

SYSTEMATIC CHECKLIST WITH A REVIEW OF PUBLICATIONS OF FAMILY HALICTIDAE OF EGYPT (ORDER: HYMENOPTERA) 1- SUBFAMILY: HALICTINAE

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Abstract

A systematic checklist of the Egyptian species of family Halictidae (Order: Hymenoptera) is presented, consisting of 62 species belonging to 4 subfamilies, 12 genera and 18 subgenera. The first part of this checklist includes subfamily Halictinae, consisting of one tribe, 4 genera, 11 subgenera and 38 species. The species *Sphecodes (Sphecodes) ephippius* (Linné, 1767) was added to the Egyptian fauna. The checklist is arranged according to species membership in higher – level taxa, based on the most recent literatureof family Halictidae.

INTRODUCTION

Family Halictidae is one of the greatest families of all bees. It is one of the most diverse families of order Hymenoptera (Pesenko *et al.*, 2000 & Michener, 2007). More than 500 species of cultivated plants are entomophilous, their yield directly depends on pollination activity of insects. The members of family Halictidae are considered one of the most important and efficient pollinators of many different crops (Michener, 2007).

Family Halictidae includes four subfamilies (Halictinae, Nomioidinae, Nomiinae and Rophitinae) of about 72 genera and nearly 3500 currently recognized species (Michener, 2007). Halictid bees of subfamily Halictinae of Egypt and Palaearctic region were studied by several scholars such as: Friese (1916); Alfken (1927); Blüthgen (1933 & 1934); Ebmer (1976 & 1995); Warncke (1975 & 1992); Pesenko (1984); El-Akkad (1993); Pesenko *et al.* (2000); El-Akkad & kamel (2002); Michener (2007); Pauly (2012); Bogusch & Straka (2012) and Ascher & Pickering (2014).

The present work is carried out to clarify the recent taxonomic status of the subfamily Halictinae and its 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: Halictinae

Tribe: Halictini

Genus: *Halictus* Latreille, 1804

The genus *Halictus* Latreille is mostly a Palaearctic group in its occurrence and includes 12 subgenera and 90 currently species (Pesenko, 1984). Only 3 species belonging to 3 subgenera are recorded from Egypt as follows:

Subgenus: *Halictus* Latreille, 1804, Nouveau Dictionnaire d'Histoire Natur. , Vol. 24:182

1- *Halictus (Halictus) brunnescens* (Eversmann, 1852)

=*Hylaeus brunnescens* Eversmann, 1852, Bull. Soc. Moscow, 25: 36, ♀.

= *Halictus brunnescens* Smith, 1854, Catalogue of Hymen. Part (2): 423, ♂.

Published records from Egypt:

Friese (1916): 29-30: *Halictus* 4- *cinctus* var. *aegyptiacus* var. n. &*Halictus* 4- *cinctus* var. *rubripes* var. n. Blüthgen (1925), Konowia, 2 (1-2): 69: (key to females), 81 (key to males): *Halictus quadricinctus* var. *aegyptiacus* Friese. Blüthgen (1933): 16: *Halictus quadricinctus* var. *aegyptiaca* Friese & *Halictus quadricinctus* subsp. *rufipes* (F.). Blüthgen (1934): 188:*Halictus quadricinctus* var. *aegyptiaca* Friese. El-zoheiry & Mohamed (1949): 75: *Halictus quadricinctus* var. *aegyptiacus* Friese. Shalaby (1958): 53: *Halictus quadricinctus* F. & *Halictus quadricinctus* var. *aegyptiacus* Friese. Ebmer (1976), Acta Musei Moravia, 59:186-187 (Distribution): *Halictus* (*Halictus*)

