabricius, 1792)

Examined material: 2 specs., Volubilis, archaeological site (34°04'19"N, 005°33'08"W), 390 m a.s.l., 10.05.2013, leg. C. Stanciu, R. Zaharia; 2 specs., Moulay Idriss (34°02'59"N, 005°32'35"W), 438 m a.s.l., 11.05.2013, leg. C. Stanciu; 3 specs., Dchar, Beni Mtir, bank of Oued el Abiod river (34°08'54"N, 004°21'19"W), 264 m a.s.l., 12.05.2013, leg. C. Pârvu.

Distribution: Europe: Croatia, France, Italy, Macedonia, Portugal, Spain; North Africa: Algeria, Libya, Morocco, Tunisia (Regalin & Medvedev, op. cit.).

Biology: host plants: *Rumex* (Rozner & Rozner, 2013).

Genus *Lachnaia* Chevrolat, 1836

Subgenus *Barathraea* Lacordaire, 1848

Lachnaia octomaculata (Pic, 1895) (Fig. 1 D)

Examined material: 1 spec., Volubilis, archaeological site (34°04'19"N, 005°33'08"W), 390 m a.s.l., 10.05.2013, leg. R. Zaharia.

Distribution: North Africa: Algeria, Morocco (Regalin & Medvedev, op. cit.).

Subgenus *Lachnaia* Chevrolat, 1836

Lachnaia paradoxa (Olivier, 1808)

Examined material: 7 specs., Volubilis, archaeological site (34°04'19"N, 005°33'08"W), 390 m a.s.l., 10.05.2013, leg. G. Chişamera, C. Stanciu; 2 specs., Ksabi, Moulouya, Valley of Moulouya river (32°51'53"N, 004°16'43"W), 490 m a.s.l., 18.05.2013, leg. C. Stanciu.

Distribution: Europe: France (Pyrénées-Orientales), Italy (Sicily), Portugal, Spain; North Africa: Algeria, Egypt, Libya, Morocco, Tunisia (Regalin & Medvedev, op. cit.).
Biology: the species was found on Anacardiaceae (*Pistacia*) and Fagaceae (*Quercus*) (Jolivet, 1997).

Lachnaia puncticolis Chevrolat, 1840

Examined material: 1 spec., Volubilis, archaeological site (34°04'19"N, 005°33'08"W), 390 m a.s.l., 10.05.2013, leg. C. Pârvu; 3 specs., Moulay Idriss (34°02'59"N, 005°32'35"W), 438 m a.s.l., 11.05.2013, leg. R. Popescu-Mirceni, R. Zaharia.

Distribution: Europe: France, Portugal, Spain; North Africa: Algeria, Libya, Morocco, Tunisia (Regalin & Medvedev, op. cit.).

Genus *Macrolenes* Chevrolat, 1836

Macrolenes dentipes (Olivier, 1808)

Examined material: 1 spec., Dchar, Beni Mtir, bank of Oued el Abiod River (34°08'54"N, 004°21'19"W), 264 m a.s.l., 12.05.2013, leg. G. Chişamera.

Distribution: Europe: Albania, Austria, Bosnia Herzegovina, Bulgaria, Croatia, France, Greece, Italy, Montenegro, Macedonia, Slovenia, Spain; North Africa: Algeria, Morocco, Tunisia; Asia: Turkey ("Mesopotamie") (Regalin & Medvedev, op. cit.).

Biology: polyphagous; the host plants are *Rubus coriaria*, *Pistacia lentisus* and *Quercus* (Rozner & Rozner, 2013).

Genus *Tituboea* Lacordaire, 1848

Tituboea sexmaculata (Fabricius, 1781)

Examined material: 1 spec., Dchar, Beni Mtir, bank of Oued el Abiod river (34°08'54"N, 004°21'19"W), 264 m a.s.l., 12.05.2013, leg. G. Chişamera.

Distribution: Europe: France, Italy, Portugal, Spain; North Africa: Algeria, Morocco, Tunisia; Asia: Iran, Israel, Lebanon, Syria, Turkey (Regalin & Medvedev, op. cit.).

