
A Checklist with Some Taxonomic Notes on the Species of the Family Anthicidae (Coleoptera) Recorded In Egypt

Mohammed K. Abied

Department of Plant Protection, Faculty of Agriculture, Al-Azhar University.

Corresponding author: amerkame174@yahoo.com

Abstract

A checklist of the family Anthicidae existing in Egypt is given, based on material kept in the main reference insect collections in Egypt and records in the literature. The list includes 74 species and 16 subspecies belonging to 17 genera under four subfamilies (Anthicinae, Notoxinae, Tomoderinae and Macratriinae). Updated scientific names and synonyms are presented together with Taxonomic notes. Certain subgenera were promoted to genus rank, consequently changing in scientific names. Activity period and distribution for most species in Egypt. All taxa (subfamilies, genera and species) are alphabetically arranged.

Key words: A Checklist – Taxonomic notes – Anthicidae – Egyptian Ecological Zones.

Introduction

Family Anthicidae important applications of the reversionary work of taxonomists is the production of chicklists. They forms an essential tool in studies of biodiversity and systematic.

They are omnivorous and appear to feed on any thing that is nutritious, many species are predaceous, and several species were found associated with crops but none are serious pests. Larvae live in soil and in decayed vegetation on ground. Family Anthicidae recognized by their superficial shape, which resembles ants, pronotum is constricted, elytra with reddish yellow and cream patches or spots (**Imms**, 1937, and **White**, 1983).

Some species have an obvious horn on the anterior border of pronotum.

The number of species all over the world is approximately 3000 species (**Booth**, 1990).

From the taxonomic point of view there is no satisfactory classification (**Abdullah**, 1965) and the higher categories (subfamilies, tribes and genera) have rarely been studied. Other than being treated in part (**Schatzmayer** and **Koch**, 1933) and listing in a catalogue (**Alfieri**, 1976). Recently in 2004 **Chandler et al.**; resolved many of Anthicidae insects.

Nomenclatural problems in the Anthicidae of the Palaearctic regions. **Kejval** (2003, 2012) treated taxonomically genus *Anthelephila* in Yemen and Palaearctic region, **Uhmann** (1998), treated taxonomically fifty species of Anthicidae from Saudi Arabia.

The present work provides an updated checklist with the local distribution, Egyptian localities, and activity period of family Anthicidae in Egypt. The adult of family Anthicidae are active on the soil surface or around flowers and foliage of various

plants and trees. These beetles occur in salt marches, heaps of vegetable debris, holes, etc.

Biogeographic Remarks:

Egypt forms the North Eastern Corner of Africa, Also includes the Sinai Peninsula in Asia. The position of Egypt amongst the faunal regions of the world is a rather anomalous one, since it combines the characteristic of both palaearctic and afrotropical regions. The air temperature in Egypt frequently rises to over 40°C in the daytime during the summer and seldom falls as low as 0°C even during the coldest nights of winter (**Steyskal** and **El-Bialy**, 1967).

Egypt is a whole forms a part of the great desert belt, and it is characterized by warm and almost rainless climate. Only the Coastal Strip, Eastern Desert, Gabel Elba, and higher parts of southern Sinai mountains receive comparatively higher rainfall. This is reflected on their floral and faunal composition. Most of landmass is below 500m, which further limits potential diversity. Ecologists divide Egypt into 8 ecological zones namely: Coastal strip, Lower Nile Valley and Delta, Upper Nile Valley, Fayoum Basin, Eastern Desert, Western Desert, Gabel Elba and Sinai (Fig. 1) (**Larsen**, 1990).

Old Egyptian Coleopterologists collected many coleopteran species from localities in the neighborhood of Cairo such as Mansoriya, Abu-Rawash and Borqash; they also recorded many species from Maryut district at the Coastal strip. However, many of these species have disappeared from these localities because of severe changes in their floral and faunal composition during the last 40 years. These changes may be attributed to many reasons such as urbanization or modern agricultural activities in these localities.

