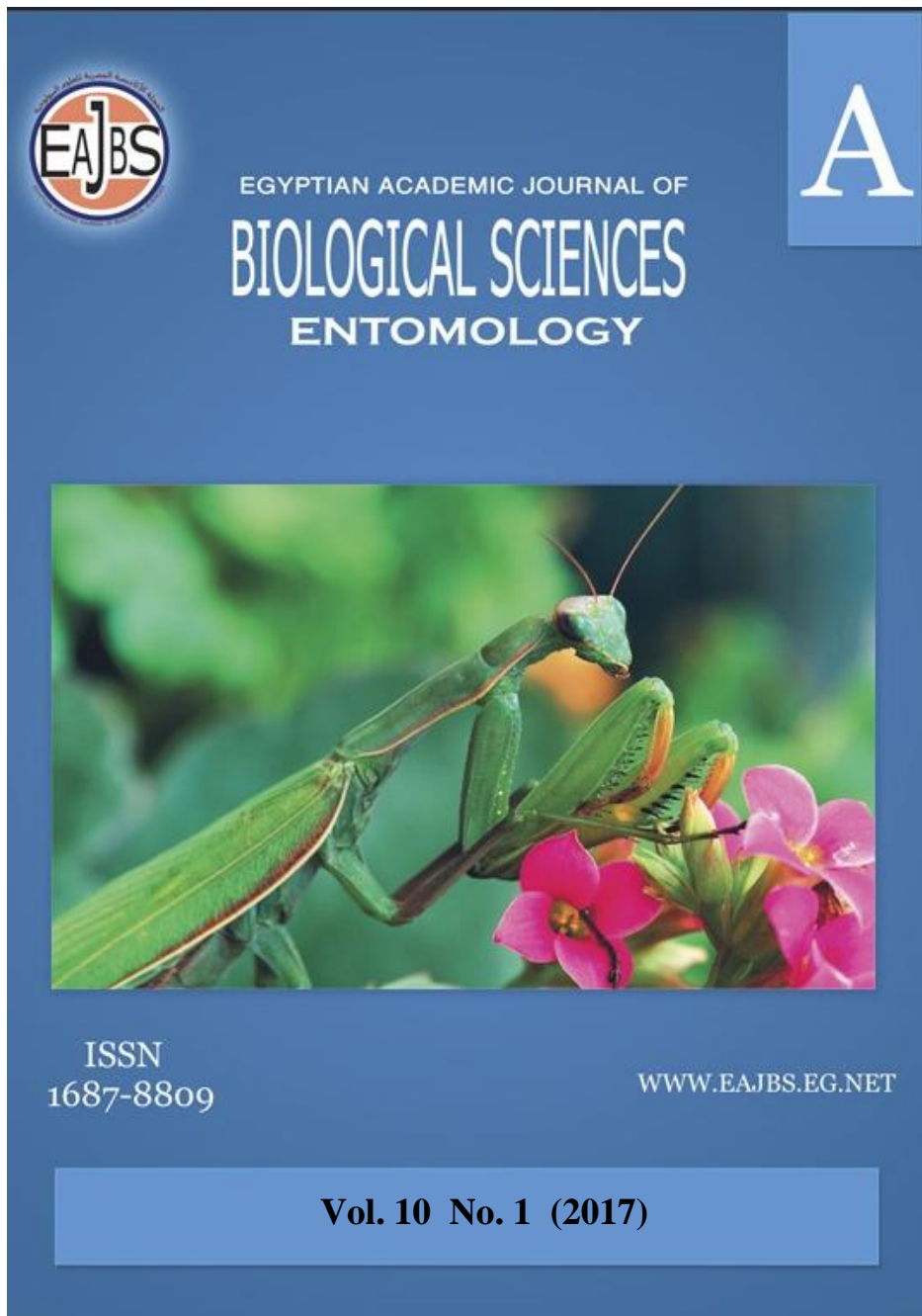


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Revision of Higher Classification of Superfamily Noctuoidea (Lepidoptera) in Egypt

Abdel Fattah M. Amer¹ and Ashraf M. El-Torkey²

1-Senior Scientific Secretary Entomology, Inter-African Phytosanitary Council, African Union, AmerA@africa-union.org

2- Classification Department, Plant Protection Research Institute, Agriculture Research Center, amel_torkey@yahoo.com

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ABSTRACT

Revision of Superfamily Noctuoidea in Egypt can be summarized by four families, 31 subfamilies and 329 species belonging to 138 genera as follows: Family Erebidae (12 subfamilies with 51 genera and 116 species); Family Euteliidae (one subfamily, two species belonging to one genus); Family Nolidae (three subfamily was recorded, include 5 genera and 10 species); and Family Noctuidae (16 subfamilies including 203 species belonging to 81 genera).

INTRODUCTION

Noctuoidea is the most species rich superfamily of Lepidoptera in Egypt: about 337 species belonging to four families were recorded. The Classification of Noctuoidea in Egypt before was come down until subfamilies only (in some cases and recorded three families, Arctiidae, Lymantriidae and Noctuidae), and not touch tribes. In this paper we try to go down until tribes and reclassified the families.

In recent years the classification of Noctuoidea has been the subject of permanent classification change.

