



**Revision of family Noctuidae of Egypt (3)
Subfamilies “Acontiinae, Agaristinae, Amphipyrinae and Hadeninae”
(Lepidoptera, Noctuidae)**

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ABSTRACT

In the last 2 papers for the revision of Noctuidae in Egypt, we revised 7 subfamilies (Xyleninae, Acronictinae, Heliothinae, Metoponiinae, Noctuinae, Oncocnemidinae, and Plusiinae) from the 16 subfamilies belonging to family Noctuidae. In this study, we are exposed to revise four subfamilies which are Acontiinae, Agaristinae, Amphipyrinae, and Hadeninae. These subfamilies contain 22 genera contain 55 species. Subfamily Hadeninae is the most representative subfamily with 29 species under 12 genera, while subfamilies Agaristinae and Amphipyrinae are the smallest subfamilies containing three species under two genera. Subfamily Acontiinae in the 2nd subfamily with 20 species under 6 genera.

INTRODUCTION

This is the 3rd paper in a series revision of the Noctuidae of Egypt. During this study, we revised 4 subfamilies (Acontiinae, Agaristinae, Amphipyrinae, and Hadeninae).

Based on material from the main reference collections in Egypt, light traps collections, National museums, and other references, 51 species in the 4 subfamilies (Acontiinae, Agaristinae, Amphipyrinae, Hadeninae) and 21 genera were listed. Some further taxonomic changes re-proposed. Taxonomic position, synonyms, and types are included and photographs for available species are provided.

Acontiinae formerly included about 2000 species worldwide (Speidel *et al.*, 1996a), but has been considerably reduced by recently proposed classifications. In the case of western Palearctic fauna, only the genus *Acontia* Ochsenheimer, 1816 is maintained inside the new subfamily. The tribes Armadini and Aediini have been transferred from the former Catocalinae/Ophiderinae to the Acontiinae (Fibiger & Lafontaine, 2005).

In Egypt, there are 15 species belonging to 5 genera under 2 tribes

Subfamily Agaristinae includes about 450 species, predominantly distributed in the tropics: Old World about 321 species, New World about 128 species (Kiriakoff 1977 a-c). In Egypt there are 3 species belonging to 2 genera.

Subfamily Amphipyrinae contains more than 4500 species worldwide (Speidel *et al.*, 1996a). The old concept, however, is based on thoroughly unspecialized characters (no tibial spines; eyes not lashed or hairy) and the group has recently been recognized as polyphyletic. This

subfamily is currently restricted to the genera *Pyrois* Hübner, 1820 and *Amphipyra* Ochsenheimer, 1816 (Fibiger & Lafontaine, 2005; Fibiger & Hacker, 2005). So far, 3 species have been recorded in Egypt belonging to 2 genera.

The Hadeninae is a very large subfamily with more than 2400 species worldwide (Speidel *et al.*, 1996a) however, it is probably paraphyletic. In the present scope, this subfamily is mainly characterized by the hairy compound eyes of the adult moths. Tribal systematics are arranged according to Fibiger & Lafontaine (2005). 29 species from 12 genera and 2 tribes have been recorded in Egypt, mostly belonging to the tribes Hadenini and Leucaniini. Genus *Pseudohadena* transfer from Hadeninae to Xyleninae, Xylenini.

MATERIALS AND METHODS

The present work based upon:

- * The main five reference insect collections in Egypt: Collection of Ministry of Agriculture, Plant Protection Research Institute (PPRI); Collection of Faculty of Science, Cairo University (CUC); Collection of Faculty of Science, Ein Shams University (ESUC); Collection of El Alfieri, Al Azhar University, Faculty of Agriculture (ALUC) and Collection of Egyptian Entomological Society (EESC).
- * The published papers and Thesis in Egypt.
- * Data from the Collections of International Museums (BMNH, London; USNM, Smithsonian, USA; ZI, Leningrad; MNHU, Berlin; MNHN, Paris, ...etc.)
- * Main monographs of Lepidoptera in the world

Recent taxonomic position, senior synonyms, types, and host records together with local and world distribution for each species are presented. Photos for all species are also provided (as possible). Tribes, genera, and species are alphabetically arranged.

Acronymy

BMNH: The Natural History Museum, London, United Kingdom

HNHM: Hungarian Natural History Museum, Budapest, Hungary

LNK: Landessammlungen für Naturkunde, Karlsruhe, Germany

LS: Linnean Society, London, United Kingdom

MNGH: National Museum of Natural History Grigore Antipa, Bucharest, Romania

MNHN: Muséum National d'Histoire Naturelle, Paris, France

MNHU: Museum für Naturkunde der Humboldt Universität, Berlin, Germany

NHMW: Naturhistorisches Museum Wien, Vienna, Austria

NHRM: Naturhistoriska Riksmuseet, Stockholm, Sweden

NM: National Museum in Prague

USNM: National Museum of Natural History, Smithsonian Institution, Washington, U.S.A.

ZI: Zoological Institute, Academy of Sciences, Leningrad, Russia

ZSM: Zoologische Staatssammlung, Münchenhausenstr. Munich, Germany

ZMHB: Zoologisches Institut und Museum, Universität Hamburg, Germany.

ZMUC: Zoologisk Museum, Universitetsparken, Copenhagen, Denmark

RESULTS AND DISCUSSION

After the revision of the specimens, the list of Nocouidea in Egypt (Amer & El-Torky, 2017) and all references we found:

- * *Pseudohadena jordana* (Staudinger, 1900) transfer from subfamily Hadeninae to subfamily Xyleninae
- * *Aegoceropsis brevivitta* (Hampson, 1901) added to subfamily Agaristinae
- * *Anarta sodae* (Boisduval, 1829) added to subfamily Hadeninae

- * *Anarta sodae* (Boisduval, 1829) added to subfamily Hadeninae
- * Transfer the genus *Eulocastra* from subfamily Acontiinae to subfamily Eustrotiinae
- * There are 14 types (or types synonymy) are recorded from 2 subfamilies (Acontiinae and Hadeninae)

Subfamily Acontiinae:

- * *Acontia asbenensis* (Rothschild, 1921) from Bir Tarfa, (S. Sinai) as ***Trache hemipentha*** Wiltshire, 1947, (Holotype male, USNM, Washington; Paratype male, (BMNH, Lond.)
- * *Acontia biskrensis* Oberthür, 1887 from Gebel Elba as ***Tarache grisescens*** Rebel, 1947, (Syntype: Allfieri Coll., not found)
- * *Acontia crassivalva* (Wiltshire, 1947) from Sinai (Holotype: male, Alfieri collection (not found); USNM, Washington; genitalia in BMNH, London)
- * *Acontia dichroa* (Hampson, 1914) from Wadi Aideb (Gebel Elba) as ***Tarache seminigra*** Rebel, 1947, (Type)
- * *Armada nilotica* Bang-Hass, 1912, from Cairo (Lower Egypt); (Holotype: 2 males, MNHU, Berlin)
- * *Epharmottomena eremophila* (Rebri, 1895); from Sinai as ***M. plumbizonata*** (Type: BMNH, London); from Cairo (Lower Egypt) as ***L. plumbizonata*** (Holotype: BMNH, London)
- * *Pyraloides spodia* Rebel, 1947; from Wadi Aideb (Gebel Elba); (Holotype: Alf. Coll.; male (not found))

Subfamily Hadeninae:

- * *Cardepia sociabilis* (Graslin, 1850) from Alexandria (Coastal Strip) as ***Mamestra afra*** Bethune-Baker, 1894; (Types: BMNH, London).
- * *Hadula deserticola* (Hampson, 1905) from Suez (Eastern Desert) as ***Aglossestra deserticola*** Hampson, 1905 (Holotype: BMNH, London)
- * *Hadena syriaca* (Osthelder, 1933) from Sinai as ***Anepia imitaria* subsp. *petroffi*** Wiltshire, 1948, (Holotype: BMNH, London)
- * *Thargelia gigantea* Rebel, 1909, from W. Werdan, Ajun Mus Oasis, W, Werdan (Sinai) (Syntypes: NM, Vienna)
- * *Mamestra immiscens* Walker, 1870; from Sinai, (Type: Mount Sinai)
- * *Mamestra mixtura* Walker, 1870; from Sinai, (Type: Mount Sinai)
- * *Mythimna languida* (Walker, 1858) from Alexandria (Coastal Strip) as ***Mamestra abbas*** Bethune-Baker, 1894 and as ***Aletia abbas*** Bethune-Baker, 1894 (Holotype: BMNH, London).