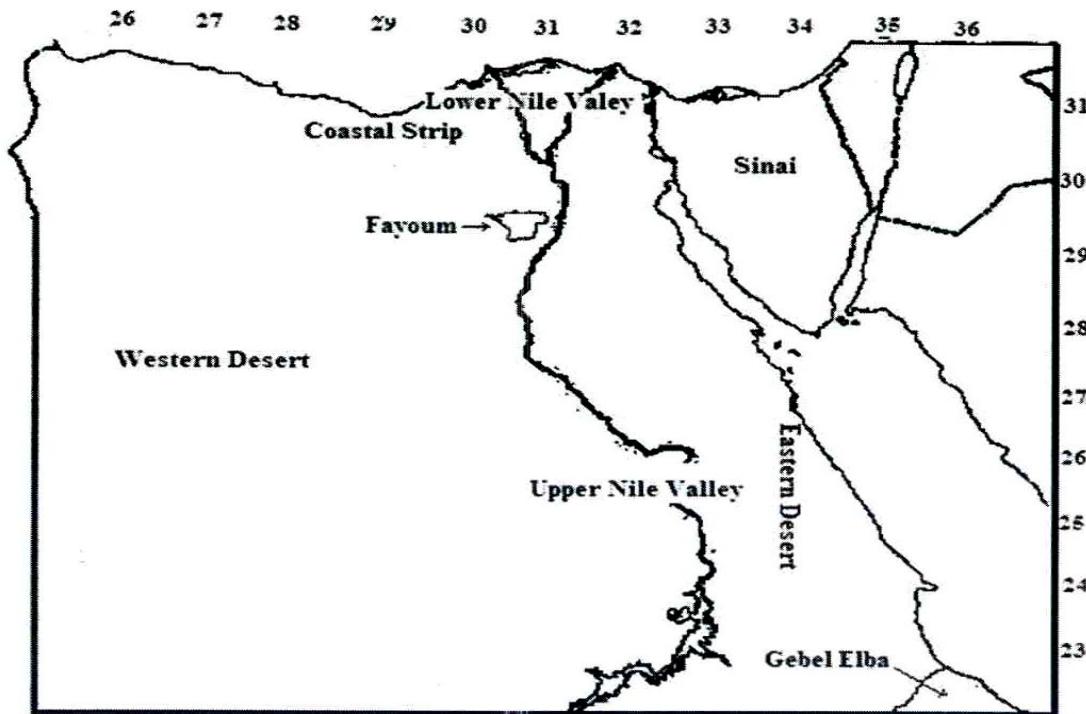


Fig. 1: Map of Egypt showing the eight Egyptian ecological zones

Material and Methods

The present work is based on all records of the species of the family Anthicidae recorded from Egypt, whether represented by specimens in the main reference insect collections in Egypt, i.e. Alfieri Collection, Faculty of Agriculture, Al-Azhar University; Ministry of Agriculture, Plant Protection Research Institute Collection; Egyptian Entomological Society Collection; Cairo University Collection, Department of Entomology, Faculty of Science and Ain Shams University collection, Department of Entomology, Faculty of Science or reported in the literature. Recent names, recent taxonomic position and senior synonyms are presented.

Taxonomic notes including activity period and distribution in Egypt are provided. The checklist are alphabetically arranged.

Results And Discussion

Family Anthicidae Laterille, 1819

Subfamily Anthicinae Laterille, 1819

Genus Amblyderus Laferte-Senecrete, 1847

Remarks: current valid name **Bold**; synonyms in brackets ().

Amblyderus maculipennis Vic, 1898

Distribution: Not determined.

Activity Period: Not determined.

Amblyderus sabulosus (Pic, 1891)

Distribution: Coastal strip.

Activity period: April

Amblyderus truncates Laferte-Senecrete, 1849.

Distribution: Coastal Strip, Lower Nile Valley and Delta.

Activity Period: April to August.