brunnescens (Eversmann). Warncke (1975): 112: *Halictus (Halictus) quadricinctus* spp. *aegyptiacus* Frieze. El-Akkad (1993): 30 (key to females), 31 (key to males), 33-37 [Synonymy, re – description & 80 specimens examined (48 ♀♀ & 32 ♂♂)]: *Halictus (Halictus) brunnescens* (Eversmann). Dikmen & Aytekin (2011), Turkey Journal Zoology, 35 (4): 539 - 540 (Distribution): *Halictus (Halictus) brunnescens* (Eversmann). Dikmen *et al.* (2011), Zoology in the Middle East, 54: 84 (Synonym and distribution): *Halictus (Halictus) brunnescens* (Eversmann). Saini & Vikram (2012): 151 (Distribution): *Halictus (Halictus) brunnescens* (Eversmann). Pauly (2012): *Halictus (Halictus) brunnescens* (Eversmann).

Subgenus: *Hexataenites* Pesenko, 1984: 348

2- *Halictus (Hexataenites) resurgens* Nurse, 1903

- = *Halictus resurgens* Nurse, 1903, Ann. Magazine of Nat. Hist.: 542.
- = *Lucasius holtzi* Schulz, 1906, Spolia Hymenopterologica: 49, ♂♀.

Published records from Egypt:

Blüthgen (1923), Konowia, 2 (1-2):73: (key to females), 124 (key to males): *Halictus holtzi* Schulz. Blüthgen (1933): 15: *Halictus holtzi* Schulz. Blüthgen (1934): 188: *Halictus holtzi* Schulz. El-zoheiry & Mohamed (1949): 75: *Halictus holtzi* Schulz. Shalaby (1958): 53: *Halictus holtzi* Schulz. Warncke (1975): 111: *Halictus (Halictus) frontalis* ssp. *turkomannus* Pérez, = *Halictus holtzi* Schulz (Comb. n.). Ebmer (1976), Linzer Biologische Beiträge, 8/2: 396: *Halictus (Halictus) turkomannus* Pérez = *H. holtzi* Schulz = *H. asiaminoris* Strand. El-Akkad (1993): 30 (key to females), 32 (key to males); 40 - 43 [Synonymy, re – description & 64 specimens examined (36 ♀♀ & 28 ♂♂)]: *Halictus (Halictus) resurgens* Nurse. Dikmen & Aytekin (2011), Turkey Journal Zoology, 35(4):539 - 540 (Distribution): *Halictus (Hexataenites) resurgens* Nurse. Dikmen *et al.* (2011), Zoology in the Middle East (54): 86: *Halictus (Hexataenites) resurgens* Nurse. Saini & Vikram (2012): 151 (Distribution): *Halictus (Hexataenites) resurgens* Nurse. Pauly (2012): *Halictus (Hexataenites) resurgens* Nurse.

Subgenus: *Argalictus* Pesenko, 1984: 348

3- *Halictus (Argalictus) senilis* (Eversmann, 1852)

- = *Hylaeus senilis* Eversmann, 1852, Bull. Soc. Moscow, 25: 38, ♀♂.

Published records from Egypt:

Blüthgen (1923), Konowia, 2 (1-2):75: (key to females); 80 (key to males): *Halictus senilis* (Eversmann); 125 (key to males): *Halictus aegypticola* Strand. Blüthgen (1933): 15-16: *Halictus senilis* Eversmann; *Halictus senilis* var. *fucosa* Mor. (♂) & *Halictus aegypticola* Strand (♂). Blüthgen (1934): 188: *Halictus senilis* (Eversmann). El-zoheiry & Mohamed (1949): 75: *Halictus senilis* Eversmann. Shalaby (1958): 53:

Halictus senilis Eversmann. Ebmer (1974), Acta Musei Moravia, 59: 189:(Distribution):
Halictus (Halictus) senilis (Eversmann). Warncke (1975): 109: *Halictus (Halictus) senilis* (Eversmann). El-Akkad (1993): 30 (key to females), 31 (key to males), 44 - 48 [Synonymy, re – description & 155 specimens examined (90 ♀♀ & 65 ♂♂)]: *Halictus (Halictus) senilis* (Eversmann). Dikmen & Aytekin (2011), Turkey Journal Zoology, 35(4):539 (Synonymy & distribution): *Halictus (Argalictus) senilis* (Eversmann). Pauly (2012): *Halictus (Argalictus) senilis* (Eversmann).