The higher classification of the Noctuoidea was reviewed from the perspective of the classification proposed by Fibiger and Lafontaine (2005), a new molecular phylogeny offers hope for a stable family level of the Noctuoidea (Lepidoptera) proposed by Reza Zahiri *et al.* 2010, and Molecular systematics of Noctuoidea Zahie (2012). Several taxa are reinstated, described as new, synonymized, or redescribed. Some characters that been inadequately described, poorly understood, or misinterpreted, are redescribed and discussed. six families were recorded belonging to this superfamily (Oenosandridae, Notodontidae, Nolidae, Euteliidae, Erebidae, and Noctuidae).

Despite all those changes, in Egypt, the classification has not been revised since long time.

The main purpose of this paper is therefore to present a revised classification of superfamily Noctuoidea in Egypt, based on morphological and molecular analyses that have taken place during the recent few years.

MATERIALS AND METHODS

The main five references collections in Egypt are: 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 (BM, London; Smithsonian, USA; ZI, Leningrad; MNHU, Berlin; MNHN, Paris).

* Main monographs of Lepidoptera in the world

RESULTS

New Classification of Superfamily Noctuoidea in Egypt:

Superfamily **Noctuoidea** Latreille, 1809

1. Family **Erebidae** Leach, [1815]

1. Subfamily **Anobinae** Holloway, 2005

1. **Plecoptera** Guenée, 1852

1. *Plecoptera reflexa* (Guenée, 1852)

2. Subfamily **Arctiinae** Leach, [1815]

Tribe **Arctiini** Leach, [1815]

Subtribe **Callimorphina** Walker, [1865]

2. **Euplagia** Hübner, 1820

2. *Euplagia quadripunctaria* Poda, 1761

3. **Utetheisa** Hübner, [1819]

3. *Utetheisa lepida* Rambur, 1866

4. *Utetheisaa lotrix* (Cramer, [1777])

5. *Utetheisa pulchella* (Linnaeus, 1758)

Subtribe **Spilosomina** Seitz, 1910

4. **Epilacydes** Butler, 1875

6. *Epilacydes simulans* Butler, 1875

5. **Creataloum** Dubatolov, 2004

7. *Creataloum arabicum* Hampson, (1896)

6. **Ocnogyna** Lederer, 1853

8. *Ocnogyna loewii* (Zeller, 1846)

9. *Ocnogyna mutabilis* Turati, 1924

3. Subfamily **Boletobiinae** Guenée, [1858]

7. **Autoba** (Walker, 1863)

10. *Autoba beraudi* (Joannis, 1909)

11. *Autoba teilhardi* (Joannis, 1909)

4. Subfamily **Calpinae** Boisduval, 1840

Tribe **Calpini** Boisduval, 1840

8. **Africalpe** Krüger, 1939

12. *Africalpe nubifera* Hampson, 1926
13. *Africalpe vagabunda* (Swinhoe, 1884)
9. ***Lophotavia* Berio, 1938**
 14. *Lophotavia globulipes* (Walker, 1865)
10. ***Oraesia* Guenée, 1852**
 15. *Oraesia intrusa* (Krüger, 1939)
11. ***Polydesma* Boisduval, 1833**
 16. *Polydesma umbricola* Boisduval, 1833
5. Subfamily **Erebinae** Leach, [1815]
 - Tribe **Acantholipini** Fibiger & Lafontaine, 2005
 12. ***Acantholipes* Lederer, 1857**
 17. *Acantholipes circumdata* (Walker, 1858)
 - Tribe **Audeini** Wiltshire, 1990
 13. ***Crypsotidia* Strand, 1909**
 18. *Crypsotidia maculifera* (Staudinger, 1898)
 19. *Crypsotidia mesosema* Hampson, 1913
 20. *Crypsotidia postfusca* Kuhne, 20005
 21. *Crypsotidia poss wollastoni* Rothschild, 1901
 - Tribe **Pandesmini** Guenée, 1854
 14. ***Pandesma* Guenée, 1852**
 22. *Pandesma anysa* Guenée, 1852
 23. *Pandesma quenavadi* Guenée, 1852
 24. *Pandesma robusta* (Walker, [1858])
 - Tribe **Pericymini** Wiltshire, 1976
 15. ***Pericyma* Herrich-Schäffer, 1851**
 25. *Pericyma albidentaria* (Freyer, 1842)
 26. *Pericyma squalens* Lederer, 1855
 - Tribe **Catocalini** Boisduval, [1828]
 16. ***Catocala* Schrank, 1802**
 27. *Catocala lesbia* Christoph, 1887
 28. *Catocala olgaorlovae* Kravchenko *et al.*, 2008
 29. *Catocala puerpera* (Giorna, 1791)
 17. ***Cyligramma* Boisduval, 1833**
 30. *Cyligramma latona* (Cramer, 1779)
 31. *Cyligramma limacina* (Guerin-Meneville, 1832)
 18. ***Sphingomorpha* Guenée, 1852**
 32. *Sphingomorpha chlorea* (Cramer, 1777)
 19. ***Ulotrichopus* Wallengren, 1860**
 33. *Ulotrichopus tinctipennis* (Hampson, 1902)
 - Tribe **Melipotini** Grote, 1895
 20. ***Drasteria* Hübner, 1818**
 34. *Drasteria flexuosa* (Ménétriés, 1847)
 35. *Drasteria herzi* (Alphéraky, 1895)
 36. *Drasteria kabylaria* (Bang-Hass, 1906),
 37. *Drasteria oranensis* Rothschild, 1920
 38. *Drasteria picta* (Christoph, 1877)
 - Tribe **Euclidiini** Guenée, 1852
 21. ***Mocis* Hübner, 1823**
 39. *Mocis frugalis* (Fabricius, 1775)
 22. ***Scodionyx* Staudinger, 1900**