During this study, we revised 4 subfamilies and 51 species under 21 genera.

List of subfamilies, genera, and species:

Subfamily: Acontiinae Guenée, 1841

Tribe Acontiini Guenée, 1841

1. *Acontia* Ochsenheimer, 1816

1. *Acontia asbenensis* (Rothschild, 1921)
2. *Acontia biskrensis* Oberthür, 1887
3. *Acontia carnescens* (Hampson, 1910)
4. *Acontia crassivalva* (Wiltshire, 1947)
5. *Acontia dichroa* (Hampson, 1914)
6. *Acontia hortensis* Swinhoe, 1884
7. *Acontia karachiensis* Swinhoe, 1889
8. *Acontia lucida* (Hufnagel, 1766)
9. *Acontia opalinooides* (Guenée, 1852)

Tribe Armadini Wiltshire, 1961

2. *Armada* Staudinger, 1884

10. *Armada dentata* (Staudinger, 1884)
11. *Armada nilotica* Bang-Haas, 1912
12. *Armada panaceorum* (Ménétriés, 1849)

3. *Epharmottomena* John, 1909

13. *Epharmottomena eremophila* (Rebel, 1895)

4. *Iranada* Wiltshire, 1977

14. *Iranada turcorum* (Zerny, 1915)

5. *Pyraloides* Rebel, 1947

15. *Pyraloides spodia* Rebel, 1947

Subfamily: Agaristinae Herrich-Schäffer, [1858]

6. *Aegoceropsis* Karsch, 1895

16. *Aegoceropsis rectilinea* Boisduval, 1836

17. *Aegoceropsis brevivitta* (Hampson, 1901)

7. *Heraclia* Hübner, 1820

18. *Heraclia geryon* (Fabricius, 1781)

Subfamily Amphipyrinae Guenée, 1837

Tribe: Amphipyriini Guenée, 1837

8. *Amphyipyra* Ochsenheimer, 1816

19. *Amphyipyra tetra* (Fabricius, 1787)

20. *Amphyipyra tragopoginis* (Clerck, 1759)

9. *Matopo* Distant, 1898

21. *Matopo selects* (Walker, 1865)

Subfamily Hadeninae Guenée, 1837

Tribe Hadenini Guenée, 1837

Subtribe: Discestrina Beck, 1996

10. *Anarta* Ochsenheimer, 1816

22. *Anarta trifolii* (Hufnagel, 1766)

23. *Anarta sodae* (Boisduval, 1829)

11. *Cardepia* Hampson, 1905

24. *Cardepia affinis* Rothschild, 1913

25. *Cardepia irratoria* (Erschoff, 1998)

26. *Cardepia sociabilis* (Graslin, 1850)

12. *Hadula* Staudinger, 1889

27. *Hadula deserticola* (Hampson, 1905)

28. *Hadula sabulorum* (Alphéraky, 1882)

29. *Hadula stoliczkana* Moore, 1878

Subtribe: Hadenina Guenée, 1852

13. *Enterpia* Guenée, 1850

30. *Enterpia laudeti* (Boisduval, 1840)

14. *Hadena* Schrank, 1802

31. *Hadena sancta* Staudinger, 1840

32. *Hadena silenes* (Hübner, 1822)

33. *Hadena silenides* (Staudinger, 1895)

34. *Hadena syriaca* (Osthelder, 1933)

15. *Odontelia* Hampson, 1905 7

35. *Odontelia daphnadeparisae* Kravchenko et. al., 2007

16. *Thargelia* Pungeler, 1900

36. *Thargelia gigantea* Rebel, 1909

Subtribe: Mamestrina Beck, 1996

17. *Haplocestra* Aurivillius, 1910

37. *Haplocestra similis* Aurivillius, 1910

18. *Hecatera* Guenée, 1852

38. *Hecatera dysodea* ([Denis & Schiffermüller], 1775)

39. *Hecatera fixseni* (Christoph, 1883)

40. *Hecatera weissi* (Draudt, 1934)

19. *Mamestra* Ochsenheimer, 1816

41. *Mamestra immiscens* Walker, 1870

42. *Mamestra mixtura* Walker, 1870

Tribe: Leucaniini Guenée, 1837

20. *Leucania* Ochsenheimer, 1816

43. *Leucania herrichii* Herrich-Schäffer, 1849

44. *Leucania loreyi* (Duponchel, 1827)

45. *Leucania palaestinae* Staudinger, 1897

46. *Leucania punctosa* (Treitschke, 1825)

47. *Leucania putrescens* (Hübner, 1824)

48. *Leucania zaea* Duponchel, 1827

21. *Mythimna* Ochsenheimer, 1816

49. *Mythimna languida* (Walker, 1858)

50. *Mythimna sicula* Treitschke, 1835

51. *Mythimna unipuncta* (Haworth, 1809)

Subfamily: Acontiinae Guenée, 1841(Plate I)

Acontiinae formerly included about 2000 species worldwide (Speidel *et al.*, 1996a), but has been considerably reduced by recently proposed classifications. The currently classified by Fibiger and Lafontaine (2005) transfer the tribes Armadini and Aediini have from the former Catocalinae/Ophiderinae to the Acontiinae; so now subfamily Acontiinae includes 4 tribes: Acontiini, Armadini, Aediini, and Hypermniini. A number of the more striking apomorphic characters, such as the hair tufts on the scaphium and the characters of the tympanic area, apply to the subfamily. The Acontiinae are mostly small moths, many of which are camouflaged as bird droppings.

In Egypt, there are 15 species belonging to 5 genera under 2 tribes

Seven species are types (or synonymy types) 4 under tribe Acontiini (*Acontia asbenensis* (Rothschild, 1921); *Acontia biskrensis* Oberthür, 1887; *Acontia crassivalva* (Wiltshire, 1947) and *Acontia dichroa* (Hampson, 1914)) and three belonging to tribe Armadini (*Armada nilotica* Bang-Hass, 1912; *Epharmottomena eremophila* (Rebri, 1895) and *Pyraloides spodia* Rebel, 1947)

1. Tribe Acontiini Guenée, 1841

1. *Acontia* Ochsenheimer, 1816

1. *Acontia asbenensis* (Rothschild, 1921)

2. *Acontia biskrensis* Oberthür, 1887

3. *Acontia carnescens* (Hampson, 1910)

4. *Acontia crassivalva* (Wiltshire, 1947)

5. *Acontia dichroa* (Hampson, 1914)

6. *Acontia hortensis* Swinhoe, 1884

7. *Acontia karachiensis* Swinhoe, 1889

8. *Acontia lucida* (Hufnagel, 1766)

9. *Acontia opalinoides* (Guenée, 1852)

2. Tribe Armadini Wiltshire, 1961

2. *Armada* Staudinger, 1884

10. *Armada dentata* (Staudinger, 1884)

11. *Armada nilotica* Bang-Haas, 1912
12. *Armada panaceorum* (Ménétriés, 1849)
- 3. Epharmottomena John, 1909**
13. *Epharmottomena eremophila* (Rebel, 1895)
- 4. Iranada Wiltshire, 1977**
14. *Iranada turcorum* (Zerny, 1915)
- 5. Pyraloides Rebel, 1947**
15. *Pyraloides spodia* Rebel, 1947

Tribe1: Acontiini Guenée, 1841

Most of these species inhabit eremic regions; few of them are truly deserticolous; the others prefer places with rich herbaceous vegetation in the temperate region, or when penetrating the deserts, they concentrate in oases. Nine species belonging to genus *Acontia* only are found in Egypt. Four species are types from Egypt (or synonymy types).

1. Acontia Ochsenheimer, 1816

1. Acontia asbenensis (Rothschild, 1921)

Trache hemipentha Wiltshire, 1947, (Holotype, Egypt, S. Sinai, Bir Tarfa, male, [USNM, Washington])

Trache asbenensis Rothschild, 1921

Common name: Unknown

Wingspan: about 26mm

Host records: L.T.