Genus: *Seladonia* Robertson, 1918

***Seladonia* Robertson, 1918**, Entomological News 29: 91.

The genus *Seladonia* Robertson is considered as a separate genus and was subdivided into six subgenera namely *Mucoreohalictus* Pesenko; *Pachyceble* Moure; *Paraseladonia* Pauly; *Placidohalictus* Pesenko; *Seladonia* Robertson and *Vistitohalictus* Blüthgen (Pesenko (2004), Zoosystematica Rossica, 13: 102-113). It includes 102 currently recognized species, 72 of which are Palaearctic species (Pesenko (2006), Esakia, 46: 53). Only 4 species belonging to 3 subgenera are represented in Egypt as follows:

Subgenus: *Mucoreohalictus* Pesenko, 2004, Zoosystematica Rossica, 13:102

4- *Seladonia (Mucoreohalictus) polinosus thevestensis* (Pérez, 1903).

= *Halictus pollinosus* Sichel, 1860, Ann. Soc. Entom. France, 8: 763, ♀.

= *Halictus carinaeventris* Morawitz, 1876, Turkestan Mellifera: 226, ♂.

Published records from Egypt:

Blüthgen (1933): 17: *Halictus pollinosus* Sichel = *Halictus carinaeventris* Morawitz. El-zoheiry & Mohamed (1949): 75: *Halictus pollinosus* Sichel. Shalaby (1958): 53: *Halictus pollinosus* Sichel. Ebmer (1975), Mitteilungen aus dem Zoologischen Museum in Berlin, 51 (2):169 – 171 (Synonymy & distribution), 175 (key to males); 176 (key to females): *Halictus (Vestitohalictus) pollinosus pollinosus* Sichel. Warncke (1975): 107: *Halictus (Vestitohalictus) pollinosus* Sichel. El-Akkad (1993): 57 (key to females), 58 (key to males), 66 - 69 (Synonymy, re – description & 17 specimens examined (13 ♀♀ & 4 ♂♂)): *Halictus (Vestitohalictus) pollinosus* Sichel. Pesenko (2006), Esakia, 46: 56 - 65: (key to males and females), 65- 66 (Distribution): *Seladonia (Mucoreohalictus) pollinosa* Sichel. Pauly (2012): *Vestitohalictus polinosus thevestensis* (Pérez). Ascher and Pickering (2014): *Halictus (Mucoreohalictus) pollinosus thevestensis* (Pérez); valid species.

Subgenus: *Seladonia* Robertson, 1918, Entomological News 29: 91.

5- *Seladonia (Seladonia) lucidipennis* (Smith, 1853).

= *Halictus lucidipennis* Smith, 1853, Catalogue of Hymen. Part (1): 62, ♂♀.

Published records from Egypt:

Alfken (1927): 104 – 105: *Halictus dives* Pérez. Blüthgen (1933): 16 – 17: *Halictus varipes* var. *koptica* var. n. ♀♂. Blüthgen (1934): 188: *Halictus varipes* var. *dives* Pérez. El-zoheiry & Mohamed (1949): 75: *Halictus varipes* var. *koptica* Blüthgen & *Halictus varipes* var. *dives* Pérez. Shalaby (1958): 53 – 54: *Halictus dives* Pérez; *Halictus varipes* var. *dives* Pérez and *Halictus varipes* var. *koptica* Blüthgen. Ebmer (1974), Acta Musei Moravia, 59: 191: *Halictus (Seladonia) varipes* Mor. El-Akkad (1993): 50 - 55 (Synonymy, re – description & 442 specimens examined (377 ♀♀ & 65 ♂♂)): *Halictus (Seladonia) lucidipennis* Smith. Pauly *et al.* (2002), Bulletin de l’Institut Royal des Sciences Naturelles de Belgique, Entomologie, 72: 202 (Synonymy & distribution): *Halictus (Seladonia) lucidipennes* Smith. Dawut & Tadauchi (2003): Esakia, (43): 108 – 111 (Re- description of female; distribution and floral association in Bangladesh): *Halictus (Seladonia) varipes* Mor. Pesenko (2006): Esakia, 46: 61 (key to females), 64 (key to males), 73 – 74 (Synonymy & distribution): *Seladonia (Seladonia) lucidipennes* (Smith). Pauly (2008), Zoologische Mededelingen, Leiden, 82: 393-394 (Synonymy): *Seladonia (Seladonia) lucidipennes* (Smith). Saini & Vikram (2012): 152 (Distribution): *Seladonia (Seladonia) lucidipennes* (Smith).