40. *Scodionyx mysticus* Staudinger, 1900
- Tribe **Poaphilini** Guenée, 1852
23. ***Achaea* Guenée, 1852**
41. *Achaea catella* (Guenée, 1852)
42. *Achaea lienardi* (Boisduval, 1833)
- Tribe **Ophiusini** Guenée, 1837
24. ***Cerocala* Boisduval, 1829**
43. *Cerocala insana* (Herrick-Schäffer, [1858])
44. *Cerocala sana* Staudinger, 1901
45. *Cerocala scapulosa* (Hübner, 1808)
25. ***Clytei* Hübner, [1823]**
46. *Clytei benenotata* Warren, 1888
47. *Clytei Haifa* (Habich, 1905)
48. *Clytei illunaris* (Hübner, [1813])
49. *Clytei sancta* (Staudinger, 1898)
50. *Clytei scotorrhiza* Hampson, 1913)
51. *Clytei syriaca* (Bugnion, 1837)
26. ***Dysgonia* Hübner, [1823]**
52. *Dysgonia algira* (Linnaeus, 1767)
53. *Dysgonia torrida* (Guenée, 1852)
27. ***Gnamptonyx* Hampson, 1894**
54. *Gnamptonyx innexa* (Walker, 1858)
28. ***Grammodes* Guenée, 1852**
55. *Grammodes bifasciata* (Petagna, 1738)
56. *Grammodes boisdeffrii* (Oberthür, 1876)
57. *Grammodes geometrica* (Fabricius, 1775)
58. *Grammodes latifera* Walker, 1870
59. *Grammodes stolidi* (Fabricius, 1775)
29. ***Heteropalpia* Berio, 19039**
60. *Heteropalpia acrosticta* (Püngeler, 1904)
30. ***Ophiusa* Ochsenheimer, 1816**
61. *Ophiusa tirhaca* (Cramer, [1777])
31. ***Rhabdophera* Staudinger, 1897**
62. *Rhabdophera arefacta* (Swinhoe, 1884)
32. ***Trigonodes* Guenée, 1852**
63. *Trigonodes hyppasia* (Cramer, 1779)
33. ***Tyroca* Wiltshire, 1970**
64. *Tyroca dispar* (Püngeler, 1904)
6. Subfamily **Eubleminae** Forbes, 1954
- Tribe **Eublemini** Forbes, 1954
34. ***Eublemma* Hübner, [1821]**
65. *Eublemma albivestalis* Hampson, 1910
66. *Eublemma amydrozana* Rebel, 1947
67. *Eublemma bulla* (Swinhoe, 1884)
68. *Eublemma cochylioides* (Guenée, 1852)
69. *Eublemma cynerea* (Turati, 1924)
70. *Eublemma deserti* Rothschild, 1909
71. *Eublemma ecthaemata* Hampson, 1896
72. *Eublemma gayneri* (Rothschild, 1901)
73. *Eublemma himmighoffeni* (Millière, 1867)

74. *Eublemma nives* (Brandt, 1938)
 75. *Eublemma ostrina* (Hübner, [1808])
 76. *Eublemma parva* (Hübner, [1808])
 77. *Eublemma scitula* (Rambur, 1833)
 78. *Eublemma siticua* (Lederer, 1858)
 79. *Eublemma suppura* (Staudinger, 1891)
 80. *Eublemma uniformis* (Staudinger, 1878)
 81. *Eublemma virginalis* (Oberthür, 1881)
 82. *Eublemma wollastoni* Rothschild, 1901
 35. ***Metachrostis*** Hübner, [1820]
 83. *Metachrostis costiplaga* Warren, 1903
 84. *Metachrostis griseimargo* (Warren, 1912)
 85. *Metachrostis velox* (Hübner, [1813])
7. Subfamily **Hypeninae** Herrich-Schäffer, [1851]
 36. ***Arrada*** Walker, 1863
 86. *Arrada parva* Bethune-Baker, 1894
 37. ***Hypena*** Schrank, 1802
 87. *Hypena lividialis* (Hübner, 1790)
 88. *Hypena obsitalis* (Hübner, 1813)
 38. ***Zekelita*** Walker, 1863
 89. *Zekelita ravalis* (Herrich-Schäffer, 1851)
 90. *zekelita sagittalis* (Rebel, 1947)
8. Subfamily **Lymantriinae** Hampson, [1893]
 1. Tribe **Nygmiiini** Holloway, 1999
 39. ***Euproctis*** Hübner, [1819]
 91. *Euproctis chrysophaea* Walker, 1865
 92. *Euproctis susanna* Staudinger, [1895]
 40. ***Polymona*** Walker, 1855
 93. *Polymona rubescens* Rebel, 1948
 2. Tribe **Orgyiini** Wallengren, 1861
 41. ***Albarracina*** Staudinger, 1883
 93. *Albarracina baui* Standfuss, 1890
 42. ***Casama*** Walker, 1865
 95. *Casama innotata* (Walker, 1855)
 43. ***Orgyia*** Ochseneimer, 1810
 96. *Orgyia dubia* (Tauscher, 1806)
 97. *Orgyia ochrodorsalis* Rebel, 1948
9. Subfamily **Phytometrinae** Hampson, 1913
 44. ***Raparna*** Pagenstecher, 1909
 98. *Raparna conicephala* (Staudinger, 1870)
10. Subfamily **Rivulinae** Grote, 1895
 45. ***Rivula*** Guenée, [1854]
 99. *Rivula pallida* Moore, 1882
 100. *Rivula sericealis* (Scopoli, 1763)
11. Subfamily **Scoliopteryginae** Herrich-Schäffer, 1852
 Tribe **Scoliopterygini** Herrich-Schäffer, [1852]
 46. ***Scoliopteryx*** Germar, 1810
 101. *Scoliopteryx libetrix* Hampson, 1926