Geographical Records: Ethiopia, Niger, Oman, Saudi Arabia, United Arab Emirate, Yemen

Distribution in Egypt: Sinai

Type locality: Egypt (Sinai, Bir tarfa, 1430m) as *A. hemipentha*

Niger (Mts. Of Baguezan, Asben) as *A. asbenensis*

Type Specimens:

Holotype: Egypt, Alfierii Collection as *A. hemipentha*, & Male, (USNM, Washington)

Paratype: Egypt, Alfierii Collection as *A. hemipentha*, & Male, (BMNH, London)

Lecotype: Niger, as *A. absenensis*, Male, (BMNH, London)

2. Acontia biskrensis Oberthur, 1887

Tarache grisescens Rebel, 1947, (Synt.: Egypt, Gebel Elba)

Tarache agacinoi (Rungs, 1945), (Holot.: Morocco, Oed Leichebi MNHN, Paris)

Tarache biskrensis subsp. *orientalis* Brandt, 1893

Tarache biskrensis subsp. *agacinoi* Rungs, 1945

Common name: unknown

Wingspan: 22-26 mm

Host records: on Malvaceae

Geographical Records: Algeria, Iran, Iraq, Israel, Jordan, Kuwait, Libya, Mauritania, Morocco, Palestine, Spain, Saudi Arabia, Tunisia, United Arab Emirates

Distribution in Egypt: Lower Egypt, Coastal Stripe, Gebel Elba, Sinai

Holotype: Morocco, MNHN, Paris

Type locality: Algeria (Biskra) (as *Tarache biskrensis* Oberthur, 1887)

Egypt (Gebel Elba) (as *Tarache grisescens* Rebel, 1947)

Type Specimens:

Syntype: Egypt, (Allfieri Coll., not found) as *Tarache grisescens* Rebel, 1947

Holotype: Algeria, female, (BMNH, London) as *Tarache biskrensis* Oberthur, 1887

3. *Acontia carnescens* (Hampson, 1910)*Tarache carnescens* Hampson, 1910**Common name:** Unknown**Wingspan:** 29-34mm**Host records:** L.T.**Geographical Records:** Eritrea, Ethiopia, Kenya, Somalia, Tanzania**Distribution in Egypt:** Upper Egypt**Type Locality:** Kenya (Br. E. Africa, Sabaki Valley)**Type Specimen:****Holotype:** Male (BMNH, London)**4. *Acontia crassivalva* (Wiltshire, 1947)***Tarache crassivalva* Wiltshire, 1947**Common name:** Unknown**Wingspan:** about 28mm**Host records:** Grasses,**Geographical Records:** Saudi Arabia, Yemen**Distribution in Egypt:** Sinai, Gebel Kathrine, Wadi el-Rabaa**Type locality:** Egypt, Sinai**Type specimen:****Holotype:** Male, Alfieri collection (not found); (in USNM, Washington); genitalia in (BMNH, London)**5. *Acontia dichroa* (Hampson, 1914)***Tarache seminigra* Rebel, 1947, Type: Egypt, Gebel Elba, Wadi Aideb*Acontia seminigra* (Rebel, 1947)*Tarache dichroa* Hampson, 1914**Common name:** Unknown**Wingspan:** about 26mm**Host records:** L.T.**Geographical Records:** Djibouti, Ethiopia, India, Kenya, Saudi Arabia, Sudan, Tanzania, Yemen**Distribution in Egypt:** S. Sinai, Gebel Elba**Type locality:** Sudan, Port Sudan**Type Specimen:****Lectotype:** Male, (BMNH, London);**Paralectotype:** 2Males, (BMNH, London)**6. *Acontia hortensis* Swinhoe, 1884***Tarache audeoudi* Brandt, 1939**Common name:** Unknown**Wingspan:** about 25mm**Host records:** L.T.**Geographical Records:** Eritrea, Ethiopia, Iran, Kenya, Pakistan, Somalia, Sudan, Saudi Arabia, Yemen,**Distribution in Egypt:** Western Desert (Paris Oasis)**Type locality:** Pakistan**Type specimen:****Holotype:** Female, (BMNH, London)**7. *Acontia karachiensis* Swinhoe, 1884***Acontia karachiensis* Wiltshire, 1947

Common name: Unknown

Wingspan: about 26mm.

Host records: L.T.

Geographical Records: Ethiopia, India, Niger, Pakistan, Sudan, Tanzania, Yemen

Distribution in Egypt: Sinai

Type locality: Pakistan, Sind, Karachi

Type specimen:

Syntypes: 1 Male, & 5 Females (BMNH, London)

8. *Acontia lucida* (Hufnagel, 1766)

Phalaena lucida Hufnagel, 1766

Noctua solaris Denis & Schiffermüller, 1775; (T.: Austria, Vienna, zerstört)

Noctua albicollis Fabricius, 1781; (T.: Italia)

Phalaena Noctua rupicola Borkhausen, 1792; (T.: Germany, Frankfurt)

Noctua insolatrix Hübner, (1822); (T.: Europa)

Acontia triradiata Walker, (1858); (Holot.: Indien, Punjab, BMNH, London)

Aconthia (sic) lucida var. *triangulum* Costa, 1882; (T.: Sardinien, Oristano)

Acontia lucida var. *lugens* Alpheraky, 1889; (Synt.: Tadzhikistan, Babatagh, ZI, St. Petersb.)

Acontia lucida form *mediofasciata* Stauder, 1923; (Synt.: Jugosl., Pula)

Tarache (Acontia) lucida var. *heliodora* Schawerda, 1947; (Holot.: Irak, Mesopotamien, LN, Karlsruhe)

Common name: Pale Shoulder, White Shoulder,

Wingspan: 26 – 30mm.

Host records: cotton, *Convolvulus*, *Chenopodium*, *Taraxacum*, Labiatae (Glechoma hederacea, Nepeta mussinii), Malvaceae (Malva sylverstris, M. neglecta, *Althaea officinalis*).

Geographical Records: Albania, Algeria, Armenia, Austria, Croatia, Cyprus, England, Finland, Holland, Germany, India, Iran, Israel, Italy, Jordan, Lebanon, Libya, Malta, Morocco, Oman, Pakistan, Palestine, Portugal, Romania, Sardinia, Saudi Arabia, Sardinia, Spain, Syria, Russia, Tajikistan, Tunisia, Turkey, Ukraine, United Arab Emirates, Yemen

Distribution in Egypt: Lower Egypt, Western Desert, Sinai.

Type locality: Germany, Berlin

Type specimens:

Type: Berlin

9. *Acontia opalinoides* (Guenée, 1852)

Trache opalinoides Guenée, 1852

Common name: Unknown

Wingspan: about 28mm

Host records: *Abutilon*, *Gossypium*

Geographical Records: Angola, Cape Verde, Eritrea, Ethiopia, India, Iran, Kenya, Mali, Mauritania, Namibia, Oman, Somalia, Saudi Arabia, Sudan, Tanzania, Yemen

Distribution in Egypt: Lower Egypt, Coastal Stripe, Gebel Elba

Type locality: India S.E., Coromandel Coast

Type specimens:

Lectotype: Male, (MNHN, Paris);

Paralectotype: Male and Female, (BMNH, London)

Tribe: Armadini Wiltshire, 1961

The Armadini were formerly included in the Catocalinae (Ophiderinae), but were transferred to Acontiinae by Fibiger & Lafontaine (2005). The tribe, according to Wiltshire

(1979) and Goater et al. (2003), is comprised of two morphologically different groups of genera: the Armada, which are robust-bodied moths lacking an epaulette in the tympanal organ, and the Metoponrhis which contains slender species with an epaulette in the tympanal organ. Species of Armadini inhabit the arid and semi-arid desert zones of North Africa, the Middle East, and the dry steppe areas and deserts of Central Asia (Goater et al., 2003). In Egypt, the Armadini are represented by six species in the genera *Armada* Staudinger, 1884 *Epharmottomena* John, 1909, *Pyraloides* Rebel, 1947 and *Iranada* Wiltshire, 1977. Three types (or synonymy types) are found (*Armada nilotica* Bang-Hass, 1912; *Epharmottomena eremophila* (Rebri, 1895) and *Pyraloides spodia* Rebel, 1947). *Pyraloides spodia* Rebel, 1947 recorded only in Egypt.

2. *Armada* Staudinger, 1884

10. *Armada dentata* (Staudinger, 1884)

Acontia dentata (Staudinger, 1884)

Acrobyla afghana Hampson, 1926

Common name: Unknown

Wingspan: 26-30 mm

Host records: L.T.