Subgenus: *Vestitohalictus* Blüthgen, 1961, Beiträge zur Naturkundlichen, 19: 287.

= *Mucoreohalictus* Pesenko, 2004, Zoosystematica Rossica, 13: 102 (Michener, 2007: 370; new synonymy)

6- *Seladonia (Vestitohalictus) cupidus* (Vachal, 1902).

= *Halictus cupidus* Vachal, 1902, Rev. Russ. Entomology (2): 230, ♂.

Published records from Egypt:

Ebmer (1976):231: Synonymy and distribution (Egypt: Fayed; Fayoum; Wadi hoff; Wadi Digla; Sinai [Wadi Feiran and Al Tor] and Israel): *Halictus (Vestitohalictus) cupidus* Vachal. El-Akkad (1993): 57 (key to females), 58 (key to males), 59-60 (Synonymy, re – description & 11 specimens examined (7 ♀♀ & 4 ♂♂)): *Halictus (Vestitohalictus) cupidus* Vachal. Pauly (2012): *Vestitohalictus cupidus* (Vachal).

7- *Seladonia (Vestitohalictus) pici* (Pérez, 1895).

= *Halictus pici* Pérez, 1895, Espéces nouvelles de Mellifères de Barbariae: 53, ♀.

Published records from Egypt:

Vachal (1902): Rev. Russ. Entomology, 2: 230: *Halictus extorris* sp. n. ♂, Loc. Type: Egypt. Blüthgen (1933): 17: *Halictus pici* Péres. El-zoheiry & Mohamed (1949): 75: *Halictus pici* Péres. Shalaby (1958): 53- 54: *Halictus pici* Péres & *Halictus vestitus* Péres. Ebmer (1976):228 – 230: (comparing between *H. pici* and *H. cupidus*): *Halictus (Vestitohalictus) pici* Pérez. El-Akkad (1993): 57 (key to females), 58 (key to males),

61 - 65 (Synonymy, re – description & 52 specimens examined (45 ♀♀ & 7 ♂♂)): *Halictus (Vestitohalictus) pici* Pérez. Pauly (2012): *Vestitohalictus pici* (Pérez).

Genus: *Lasioglossum* Curtis, 1833

***Lasioglossum* Curtis, 1833**, British Entomology, Vol. 10, pls. 434-481.

The genus *Lasioglossum* Curtis is divided into two series: the *Lasioglossum* series consists of those subgenera in which the second submarginal crossvein is strong. The *Hemihalictus* series consists of those in which the second submarginal crossvein is weaker than the first. This genus includes 18 subgenera and nearly 1200 species worldwide (Michener, 2007). 23 species belonging to four subgenera are represented in Egypt as follows:

Subgenus: *Ctenonomia* Cameron, 1903, Journal of the Straits Branch of the Royal Asiatic Society, 39: 107. The subgenus *Ctenonomia* belongs to *Lasioglossum* series. It includes four species in Egypt as follows:

8- *Lasioglossum (Ctenonomia) fasciger* (Strand, 1909)

=*Halictus fasciger* Strand, 1909, Archiv für Naturgeschichte 75 (1): 32, ♀♂.