12. Subfamily **Toxocampinae** Guenée, 1852
 Tribe **Toxocampini** Guenée, 1852
 47. **Anumeta** Walker, 1858
 102. *Anumeta atosignata* Walker, 1858
 103. *Anumeta hilgerti* (Rothschild, 1909)
 104. *Anumeta sabulosa* Rothschild, 1913
 105. *Anumeta spilota harterti* Rothschild, 1913
 106. *Anumeta straminea* (Bang-Haas, 1906)
 48. **Anydrophila** John, 1909
 107. *Anydrophila stuebeli* (Calberla, 1891)
 49. **Apopestes** Hübner, [1823]
 108. *Apopestes spectrum* (Esper, 1787)
 50. **Autophila** Hübner, [1823]
 109. *Autophila cerealis* (Staudinger, 1871)
 110. *Autophila cymaenotaenia* Boursin, 1940
 111. *Autophila dilucida dilucida* (Staudinger, 1888)
 112. *Autophila pauli* Boursin, 1940
 113. *Autophila rosea* (Staudinger, 1888)
 51. **Tathorhynchus** Hampson, 1894
 114. *Tathorhynchus exsiccatus* (Ledrerer, 1855)
2. Family **Euteliidae** Grote, 1882
 Subfamily **Euteliinae** Grote, 1882
 1. **Eutelia** Hübner, 1823
 1. *Eutelia adulatrix* (Hübner, 1813)
 2. *Eutelia insolatrix* (Hübner, 1822)
3. Family **Nolidae** Bruand, 1846
 1. Subfamily **Nolinae** Bruand, 1846
 1. **Meganola** Dyar, 1898
 1. *Meganola gallicola* (Wiltshire, 1949)
 2. **Nola** Leach, [1815]
 2. *Nola aegyptiaca* Snellen, 1875
 3. *Nola chlamitulalis* (Hubner, 1813)
 4. *Nola harouni* (Wiltshire, 1951)
 5. *Nola socotrensis* (Hampson, 1901)
 6. *Nola squalida* Staudinger, 1870
 2. Subfamily **Chloephorinae** Stainton, 1859
 Tribe **Sarrothripini** Hampson, 1894
 3. **Characoma** Walker, 1863
 7. *Characoma nilotica* (Rogenhofer, 1882)
 Tribe **Chloephorini** Stainton, 1859
 4. **Microxestis** Hampson, 1912
 8. *Microxestis wutzdorffi* Pungeler, 1907
 3. Subfamily **Eariadinae** Hampson, 1912
 5. **Earias** Hubner, [1825]
 9. *Earias insulana* (Boisduval, 1833)
 10. *Earias nubica* (Stran, 1915)
4. Family **Noctuidae** Latreille, 1809
 1. Subfamily **Acontiinae** Guenée, 1841
 1. Tribe **Acontiini** Guenée, 1841
 1. **Acontia** Ochseneimer, 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, 1848)
 3. *Epharmottomena* John, 1909
 13. *Epharmottomena eremophila* (Rebel, 1895)
 4. *Eulocastra* Butler, 1886
 14. *Eulocastra alfierii* (Wiltshire, 1948)
 15. *Eulocastra diaphora* (Staudinger, 1878)
 16. *Eulocastra rex* (Wiltshire, 1948)
 17. *Eulocastra platizona* (Lederer, 1869)
 18. *Eulocastra tamsina* Brandt, 1947
 5. *Iranada* Wiltshire, 1977
 19. *Iranada turcorum* (Zerny, 1915)
 6. *Pyraloides* Rebel, 1947
 20. *Pyraloides spodia* Rebel, 1947
2. Subfamily **Acronictinae** Heinemann, 1859
 7. *Simyra* Ochsenheimer, 1816
 21. *Simyra albovenosa* (Goeze, 1781)
 22. *Simyra dentinosa* Freyer, 1839
3. Subfamily **Agaristinae** Herrich-Schäffer, [1858]
 8. *Aegocera* Latreille, 1809
 23. *Aegocera rectilinea* Boisduval, 1836
 9. *Heraclia* Hübner, 1820
 24. *Heraclia geryon* (Fabricius, 1781)
4. Subfamily **Eustrotiinae** Grote, 1882
 10. *Ozarba* Walker, 1865
 25. *Ozarba Capreolana* Rebel, 1947
 26. *Ozarba fuscescens* Rebel, 1947
 27. *Ozarba timida* Berio, 1940
 28. *Ozarba variabilis* Berio, 1940
 11. *Pseudozarba* Warren, 1913
 29. *Pseudozarba bipartita* (Herrich-Schäffer, 1850)
 30. *Pseudozarba menozona* (Hampson, 1910)
5. Subfamily **Amphipyrinae** Guenée, 1837
 1. Tribe **Amphipyriini** Guenée, 1837
 12. *Amphipyra* Ochsenheimer, 1816
 31. *Amphipyra tetra* (Fabricius, 1787)