Tribe: Formicomini

Genus: Anthalephila Hope, 1833

(= *Formicoma* Motschulsky, 1845)

(= *Formicomus* Laferte-Senecrete, 1849)

(= *Formicosoma* Mannerheim, 1846)

(= *Orthauchen* Kreklich, 1925)

Anthelephila alfieri Pic, 1924.

Distribution: East Coastal Strip and Upper Nile Valley

Activity Period: March and April

Anthelephila amaena

(= *Anthelephila mellyi* Pic, 1894)

Distribution: Lower Nile Valley.

Activity Period: May

Anthelephila anastase Pic, 1935

Distribution: Upper Nile Valley Laferte-Senecrete, 1849

Activity Period: March and April

Anthelephila angustiformis Fairmaire, 1893

(= *Anthelephila filicollis* Pic, 1898)

Distribution: Sinai

Activity period: Not determined.

Anthelephila bimaculatipennis Pic, 1939

Distribution: Sinai

Activity Period: May

Distribution: North Coast, Lower Nile Valley and Western Desert.
Activity Period: April, June, September and November.
Cyclodinus larvipennis Marseul, 1879
(= *Cyclodinus graecus* Pic, 1896)
(= *Cyclodinus motschulskyi* Pic, 1894)
(= *Cyclodinus testaceipes* Pic, 1892)
Distribution: Recorded from different areas.
Activity Period: January to December.
Cyclodinus ustulatus ustulatus Laferte-Senecrete, 1849
(= *Cyclodinus lacustris* Pic, 1901)
Distribution: Upper and Lower Nile Valley, Fayoum and Sinai
Activity Period: March to November.
Tribe: Endomini
Genus: Endomia Laporte, 1840
(= *Ochthenomus* Schmidt, 1842)
Endomia lafeburei Laferte-Senecrete, 1849.
(= *Endomia bivittata* Truhui, 1855)
(= *Endomia leprieuri* Pic, 1893)
Distribution: Western Part of Mediterranean Coast, Lower and Upper Nile Valley, Sinai and Fayoum.
Activity Period: February to December.
Endomia occipitalis Dufour, 1843.
(= *Endomia pallidicolor* Pic, 1913)
(= *Endomia punctatu* Laferte-Senecrete)
(= *Endomia huadrinatata* Pic, 1913)
Distribution: Western Part of Mediterranean Coast and Sinai.
Activity Period: Not determined.
Endomia tenuicollis tenuicollis Rossi, 1792
(= *Endomia angustata* Laferte-Senecrete, 1847)
(= *Endomia alongatissima* Laporte, 1840)
(= *Endomia melanocephala* Kuster, 1847)
(= *Endomia obscuripennis* Pic, 1913)
Distribution: Eastern Desert and Sinai.
Activity Period: Not determined.
Endomia unifasciata unifasciata Bonelli, 1812
(= *Endomia caucasica* Baudi Di Selve, 1878)
(= *Endomia maculata* Pic, 1919)
(= *Endomia sinuata* Schmidt, 1842)
Distribution: Eastern Desert and Sinai.
Activity Period: Not determined.
Genus: Hirticollis Marseul, 1879.
(= *Hirticomus* Pic, 1894)
Hirticollis floreus Laferte-Senecrete, 1849
Distribution: Lower and Upper Nile Valley and Eastern Desert.
Activity Period: May, April, July, October.
Hirticollis hispidus Rossi, 1792
(= *Hirticollis bicolor* Olivier, 1795)
(= *Hirticollis hirtellus* Creutzer, 1796)
Distribution: Western Part the Mediterranean Coast, Lower and Upper Nile Valley and Eastern Desert.
Activity Period: February to October.
Genus: Leptaleus Laferte-Senecrete, 1849.
(= *Ephippicollis* Marseul, 1879)
Leptaleus glabellus Truhui, 1855.