Geographical Records: Afghanistan, Iran, Turkmenistan, USSR

Distribution in Egypt: S. Sinai, Gebel Elba

Type locality: Turkmen SSR

Type specimens:

Lecotype: USSR [Turkmen SSR], Askhabad. [MNHU, Berlin]

11. *Armada nilotica* Bang-Hass, 1912

Armada philbyi Wiltshire, 1979

Common name: Unknown

Wingspan: about 29 mm.

Host records: *Heliotropium luteum*, *H. arabense*

Geographical Records: Israel, Qatar, Palestine, Saudi Arabia, United Arab Emirates

Distribution in Egypt: Lower Egypt (Cairo), N. Sinai

Type locality: Egypt (Cairo)

Type specimen:

Holotype: 2Males, (MNHU, Berlin)

12. *Armada panaceorum* (Ménétriés, 1849)

Ophiusa panaceorum Ménétriés, 1848

Common name: Unknown

Wingspan: 34-37 mm

Host records: *Arnebia decumbens*, *Heterocaryum rigidum*, *Lappula ceratophora*

Geographical Records: Afghanistan, Algeria, Armenia, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Libya, Mongolia, Morocco, Palestine, Saudi Arabia, Syria, Tibet, Turkey, Uzbekistan

Distribution in Egypt: Lower Egypt, Sinai

Type locality: Uzbekistan (Bokhara)

Type Specimens:

Holotype: ZI, Leningrad, St. Petersb.

3. *Epharmottomena* Berio, 1939

13. *Epharmottomena eremophila* (Rebri, 1895)

Armada eremophila Rebel, 1895

Epharmottomena plumbizonata Warren, 1913

Metoponrhis plumbizonata Warren, 1913; (T.: Egypt, BMNH, London)

Lipatephia plumbizonata (Hampson, 1926); (Holot. Egypt, Maadi, BMNH, London)

Lipatephia plumbizonata Hampson, 1926

Armada lacroixii (D. Lucas, 1814); (Lectot.: Tunisia, Foum-Tatahouine, MNHN, Paris)

Common name: Unknown

Wingspan: about 34 mm.

Host records: L.T.

Geographical Records: Algeria, Israel, Libya, Mauritania, Morocco, Palestine, Saudi Arabia, Syria, Tunisia

Distribution in Egypt: Lower Egypt, Sinai.

Type locality: Egypt, Sinai as *Metoponrhis plumbizonata* Wareen, 1913 & as

Cairo (Maadi) *Lipatephia plumbizonata* (Hampson, 1926)

Type specimen:

Type: as *M. plumbizonata* (BMNH, London)

Holotype: as *L. plumbizonata* (BMNH, London)

4. *Iranada* Wiltshier, 1977

14. *Iranada turcorum* (Zerny, 1915)

Armada turcorum Zerny, 1915

Common name: Unkown

Wingspan: about 20mm.

Host records: L.T.

Geographical Records: Iran, Iraq, Israel, Jordan, Lebanon, Oman, Palestine, Saudi Arabia, Syria, United Arab Emirates

Distribution in Egypt: Sinai, Costal Stripe.

Type locality: Syria, Palestine, Israel (Haifa)

Type Specimen:

Lecotype: male (NHMW, Vienna)

Paralecotype: 2 males (NHMW, Vienna)

5. *Pyraloides* Rebel, 1947

15. *Pyraloides spodia* Rebel, 1947

Common name: Unkown

Wingspan:

Host records: L.T.

Geographical Records: Not recorded

Distribution in Egypt: Gebel Elba

Type locality: Egypt, Wadi Aideb, Gebel Elba

Type specimen:

Holotype: Alf. Coll.; Male (not found)

Subfamily Agaristinae Herrich-Schäffer, [1858] (Plate I)

The Agaristinae includes about 450 species, predominantly distributed in the tropics:

Old World about 321 species, New World about 128 species (Kiriakoff 1977 a-c)

In Egypt, there are 3 species belonging to 2 genera

1. *Aegoceropsis* Karsch, 1895

1. *Aegoceropsis rectilinea* Boisduval, 1836

2. *Aegoceropsis brevivitta* (Hampson, 1901)

2. *Heraclia* Hübner, 1820

3. *Heraclia geryon* (Fabricius, 1781)

1. *Aegoceropsis* Karsch, 1895**1. *Aegoceropsis rectilinea* Boisduval, 1836***Aegocera rectilinea* Boisduval, 1836*Aegocera rectilinear*, (Boisduval, 1836)**Common name:** Unknown**Wingspan:** 36-40 mm**Host records:** *Arachis hypogaea*, *Boerhavia diffusa*, *Brassica olerace*, *Lagenaria sicerana*, *Lycopersicon*, *Manihot esculenta*, *Phaseolus vulgaris*, *Vigna unguiculata*, *Zea mays***Geographical Records:** Angola, Benin, Burundi, Cameroon, Central African Republic, Chad, Congo, DR Congo, Eritrea, Ethiopia, Gabon, Gambia, Ghana, Guinea, Ivory Coast, Kenya, Mali, Mauritania, Mozambique, Niger, Nigeria, Rwanda, Senegal, Somalia, Sudan, Tanzania, Uganda, Saudi Arabia, Yemen**Distribution in Egypt:** Lower Egypt (Cairo).**Type Locality:** Senegal, W. Africa, Galam**Type specimen:** Not stated,**2. *Aegoceropsis brevivitta* (Hampson, 1901)***Aegocera brevivitta* Hampson, 1901*Aegocera irangiana* Wichgraf, 1913*Aegoceropsis rectilineoides*, Rothschild, 1921**Common name:** Unknown**Wingspan:** 36-40 mm**Host records:** L.T.**Geographical Records:** Angola, Chad, Eritrea, Ethiopia, Kenya, Namibia, Niger, Nigeria, Oman, Saudi Arabia, Somalia, Sudan, Tanzania, Yemen**Distribution in Egypt:** S. Sinai (St. Katherine).**Type Locality:** Kenya**Type specimen:****Subtypes:** Female (BMNH, London)**2. *Heraclia* Hübner, 1820****3. *Heracula geryon* (Fabricius, 1781)***Noctua geryon* Fabricius, 1781*Eusemia nugatrix* westwood 1881*Phalaena Noctua Euphemia* Stoll, (1781)*Xanthospilopteryx geryon* f. *flava* Jordan, 1913**Common name:** Unknown**Wingspan:** 72 - 86 mm**Host records:** L.T.**Geographical Records:** Angola, Burundi, Congo, DR Congo, Equatorial Guinea, Ethiopia, Gabon, Ghana, Guinea, Cote D'Ivoire, Kenya, Liberia, Nigeria, Senegal, Sierra Leone, South Africa, Gambia, Uganda, Sudan**Distribution in Egypt:** Lower Egypt**Type Locality:** Africa: "Africa aequinoctiali. Mus. Dm Yeats**Type specimen:** Not stated, ZMUC**Subfamily: Amphipyrinae Guenée, 1837(Plate I)**

The subfamily Amphipyrinae contains more than 4500 species worldwide (Speidel *et al.*, 1996a). The old concept, however, is based on thoroughly unspecialized characters (no tibial spines; eyes not lashed or hairy) and the group has recently been recognized as polyphyletic. This subfamily is currently restricted to the genera *Pyrois* Hübner, 1820 and

Amphipyra Ochsenheimer, 1816 (Fibiger & Lafontaine, 2005; Fibiger & Hacker, 2005). So far, 3 species have been recorded in Egypt belonging to 2 genera.