32. *Amphipyra tragopoginis* (Clerck, 1759)
13. *Matopo* Distant, 1898
33. *Matopo selects* (Walker, 1865)
6. Subfamily **Bryophilinae** Guenée, 1852
14. *Cryphia* Hübner, [1818]
34. *Cryphia algae* (Fabricius, 1775)
35. *Cryphia amasina* (Drandt, 1931)
36. *Cryphia fraudatricula* (Hübner, [1803])
37. *Cryphia maeonis* (Lederer, 1865)
38. *Cryphia minima* Waltshire, 1949
39. *Cryphia pallida* (Bethune-Baker, 1894)
40. *Cryphia paulina* (Staudinger, 1892)
41. *Cryphia petrea* (Guenée, 1852)
42. *Cryphia raptricula* (Denis & Schiffermüller, 1775)
43. *Cryphia receptricula* (Hübner, [1803])
44. *Cryphia vandalusia* (Duponchel, 1842)
7. Subfamily **Condicinae** Poole, 1995
1. Tribe **Condicini** Poole, 1995
15. *Acosmetia* Stephens, 1829
45. *Acosmetia arida* Joannis, 1909
16. *Condica* Walker, 1856
46. *Condica capensis* (Guenée, 1852)
47. *Condica conducta* (Walker, 1857)
48. *Condica palaestinensis* (Staudinger, 1895)
49. *Condica viscosa* (Freyer, 1831)
17. *Prospalta* Walker, 1858
50. *Prospalta coptica* Wiltshire, 1948
8. Subfamily **Cucullinae** Herrich-Schäffer, [1850]
- Tribe **Cucullini** Ronkay & Gyulai, 2011
18. *Cucullia* Schrank, 1802
51. *Cucullia amaenissima* Oberthur, 1918
52. *Cucullia calendula* Treitschke, 1835
53. *Cucullia chamomillae* ([Denis & Schiffermüller], 1775)
54. *Cucullia eflatouni* Wiltshire, 1948
55. *Cucullia macara* Rebel, 1947
56. *Cucullia strigicosta* Boursin, 1940
57. *Cucullia syrtana* (Mabille, 1888)
58. *Cucullia verbasci* Linnaeus, 1758
19. *Metlaouia* Dumont, 1929
59. *Metlaouia autumnna* (Chrétien, 1910)
9. Subfamily **Eriopinae** *Herrich-Schäffer, [1851]*
20. *Callopietria* Hübner, [1821]
60. *Callopietria yerburii* (Butler, 1884)
61. *Callopietria latreilli* (Duponchel, 1827)
10. Subfamily **Hadeninae** Guenée, 1837
- Tribe **Hadenini** Guenée, 1837
- Subtribe **Discestrina** Beck, 1996
21. *Anarta* Ochseneimer, 1816

