

**SYSTEMATIC CHECKLIST WITH A REVIEW OF PUBLICATIONS
OF FAMILY HALICTIDAE OF EGYPT (ORDER: HYMENOPTERA)
2- SUBFAMILIES: NOMIOIDINAE, NOMIINAE AND
ROPHITINAE**

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Abstract

This is the second paper of the systematic checklist of the Egyptian species of family Halictidae (Order: Hymenoptera), includes subfamilies Nomioidinae, Nomiinae and Rophitinae is presented. The subfamily Nomioidinae consisting of 11 species belonging to 2 genera and 2 subgenera. Three species of this subfamily were added to the Egyptian fauna. The subfamily Nomiinae includes 8 species belonging to 3 genera and 2 subgenera. Two species of this subfamily were added to Egyptian fauna. The third subfamily includes 6 species belonging to 3 genera. In addition to three species were recorded from neighboring countries and probably will be recorded later from Egypt. The checklist is arranged according to species membership in higher – level taxa, based on the most recent literature of family Halictidae.

INTRODUCTION

Family Halictidae includes four subfamilies namely: Halictinae, Nomioidinae, Nomiinae and Rophitinae (Michener, 2007), it contains about 72 genera and nearly 3500 currently recognized species worldwide (Pesenko, 2007). The Egyptian fauna and also Palaearctic fauna of subfamilies Nomioidinae, Nomiinae and Rophitinae were studied by several scholars such as: Handlirsch (1888); Friese (1898); Debski (1917); Alfken (1927); Blüthgen (1925, 1933 & 1934); Warncke (1976, 1979 & 1980); Pesenko (1983, 2000 & 2007); Ebmer (1984, 1993 & 1999); Pauly (1990 & 2012); El-Akkad (1993); Baker (1996 & 2002); Shoukry, *et al.* (2004); Pesenko & Pauly (2005 & 2009); Michener (2007).

The present study is carried out to clarify the recent taxonomic status of three subfamilies of family Halictidae and their members in Egypt.

MATERIALS AND METHODS

The checklist of family Halictidae of Egypt is based on all records found in the available entomological literature and those reviewed from the preserved specimens in the main Egyptian insect collections. These collections are: the Egyptian Entomological Society collection, Ain Shams University collection and collection of the Plant Protection Research Institute, Ministry of Agriculture. Identification of the specimens had been confirmed early by A. W. Ebmer (Austria) and the late Prof. Dr. K. Warncke (Germany), the specialists of Halictidae of Palaearctic region. These specimens preserved in the collection of Plant Protection Research Institute, Ministry of Agriculture. The nomenclature and taxonomic status are adopted from the following sources: Pesenko (1984); Warncke (1992); Ebmer (1976 & 1995); Michener (2007), Bogusch & Straka (2012), Pauly's Atlas Hymenoptera online (2012) and Ascher & Pickering (2014). The checklist is arranged according to species membership in higher – level taxa, based on the most recent literature. Synonyms, taxonomic notes and published records from Egypt are included.

Family: Halictidae

Subfamily: Nomioidinae Börner, 1919

Nomioidinae Börner, 1919, Biologisches Zentralblatt, 39: 145-185.

The subfamily Nomioidinae consists of minute species (2.5 – 6.5 mm.) often with yellow or cream markings on head, mesosoma and metasoma. It includes three genera all over the world; two of them are represented in Egypt.

Genus: *Ceylalictus* Strand, 1913

This genus is represented by a single subgenus covering only two species in Egypt as follows:

Subgenus: *Ceylalictus* Strand, 1913, Arch. Naturg., 79 (12): 127 – 171.

39: *Ceylalictus (Ceylalictus) punjabensis* (Cameron, 1907)

= *Ceratina punjabensis* Cameron, 1907, Journal of the Bombay Natural History Society, 17 (4): 1003.

