

Notes on Libyan Carabidae (Insecta: Coleoptera)

AMER KRAIM¹

ABSTRACT

This study provides a preliminary faunal survey of Libyan Carabidae. 10 tribes, 16 genera and 22 species were investigated and keys for their determination were developed, 16 species representing 14 genera are recognized for the first time in Libya.

INTRODUCTION

The Carabidae of Libya have been very poorly studied if at all and are known only from two faunal lists. The List made by Damiano (3) gave 5 species and the one by Edwards (4) gave 97 species. From the existing literature the following points become evident. Firstly, there is no catalogue for the Carabid fauna of Libya, nor is there any key to distinguish the species. Secondly, there is no extensive faunal study.

MATERIALS AND METHODS

This study was initiated in 1979. Areas from Derna in the east to Zwara in the west and Tragen in the South were covered in this study. Specimens were hand collected from leaves, debris and clumps of soil. Underneath stones and the litter in refuse dumps were also searched as well as decaying wood. The specimens were mounted dry on pins and points. Labeling of specimens included scientific names, kind of habitat, localities, date of collection and collector. All species were identified in the museum of the University of Arkansas, U.S.A.

CLASSIFICATION

Several schemes of classification of the Carabidae have been proposed in the past. Ball's Classification seems most clearly to illustrate the known information about the Carabidae at this time. Therefore, I chose to follow closely his classification.

Key to the tribes of Libyan Carabidae:

1. Middle coxal cavities not entirely enclosed by sterna (disjunct).
Mesepimeron attaining the middle coxal cavity (2)

¹ Department of Plant Protection, Faculty of Agriculture, University of Al-Fateh, Tripoli, S.P.L.A.J.

- Middle coxal cavities entirely enclosed by sterna (conjunct). Mesepimeron not attaining the middle coxal cavity (3)
- 2. Anterior coxal cavities open behind Carabini
- Anterior coxal cavities closed behind Scaritini
- 3. (1) Head with one supraorbital setigerous puncture over each eye (4)
- Head with two supraorbital setigerous puncture over each eye (5)
- 4. (3) Elytral margin without an internal plica near the apex, antenna with articles 1-2 with only a ring of long setae toward apex Harpalini
- Elytra margin with an internal plica toward the apex Antenna with articles. 2-3 with a ring of long setae towards apex Chlaenini
- 5. (3) Maxillary palpus with the terminal article small, subulate, about one-third the length of the penultimate article Bembidini
- Maxillary palpus with the terminal article not subulate, usually subequal in length to penultimate article (6)
- 6. (5) Clypeus with its dorsal surface concave, deflected, meeting labrum at an obtuse angle Licinini
- Clypeus plane, not deflected, meeting labrum in the same plane (7)
- 7. (6) Elytron with an internal plica near apical portion of lateral margin (8)
- Elytron without an internal plica near apical portion of lateral margin (9)
- 8. (7) Labial palpus with the penultimate article bisetose if plurisetose, then elytron has more than one dorsal puncture Pterostichini
- Labial palpus with the penultimate article plurisetose, elytron without a puncture on the disc Amarini
- 9. (7) Elytron with apical margin obliquely truncate or sinuate truncate tarsal claws pectinate Bebiini
- Elytron with apical margin not truncate, tarsal claws simple Agonini

TRIBE CARABINI

- Genus *Calosoma* Webber, 1801
Calosoma marginale Cassey

TRIBE SCARITINI

- Genus *Dyschirius* Panger, 1813
Dyschirius globulorus Say
- Genus *Scaritis* Fabricius, 1801
Scaritis impressus Fabricius

TRIBE BEMBIDINI

- Genus *Bembidion* Latreille, 1802
Bembidion absoorellum Dowlne
Bembidion patruelle Dejean

TRIBE PTEROSTICHINI

- Genus *Orthomus* Choudoir, 1838
Orthomus herytensis Rich and Sandly

TRIBE AGONINI

- Genus *Calathus* Bonelli, 1810.
Calathus fuscipus Goege.
Calathus mollis Marchamm

- Genus *Odontonyx* Stephens, 1827
Odontonyx puncticollis Lucas
 Genus *Pristanynchus* Dejean, 1828
Pristanynchus demenveni Fairmaire

TRIBE AMARINI

- Genus *Amara* Bonelli, 1810
Amara Pseudovolva Ali

TRIBE HARPALINI

- Genus *Stenolaphus* Stenphens, 1827
Stenolaphus tentanus Schrank
Stenolaphus irinoviridis Fairmera
 Genus *Harpalus* Latreille, 1802
Harpalus tenebrosus Dejean
 Genus *Acinopus* Latreille, 1829
Acinopus ambigenus Dejean

TRIBE LICININI

- Genus *Licinus* Latreille, 1802
Licinus punctatulus Fabricus

TRIBE CLOENINI

- Genus *Chlaenius* Bonelli, 1809
Chlotenius velutinus Duftschmidt.
Chlotenius Spoliatus Rassi

TRIBE LIBINI

- Genus *Microlistis* schmidt, Goebel, 1846
Microlistis carticalis Dufous
Microlistis luctuosus Haldhans
Microlistis angustefarcipatus Antoine
 Genus *Cymidid* Latreille, 1806
Cymidid retifensis Lucas.

REFERENCES

1. Allen, R.T. and Thompson, R.G. 1977. Faunal Composition and Seasonal activity of Carabidae (Insecta: Coleoptera) in three different woodland communities in Arkansas. *Annual of the Entomological Society of America* 70: 31-34.
2. Ball, G.E. 1973. Carabidae (Latreille, 1810), in: *Arnett, beetles of the United States*. The American Entomological Institute. Ann Arbor, Mich. 1112pp.
3. Damiano, A. 1961. *Elenco delle Specie di Insecti Dannosi Ricordati per la Libya fino*. Tipografia del Governo-Tripoli, Libya. 81pp.
4. Edoardo, Z. 1934. *Prodramo Della Founa Della Libia* Pubblicato Sotto gli Auspici del Ministeradelle Colonie della R. universita Di pavia, pavia Tipografia Gia Cooperativa Piazza Botta-vialanfranco XII, p. 367-385.
5. Hessien, N.A., and Kraim, A.M. 1975. Insect species caught by a light trap in Tripoli, Libya. *Libyan J. of Agr.* 4: 113-115.

إشارة عن الخنافس الأرضية (Coleoptera: Carabidae) في ليبيا

عامر كريم

المستخلص

دراسة أولية لتحديد أنواع الخنافس الأرضية الشائعة في ليبيا، تمت دراسة عشر عشائر وستة عشر جنساً وإثنين وعشرين نوعاً، كما عمل مفتاح تصنيفي لتحديد لها. ستة عشر نوعاً تنتمي إلى أربعة عشر جنساً تم تسجيلها لأول مرة في ليبيا.