62. *Anarta trifolii* (Hufnagel, 1766)
22. ***Cardepi*** Hampson, 1905
63. *Cardepi affinis* Rothschild, 1913
64. *Cardepi irrisoria* (Erschoff, 1998)
65. *Cardepi sociabilis* (Graslin, 1850)
23. ***Hadula*** Staudinger, 1889
66. *Hadula deserticola* (Hampson, 1905)
67. *Hadula sabulorum* (Alphéraky, 1882)
68. *Hadula stoliczkana* Moore, 1878
- Subtribe **Hadenina** Guenée, 1852
24. ***Enterpia*** Guenée, 1850
69. *Enterpia laudeti* (Boisduval, 1840)
25. ***Hadena*** Schrank, 1802
70. *Hadena sancta* Staudinger, 1840
71. *Hadenasilenes* (Hübner, 1822)
72. *Hadena silenides* (Staudinger, 1895)
73. *Hadena syriaca* (Osthelder, 1933)
26. ***Odontelia*** Hampson, 1905
74. *Odontelia daphnadeparisae* Kravchenko *et. al.*, 2007
27. ***Pseudohadena*** Alphéraky, 1889
75. *Pseudohadena jordana* (Staudinger, 1900)
28. ***Thargelia*** Pungeler, 1900
76. *Thargelia gigantea* Rebel, 1909
- Subtribe **Mamestrina** Beck, 1996
29. ***Haplocestra*** Aurivillius, 1910
77. *Haplocestra similis* Aurivillius, 1910
30. ***Hecatera*** Guenée, 1852
78. *Hecatera dysodea* ([Denis & Schiffermüller], 1775)
79. *Hecatera fixseni* (Christoph, 1883)
80. *Hecatera weissii* (Draudt, 1934)
31. ***Mamestra*** Ochsenheimer, 1816
81. *Mamestra immiscens* Walker, 1870
82. *Mamestra mixtura* Walker, 1870
- Tribe **Leucaniini** Guenée, 1837
32. ***Leucania*** Ochsenheimer, 1816
83. *Leucania herrichii* Herrich-Schäffer, 1849
84. *Leucania palaestinae* Staudinger, 1897
85. *Leucania punctosa* (Treitschke, 1825)
86. *Leucania putrescens* (Hübner, [1824])
33. ***Mythimna*** Ochsenheimer, 1816
87. *Mythimna longuida* (Walker, 1858)
88. *Mythimna loreyi* (Duponchel, 1827)
89. *Mythimna sicula* Treitschke, 1835
90. *Mythimna unipuncta* (Haworth, 1809)
91. *Mythimna zae* Duponchel, 1827
11. Subfamily **Heliothinae** Boisduval, [1828]
34. ***Helicoverpa*** Hardwick, 1965
92. *Helicoverpa armigera* (Hübner, [1805])
35. ***Heliothis*** Ochsenheimer, 1816
93. *Heliothis nubigera* (Herrich-Schäffer, 1851)

94. *Heliothis peltigera* (Denis & Schiffermüller, 1775)
36. *Masalia* Moore, 1881
95. *Masalia albida* (Hampson, 1905)
37. *Schinia* (Hübner, 1823)
96. *Schinia scutosa* (Denis & Schiffermüller, 1715)
12. Subfamily **Metoponiinae** Herrich-Schäffer, [1851]
38. *Aegle* Hübner, 1823
97. *Aegle vespertalis* Hübner, [1812]
98. *Aegle semicana* (Esper, 1798)
13. Subfamily **Noctuinae** Latreille, 1809
- Tribe **Noctuini** Latreille, 1809
- Subtribe **Agrotina** Rambur, 1848
39. *Agrotis* Ochsenheimer, 1816
99. *Agrotis alexandriensis* Bethune-Baker, 1894
100. *Agrotis biconica* Kollar, 1844
101. *Agrotis bigramma* (Hübner, 1803)
102. *Agrotis desertorum* Boisduval, 1840
103. *Agrotis haifae* Staudinger, 1897
104. *Agrotis herzogi* (Rebel, 1911)
105. *Agrotis inobtrusa* Walker, 1870
106. *Agrotis ipsilon* (Hufnagel, 1766)
107. *Agrotis lasserrei* (Oberthür, 1881)
108. *Agrotis lata* Treitschke, 1835
109. *Agrotis marginata* Walker, 1870
110. *Agrotis pictifascia* (Hampson, 1896)
111. *Agrotis pierrettii* (Bugnion, 1837)
112. *Agrotis puta* (Hübner, [1803])
113. *Agrotis ripae* (Hübner, [1823])
114. *Agrotis sardzeana* Brandt, 1941
115. *Agrotis segetum* (Denis & Schiffermüller, 1775)
116. *Agrotis trux* (Hübner, [1824])
40. *Dichagyris* Lederer, 1857
117. *Dichagyris flammatra* (Denis & Schiffermüller, 1775)
118. *Dichagyris imperator* (Bang-Hass, 1912)
119. *Dichagyris leucomelas* Brandt, 1941
120. *Dichagyris melanuroides* (Kozhantschikov, 1930)
41. *Euxoa* Hübner, 1821
121. *Euxoa anarmodia* (Staudinger, 1897)
122. *Euxoa canariensis* Rebel, 1902
123. *Euxoa diamondi* Boursin, 1940
124. *Euxoa nigrofusca* (Esper, 1788)
125. *Euxoa wagneri* Corti, 1926
42. *Feltia* Walker, 1856
126. *Feltia mollis* (Walker, [1857])
- Subtribe **Noctuina** Latreille, 1809
43. *Noctua* Linnaeus, 1758
127. *Noctua pronuba* (Linnaeus, 1758)
44. *Ochropleura* Hübner, 1821
128. *Ochropleura forficula* (Staudinger, 1877)