Tribe: Amphipyriini Guenée, 1837

1. *Amphipyra* Ochsenheimer, 1816

1. *Amphipyra tetra* (Fabricius, 1787)
2. *Amphipyra tragopoginis* (Clerck, 1759)

2. *Matopo* Distant, 1898

3. *Matopo selects* (Walker, 1865)

1. *Amphipyra* Ochsenheimer, 1816

1. *Amphipyra tetra* (Fabricius, 1787)

Noctua tetra, Fabricius, 1787

Noctua tetra pallida, Staudinger, 1901

Common name: Unknown

Wingspan: 30-37 mm

Host records: *Crepis*, grasses

Geographical Records: Armenia, Austria, Bulgaria, Croatia, Greek, Iran, Iraq, Israel, Italy, Lebanon, Mauritania, Morocco, Palestine, Romania, Sicily, Syria, Switzerland, Turkey, Ukraine, USSR

Distribution in Egypt: Lower Egypt, Sinai

Type Locality: Austria

Type specimens:

Type: Austria

2. *Amphipyra tragopoginis* (Clerck, 1759)

Phalaena tragopoginis Clerck, 1759

Common name: Mouse Moth

Wingspan: 38-43 mm

Host records: pins, and various low plants, *Galium*, *Crepis*, *Serratula tinctoria*, *Tragopogon*, *Rumes*, *Epilobium*, *Ribes*

Geographical Records: Algeria, Austria, France, Germany, Greece, India, Iran, Iraq, Italy, Slovakia, Switzerland, Syria

Distribution in Egypt: Lower & Upper Egypt

Type Locality: Europe (France)

Type specimens:

Type: No locality given.

2. *Matopo* Distant, 1898

3. *Matopo selecta* (Walker, 1865)

Xylophasia selecta Walker, 1865

Common name: Unknown

Wingspan: 30-37 mm

Host records: grasses

Geographical Records: Chad, India, Nigeria, Pakistan, Senegal, Sudan

Distribution in Egypt: Lower Egypt

Type Locality: India, Hindostan

Type specimen:

Holotype: Male (BMNH, London)

Subfamily Hadeninae Guenée, 1837(Plate II)

The Hadeninae is a very large subfamily with more than 2400 species worldwide (Speidel *et al.*, 1996a) however, it is probably paraphyletic. In the present scope, this subfamily is mainly characterized by the hairy compound eyes of the adult moths. Tribal

systematics are arranged according to Fibiger & Lafontaine (2005). Twenty-nine species from 12 genera and 2 tribes have been recorded in Egypt, mostly belonging to the tribes Hadenini and Leucaniini.

* Genus *Pseudohadena* transfer from Hadeninae to Xyleninae, Xylenini.

* Two species recorded only in Egypt (*Mamestra immiscens* Walker, 1870 and *Mamestra mixtura* Walker, 1870)

* Seven types (or types synonymy) recorded in Egypt; 6 belonging to tribe Hadenini (*Cardepia sociabilis* (Graslin, 1850); *Hadula deserticola* (Hampson, 1905); *Hadena syriaca* (Osthelder, 1933); *Thargelia gigantea* Rebel, 1909; *Mamestra immiscens* Walker, 1870 and *Mamestra mixtura* Walker, 1870) and one belonging to tribe leucaniini (*Mythimna languida* (Walker, 1858))

Tribe Hadenini Guenée, 1837

Subtribe1: Discestrina Beck, 1996

1. *Anarta* Ochsenheimer, 1816

1. *Anarta trifolii* (Hufnagel, 1766)
2. *Anarta sodae* (Boisduval, 1829)

2. *Cardepia* Hampson, 1905

3. *Cardepia affinis* Rothschild, 1913
4. *Cardepia irrisoria* (Erschoff, 1998)
5. *Cardepia sociabilis* (Graslin, 1850)

3. *Hadula* Staudinger, 1889

5. *Hadula deserticola* (Hampson, 1905)
6. *Hadula sabulorum* (Alphéraky, 1882)
7. *Hadula stoliczkana* Moore, 1878

Subtribe2: Hadenina Guenée, 1852

4. *Enterpia* Guenée, 1850

8. *Enterpia laudeti* (Boisduval, 1840)

5. *Hadena* Schrank, 1802

9. *Hadena sancta* Staudinger, 1840
10. *Hadena silenes* (Hübner, 1822)
11. *Hadena silenides* (Staudinger, 1895)
12. *Hadena syriaca* (Osthelder, 1933)

6. *Odontelia* Hampson, 1905 7

13. *Odontelia daphnadeparisae* Kravchenko et. al., 2007

7. *Thargelia* Pungeler, 1900

14. *Thargelia gigantea* Rebel, 1909

Subtribe3: Mamestrina Beck, 1996

8. *Haplocestra* Aurivillius, 1910

15. *Haplocestra similis* Aurivillius, 1910

9. *Hecatera* Guenée, 1852

16. *Hecatera dysodea* ([Denis & Schiffermüller], 1775)
17. *Hecatera fixseni* (Christoph, 1883)
18. *Hecatera weissi* (Draudt, 1934)

10. *Mamestra* Ochsenheimer, 1816

19. *Mamestra immiscens* Walker, 1870
20. *Mamestra mixtura* Walker, 1870

Tribe2: Leucaniini Guenée, 1837

11. *Leucania* Ochsenheimer, 1816

21. *Leucania herrichii* Herrich-Schäffer, 1849
22. *Leucania loreyi* (Duponchel, 1827)

23. *Leucania palaestinae* Staudinger, 1897
24. *Leucania punctosa* (Treitschke, 1825)
25. *Leucania putrescens* (Hübner, 1824)
26. *Leucania zae* Duponchel, 1827
12. ***Mythimna*** Ochsenheimer, 1816
 27. *Mythimna languida* (Walker, 1858)
 28. *Mythimna sicula* Treitschke, 1835
 29. *Mythimna unipuncta* (Haworth, 1809)

Tribe1: Hadenini Guenée, 1837

Hadenini is a large tribe in Hadeninae; the larvae of the Hadeinini are characterised by the presence of a transverse cleft on the hypopharynx; apical lobe of hypopharynx covered with short fine spines, usually to the base of the labial palpi; mandible with one or two teeth on the inner surface (sometimes reduced to swellings on the first or second ridge or absent) (Fibiger & Lafontaine, 2005). The generic concepts have been considerably broadened and modified in the most recent publications (Hacker et al., 2002; Fibiger & Hacker, 2005). In Egypt, this tribe represented by 3 subtribes with 20 species under 10 genera.

1. ***Anarta*** Ochsenheimer, 1816

Subtribe1: Discestrina Beck, 1996

1. ***Anarta trifolii*** (Hufnagel, 1766)

- Discestra trifolii* Hufnagel, 1766
Noctua chenopodii (Denis & Schiffermuller), 1775
Mamestra farkasii (Treitschke, 1835)
Hadena intermissa (Walker, 1857)
Mamestra trifolii var. *major* (Speyer, 1875)
Cardepia taylori (Rothschild, 1913)
Scotogramma trifolii var. *fruticosae* (Dumont, 1925)
Mamestra canescens (Moore, 1878)
Phaleana trifolii Hufnagel, 1766d
Hadena trifolii (Hufnagel, 1766)
Mamestra trifolii (Hufnagel, 1766)
Scotogramma cinnamomina Rothschild, 1913
Scotogramma trifolii [sic] var. *major* Speyer, 1875
Scotogramma trifolii form *zermattensis* Draudt, 1934
Noctua verna Esper, 1787
Phaleana Noctua saucia Esper, 1790

Common name: Nutmeg, Clover cutworm, sweet potato army-worm

Wingspan: 31-38 mm

Host records: *Salsola iberica*, *Hibiscus*, cotton, hemp, rhubarb, cabbages, soybeans, groundnuts, *Ricinus*, flax, tomatoes, *Trifolium*, lucerne, Leguminosae, beetroots, swedes

Geographical Records: Afghanistan, Albania, Algeria, Armenia, Austria, Bahrain, Belgium, Bulgaria, Cape Verde, Chile, China, Cyprus, Denmark, England, Finland, France, Germany, Greece, India, Iran, Iraq, Israel, Italy, Japan, Jordan, Korea, Kuwait, Lebanon, Libya, Malta, Mauritania, Morocco, Niger, Oman, Pakistan, Palestine, Poland, Portugal, Romania, Russia, Saudi Arabia, Spain, Sudan, Switzerland, Syria, Tunisia, Turkey, Ukraine, United Arab Emirates, USA, Yemen

Distribution in Egypt: Lower & Upper Egypt, Fayoum, Coastal Stripe, Sinai

Type locality: Germany, near Berlin

Type specimen:

Type: Lost (see H. Hacker 1998b: 727)

2. *Cardepia* Hampson, 19052. *C. affinis* Rothschild, 1913

Discestra deserticola (Hampson, 1905)

Scotogramma ghigii (Turatii, 1921) (T.: Libya, Cirenaica, lost)

Discestra strobilacei (Dumont, 1925) (Synt.: Tunisia, Tozeur, MNHN, Paris)

Scotogramma compacta Turati, 1934

Common name: Unknown

Wingspan: 30-34 mm

Hostrecords: Various halophilous herbaceous plants, including *Atriplex* sp. (Amaranthaceae)

Geographical Records: Algeria, Cyprus, Iran, Israel, Jordan, Lebanon, Libya, Mauritania, Morocco, Pakistan, Palestine, Spain, Syria, Tunisia, Turkey, United Arab Emirates

Distribution in Egypt: Sinai

Type locality: Algeria, Western Central Sahara, Kef el Dor

Type specimen:

Holotype: Male, (BMNH, London)

3. *Cardepia irrigoria* (Erschoff, 1874)

Mamestra irrigoria Erschoff, 1874)

Mamestra albipicta (Christoph, 1887), (Synt.: Russia, Krasnodowsk, ZI, St. Petersb.)