Published records from Egypt:

Debski (1917): 31 – 32 (key to males and females); 46 – 50 (Re- description): *Nomioides fasciatus* Friese. Blüthgen (1925): 61: *Nomioides fasciata* var. *punjabensis* Blüthgen. Alfken (1927): 105: *Nomioides fasciata* Friese. Blüthgen (1933): 24: *Nomioides fasciata* Friese. El-zoheiry & Mohamed (1949): 75: *Nomioides fasciata* Friese. Shalaby (1958): 80: *Nomioides fasciata* Friese. Pesenko (1983): 178: (key to females); 179 (key to males): *Ceylalictus (Ceylalictus) punjabensis* (Cameron). El-Akkad (1993): 174 - 175 (key to females); 175 - 176 (key to males); 185– 188

(Synonym, re – description; 54 specimens examined (24♀♀ + 30♂♂)): *Nomioides fasciata* Friese. Pauly *et al.* (2002), Bulletin de l'Institut Royal des Sciences Naturelles de Belgique, Entomologie, 72: 206: (Synonymy & distribution): *Ceylalictus (Ceylalictus) punjabensis* (Cameron). Pesenko & Pauly (2005): 143 – 144 (key); 157 – 160 (Re- description): *Ceylalictus (Ceylalictus) punjabensis* (Cameron). Pesenko & Pauly (2009): 219: *Ceylalictus (Ceylalictus) punjabensis* (Cameron). Saini & Vikram (2012): 137 (Distribution): *Ceylalictus (Ceylalictus) punjabensis* (Cameron).

40: *Ceylalictus (Ceylalictus) variegatus* (Olivier, 1789)

= *Apis variegata* Olivier, 1789: Encyclopedia méthodique Paris: 139.

Published records from Egypt:

Handlirsch (1888): 402 – 404: *Nomioides variegata* (Olivier). Friese (1898): 307: Original description of *Nomioides fasciatus* sp. n. ♀, ♂, [Lectotype: Heluan, Egypt]. Debski (1917): 31 & 33 (key to males and females); 46 – 50 (Re- description): *Nomioides variegates* (Olivier). Sowerby (1917), Entomologist, 50 (2): 31: *Nomioides variegata* (Olivier). Alfken (1927): 105: *Nomioides variegata* (Olivier). Blüthgen (1933): 24: *Nomioides variegata* (Olivier). El-zoheiry & Mohamed (1949): 75: *Nomioides variegata* (Olivier). Shalaby (1958): 81: *Nomioides variegata* Olivier. Pesenko (1983): 178 (key to females); 179 (key to males): *Ceylalictus (Ceylalictus) variegatus* (Olivier). El-Akkad (1993): 174 - 175 (key to females); 175 - 176 (key to males); 198–202 (Synonymy, re – description; 375 specimens examined (145♀♀ + 230♂♂)): *Nomioides fasciata* Friese. Pesenko & Pauly (2005): 144 (key to males and females); 160 – 164 (Re- description): *Ceylalictus (Ceylalictus) variegatus* (Olivier). Pesenko & Pauly (2009): 219 – 221: *Ceylalictus (Ceylalictus) variegatus* (Olivier). Saini & Vikram (2012): 137 (Distribution): *Ceylalictus (Ceylalictus) variegatus* (Olivier).

Genus *Nomioides* Schenck 1867

Nomioides Schenck, 1867, Berliner Entomologische Zeitschrift 10: 333.

This genus is widespread in the Palaearctic region. It is represented by a single subgenus covering nine species from Egypt; three of them newly added to the Egyptian fauna namely: *N. (Nomioides) bluethgeni* Pesenko, *N. (Nomioides) micheneri* Pesenko & Pauly and *N. (Nomioides) ornatus* Pesenko.

Subgenus *Nomioides* Schenck, 1867, Berliner Entomologische Zeitschrift 10: 333

41- *Nomioides (Nomioides) aegyptiaca* Blüthgen, 1933

Published records from Egypt:

Blüthgen, (1933): 25 – 27: Original Description of *Nomioides aegyptiaca* sp. n. (Type: 1♀ from Gabal el Asfer 27/10/1925 & 1♂ from Wadi Nesour (Heluan), 23/10/1925). El-zoheiry & Mohamed (1949): 75: *Nomioides aegyptiaca* Blüthgen. Shalaby (1958):

80: *Nomioides aegyptiaca* Blüthgen. El-Akkad (1993): 174 - 175 (key to females); 175 - 176 (key to males); 177–179 (Synonymy, re – description; Holotype examined (♀ + ♂)): *Nomioides aegyptiaca* Blüthgen. Pesenko & Pauly (2005): 133 & 215: They could not examine the type of this species, for this reason, they considered *Nomioides aegyptiaca* as a dubious name belonging to genus *Nomioides* subgenus *Nomioides* until examination of the type.