Distribution: Lower Nile Valley Western Desert and Sinai.
Activity Period: April and May.
Leptaleus klugi klugi Laferte-Senecrete, 1849.
(= *Leptaleus truncatus* Fairmair, 1892)
Distribution: Upper and Lower Nile Valley, Fayoum and Eastern Desert.
Activity Period: May to November.
Leptalus maximicollis Pic, 1893
Distribution: Sinai
Activity Period: Not determined.
Leptaleus punctatissimus Fairmaire, 1893
Distribution: Not determined.
Activity Period: Not determined.
Leptaleus rodriguesi Laterille, 1804
(= *Leptaleus postreductus* Pic, 1919)
(= *Leptaleus pulchellus* Laferte-Senecrete, 1842)
(= *Leptaleus pulchellus* Schmidt, 1842)
(= *Leptaleus rufescens* Pic, 1891)
(= *Leptaleus subinfasciatus* Pic, 1916)
Distribution: Not determined.
Activity Period: Not determined.
Tribe: Microhorini Genus: Microhoria Chevrolat, 1877.
(= *Bifossicollis* Marseul, 1879)
(= *Immicrohoria* Pic, 1894)
(= *Monstrosipedes* Marseul, 1879)
(= *Normalipedes* Marseul, 1879)
(= *Platyhoria* Bonadona, 1952)
(= *Submicrohoria* Bonadona, 1952)
Microhoria chakouri Pic, 1909
Distribution: Upper and Lower Nile Valley.
Activity Period: April to September.
Microhoria hafidi Pic, 1923
Distribution: Western Part of Mediterranean Coast, Lower Nile Valley, Eastern Desert and Sinai.
Activity Period: March to May.

Microhoria iscariotae Laferte-Senecrete, 1849
Distribution: Western Part of Mediterranean Coast, Upper Nile Valley and Sinai.
Activity Period: February, March, April, August, September and November.
Microhoria latipennis Pic, 1892
Distribution: Not determined.
Activity Period: Not determined.
Microhoria rabinovitchi Koch, 1935
Distribution: Eastern desert.
Activity Period: June.
Genus: Omonadus Mulsant and Ray, 1866.
(= *Hemantus* Casey, 1895)
(= *Trapezicollis* Marseul, 1879)
(= *Trapezicomus* Pie, 1894)
(= *Trapezonotus* Sahlberg, 1913)
Omonadus floralis Linnaeus, 1758 (= *Omonadus basalis* Villa, 1838)
(= *Omonadus basillaris* Say, 1824)
(= *Omonadus breviculus* Phillipi, 1824)
(= *Omonadus calycinus* Panzer, 1912)