Common name: Unknown

Wingspan: 34-38 mm

Host records: Various halophilous herbaceous plants

Geographical Records: Bulgaria, China, India, Iran, Iraq, Israel, Mongolia, Pakistan, Palestine, Romania, Russia, Saudi Arabia, Spain, Syria, Turkey, Tajikistan, Turkmenistan, Ukraine, Uzbekistan

Distribution in Egypt: Sinai

Type locality: Turkestan

Type specimen:

Type: (ZI, St. Petersburg)

4. *Cardepia sociabilis* (Graslin, 1850)

Mamestra afra Bethune-Baker, 1894; Types: **Egypt, Alexandria** (BMNH, London).

Discestra pedrosai (Monteiro, 1972); (Holot.: Portugal, Monte Gordo Beach, Coll. Singeverga)

Mamestra sociabilis Graslin, 1850

Mamestra albipicta Christoph, 1884

Cardepia affinis Rothschild, 1913.

Cardepia deserticola Rothschild, 1920

Cardepia irrigoria subsp. *mauretanica* Rothschild, 1920

Scotogramma compacta Turati, 1921

Cardepia sociabilis subsp. *antinea* Rungs, 1972

Common name: Unknown

Wingspan: 27-38 mm

Host records: Papilionaceous plants, *Atriplex halimus*, *Salsola vermiculata*

Geographical Records: Afghanistan, Albania, Algeria, Armenia, Chad, France, India, Iran, Israel, Italy, Kuwait, Libya, Mauritania, Morocco, Oman, Pakistan, Palestine, Portugal, Saudi Arabia, Spain, Syria, Tunisia, Turkey, United Arab Emirates, Yemen,

Distribution in Egypt: Coastal Strip (Alexandria), Lower & Upper Egypt

Type locality: as *sociabilis*: France, East Pyrenees

as *afra*: **Egypt, Alexandria**

Type specimen:

Type: as *sociabilis* France, Eastern Pyrenees

Type: as *afra* : (MBNH, London)

3. *Hadula* Staudinger, 1889**5. *Hadula deserticola* (Hampson, 1905)**

Aglossestra deserticola Hampson, 1905 (Egypt, Eastern Desert, Suez, BMNH, London)

Hadula mariaeludoviciae Lucas, 1914

Derthisa affinis Rothschild, 1914

Common name: Unknown

Wingspan: 34 - 37 mm

Host records: L.T.

Geographical Records: Algeria, Iraq, Malta, Tunisia

Distribution in Egypt: Eastern Desert, Suez

Type locality: as *Aglossestra deserticola* Egypt, Eastern Desert, Suez

as *A. mariaeludoviciae* Tunisia, Tunis,

Type specimens:

Holotype: as *Aglossestra deserticola* (BMNH, London)

Syntype: as *A. mariaeludoviciae* (MNHN, Paris)

6. *Hadula sabulorum* (Alphéraky, 1882)

Hadula sabulorum pulverata (Abang-Hass, 1907)

Scotogramma chimaera (Rothscild, 1913)

Mamestrina pulverata Bang-Haas, 1907

Polia cinnamomeogrisea Rotyhschild, 1913

Anarta sabulorum (Alpheraky, 1882)

Hadula leucheima Boursin, 1963

Scotogramma segnis Püngeler, 1906

Common name: Unknown

Wingspan: 36-41 mm

Host records: L.T.

Geographical Records: Algeria, China, Iraq, Israel, Kuwait, Malta, Mongolia, Morocco, Palestine, Saudi Arabia, Tunisia

Distribution in Egypt: Sinai

Type locality: China, Kouldja district

Type specimen:

Syntype: (ZI, Leningrad)

Subtribe2: Hadenina Guenée, 1852**4. *Enterpia* Guenée, 1850****7. *Enterpia laudeti* (Boisduval, 1840)**

Cleophane laudeti (Boisduval, 1840)

Acontia cretacea (Eversmann, 1847)

Cleophana laudei Boisduval, 1840

Acontia cretacea Eversmann, 1847, (T.: S-Russia, Sarepta, ZI, St. Petersb.)

Euterpia laudeti subsp. *latestrigata* Amsel, 1935

Euterpia laudeti Spuler, 1907

Common name: Laudet Scoop

Wingspan: 26-31 mm

Host records: *Silene* spp., *Gypsophila* spp., *Cerastium glomeratum*

Geographical Records: Armenia, Bulgaria, France, Greece, Iraq, Iran, Israel, Italy, Jordan, Lebanon, Palestine, Romania, Russia, Saudi Arabia, Spain, Switzerland, Syria, Turkey, Turkmenistan, Ukraine

Distribution in Egypt: Sinai (Al-Arish), Lower Egypt

Type locality: Switzerland, Wallis (Valesia)

Type specimen:**Types:** Not stated, unknown (see H. Hacker, 1996: 590)**5. *Hadena* Schrank, 1802****8. *Hadena sancta* Staudinger, 1840***Hadena atrifusa* Wiltshire, 1986*Dianthoecia sancta* Staudinger, 1859*Anepia (Epia) sancta* Staudinger, 1859**Common name:** Unknown**Wingspan:** 31-35 mm**Host records:** seeds of various silene**Geographical Records:** Algeria, Cyprus, Israel, Italy, Jordan, Libya, Malta, Morocco, Palestine, Portugal, Sardinia, Saudi Arabia, Spain, Syria, Tunisia, Turkey, Yemen**Distribution in Egypt:** Lower Egypt**Type locality:** Spain, Andalusien, Chiclana, Cerro de Santa Anna**Type specimen:****Holotype:** (MNHU, Berlin)**9. *Hadena silenes* (Hübner, 1822)***Harmodia calcescens* (Dannehl, 1929)*Dianthoecia sejuncta* (Herrich-Schaffer, 1850) (T.: Turkey, Istanbul)*Harmodia calcescens* (Dannehl, 1929) (Synt.: Italy, Abruzzo, ZSM, Munich)**Common name:** Unknown**Wingspan:** 31-35 mm**Host records:** silene**Geographical Records:** Bulgaria, Crete, Croatia, France, Greece, Hungary, Israel, Italy, Morocco, Palestine, Portugal, Romania, Russia, Sicily, Spain, Turkey, Ukraine**Distribution in Egypt:** Sinai**Type locality:** Europe**Type:** Europe**10. *Hadena silenides* (Staudinger, 1895)***Pronotestra silenides* Staudinger, 1895*Mamestra silenides* Staudinger, 1895*Dianthaecia cinochrea* (Chretien, 1911), Holotype, Tunisia, Gasfa, MNHN, Paris)**Common name:** Unknown**Wingspan:** 29-33mm**Host records:** L.T.**Geographical Records:** Iran, Iraq, Israel, Jordan, Lebanon, Libya, Mauritania, Morocco, Palestine, Portugal, Saudi Arabia, Spain, Syria, Tunisia**Distribution in Egypt:** Lower Egypt, Sinai**Type locality:** Spain, Andalusia, near Chiclana**Type specimens:****Syntype:** 3 Males & 3 Females, (MNHU, Berlin)**11. *Hadena syriaca* (Ostheder, 1933)***Hadena syriaca imitaria* Brandt, 1947*Anepia imitaria* subsp. *petroffi* Wiltshire, 1948, (Holotype, Egypt (BMNH, London))*Harmodia lepida syriaca* Ostheder, 1933*Dianthoecia osthederi* Draudt, 1933*Harmodia imitaria* Brandt, 1947, (Holotype, Iran, Fars, Sinh Safid, (NR, Stockholm))*Hadena (Anepia) syriaca imitaria*; (Kremky, 1937)*Anepia imitaria petroffi* Wiltshire, 1948;*Hadena (Anepia) syriaca quetta*; Hacker, 1996