42- *Nomioides (Nomioides) bluethgeni* Pesenko, 1979

= *Nomioides (Nomioides) bluethgeni* Pesenko 1979, Trudy Vsesoyuznogo Entomologicheskogo Obshchestva, 61:176 ♂.

= *Nomioides (Nomioides) bluethgeni* Pesenko, 1983: 125♀.

Published records from Egypt:

Pesenko (1979): 176: Original description of *Nomioides (Nomioides) bluethgeni* sp. n.
 Pesenko (1983): 125 (key to females); 128 (key to males): *Nomioides (Nomioides) bluethgeni* Pesenko. Pesenko & Pauly (2005): 168 - 172 (key to males and females); 174 (Synonymy & re- description): *Nomioides (Nomioides) bluethgeni* Pesenko. Pauly (2012): (Distribution: Morocco, Egypt, Kenya, Jordan, Syria and Armenia): *Nomioides (Nomioides) bluethgeni* Pesenko.

43- *Nomioides (Nomioides) deceptor deceptor* Saunders, 1908

= *Nomioides deceptor* Saunders 1908, Trans. Royal Entom. Soc. London, (2): 223, ♀, ♂.

Published records from Egypt:

Blüthgen, (1925): 11: *Nomioides minutissima* var. *deserticola* Blüthgen [Holotype ♂, Khanka, 25.V.1914, Egypt [In Coll. Ministry Agric., Cairo]. Blüthgen (1933): 23: *Nomioides deceptrix* Saunders: Wadi Um Elek. Blüthgen (1934): 192: *Nomioides deceptrix* Saunders: Wadi Um Elek. El-zoheiry & Mohamed (1949): 75: *Nomioides minutissimus* K; *Nomioides minutissima* var. *deserticola* Blüthgen and *Nomioides minutissima* var. *nubica* Blüthgen. Shalaby (1958): 80: *Nomioides deceptor* S. & *Nomioides minutissima* K. Pesenko (1983): 138: *Nomioides minutissima deceptor* Saunders. El-Akkad (1993): 174 - 175 (key to females); 175 - 176 (key to males); 180–182 (Synonym, re – description; 8 specimens examined (5♀♀ + 3♂♂)): *Nomioides deceptor* Saunders. Pesenko & Pauly (2005): 168 - 172 (key to males and females); 174 (Synonymy & re- description): *Nomioides (Nomioides) deceptor deceptor* Saunders. Pesenko & Pauly (2009): 223 – 224: *Nomioides (Nomioides) deceptor deceptor* Saunders. Pauly (2012): (Distribution: North Africa and Arabian Peninsula): *Nomioides (Nomioides) deceptor deceptor* Saunders.

44- *Nomioides (Nomioides) elbanus* Blüthgen, 1934

= *Nomioides elbana* Blüthgen 1934: 200.

Male: unknown**Published records from Egypt:**

Blüthgen (1934): 192 & 200: Original description of *Nomioides elbana* sp. n. (Holotype: ♀, Gebel Elba: 21.1.1933, Egypt; in Coll. Ministry Agric., Cairo). El-Akkad (1993): 174 - 175 (key to females); 183–184 (Synonym, re – description; Type examined (2 ♀♀): *Nomioides deceptor* Saunders. Pesenko & Pauly (2005): 172 (key to females); 178 (Synonymy & re- description): *Nomioides (Nomioides) elbanus* Blüthgen. Pesenko & Pauly (2009): 224: *Nomioides (Nomioides) elbanus* Blüthgen. Pauly (2012): (Distribution: Algeria, Egypt and Arabian Peninsula): *Nomioides (Nomioides) elbanus* Blüthgen.

45- *Nomioides (Nomioides) micheneri* Pesenko & Pauly, 2005

= *Nomioides (Nomioides) micheneri* Pesenko & Pauly 2005: 191-193, ♀, ♂.

Published records from Egypt:

Pesenko & Pauly (2005): 171 - 172 (key to males and females); 191 - 193 (Original description of male and female; Paratypes (294 specimens): Egypt: Sinai, Wadi Suor, 3/5/1993): *Nomioides (Nomioides) micheneri* Pesenko & Pauly. Pesenko & Pauly (2009): 225: *Nomioides (Nomioides) micheneri* Pesenko & Pauly.

46- *Nomioides (Nomioides) ornatus* Pesenko, 1983

= *Nomioides (Nomioides) ornatus* Pesenko 1983: 124 & 127; ♀, ♂.