Published records from Egypt:

Blüthgen (1933): 20: *Halictus fasciger* Strand. Bytinski - Salz & Ebmer (1974): 194-195 (Distribution): *Lasioglossum (Evylaeus) fasciger* (Strand). El-Akkad (1993): 95 (key to females), 100 (key to males), 126 – 129 (Synonymy, re – description & 16 specimens examined (10 ♀♀ & 6 ♂♂)): *Lasioglossum (Evylaeus) fasciger* (Strand). Ascher and Pickering (2014): *Lasioglossum (Ctenonomia) fasciger* (Strand).

9- *Lasioglossum (Ctenonomia) gibber* (Vachal, 1892)

=*Halictus gibber* Vachal, 1892, Entomology France, 61:136, ♀.

= *Halictus gibber* Blüthgen, 1925, Archiv für Naturgeschichte: 101, ♂.

Published records from Egypt:

Blüthgen (1933): 18: *Halictus gibber* Vachal. El-zoheiry & Mohamed (1949): 75: *Halictus gibber* Vachal. Shalaby (1958): 53: *Halictus gibber* Vachal. Bytinski – Salz & Ebmer (1974): 195: *Lasioglossum (Incertum) gibber* (Vachal). El-Akkad (1993): 76 (key to females), 77 (key to males), 78 - 81 (Synonymy, re – description & 54 specimens examined (36 ♀♀ & 18 ♂♂)): *Lasioglossum (Ctenonomia) gibber* (Vachal, 1892). Pauly (2012): *Lasioglossum (Ctenonomia) gibber* (Vachal). Ascher and Pickering (2014): *Lasioglossum (Ctenonomia) gibber* (Vachal).

10- *Lasioglossum (Ctenonomia) luridipes* (Vachal, 1892)

=*Halictus luridipes* Vachal, 1892, Entomology France, 61: 136, ♀.

Published records from Egypt:

Blüthgen (1934): 189: *Halictus luridipes* Vachal. El-zoheiry & Mohamed (1949): 75: *Halictus luridipes* Vachal. Shalaby (1958): 53: *Halictus luridipes* Vachal. El-Akkad (1993): 77 (key to males and females), 82 – 85 (Synonymy, re – description & 8 specimens examined (5 ♀♀ & 3 ♂♂)): *Lasioglossum (Ctenonomia) luridipes* Vachal. Ascher and Pickering (2014): *Lasioglossum (Ctenonomia) luridipes* (Vachal).

11- *Lasioglossum (Ctenonomia) vagans* (Smith, 1857)

=*Halictus vagans* Smith, 1857, Journal of the Proceeding of the Linnean Society of London, Zoology (2): 42, ♀.

= *Halictus cattulus* Vachal, 1894, Ann. Mus. Civ. Genova, 34: 437, ♀.

Published records from Egypt:

Alfken (1927): 104: *Halictus cattulus* Vachal. Blüthgen (1933): 18: *Halictus vagans* Smith. Blüthgen (1934): 189: *Halictus vagans* Smith. El-zoheiry & Mohamed (1949): 75: *Halictus vagans* Smith. Shalaby (1958): 53: *Halictuscattulus* Vachal & *Halictus vagans* Smith. Ebmer (1974), Acta Musei Moravia, 59:197 (Distribution): *Lasioglossum (Lasioglossum) vagans* Smith. Bytinski – Salz & Ebmer (1974):181 (Distribution): *Lasioglossum (Lasioglossum) vagans* Smith. Sakagami (1989), Journal Kansas Entomology Soc., 62 (4):509 (key to species): *Lasioglossum (Ctenonomia) vagans* Smith. El-Akkad (1993): 76 - 77 (key to males and females), 86 - 93 (Synonymy, re – description & 350 specimens examined (151 ♀♀ & 199 ♂♂)): *Lasioglossum (Ctenonomia) vagans chaldoeorum* (Morice). Ebmer (1998), Linzer biologische Beiträge, 30 (1):377 (Distribution): *Lasioglossum (Ctenonomia) vagans* (Smith). Murao *et al.* (2009), Esakia (49):90: *Lasioglossum (Ctenonomia) vagans* (Smith). Saini & Vikram (2012): 157 (Distribution): *Lasioglossum (Ctenonomia) vagans* (Smith). Pauly (2012): *Lasioglossum (Ctenonomia) vagans* (Smith). Ascher and Pickering (2014): *Lasioglossum (Ctenonomia) vagans* (Smith).