- (= *Omonadus fallax* Broun, 1893)
(= *Omonadus formicarius* Olivier, 1795)
(= *Omonadus formicoides* Geoffroy, 1785)
(= *Omonadus fuscus* Marsham, 1802)
(= *Omonadus masauensis* Pic, 1900)
(= *Omonadus mymicocephalus* Rossi, 1792)
(= *Omonadus pedicularius* Schrank, 1781)
(= *Omonadus reducteapicalis* Pic, 1915)
(= *Omonadus semirufus* Fairmaire and Germain, 1860)
(= *Omonadus syriacus* Baudi, 1881)
- Distribution:** This species was recorded from all the geomorphologic regions in Egypt except Gabal Elba.
- Activity Period:** January to December.
- Genus:** *Omonadus* Koch, 1931
(= *Omonadus formicarius formicarius* Goeze, 1777)
(= *Omonadus picianus* Koch, 1931)
(= *Omonadus huishuillies* Thomson, 1864)
- Distribution:** The species was recorded from all geomorphologic regions in Egypt.
- Activity Period:** January to December.
- Genus:** *Pseudoleptaleus* Pic, 1900
Pseudoleptaleus unifasciatus unifasciatus Desbrochers, 1875
(= *Pseudoleptaleus sublatus* Pic, 1914)
- Distribution:** Upper and Lower Nile Valley, Western of the Mediterranean Coast, Eastern Desert and Sinai.
- Activity Period:** February to December.
- Genus:** *Stenidius* Laferte-Senecrete, 1847
(= *Stenocollis* Marseul, 1879)
(= *Stenidius* Laferte-Senecrete, 1849)
- Stenidius arisidis** Tic, 1893
- Distribution:** Western Part of Mediterranean Coast and Sinai.
- Activity Period:** March and April.
- Stenidius vittatus hartliebi** Pic, 1899
- Distribution:** Upper and Lower Nile Valley and Western of Mediterranean Coast.
- Activity Period:** January, April, Jun, July, August, September, July, February, December, October.
- Stenidius vittatus vittatus** Lucas, 1843.
- Distribution:** Lower Nile Valley.
- Activity Period:** June to August.
- Genus:** *Striticollis* Marseul, 1879
(= *Striticomus* Pic, 1894)
(= *Sulcicollus* Marseul, 1879)
- Striticollis goebelii** Laferte-Senecrete, 1849
(= *Striticollis herzi* Pic, 1905)
(= *Striticollis incrinitus* Pic, 1929)
- Distribution:** Sinai.
- Activity Period:** Not determined.
- Striticollis modestus** Laferte-Senecrete, 1849
- Distribution:** Upper and Lower Nile Valley Fayoum and Sinai.
- Activity Period:** March to December.
- Striticollis ophthalmicum** Rotenberry, 1871
(= *Striticollis dromioides* Pic, 1894)
(= *Striticollis megalops* Marseul, 1879)
- Distribution:** Lower Nile Valley.
- Activity Period:** October.
- Striticollis peyerhoffi** Pic, 1902.
- Distribution:** Lower Nile Valley, Sinai and Eastern Desert.
- Activity Period:** June to October.
- Striticollis tobias** Marseul, 1879.
(= *Striticollis binhanus* Pic, 1927)
(= *Striticollis corporaali* Pic, 1923)
(= *Striticollis riiaufitiensis* Pic, 1898)
(= *Striticollis rhunduius* Shamp, 1885)
- Striticollis parisiensis** Saint, 1952
(= *Striticollis postoculatus* Fairmaire, 1846)
(= *Striticollis tanakai* Nomura, 1960)
(= *Striticollis turanicus* Reitter, 1889)
- Distribution:** Upper and Lower Nile Valley, Eastern Desert and Western Desert.
- Activity Period:** April to November.
- Genus:** *Tenuicollis* Marseul, 1879.
(= *Tenuicomus* Pic, 1894)
- Tenuicollis alfieri** Pic, 1923
(= *Anthicus alfieri* Pic, 1923)
- Distribution:** Sinai and Upper Nile Valley.
- Activity Period:** April and March.
- Subfamily:** *Macratriinae* Leconte, 1862
- Genus:** *Macratria* Newman, 1838.
(= *Macrarthrius* Laferte-Senecrete-Senecrete, 1849)
- Macratria Leprieuri** Reiche, 1864
(= *Macratria brunnipennis* Pic, 1899)
(= *Macratria gracilis* Pic, 1907)
- Distribution:** Not determined.
- Activity Period:** Not determined.
- Subfamily:** *Notoxinae* Stephens, 1829
- Genus:** *Mecynotarsus* Laferte-Senecrete, 1849
- Mecynotarsus bison** Olivier, 1811
(= *Mecynotarus algericus* Desbrochers, 1881)
(= *Mecynotarus beccarii* Pic, 1894)
(= *Mecynotarus bimaculatus* Desbrochers, 1893)
(= *Mecynotarus cornutus* Pic, 1896)
(= *Mecynotarus ferrantei* Pic, 1910)
(= *Mecynotarus latior* Pic, 1897)
(= *Mecynotarus macularis* Baudi, 1877)
(= *Mecynotarus mellyi* Marseul, 1878)
(= *Mecynotarus osiris* Pic, 1893)
(= *Mecynotarus sabulosus* Pic, 1893)
- Distribution:** Western Part of Mediterranean Coast, Lower and Upper Nile Valley, Eastern desert and Sinai.
- Activity Period:** February to December.
- Mecynotarsus semicinctus** Wollaston, 1865
- Distribution:** Upper and Lower Nile Valley.
- Activity Period:** March, June, July, September and December.
- Mecynotarsus truquii** Marseul, 1879
(= *Mecynotarsus alatus* Koch, 1935)
(= *Mecynotarsus lysholmi* Pic, 1899)
- Distribution:** Upper and Lower Nile Valley and Eastern Desert.
- Activity Period:** January to December.
- Genus:** *Notoxus* Geoffroy, 1762.
(= *Caratoderus* Blanchard, 1845)