Published records from Egypt:

This species recorded from Egypt (Pesenko, 1983: 160), one male specimen from Fayed, V/ 1943, Coll. Priesner (Paratype).

Pesenko & Pauly (2005): 168 - 172 (key to males and females); 195 – 196 (Synonymy & re- description): *Nomioides (Nomioides) ornatus* Pesenko. Pesenko & Pauly (2009): 225: *Nomioides (Nomioides) ornatus* Pesenko.

Pauly (2012): (Distribution: Egypt, Niger, Burkinafaso, Chad, Israel and Kazakhstan): *Nomioides (Nomioides) ornatus* Pesenko.

47- *Nomioides (Nomioides) rotundiceps* Handlirsch, 1888

= *Nomioides rotundiceps* Handlirsch 1888: 405, Syntypes: 3 ♀♀, Egypt, Cairo.

Published records from Egypt:

Handlirsch (1888): 405: Original description of female of *Nomioides rotundiceps* sp. n. Alfken (1927): 105: *Nomioides rotundiceps* Handlirsch. Blüthgen (1933): 24: *Nomioides rotundiceps* Handlirsch. El-zoheiry & Mohamed (1949): 75: *Nomioides rotundiceps* var. *viridanus* Bl. Shalaby (1958):81: *Nomioides rotundiceps* & *Nomioides rotundiceps* var. *viridanus* Bl. Pesenko (1983): 124 (key to females); 127 (key to males): *Nomioides (Nomioides) rotundiceps* Handlirsch. El-Akkad (1993): 174 - 175 (key to females); 175 - 176 (key to males); 192–194 (Synonym, re – description; 63

specimens examined (19♀♀ + 44♂♂): *Nomioides rotundiceps* Handlirsch. Pesenko & Pauly (2005): 170 - 172 (key to males and females); 197 - 199 (re- description & distribution): *Nomioides (Nomioides) rotundiceps* Handlirsch. Pesenko & Pauly (2009): 226 - 227: *Nomioides (Nomioides) rotundiceps* Handlirsch. Pauly (2012): (Distribution: Morocco, Algeria, Egypt, Mauritania, Senegal, Mali, Burkina Faso, Niger, Cameroon, Chad, Sudan, Kenya, Israel, Jordon, Arabian Peninsula, southern Iran): *Nomioides (Nomioides) rotundiceps* Handlirsch.

48- *Nomioides (Nomioides) squamiger* Saunders, 1908

= *Nomioides squamiger* Saunders 1908, Trans. Royal Entom. Soc. London, (2): 222, ♀, ♂.

Published records from Egypt:

Debski (1917): 31 (Key to males and females); 35 (*Nomioides sp.?*): *Nomioides squamiger* Saunders. Blüthgen (1934): 201 table to comparing between females of *Nomioides squamiger*, *N. curvilineata* and *N. elbana*. El-Akkad (1993): 174 - 175 (key to females); 175 - 176 (key to males); 189–191 (Synonymy, re – description; 18 specimens examined (16♀♀ + 2♂♂)): *Nomioides minutissima* Rossi. Pesenko & Pauly (2005): 168 - 172 (key to males and females); 199 - 201 (Synonymy, re-description & distribution [Egypt: Sinai: Wadi Sour; 3/5/1993]): *Nomioides (Nomioides) squamiger* Saunders. Pauly (2012): (Distribution: North Africa, Israel, Arabian Peninsula): *Nomioides (Nomioides) squamiger* Saunders.

49- *Nomioides (Nomioides) turanica* Morawitz, 1876

= *Nomioides turanica* Morawitz 1876, Turkestan Mellifera: 214, ♀, ♂.

Published records from Egypt:

Handlirsch (1888): 402: *Nomioides turanica* Morawitz. Debski (1917): 31 (Key to males); 32 (key to females); 33 – 35: Original description of *Nomioides heluanensis* [Holotype ♂: Egypt, Heluan 4/9 /1916] & *Nomioides storeyi* [Holotype ♀: Egypt, Qaliub 9/7/1912]. Alfken (1927): 105: *Nomioides turanica* Morawitz. Blüthgen (1925): 20 *Nomioides turanica* var. *nubica* Blüthgen. Blüthgen (1933): 23: *Nomioides turanica* Morawitz. Blüthgen (1934): 192: *Nomioides turanica* var. *subvariegata* Blüthgen [Holotype: ♀, Djebel Elba (Wadi Aideb); Egypt]. El-zoheiry & Mohamed (1949): 75: *Nomioides storeyi* Debski & *Nomioides turanica* Morawitz. Shalaby (1958): 81: *Nomioides storeyi* Debski & *Nomioides turanica* Morawitz. Pesenko (1983): 125 (key to females); 130 (key to males): *Nomioides turanica* Morawitz. El-Akkad (1993): 174 - 175 (key to females); 175 - 176 (key to males); 195–197 (Synonymy, re – description; 20 specimens examined (11♀♀ + 9♂♂)): *Nomioides turanica* Morawitz. Pesenko & Pauly (2005): 168, 171 (key); 201 - 203 (re- description & distribution): *Nomioides (Nomioides) turanica* Morawitz. Pesenko

& Pauly (2009): 234: *Nomioides (Nomioides) turanica* Morawitz. Pauly (2012): (Distribution: North Africa to Sudan, Djibouti, Senegal, and Mauritania in the south; deserts of western Asia to Kirghizia and Pakistan in the east): *Nomioides (Nomioides) turanica* Morawitz.

Subfamily: Nomiinae

This subfamily is revised by Shoukry *et al.* (2004). Three genera belonging to this subfamily are represented in Egypt. Two species were added to the Egyptian fauna by Warncke (1980) and Baker (2002).

Genus: *Leuconomia* Pauly, 1980

Genus: *Leuconomia* Pauly, 1980, Revue de Zoologie Africaine, 94: 124.

= *Paranomina* Michener, 1944, Bull. Amer. Mus. Nat. History, 130: 251

50- *Leuconomia lutea* (Warncke, 1976)

= *Nomia (Paranomina) lutea* Warncke, 1976: 109 & 119, ♀ & ♂.

Published records from Egypt:

Warncke (1976): 94 (key to females); 96 (key to males); 109 (Distribution) & 119 (Original description: Holotype: ♀, Egypt, Heluan, 21. 10. 1930): [*Nomia (Paranomina) lutea* n. sp. ♀ & ♂]. Pauly (2000), Bulletin de l'Institut Royal des Sciences Naturelles de Belgique, Entomologie, 70: 167, 180 – 181 (Synonymy & Distribution): *Leuconomia lutea* (Warncke). Shoukry *et al.* (2004): 146 – 147 (Re-description): *Nomia (Leuconomia) lutea* Warncke. Pauly (2012): *Leuconomia lutea* (Warncke).

Genus: *Nomiapis* Cockerell, 1919

Nomia (Nomiapis) Cockerell, 1919, Proceedings of the United States Nat. Museum, 55: 208.

51- *Nomiapis bispinosa* (Brulle, 1832)

Nomia bispinosa Brulle, 1832, Expédition scientifique de Morée: 348, ♂.

Nomia rufiventris Spinola, 1839, Ann. Soc. Entom. France, 7: 514; ♀; (Egypt)

Nomia ruficornis Spinola, 1839, Ann. Soc. Entom. France, 7: 514; ♂; (Egypt)

Published records from Egypt:

Alfken (1927): 103: *Nomia rufiventris* Spin. El-zoheiry & Mohamed (1949): 76: *Nomia rufiventris* Spin & *Nomia rufiventris* var. *albocincta* Luc. Shalaby (1958): 80: *Nomia rufiventris* Spin. Warncke (1976): 94 – 96 (key to females); 96 – 99 (key to males); 109 (Synonymy & distribution): *Nomia (Nomiapis) unidentata* Olivier. Warncke (1980): 264, 269: *Nomia (Nomiapis) unidentata* Olivier. Baker (2002): 34 – 35 (Synonymy); 50 - 58 (key to males): *Nomiapis (Nomiapis) bispinosa* (Brulle). Shoukry *et al.* (2004): 149 (key to males and females); 153– 154 (Synonymy & re- description): *Pseudapis*

(*Pseudapis*) *unidentata* (Olivier). Saini & Vikram (2012): 148 (Synonymy & distribution): *Nomiapis bispinosa* (Brulle).

Genus *Pseudapis* Kirby, 1900

Subgenus: *Pseudapis* Kirby, 1900, Bulletin of the Liverpool Museums, 3: 15.

= *Nomia* (*Lobonomia*) Warncke, 1976: 99.