Subgenus: *Dialictus* Robertson, 1902: Canadian Entomology, 34:248.

The members of subgenus *Dialictus* having metallic green reflections and the second submarginal crossvein is weaker than the first. This subgenus belongs to *Hemihalictus* series (Michener (2007). Three species of subgenus *Dialictus* are recorded from Egypt

12- *Lasioglossum (Dialictus) albovirens* (Pérez, 1895)

= *Halictus albovirens* Pérez, 1895, Espéces nouvelles de Mellifères de Barbaria: 52 - 53, ♂♀.

Published records from Egypt:

Blüthgen (1925), Archiv für Naturgeschichte, 90 (1924):132, ♂♀: *Halictus pseudoleptocephalus* sp. n. Warncke (1975): 86: *Halictus (Microhalictus) albovirens* (Pérez). Ebmer (1976):244: *Lasioglossum (Evylaeus) albovirens albovirens* (Pérez) & *Lasioglossum (Evylaeus) albovirens pseudoleptocephalum* (Blüthgen). El-Akkad

(1993): 95 (key to females), 107 – 109 (Synonymy, re – description of female & one female examined): *Lasioglossum (Evylaeus) albovirens pseudoleptocephalum* (Blüthgen). Pauly (2012): *Lasioglossum (Dialictus) albovirens* (Pérez).

13- *Lasioglossum (Dialictus) leptocephalum* (Blüthgen, 1923)

= *Halictus leptocephalus* Blüthgen, 1923, Archiv für Naturgeschichte: 245, ♀.

Published records from Egypt:

Blüthgen (1934): 190: *Halictus leptocephalus* Blüthgen. El-zoheiry & Mohamed (1949): 75: *Halictus leptocephalus* Blüthgen. Shalaby (1958): 53: *Halictus leptocephalus* Blüthgen. Bytinski– Salz & Ebmer (1974): 183: *Lasioglossum (Evylaeus) leptocephalum* (Blüthgen); 195- 197: Original description of female of *Lasioglossum (Evylaeus) leptocephalumsinaiticum* Ebmers sp. n ♀. El-Akkad (1993): 94 (key to females), 130 – 132 (Synonymy, re – description of female; one specimen examined): *Lasioglossum (Evylaeus) leptocephalum* (Blüthgen). Pauly (2012): *Lasioglossum (Dialictus) leptocephalum* (Blüthgen).

14- *Lasioglossum (Dialictus) mandibulare* (Morawitz, 1866)

= *Halictus mandibular* Morawitz, 1866, Soc. Entom. Ross. (4): 3 – 28.

= *Halictus carneiventris* Dours, 1872, Revue et magasin de Zool. (2) 23: 311, ♀.

= *Halictus carneiventris* Blüthgen, 1925, Archiv für Naturgeschichte: 118, ♂.

Published records from Egypt:

Blüthgen (1933): 20: *Halictus carneiventris* Dours. El-zoheiry & Mohamed (1949): 75: *Halictus carneiventris* Dours. Shalaby (1958): 53: *Halictus carneiventris* Dours. Bytinski – Salz & Ebmer (1974): 194 (Distribution): *Lasioglossum (Evylaeus) carneiventre* (Dours). Warncke (1975): 104: *Halictus (Pyghalictus) mandibulare* Morawitz = *Halictus carneiventris* Dours synonymnew. El-Akkad (1993): 96 (key to females), 101 (key to males), 113 – 117 (Synonymy, re – description and 51 specimens examined (40 ♀♀ & 11 ♂♂)): *Lasioglossum (Evylaeus) carneiventre* (Dours). Pauly (2012): *Lasioglossum (Dialictus) mandibular* (Morawitz).