(= *Monocarus* Villa, 1833)
Notoxus lancifer lancifer Olivier, 1811
(= *Notoxus chaldaeus* Laferte-Senecrete-Senecture, 1849)
Distribution: Sinai
Activity Period: Not determined.
Notoxus numidicus Lucas, 1843
(= *Notoxus aristidis* Pic, 1893)
(= *Notoxus cloueti* Chobaut, 1895)
(= *Notoxus mauritii* Pic, 1900)
Distribution: West Part of Mediterranean Coast.
Activity Period: May to July.
Notoxus syriacus Laferte-Senecrete, 1849
Distribution: Western Part of Mediterranean Coast.
Activity Period: June.
Genus: *Pseudonotoxus* Pic, 1899
Pseudonotoxus testaceus testaceus Laferte-Senecrete, 1849
(= *Pseudonotoxus feminus* Bock, 1965)
(= *Pseudonotoxus photophilus* Hille, 1961)
Distribution: Upper and Lower Nile valley.
Activity Period: January, April, June, July, October and December.
Subfamily: Tomoderinae Bonadona, 1961
Genus: Tomoderus Laferte-Senecrete, 1849
Tomoderus nitidus Pic, 1894
Distribution: Not determined.
Activity Period: Not determined.

Conclusion

The current data revealed that the family Anthicidae concluded four subfamilies, three tribes and 24 genera. Alfieri (1976) mentioned in his monograph "Coleoptera of Egypt", two tribes (Anthicinae and Notoxini), whereas, Chandler *et al.*, as mentioned in catalogue of Coleoptera of Palaearctic region, promoted and classified both tribes (Anthicinae and Notoxini), to four subfamilies (Anthicinae Notoxinae, Tomoderinae, and Macratriinae). Nine subgenera were promoted to genera rank (Uhmann, 1998), were as follows: *Birricomus*, *Birvicomus*, *Cordicomus*, *Cyclodenus*, *Hirticomus*, *Pubicomus*, *Stricticomus*, *Tenuicomus*, and *Omonadus*.

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قائمة مرجعية حديثة لأنواع التابعة لفصيلة أنيسيدي (خنافس الأزهار الشبيهة بالنمل) (رتبة غمديّة الأجنحة) المسجلة في مصر مع بعض الملاحظات التقسيمية

محمد كامل عبيد

يحتوي هذا البحث على قائمة حشرات فصيلة أنيسيدي من رتبة غمديّة الأجنحة بناءً على العينات المحفوظة بالجموعات الحشرية المصرية الرئيسية في مصر وكذلك التسجيلات في المراجع العلمية الحشرية المحلية والعالمية. تضم القائمة 74 نوعاً و 16 نوعاً تتنتمي إلى 17 جنس تابعة لأربعة فصيلات (أنيسيدي، نوتوكوسيني، توموديرين ومكراتريني).

يتضمن هذا البحث الأسماء العلمية الحديثة ومرادفاتها، وكذلك بعض الملاحظات التقسيمية، حيث أن بعض الجنسيات تم تصعيدها إلى مرتبة الجنس مما ترتب عليه تغييرات في الأسماء العلمية، وتشمل فترات النشاط والتوزيع الجغرافي في مصر لمعظم الأنواع. جميع الوحدات والمراتب التصنيفية مرتبة ترتيباً أبجدياً.