129. *Ochropleura renigera* (Hübner, [1808])
 45. **Rhyacia** Hübner, 1821
 130. *Rhyacia arenacea* (Hampson, 1907)
 46. **Xestia** Hübner, 1818
 131. *Xestiac-nigrum* (Linnaeus, 1758)
14. Subfamily **Oncocnemidinae** Forbes & Franclemont, 1954
 47. **Brahygalea** Hampson, 1906
 132. *Brahygalea albolineata* (Blachier, 1905)
 48. **Bryomima** Staudinger, 1900
 133. *Bryomima sinaica* Wiltshire, 1948
 49. **Calophasia** Stephens, 1829
 134. *Calophasia angularis* Chrétien, 1911
 135. *Calophasia melanglossa* Berio, 1934
 136. *Calophasia siniaca* (Wiltshire, 1948)
 50. **Cerapoda** Smith, 1894
 137. *Cerapoda aegyptiaca* Joannis, 1910
 51. **Cleonymia** Berio, 1966
 138. *Cleonymiachabordis* (Oberthür, 1876)
 139. *Cleonymia jubata* Oberthür, 1890
 140. *Cleonymiawarionis* (Oberthür, 1876)
 52. **Lithophasia** Staudinger, 1892
 141. *Lithophasia quadrivirgula* (Mabille, 1888)
 53. **Metopoceras** Guenée, 1850
 142. *Metopoceras eutychna* Rebel, 1947
 143. *Metopoceras Khalidja* Oberthür, 1884
 144. *Metopoceras kneuckeri* (Rebel, 1903)
 145. *Metopoceras omar* Oberthür, 1887
 146. *Metopoceras solitudo* (Brandt, 1938)
 54. **Rhabinopteryx** Christoph, 1889
 147. *Rhabinopteryx subtilis* (Mabille, 1888)
 55. **Teinoptera** Calberla, 1891
 148. *Teinoptera culminifera* Calberla, 1891
15. Subfamily **Plusiinae** Boisduval, [1828]
 Tribe **Argyrogrammatini** Eichlin & Cunningham, 1978
 56. **Argyrogramma** Hübner, [1821]
 149. *Argyrogramma signata* (Fabricius, 1775)
 57. **Chrysodeixis** Hübner, [1821]
 150. *Chrysodeixis chalcites* (Esper, 1789)
 151. *Chrysodeixis eriosoma* (Doubleday, 1843)
 58. **Thysanoplusia** Ichinose, 1973
 152. *Thysanoplusia circumscripta* (Freyer, 1831)
 153. *Thysanoplusia daubei* (Boisduval, 1840)
 154. *Thysanoplusia orichalcea* (Fabricius, 1775)
 59. **Trichoplusia** McDunnough, 1944
 155. *Trichoplusia ni* (Hübner, 1803)
- Tribe **Plusiini** Boisduval, [1828]
 Subtribe **Euchalciina** Chou & Lu, 1979
 60. **Euchalcia** Hübner, [1821]
 156. *Euchalcia maria* (Staudinger, 1892)

- Subtribe **Plusiina** Boisduval, [1828]
 61. *Autographa* Hübner, [1821]
 157. *Autographa gamma* (Linnaeus 1758)
 62. *Syngrapha* Hübner, [1821]
 158. *Syngrapha circumflexa* (Linnaeus, 1767)
16. Subfamily **Xyleninae** Guenée, 1837
 Tribe **Prodeniini** Forbes, 1954
 63. *Spodoptera* Guenée, 1852
 159. *Spodoptera cilium* (Guenée, 1852)
 160. *Spodoptera exempta* (Walker, 1857)
 161. *Spodoptera exigua* (Hübner, 1808)
 162. *Spodoptera littoralis* (Boisduval, 1833)
- Tribe **Caradrinini** Boisduval, 1840
 Subtribe **Caradrinina** Boisduval, 1840
 64. *Caradrina* Ochsenheimer, 1816
 163. *Caradrina alfierii* (Boursin, 1937)
 164. *Caradrina apicimaculata* Rebel, 1947
 165. *Caradrina aspersa* (Rambur, 1834)
 166. *Caradrina atriluna* Guenée, 1852
 167. *Caradrina clavipalpis* (Scopoli, 1763)
 168. *Caradrina bodenheimeri* Amsel, 1935
 169. *Caradrina flava* Oberthür, 1876
 170. *Caradrina flavirena* Güenee, 1852
 171. *Caradrina ingrata* (Staudinger, 1897)
 172. *Caradrina katherina* Wiltshire, 1947
 173. *Caradrina melanurina* (Staudinger, 1901)
 174. *Caradrina oberthuri* (Rothschild, 1913)
 175. *Caradrina scotoptera* (Püngeler, 1914)
 176. *Caradrina selini* Boiduval, 1840
 177. *Caradrina soudanensis* (Hampson, 1918)
65. *Catamecia* Staudinger, 1898
 178. *Catamecia minima* (Swinhoe, 1889)
66. *Hoplodrina* Boursin, 1937
 179. *Hoplodrina ambigua* (Denis & Schiffermüller, 1775)
67. *Pseudoligia* Staudinger, 1901
 180. *Pseudoligia similiaria* (Ménétriés, 1849)
68. *Scythocentropus* Speiser, 1902
 181. *Scythocentropus inquinata* (Mabille, 1888)
- Tribe **Cosmiina** Guenée, 1852
 Subtribe **Cosmiina** Guenée, 1852
 69. *Atethmia* Hübner, [1821]
 182. *Atethmia ambusta* (Denis & Schiffermüller, 1775)
 183. *Atethmia centrigo* (Haworth, 1809)
- Tribe **Phlogophorini** Hampson, 1918
 70. *Euplexia* Stephens, 1829
 184. *Euplexia lucipara* (Linnaeus, 1758)
 71. *Phlogophora* Treitschke, 1825
 185. *Phlogophora meticulousa* (Linnaeus, 1758)
- Tribe **Apameini** Guenée, 1841
 Subtribe **Apameina** Boisduval, 1828