Tribe Cryptocephalini Gyllenhal, 1813

Subtribe Cryptocephalina Gyllenhal, 1813

Genus *Cryptocephalus* Geoffroy, 1762

Subgenus *Cryptocephalus* Geoffroy, 1762

Cryptocephalus rugicollis Olivier, 1791

Examined material: 2 specs., Sidi Kaouki (31°19'40"N, 009°47'36"W), 25 m a.s.l., 22.03.2012, 11.04.2012, leg. P. M. Bogdan, C. Pârvu; 2 specs., Rabat, toward Volubilis (33°50'52"N, 005°36'55"W), 652 m a.s.l., 10.05.2013, leg. C. Stanciu; 2 specs., Dchar, Beni Mtir, bank of the Oued el Abiod river (34°08'54"N, 004°21'19"W), 264 m a.s.l., 12.05.2013, leg. C. Pârvu.

Distribution: Europe: France, Greece, Italy, Portugal, Spain, Turkey; North Africa: Algeria, Libya, Morocco, Tunisia; Asia: Jordan, Turkey (Lopatin & Smetana, op. cit.); a very common species, sometimes appearing in large numbers, collected very often in Morocco, Algeria and Tunisia (Maican, op. cit.; Warchalowski, pers. comm.).

Biology: xerophilous species, strictly associated with the Mediterranean area; oligophagous; it feeds on various genera of Asteraceae (Sassi & Kismali, 2000).

Out of the 26 species (eight species of Cerambycidae and 18 species of Chrysomelidae) identified in the material collected during the previous expedition ("Atlas" 2007) in Morocco, the following were found again: *Certallum ebulinum* (L.), *Agapanthia annularis* (Oliv.), *A. irrorata* (Fab.), *Exosoma lusitanicum* (L.), *Labidostomis*

hordei (Fab.), *L. taxicornis* (Fab.), *Lachnaia octomaculata* (Pic), *L. paradoxa* (Oliv.), *L. puncticollis* Chevr., *Tituboea sexmaculata* (Fab.) and *Cryptocephalus rugicollis* Oliv.

Macrolenes dentipes (Oliv.), *Chrysolina bankii* (Fab.), *C. viridana chloris* (Lucas), *Derolus mauritanicus* (Buquet), *Neoplocaederus caroli* (Leprieur), *Phytoecia rufipes* Oliv. and *Stenopterus ater* (L.) are new acquisitions in the collections of “Grigore Antipa” National Museum of Natural History.

From the species strictly distributed in the Mediterranean area, we mention: *Derolus mauritanicus* (Buquet), *Neoplocaederus caroli* (Leprieur), *Agapanthia annularis* (Oliv.), *A. irrorata* (Fab.), *Chrysolina viridana chloris* (Lucas), *C. bankii* (Fab.), *Labidostomis hordei* (Fab.), *L. taxicornis* (Fab.), *Lachnaia paradoxa* (Oliv.), *L. puncticollis* Chevr., *Tituboea sexmaculata* (Fab.), *Macrolenes dentipes* (Oliv.) and *Cryptocephalus rugicollis* Oliv. *Lachnaia octomaculata* (Pic) is an endemic species in North-Africa (Algeria, Morocco).

Until now, a total of 33 species (among them, 12 Cerambycidae species and 21 Chrysomelidae species) were identified in the material collected during “Atlas” 2007, “Dakhla” 2012 and “Merzouga” 2013 expeditions organized in Morocco.

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DATE NOI REFERITOARE LA CERAMBYCIDELE ȘI CHRYSOMELIDELE (COLEOPTERA: CHRYSOMELOIDEA) COLECTATE ÎN EXPEDIȚIILE MEDITERANEENE [REZULTATELE EXPEDIȚIILOR “DAKHLA” (2012) ȘI “MERZOUGA” (2013) ÎN MAROC]