52- *Pseudapis* (*Pseudapis*) *anomala* Kirby, 1900

Pseudapis anomala Kirby, 1900, Bulletin of the Liverpool Museums, 3: 16: ♂♀.

Published records from Egypt:

Warncke (1980): 366 (key to males); 367 (key to females); 368 (Original description: Holotype: ♂ Gebel Elba, Egypt: Paratype: 2 ♀♀, Gebel Elba, Wadi Aideb, 4. 2. 1933): *Nomia* (*Pseudapis*) *sudanica* n. sp. Baker (2002): 29: (Synonymy); 50 – 58 (key to males): *Pseudapis* (*Pseudapis*) *anomala* Kirby.

53- *Pseudapis* (*Pseudapis*) *dixica* (Warncke, 1976)

Nomia (*Lobonomia*) *dixica* Warncke, 1976: 117 - 118, figs. 9, 30; ♀, ♂;

Published records from Egypt:

Warncke (1976): 94- 96 (key to females); 96 – 99 (key to males); 117 – 118 (Original description: Holotype: ♀, Ain Sefra, Algeria): *Nomia* (*Lobonomia*) *dixica* sp. n. Pauly (1990): 68 (key to males); 72 (Diagnosis): *Pseudapis dixica* (Warncke). Baker (2002): 33: (Synonymy); 50 – 58 (key to males): *Pseudapis* (*Pseudapis*) *dixica* (Warncke). Shoukry *et al.* (2004): 149 (key to males and females); 151 (Re-description): *Pseudapis* (*Pseudapis*) *dixica* (Warncke).

54- *Pseudapis* (*Pseudapis*) *fayumensis* Baker, 2002

Pseudapis (*Pseudapis*) *fayumensis* Baker, 2002: 39- 42; Holotype ♂: Fayoum, Karanis, 15.6.1990.

Published Records from Egypt:

Baker (2002): 39 – 42 (Original description: Holotype: ♂ Egypt, Fayoum, Karanis, 15. 6. 1990 [deposited in Oxford University Museum of Natural History, Oxford]; 50 – 58 (key to males); male genitalia figure 13: *Pseudapis* (*Pseudapis*) *fayumensis* sp. n.

55- *Pseudapis* (*Pseudapis*) *innesi* (Gribodo, 1894)

Nomia innesi Gribodo, 1894, Bollettino della Società Entomologica Italiana [Firenze] 26: 126, ♂; Egypt.

Published records from Egypt:

Alfken (1927): 103: *Nomia edentate* Morawitz. El-zoheiry & Mohamed (1949): 76: *Nomia edentata* Morawitz & *Nomia innesi* Gribodo. Shalaby (1958): 80: *Nomia innesi* Gribodo & *Nomia edentate* Morawitz. Warncke (1976): 94 – 96 (key to females); 96 – 99 (key to males); 99 (Synonymy & distribution): *Nomia* (*Lobonomia*) *innesi* Gribodo. Pauly (1990): 67 – 68 (key to males and females); 73 (Diagnosis, distribution):

Pseudapis innesi (Gribodo). Baker (2002): 28: (Synonymy); 50 – 58 (key to males): *Pseudapis (Pseudapis) innesi* (Gribodo). Shoukry *et al.* (2004): 148 - 149 (key to males and females); 152 (Re- description): *Pseudapis (Pseudapis) innesi* (Gribodo).

56- *Pseudapis (Pseudapis) nilotica* (Smith, 1875)

= *Nomia nilotica* Smith, 1875, Trans. Entom. Soc. London: 63, ♀; White Nile

Published records from Egypt:

Alfken (1927): 103: *Nomia magrettii* Gribodo. Warncke (1976): 94 – 96 (key to females); 96 – 99 (key to males); 105 (Synonymy & distribution): *Nomia (Lobonomia) armata* Olivier. Warncke (1980): 363, 365: *Nomia (Lobonomia) armata* ssp. *latipes* Morawitz. Pauly (1990): 68 (key to males and females); 70 (Synonymy & Distribution): *Pseudapis armata* (Olivier). Baker (2002): 22 – 24 (Synonymy); 50 - 58 (key to males): *Pseudapis (Pseudapis) nilotica* (Smith). Shoukry *et al.* (2004): 149 (key to males and females); 149 – 150 (Re- description): *Pseudapis (Pseudapis) armata* (Olivier).