Subgenus: *Evylaeus* Robertson, 1902, Canadian Entomology, 34: 247

This subgenus is the largest subgenus of the family Halictidae. It includes 318 currently recognized species in the Palaearctic Region (Pesenko, 2007), Zootaxa, 1500: 1 – 54). This subgenus belongs to *Hemihalictus* series (Michener, 2007) and having the second submarginal crossvein is weaker than the first. It is represented by 14 species in Egypt

15- *Lasioglossum (Evylaeus) ablenum* (Blüthgen, 1934)

= *Halictus ablenus* Blüthgen, 1934: 198- 200, ♂.

Published records from Egypt:

Blüthgen (1934): 198 – 200: (Original description): *Halictus ablenus* sp. n. El-zoheiry & Mohamed (1949): 75: *Halictus ablenus* Blüthgen. Shalaby (1958): 53: *Halictus ablenus* Blüthgen. El-Akkad (1993): 99 – 102 (key to males); 162 – 165 (Re – description of type): *Lasioglossum (Evylaeus) ablenum* Blüthgen. Saini & Vikram (2012): 154: (Distribution): *Lasioglossum (Evylaeus) ablenum* (Blüthgen). Pauly (2012): *Lasioglossum (Evylaeus) ablenum* (Blüthgen).

16- *Lasioglossum (Evylaeus) articulare* (Pérez, 1895)

= *Halictus articularis* Pérez, 1895, Espéces nouvelles Mellifères Barbaria: 54. ♀.

= *Halictus romanettii* Blüthgen, 1923, Archiv für Naturgeschichte: 276. ♂♀.

Published records from Egypt:

Blüthgen (1924), Konowia, 3:60 – 62 (key to females), 262 (key to males): *Halictus romanettii* Blüthgen. Blüthgen (1933): 19: *Halictus articularis* Pérez. Blüthgen (1934): 190: *Halictus articularis* Pérez = *Halictus romanettii* Blüthgen. El-zoheiry & Mohamed (1949): 75: *Halictus articularis* Pérez. Shalaby (1958): 53: *Halictus articularis* Pérez. Bytiniski-Salz & Ebmer (1974): 185: *Lasioglossum (Evylaeus) articulare* (Pérez). Ebmer (1976): 249: *Lasioglossum (Evylaeus) articulare* (Pérez). El-Akkad (1993): 99 (key to males), 110 – 112 (Synonymy, re – description of male; 3 ♂♂ specimens examined): *Lasioglossum (Evylaeus) articulare* (Pérez). Pauly (2012): *Lasioglossum (Evylaeus) articulare* (Pérez).

17- *Lasioglossum (Evylaeus) clypeiferellum* (Strand, 1909)

= *Halictus clypeiferellus* Strand, 1909, Archiv für Naturgeschichte 75: 28, ♀.

= *Halictus testaceohirtulus* Blüthgen, 1929, Konowia, 8:65, ♂.

Published records from Egypt:

Blüthgen (1929), Konowia, 8: 65-67 (Original description): *Halictus testaceohirtulus* ♂, sp. n. Blüthgen(1933): 19: *Halictus clypeiferellus* Strand. Bytiniski – Salz & Ebmer (1974): 188: *Lasioglossum (Evylaeus) clypeiferellum* (Strand). Warncke (1975): 92: *Halictus (Evylaeus) clypeiferellus* Strand. El-Akkad (1993): 101 (key to males), 118 – 120 (Synonymy, re – description of male; one male examined): *Lasioglossum (Evylaeus) clypeiferellum* (Strand). Pauly (2012): *Lasioglossum (Evylaeus) clypeiferellum* (Strand).