REZUMAT

Lucrarea prezintă rezultatele studiului materialului de cerambycide și crisomelide colectat în Maroc, în cursul expedițiilor “Dakhla” (2012) și “Merzouga” (2013). Cercetările au vizat studiul biodiversității din zona circummediteraneană și s-au desfășurat în cadrul proiectului “Contribuții românești la studiul faunei mediteraneene”. Sunt prezentate date noi de distribuție a speciilor de cerambycide și crisomelide în Maroc, însoțite de informații referitoare la distribuția generală și biologia acestor specii. Dintre speciile tipic mediteraneene, intrate în colecțiile de coleoptere ale Muzeului Național de Istorie Naturală “Grigore Antipa”, menționăm: *Derolus mauritanicus* (Buquet), *Neoplocaederus caroli* (Leprieur), *Agapanthia annularis* (Oliv.), *A. irrorata* (Fab.), *Macrolenes dentipes* (Oliv.) *Chrysolina viridana chloris* (Lucas), *C. bankii* (Fab.), *Labidostomis hordei* (Fab.), *L. taxicornis* (Fab.), *Lachnaia paradoxa* (Oliv.), *L. puncticollis* Chevr., *Tituboea sexmaculata* (Fab.) și *Cryptocephalus rugicollis* Oliv. *Lachnaia octomaculata* (Pic) este endemică în Africa de Nord (Algeria, Maroc).

LITERATURE CITED

- ADAM, C., L. A. MOSCALIUC, 2013 - Moroccan exploits. “Dakhla” (2012) and “Merzouga” (2013) scientific expeditions [Collective photo exhibition]. pp.: 219-220. In: D. Murariu, C. Adam, G. Chișamera, E. Iorgu, L. O. Popa, O. P. Popa (eds), Annual Zoological Congress of “Grigore Antipa” Museum - Book of abstracts. “Grigore Antipa” National Museum of Natural History, Bucharest, Romania, 225 pp.
- BEENEN, R., 2010 - Subfamily Galerucinae Latreille, 1802. pp. 443-491. In: I. Löbl, A. Smetana (eds), Catalogue of Palaearctic Coleoptera, Chrysomeloidea, 6, Apollo Books, Stenstrup, 924 pp.