57- *Pseudapis (Pseudapis) nubica* (Warncke, 1976)

Nomia (Lobonomia) nubica Warncke, 1976: 117.

Published Records from Egypt:

Warncke (1976): 94 – 96 (key to females); 117 (Original description of female: Holotype: ♀ Heliopolis, IX. 1913; Egypt): *Nomia (Lobonomia) nubica* sp. n. Pauly (1990): 67 - 68 (key to males and females); 76 (Diagnosis of male and female & Distribution: Egypt and Somale): *Pseudapis nubica* (Warncke). Baker (2002): 33: (Synonymy); 50 – 58 (key to males): *Pseudapis (Pseudapis) nubica* (Warncke). Shoukry *et al.* (2004): 149 (key to females); 153 (Re- description): *Pseudapis (Pseudapis) nubica* (Warncke).

Subfamily: Rophitinae (= Dufoureaeinae)

The subfamily Rophitinae needs further taxonomic studies; where the number of recorded species from Egypt very few compared to the number of recorded species from Palaearctic Region. It is recognized by the following characters: antennal sockets are below the mid-length of eyes and somewhat closer to the upper clypeal margin. Anterior margin of labrum is rounded or sometimes truncate and the hind basitarsus without penicillus. Only three genera and 6 species are recorded from Egypt.

Genus: *Dufourea* Lepeletier, 1841

Subgenus *Dufourea* Lepeletier, 1841, Hist. Nat. Insects Hymen. Vol. 2: 227

58- *Dufourea (Dufourea) ciliata* Ebmer, 1993

Published records from Egypt:

Female unknown

Ebmer (1993): 24 – 25 (Original description: Holotype: Egypt, Kom Ombo, 16 – 18/2/1958 and Paratype: Egypt, Wadi Katara, 3. 1988): *Dufourea (Dufourea) ciliata* sp. n.; ♂. Pauly (2012): (Distribution: Egypt): *Dufourea (Dufourea) ciliata* Ebmer

59- *Dufourea (Dufourea) rufiventris* Friese, 1898

Published Records from Egypt:

Friese (1898): 303-313 (Original description: Egypt): *Dufourea rufiventris* sp. n. El-zoheiry & Mohamed (1949): 76: *Dufourea rufiventris* Friese Shalaby (1958): 39: *Dufourea rufiventris* Friese. Ebmer (1984), Sencken bergiana biol., 64: 356: *Dufourea (Dufourea) rufiventris* Friese. Ebmer (1999): 198 (Distribution: Egypt and Israel: *Dufourea (Dufourea) rufiventris* Friese. Pauly (2012): (Distribution: Egypt and Israel): *Dufourea (Dufourea) rufiventris* Friese.

60- *Dufourea (Dufourea) similis* Friese, 1898

Published records from Egypt:

Friese (1898): 303 – 313: Original description of *Dufourea similis* sp. n. (Egypt). El-zoheiry & Mohamed (1949): 76: *Dufourea similis* Friese. Shalaby (1958): 39: *Dufourea similis* Friese. Ebmer (1999): 186 (Distribution: Tunisia, Morocco, Libya, Egypt, Israel and Syria): *Dufourea (Dufourea) similis* Friese. Pauly (2012): *Dufourea (Dufourea) similis* Friese.

Subgenus: *Rophites* Spinola, 1808, Insectorum Liguria species Novae aut Rarioris: 2 & 72.

61- *Rophites quadratus* Friese, 1898

Published records from Egypt:

Friese (1898): 305 (Original description: Egypt): *Rophites quadrates* sp. n. El-zoheiry & Mohamed (1949): 76: *Rophites quadrates* Friese. Shalaby (1958): 39: *Rophites quadrates* Friese.

Michener (2007): 437: *Pararhophites quadratus* Friese.

The systematic position of this species as follows:

Family Megachilidae: Subfamily Pararhophitinae: tribe Pararhophitini.

Genus: *Systropha* Illiger, 1806

Subgenus: *Systropha* Illiger, 1806, Magazin für Insektenkunde, 5: 145

62- *Systropha (Systropha) hirsuta* Spinola, 1839

= *Systropha hirsuta* Spinola, 1839, Annales de la Société Entom. France, 7: 516, Egypt, Nubia or Arabia. Lectotype ♂ from Egypt preserved in Museo Regionale di Storia Naturale, Torino, Italy.