Harmodia imitaria Brandt, 1947

Common name: Small blood-vein

Wingspan: 28 - 34 mm

Host records: Caryophyllaceae

Geographical Records: Armenia, Bulgaria, Iran, Iraq, Israel, Italy, Jordan, Pakistan, Palestine, Romania, Russia, Syria, Turkey, Ukraine,

Distribution in Egypt: Sinai, Lower & Upper Egypt, Coastal strip (Mariout)

Type locality: as *Hadena syriaca* Turkey, Marasch

as *Anepia imitaria* subsp. *petroffi* **Egypt, Sinai**

Type specimens:

Holotype: as *Hadena syriaca* (NM, Vienna)

Holotype: as *Anepia imitaria* subsp. *petroffi* (BMNH, London)

6. Odontelia Hampson, 1905

12. *Odontelia daphnadeparisae* Kravchenko et al, 2007

Common name: Unknown

Wingspan: 43-46 for males, and 56 to 58 for females

Host records: Amaranthaceae

Geographical Records: Afghanistan, Iran, Israel, Jordan, Lebanon, Palestine, Saudi Arabia, Turkmenistan

Distribution in Egypt: Sinai

Type locality: Israel, Palestine, Arava, Gerofit

Type specimens:

Holotype: Coll. Tel Aviv University, Israel

Paratype: Coll. TAU, HNHM

7. Thargelia Püngeler, 1900

13. *Thargelia gigantea* Rebel, 1909

Hadula gigantea (Rebel, 1909)

Odontelia griseola Rothschild, 1913 (Synt.: Algerien, Biskra, Touggourt, BMNH, Lond.)

Odontelia grazianii Krüger, 1933 (Holot.: Libyen, Cirenaica, Maaten, Giofer, BMNH, Lond.)

Common name: Unknown

Wingspan: 43-56 mm.

Host records: *Haloxylon persicum*, *H. aphyllum*.

Geographical Records: Algeria, Israel, Libya, Morocco, Palestine, Saudi Arabia, Syria, Tunisia

Distribution in Egypt: Sinai.

Type locality: Sinai (W. Werdan, Ajun Mus Oasis, W, Werdan)

Type specimen:

Syntypes: NM, Vienna

Subtribe3: Mamestrina Beck, 1996

8. *Haplocestra* Aurivillius, 1910

14. *Haplocestra similis* Aurivillius, 1910

Common name: Unknown

Wingspan: about 34 mm.

Host records: Saltplants

Geographical Records: Algeria, Austria, Cape Verde, Iran, Libya, Mauritania, Morocco, Oman, Saudi Arabia, Spain, Tunisia

Distribution in Egypt:

Type locality: Cape Verde, Razo

Type specimen:

Syntype: 2Males (NR, Stockholm =SNHM)

9. *Hecatera* Guenée, 1852**15. *Hecatera dysodea* ([Denis & Schiffermüller], 1775)**

Noctua dysodea Denis & Schiffermüller, 1775
Polia dysodea Denis & Schiffermüller
Hadena spinaciae Vieweg, 1790
Polia spinaciae Vieweg, 1790
Phalaena Noctua ornata Villers, 1789
Phaleana Noctua flavicincta var. *minor* Esper, 1790
Noctua spinaciae Vieweg, 1790
Hecatera spinaciae Vieweg, 1790
Phaleana Noctua chrysozona Borkhausen, 1790
Noctua ranunculina Haworth, 1809
Polia caduca Herrich-Schäffer, (1850)
Mamestra dysodea var. *innocens* Staudinger, 1870
Polia subflava Warren, 1909
Polia antitypina Rothschild, 1914
Polia faroulti Rothschild, 1914
Hecatera dysodea var. *africana* Oberthür, 1918
Mamestra dysodea subsp. *khala* Rungs, 1972

Common name: Small ranunculus

Wingspan: 27-34 mm

Host records: Artemisia, lettuces, Compositae, different Asteraceae, Hieracium, Prenanthis, Sonchus

Geographical Records: Albania, Algeria, Armenia, Austria, Belgium, Bulgaria, China, Crete, Cecily, Cyprus, Denmark, England, France, Germany, Greece, Hungary, Iran, Iraq, Israel, Italy, Jordan, Lebanon, Libya, Morocco, Netherland, Pakistan, Palestine, Poland, Portugal, Romania, Russia, Sardinia, Saudi Arabia, Switzerland, Syria, Tunisia, Turkey, Tajikistan, Ukraine, USA, Yemen

Distribution in Egypt: Lower Egypt and Sinai

Type locality: Austria, Vienna

Type specimen:

Type: Vienna (Type destroyed)

16. *Hecatera fixseni* (Christoph, 1883)

Pseudophia fixseni (Christoph, 1882)
Epipsammia fixseni (Christoph, 1882)
Calocestra fixseni (Christoph, 1882)

Common name: unknown

Wingspan: 21-25 mm

Host records: Gramineae

Geographical Records: Afghanistan, Armenia, Iran, Israel, Jordan, Lebanon, Pakistan, Palestine, Turkey, Turkmenistan

Distribution in Egypt: Sinai

Type locality: Odrubad

Type specimens:

Type: Odrubad

17. *Hecatera weissi* (Draudt, 1934)

Mamestra corsica weissi (Draudt, 1934))

Common name: Unknown

Wingspan: 30-34 mm

Host records: Lactuca, Gramineae

Geographical Records: Algeria, Canary Islands, France, Italy, Malta, Morocco, Portugal, Spain, Turkey

Distribution in Egypt: Sinai

Type locality: Spain, Catalonia, Barcelona

Type specimens:

Type: Spain

10. *Mamestra Ochsenheimer, 1816*

18. *Mamestra immiscens Walker, 1870*

Common name: Unknown

Wingspan: 19mm

Host records: L.T.

Geographical Records:

Distribution in Egypt: Mount Sinai

Type locality: Mount Sinai

Type specimens:

Type: Mount Sinai

19. *Mamestra mixtura Walker, 1870*

Common name: Unknown

Wingspan: 18mm

Host records: L.T.

Geographical Records: Unknown

Distribution in Egypt: Mount Sinai

Type locality: Mount Sinai

Type specimens:

Type: Mount Sinai

Tribe2: Leucaniini Guenée, 1837

11. *Leucania Ochsenheimer, 1816*

20. *Leucania herrichii* (Herrich-Schäffer, 1849)

Mythimna herrichii Herrich-Schäffer, 1849

Common name: unknown

Wingspan: 30 - 36 mm

Host records: Gramineae

Geographical Records: Bulgaria, Crete, Croatia, Cyprus, Greece, Iran, Israel, Jordan, Lebanon, Palestine, Sicily, Syria, Turkey, Turkmenistan

Distribution in Egypt: Sinai

Type locality: Turkey, Bosporus

Type specimen:

Holotype: Turkey, Bosporus

21. *Leucania loreyi* Duponchel, 1827)

Mythimna loreyi (Duponchel, 1827)

Noctua caricensis (Treitschke, 1835) (Synt.: "Weise", HNHM, Budapest)

Leucania curvula (Walker, 1856) (Synt.: "Congo", BMNH, London)

Leucania collecta (Walker, 1856) (Holot.: India, Punjab, BMNH, London)

Leucania exterior (Walker, 1856) (Holot.: India, Punjab, BMNH, London)

Leucania thoracica (Walker, 1856) (T.: "Dikhun", BMNH, London)

Leucania designata (Walker, 1856) (T.: India, Canara, BMNH, London)

Leucania denotata (Walker, 1856) (T.: Srilanka, Pundaloya, BMNH, London)