72. *Luperina* Boisduval, 1829
 186. *Luperina grzimeki* Hacker, 1989
73. *Nonagria* Ochsenheimer, 1816
 187. *Nonagria typhae* (Thunberg, 1784)
74. *Sidemia* Staudinger, 1892
 188. *Sidemia beduina* Wiltshire, 1948
- Subtribe **Sesamiina** Fibiger & Goldstein, 2005
75. *Sesamia* Guenée, 1852
 189. *Sesamia cretica* Lederer, 1859
 190. *Sesamia nonagrioides* (Lefebvre, 1827)
 191. *Sesamia wiltshirei* Rungs, 1963
- Tribe **Xylenini** Guenée, 1837
- Subtribe **Antitypina** Forbes & Frandemont, 1954
76. *Aporophyla* Guenée, 1841
 192. *Aporophyla australis* (Boisduval, 1829)
 193. *Aporophyla nigra* (Haworth, 1809)
77. *Boursinia* Brandt, 1938
 194. *Boursinia discordans* (Boursin, 1940)
 195. *Boursinia lithoxylea* (Bang-Haas, 1912)
78. *Mniotype* Franclemont, 1941
 196. *Mniotype compitalis* (Draudt, 1909)
79. *Polymixis* Hübner, [1820]
 197. *Polymixis aegyptiaca* Wiltshire, 1947
 198. *Polymixis juditha* (Staudinger, 1898)
 199. *Polymixis lea* (Staudinger, 1897)
 2006 *Polymixis variabile* (Stertz, 1915)
80. *Xanthia* Ochsenheimer, 1816
 201. *Xanthia ocellaris* (Borkhausen, 1792)
- Subtribe **Xylenina** Guenée, 1837
81. *Xylena* Ochsenheimer, 1816
 202. *Xylena infusa* Walker, 1870
 203. *Xylena lefebvrei* Bugnion, 1837

DISCUSSION

We can summarize the main change of Noctuoidea as follows:

1. Added three new families (Erebidae, Euteliidae and Nolidae) to the family which recorded before;
2. Move the quadrid subfamilies (Rivulinae, Hypeninae, Catocalinae, Calpinae) from family Noctuidae to be subfamilies under family Erebidae; and Euteliinae become as family;
3. Move subfamilies Nolinae, Choleophorinae and Sarrothripinae from family Noctuidae to family Nolidae;
4. Splitting of subfamily Calpinae from the Catocalinae;
5. Move the tribe Armadini from Catocalini (Erebidae) to Acontiinae (Noctuidae);
6. Remove the tribe Eublemmini from Acontiinae and treat it as a primitive subfamily (Eublemminae) of Erebidae;
7. Move families (Arctiidae and Lymantriidae) into subfamilies belonging to family Erebidae.
8. The revision of Egyptian subfamilies of Noctuidae become as follow:

Subfamily: Ophiderinae

Acantholipes, *Acrobyla*, *Anumeta* and *Drasteria* (Catocalinae); *Sphingomorpha* (Erebinae) and *Africalpe* (Calpinae) moved to family Erebidae. While other genera stay in Noctuidae but in other subfamilies, as follows:

Armada moved to subfamily Acontiinae; *Callopietria* in subfamily Eriopinae and *Ephramottomena* and *Iranada* moved to subfamily Metoponiinae.

Subfamily: Amphipyriinae

It contain 18 genera, only two of them stay in Amphipyriinae (*Amphipyra* and *Matopo*) while the rest distribute between Erebidae (*Apopostes*, *Tathorhynchus* and *Autophila* to subfamily Toxocampinae) and Noctuidae (*Aegle* to subfamily Metoponiinae; *Acosmetia*, *Condica* and *Prospalta* to subfamily Condicinae; *Caradrina*, *Catamecia*, *Hoplodrina*, *Pseudoligia*, *Scythocentropus*, *Spodoptera*, *Euplexia*, *Phlogophora*, *Nonagria*, *Sesamia* and *Sidemia* to subfamily Xyleninae).

Subfamily: Acontiinae

Seven genera were recorded in this subfamily; Two species (*Acontia* and *Pyraloides*) stay in this subfamily and the rest is distribute between Erebidae (*Eublemma* and *Metachrostis* to subfamily Eublemminae; *Autoba* to subfamily Beletobiinae) and Noctuidae (*Ozarba* and *Pseudozarba* to subfamily Eustrotiinae and *Condica* to subfamily Condicinae)

Subfamily: Plusiinae

We have seven genera in this subfamily; we put those under two tribes. Four genera (*Argyrogramma*, *Chrysodeixis*, *Thysanoplusia* and *Trichoplusia*) become under tribe Argyrogrammatini; while, three genera (*Autographa*, *Euchalcia* and *Syngrapha*) become under tribe Plusiini

Subfamily: Cuculliinae

This subfamily represented by nine genera, only one (genus *Cucullia*) stay in this subfamily; while the other eight moved to three other subfamilies as follows:

Aporophyla, *Polymixis*, *Mniotype* and *Xylena* to Xyleninae; *Bryomima*, *Cerapoda*; *Calophasia*, *Lithophasia* and *Metopoceras* to Oncocnemidinae

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