- BEENEN, R., A. ROQUES, 2010 - Leaf and Seed Beetles (Coleoptera, Chrysomelidae). Chapter 8.3. *In*: Roques, A. et al. (eds), Alien terrestrial arthropods of Europe. *BioRisk*, 4 (1): 267-292.
- BENSE, U., 1995 - Longhorn Beetles, Illustrated key to the Cerambycidae and Vesperidae of Europe. Margraf Verlag, Germany, 512 pp.
- BRUSTEL, H., P. BERGER, C. COCQUEMPOT, 2002 - Catalogue des Vesperidae et des Cerambycidae de la faune de France (Coleoptera). *Annales de la Société Entomologique de France* (n.s.), 38 (4): 443-461.
- COCQUEMPOT, C., Å. LINDELÖW, 2010 - Longhorn beetles (Coleoptera, Cerambycidae). Chapter 8.1. *In*: Roques A. et al. (eds), Alien terrestrial arthropods of Europe. *BioRisk*, 4 (1): 193-218.
- COX, M. L., 2007 - Atlas of the seed and leaf-beetles of Britain and Ireland. Oxford, Information Press, 336 pp.
- GARCÍA-OCEJO, A., P. GURREA, 1991 - Relación entre los hábitos tróficos y la distribución por pisos bioclimáticos de la Sierra de Gredos de Chrysomelidae (Coleoptera) asociados a genisteas. *Miscellanea zoológica*, 15: 137-145.
- HOSKOVEC, M., M. REJZEK, 2009 - Longhorn Beetles (Cerambycidae) of the West Palaearctic Region. Available online at: <http://www.cerambyx.uochb.cz>.
- JOLIVET, P., 1997, *Biologie des Coléoptères Chrysomélides*. Société Nouvelle des Éditions Boubée, Paris, 274 pp.
- KIPPENBERG, H., 2010 - Subfamily Chrysomelinae Latreille, 1802. Pp. 390-442. *In*: I. Löbl, A. Smetana (eds), Catalogue of Palaearctic Coleoptera, Chrysomeloidea, 6, Apollo Books, Stenstrup, 924 pp.
- LOPATIN, I. A., A. SMETANA, 2010 - Genus *Cryptocephalus* Geoffroy, 1762. Pp. 580-606. *In*: I. Löbl, A. Smetana (eds), Catalogue of Palaearctic Coleoptera, Chrysomeloidea, 6, Apollo Books, Stenstrup, 924 pp.
- LÖBL, I., A. SMETANA (eds.), 2010 - Catalogue of Palaearctic Coleoptera. Chrysomeloidea, 6, Apollo Books, Stenstrup, 924 pp.
- MAICAN, S., 2007 - Some mediterranean Chrysomelids species (Coleoptera: Chrysomelidae) newly entered in the collections of "Grigore Antipa" National Museum of Natural History [Results of expeditions from Turkey and Tunisia, 2005-2006]. *Travaux du Muséum National d'Histore Naturelle "Grigore Antipa"*, 50: 421-429.
- MAICAN, S., R. SERAFIM, 2009 - Data about Cerambycidae and Chrysomelidae (Coleoptera: Chrysomeloidea) collected from mediterranean expeditions [Results of the "Taurus" 2005, "Focida" 2006, "Punia" 2006, "Atlas" 2007 and "Euphrates" 2008 expeditions]. *Travaux du Muséum National d'Histore Naturelle "Grigore Antipa"*, 52: 415-428.
- MOSCALIUC, L. A., 2014 - Some salticid spiders (Araneae: Salticidae) collected during "Dahla" (2012) and "Merzouga" (2013) scientific expeditions in Morocco and notes on their distribution. Pp.: 120. *In*: L. O. Popa, C. Adam, G. Chișamera, E. Iorgu, D. Murariu, O. P. Popa (eds), International Zoological Congress of "Grigore Antipa" Museum - Book of abstracts. "Grigore Antipa" National Museum of Natural History, Bucharest, Romania, 230 pp.
- PÂRVU, C., 2007 - Données générales sur le projet "Contributions roumaines à la recherche de la faune méditerranéenne". *Travaux du Muséum National d'Histore Naturelle "Grigore Antipa"*, 50: 417-420.
- REGALIN, R., L. N. MEDVEDEV, 2010 - Tribe Clytrini Kirby, 1837. Pp. 564-580. *In*: I. Löbl, A. Smetana (eds), Catalogue of Palaearctic Coleoptera, Chrysomeloidea, 6, Apollo Books, Stenstrup, 924 pp.
- ROZNER, I., G. ROZNER, 2013 - Collection data to North Africa's (Morocco, Algeria, Tunisia) leaf beetle fauna (Coleoptera: Chrysomelidae). *Natura Somogyiensis*, Kaposvár, 23: 159-172.
- SAMA, G., 2014 - Fauna Europaea: Cerambycidae. *In*: P. Audisio, 2014 - Fauna Europaea: Coleoptera 2. Fauna Europaea version 1.2. Available online at: <http://www.faunaeur.org>.
- SAMA, G., I. LÖBL, 2010 - Cerambycidae - Western Palaearctic taxa, eastward to Afghanistan, excluding Oman and Yemen and the countries of the former Soviet Union. Pp. 84-334. *In*: I. Löbl, A. Smetana (eds), Catalogue of Palaearctic Coleoptera, Chrysomeloidea, 6, Apollo Books, Stenstrup, 924 pp.
- SAMA, G., J.-C. RINGENBACH, M. REJZEK M., 2005 - A preliminary survey of the Cerambycidae of Libya (Coleoptera). *Bulletin de la Société entomologique de France*, 110 (4/5): 439-454.
- SASSI, D., Ş. KISMALI, 2000 - The Cryptocephalinae of Turkey, with informations on their distribution and ecology (Coleoptera, Chrysomelidae). *Memorie della Società Entomologica Italiana*, 78 (1): 71-129.
- VILLIERS, A., 1946 - Coléoptères Cérambycides de l'Afrique du Nord. Faune de l'Empire Français, ORSC Paris, 5: 1-152.

- VILLIERS, A., 1978 - Cerambycidae, Faune des Coléoptères de France, I. - Encyclopédie entomologique, 42, Editions Lechevalier, Paris, 611 pp.
- WARCHAŁOWSKI, A., 2010 - The Palaearctic Chrysomelidae. Identification keys. 1 & 2. Warszawa, 1212 pp.

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