Published records from Egypt:

Casolari & Casolari Moreno (1980), Museo Regionale di Scienze Naturali: 159 (Distribution: Egypt): *Systropha pilosa* Spinola. Warncke (1992), Linzer biologische Beiträge, 24: 742: Original description of *Systropha christae* sp.n. from Israel. Baker (1996): 1530 & 1543 (key to males); ♂, Wadi El Natrun, 17/4/1992, Egypt: *Systropha hirsuta* Spinola. (= *Systropha christae* Warncke, 1992) Patiny & Michez(2006), Annales de la Société entomologique de France, 42 (1):30 & 31 (key to males); 33 (key to females): *Systropha* (*Systropha*) *hirsuta* Spinola.

Genus: Trilia Vachal**63- TRILIA MUOTI VACHAL, 1900**

= *Dufourea* (*Trilia*) *muoti* Vachal, 1900, Ann. Soc. Entom. France, 68: 534. ♂ ,

Published Records from Egypt:

Warncke (1979): 118: *Rophites muoti* Vachal. Ebmer (2008), Linzer Biologische Beiträge, 40 (1): 605: *Trilia muoti* Vachal; (♀ , Lectotype from Algeria: Ghardaia). Astafurova (2010), Entomological Review, 90 (6): 760 – 763: (key to species and distribution: Algeria, Tunisia and Egypt)

Additional species can be expected later in Egypt

The following species recorded from neighboring countries and probably will be recorded later from Egypt:

1- *Dufourea* (*Dufourea*) *chagrina* (Warncke, 1979)**Published records from neighboring countries:**

Warncke (1979): 111- 155: Original description and distribution (Morocco, Tunisia and Israel): *Dufourea chagrina* sp. n. Ebmer (1993): 20: (Distribution: Tunisia and Israel): *Dufourea* (*Dufourea*) *chagrina* (Warncke). Ebmer (1999): 187: (Diagnosis and Distribution: Israel, Tunisia and Morocco): *Dufourea* (*Dufourea*) *chagrina* (Warncke).

2- *Dufourea* (*Dufourea*) *nodicornis* (Warncke 1979)**Published records from neighboring countries:**

Warncke (1979): 111- 155: Original description and distribution (Morocco, Tunisia, Libya, Israel, Jordan and Syria): *Dufourea nodicornis* sp. n. Ebmer (1993): Distribution (Tunisia, Jordan and Syria): *Dufourea* (*Dufourea*) *nodicornis* (Warncke). Ebmer (1999): 188: Distribution (Libya, Tunisia, Algeria and Israel): *Dufourea* (*Dufourea*) *nodicornis* (Warncke).

3- *Rophites algirus algirus* Pérez, 1895: 51-56**Published records from neighboring countries:**

Ebmer & Schwammberger (1986), Senckenbergiana Biologica, 66: 277 - 278 (key to females); 278 – 280 (key to males); Distribution (North Africa: Algeria). Type locality: Morocco, Tunisia (new record), Israel and Libanon; *Rophites algirus algirus* Pérez.

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قائمة تصنيفيه لفصيلة هاليكتيدي في مصر (رتبة غشائية الأجنحة)

مع عرض للأبحاث المنشورة لها

٢- تحت فصيلات نوميويديني ، نومييني وروفيتيني

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إشتملت الورقة الثانية من القائمة التصنيفية على الأنواع المصرية من فصيلة هاليكتيدي (رتبة غشائية الأجنحة) تحت فصيلات نوميويديني ، نومييني وروفيتيني مع عرض لجميع الأبحاث المنشورة لهذه المجموعة من الفصيلات. تتكون تحت فصيلة نوميويديني في مصر من ١١ نوع تنتمي إلى جنسان و ٢ تحت جنس وتم إضافة ثلاثة أنواع الي البيئة المصرية . وإشتملت تحت فصيلة نوميينعلي ثمانية أنواع تنتمي لثلاثة أجناس وتم إضافة نوعان منها إلي البيئة المصرية. وإشتملت تحت فصيلة روفيتيني علي ستة أنواع تنتمي إلى ثلاثة أجناس بالاضافة إلي ثلاثة أنواع تم تسجيلها في البلاد المجاوره لمصر ويحتمل تسجيلها في مصر. تم ترتيب القائمة طبقا لعضوية الأنواع في المراتب التصنيفية العليا وطبقا لمعظم المراجع التصنيفية الحديثة لفصيلة هاليكتيدي.