Acantholeucania loreyi Duponchel

Cirphis loreyi Duponchel

Hyphilare loreyi Duponchel

Noctua loreyi Duponchel, 1827

Pseudalelia loreyi Duponchel

Common name: Cosmopolitan, False Army Worm

Wingspan: 33 - 44 mm

Host records: Gramineae, *Oryza*, *Zea*, *Sorghum*, *Cyathea*, *Saccharum*

Geographical Records: Algeria, Austria, Bulgaria, Cape Verde, Central Africa R., China, Congo DR, Cote D'Ivoire, Crete, Croatia, Cyprus, Denmark, England, Eritrea, Ethiopia, France, Gambia, Germany, Greece, India, Indonesia, Iraq, Iran, Ireland, Israel, Italy, Japan, Jordan, Kenya, Korea, Kuwait, Lebanon, Lesotho, Malta, Mauritania, Morocco, Oman, Palestine, Portugal, Romania, Sardinia, Saudi Arabia, São Tomé & Príncipe, Seychelles, Sicily, Somalia, South Africa, Spain, Sri Lanka, Syria, Turkey, Turkmenistan, Uganda, Ukraine, United Arab Emirates, Yemen

Distribution in Egypt: Lower Egypt, Fayoum, Western Desert, Sinai

Type locality: France, Dijon

Type specimen:

Lectotype: Male, (MNHN, Paris)

22. *Leucania palaestinae* Staudinger, 1897

Mythimna palaestinae Staudinger, 1897

Leucania jordana Bartel, 1904, (Holot.m:"Jordan-Tal")

Cirphis crenulata (Hampson, 1905) (Synt.: "Persischer Golf", Fao, BMNH, London)

Boloria sesamiodes (Hampson, 1905) (Synt.: Algeria, Hammam, -es-Salahin, BMNH, Lond.)

Common name: Unknown

Wingspan: 30 - 36 mm

Host records: Germineae, *Arundo phragmites*

Geographical Records: Algeria, Cyprus, Greece, Iran, Iraq, Israel, Jordan, Palestine, Sicily, Syria, Turkey

Distribution in Egypt: Sinai

Type locality: Palestine, Israel, Haifa, Jordantal

Type specimen:

Syntype: MNHU, Berlin

23. *Leucania punctosa* (Treitschke, 1825)

Simyra punctosa Treitschke, 1825

Common name: Unknown

Wingspan: 28 - 40 mm

Host records: Germineae

Geographical Records: Armenia, Crete, Cyprus, France, , Greece, Iraq, Iran, Israel, Italy, Jordan, Malta, Mauritania, Palestine, Portugal, Russia, Syria, Turkey, Turkmenistan, Spain, Ukraine

Distribution in Egypt: Sinai

Type locality: France (Muzler in Unsbach)

Type specimen:

Type: HNM, Budapest

24. *Leucania putrescens* (Hübner, [1824])

Noctua putrescens Hübner, [1824])

Noctua boisduvalii (Duponchel, 1827) (T.: Frankr., Provence, MNHN, Paris)

Leucania putrescens var. *canariensis* Rebel, 1894

Leucania putrescens subsp. *vallettai* Boursin, 1952

Common name: Devonshire Wainscot

Wingspan: 32-36 mm

Host records: Germineae, Grasses

Geographical Records: Albania, Algeria, Bulgaria, Crete, Croatia, Cyprus, England, France, Greece, Iran, Israel, Italy, Jordan, Lebanon, Malta, Mauritania, Morocco, Palestine, Portugal, Romania, Russia, Sardinia, Sicily, Spain, Syria, Tunisia, Turkey

Distribution in Egypt: Lower Egypt

Type locality: Europe

Type specimen:

Type: Europe

25. *Leucania zae* (Duponchel, 1827)

Mythimna zae Duponchel, 1827

Leucania cinerea (Lucas, 1948)

Leucania indistincta Ochsenheimer, 1816

Cirphis zae Duponchel

Sidemia zae Duponchel

Sideridis zae Duponchel

Common name: Unknown

Wingspan: 39 - 42 mm

Host records: millets, rice, wheat, maize, and other Gramineae

Geographical Records: Albania, China, Crete, Croatia, France, Iran, Iraq, Israel, Italy, Kuwait, Mongolia, Morocco, Namibia, Oman, Palestine, Portugal, Romania, Sardinia, Saudi Arabia, Sicily, South Africa, Spain, United Arab Emirates, Tunisia, Turkey, Ukraine

Distribution in Egypt: Lower & Upper Egypt

Type locality: France, Montpellier

Type specimen:

Type: MNHN, Paris

12. *Mythimna* Ochsenheimer, 1816

26. *Mythimna languida* (Walker, 1858)

Aletia languida (Walker, 1858)

Mamestra zachii (Bohatsch, 1880) (Holot.: Syria)

Mamestra abbas (Bethune-Baker, 1894) (T.: Egypt, Alexandria, BMNH, London)

Borolia sesamoides (Hampson, 1905) (Synt.: Algeria, Hammam. es-Salahin, BMNH, London)

Hadena consanguis Guenée, 1852b

Apamea undicilia Walker, 1856

Hadena languida Walker, 1858

Hecatera impura Snellen, [1886] [

Hadena stolida Leech, 1889

Apamea cana Hampson, 1891

Aletia abbas Bethune-Baker, 1894, Type(s): **Egypt:** Alexandria (BMNH, London)].

Common name: Marbled Graseule

Wingspan: 27 - 33 mm

Host records: *Lavathera* sp., Gramineae, grasses, and alfalfa

Geographical Records: Algeria, Botswana, Burundi, Cape Verde, Congo, Congo DR., Cote D'Ivoire, Crete, Croatia, Cyprus, Gambia, Ghana, Greece, India, Iran, Iraq, Israel, Italy, Jordan, Kenya, Lebanon, Libya, Madagascar, Malta, Mauritania, Libya, Pakistan, Saudi Arabia, Senegal, Sierra Leone, South Africa, Syria, Tanzania, Thailand, Tunisia, Turkey, Yemen, Zimbabwe

Distribution in Egypt: Lower Egypt, Coastal Stripe & Sinai

Type locality: As *Mythimna languida* South Africa, Port Natal (Durban)

As *Mamestra abbas* **Egypt**, Alexandria

As *Aletia abbas* **Egypt**, Alexandria

Type specimen:**Holotype:** Male, BMNH, London as *Mythimna languida***Type:** BMNH, London as *Mamestra abbas* and *Aletia abbas***27. *Mythimna sicula* (Treitschke, 1835)***Leucania sicula* Treitschke, 1835*Aletia sicula* Treitschke, 1835*Leucania cyperi* BOISDUVAL, 1840*Leucania dactylidis* BOISDUVAL, 1840*Leucania montium* BOISDUVAL, 1840*Leucania albivena* GRASLIN, 1852*Leucania fuscilinea* GRASLIN, 1852**Common name:** Small Rootstalk Grass Owl**Wingspan:** 34 - 49 mm**Host records:** Poaceae (Germineae)**Geographical Records:** Belgium, Cyprus, France, Greece, Iran, Israel, Italy, Libya, Morocco, Palestine, Poland, Saudi Arabia, Spain, Turkey, Turkmenistan,**Distribution in Egypt:** Lower Egypt**Type locality:** Italy, Palermo**Type specimen:****Type:** HNHM, Budapest**28. *Mythimna unipuncta* (Haworth, 1809)***Noctua unipuncta* Haworth, 1809*Pseudaleitia unipuncta* (Haworth, 1809)*Leucania extranea* Guenée 1852*Leucania antica* Walker 1856*Cirphis unipuncta* Haworth 1809*Heliophila unipuncta* Haworth*Leucania unipuncta* Haworth*Sideridis unipuncta* Haworth**Common name:** Rice Armyworm, American armyworm, White Point**Wingspan:** 41-48 mm**Host records:** maize, lucerne, sugar cane, rice, and many Gramineae**Geographical Records:** Albania, Algeria, Austria, Bulgaria, Canada, Crete, Croatia, Cyprus, Denmark, England, France, Germany, Greece, Ireland, Israel, Italy, Lebanon, Mali, Malta, Morocco, Netherland, Niger, Pakistan, Palestine, Poland, Portugal, Romania, Sardinia, Senegal, Sicily, Somalia, Spain, Togo, Tunisia, Turkey, USA, Yemen**Distribution in Egypt:** Lower & Upper Egypt, Fayoum, Western Desert**Type locality:** England**Type specimen:****Type:** England

Plate I

Subfamily: Acontiinae Guenée, 1841



Subfamily: Agaristinae Herrich-Schäffer, [1858]



Subfamily Amphipyrinae Guenée, 1837



Plate II

Subfamily Hadeninae Guenée, 1837



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