18- *Lasioglossum (Evylaeus) decolor* (Pérez, 1895)

= *Halictus decolor* Pérez, 1895, Espéces nouvelles de Mellifères Barbaria: 54, ♀.

= *Halictus decolor* Blüthgen, 1934: 192- 194, ♂.

Published records from Egypt:

Blüthgen (1934): 190 – 194, Original description of *Halictus decolor* sp. n. ♂. El-zoheiry & Mohamed (1949): 75: *Halictus decolor* Pérez. Shalaby (1958): 53: *Halictus decolor* Pérez. El-Akkad (1993): 99 (key to males), 121- 122 (Re – description of

male; ♂ paratype examined): *Lasioglossum (Evylaeus) decolor* (Pérez). Ebmer (1995): 556: (Distribution: Algeria, Tunisia, Lybia and Egypt): *Lasioglossum (Evylaeus) decolor* (Pérez). Pauly (2012): *Lasioglossum (Evylaeus) decolor* (Pérez).

19- *Lasioglossum (Evylaeus) elbanum* (Blüthgen, 1934)

= *Halictus elbanus* Blüthgen, 1934: 194 – 196, ♂♀.

Published records from Egypt:

Blüthgen (1934): 190 & 192 – 194: Original description of male and female of *Halictus elbanus* sp. n. El-zoheiry & Mohamed (1949): 75: *Halictus elbanus* Blüthgen. Shalaby (1958): 53: *Halictus elbanus* Blüthgen. Bytiniski-Salz & Ebmer (1974): 185: *Lasioglossum (Evylaeus) elbanum* Blüthgen. Ebmer (1975): Linzer Biologische Beiträge, 7 (1):103 (Distribution): *Lasioglossum (Evylaeus) elbanum* (Blüthgen). El-Akkad (1993): 96 (key to females), 100 (key to males) 122- 125 (Re – description; female paratype examined from Gabal Elba, 26/1/33): *Lasioglossum (Evylaeus) elbanum* (Blüthgen). Ebmer (1995): 555: (Distribution: Sudan, Egypt and Israel): *Lasioglossum (Evylaeus) elbanum* (Blüthgen) Pauly (2012): *Lasioglossum (Evylaeus) elbanum* (Blüthgen).

20- *Lasioglossum (Evylaeus) leptorhynchum* (Blüthgen, 1931)

= *Halictus leptorhynchus* Blüthgen, 1931, Mitt. Zool. Mus. Berlin, 17: 360 – 362, Holotype: 1 ♀ Wadi Um Elek (15/10/19); Paratype: 1 ♀ Wadi Hussein (31/ 5/19), Egypt.

Published records from Egypt:

Blüthgen (1933): 19: *Halictus leptorhynchus* Blüthgen. Bytinski – Salz & Ebmer (1974): 193 *Lasioglossum (Evylaeus) leptorhynchum* (Blüthgen). El-Akkad (1993): 94 (key to females), 133 – 134 (Re – description of female; Holotype and paratype examined): *Lasioglossum (Evylaeus) leptorhynchum* (Blüthgen). Pauly (2012): (Distribution: Egypt): *Lasioglossum (Evylaeus) leptorhynchum* (Blüthgen).

21- *Lasioglossum (Evylaeus) malachurum* (Kirby, 1802)

= *Melitta malachura* Kirby, 1802, Monographia Apum Angliae, Vol. II: 67. ♀.

= *Hylaeus apicalis* Schenck, 1853, Jahr. Ver. Naturk. Nassau, 9 (1): 161. ♂.

Published records from Egypt:

Blüthgen (1924): Konowia, 3: 81 & 90 (key to females); 269 (key to males): *Halictus malachurus* Kirby. Blüthgen (1933): 19: *Halictus malachurus* (Kirby) = *H. longulus* Smith. Bytiniski-Salz & Ebmer (1974): 186: *Lasioglossum (Evylaeus) malachurum* (Kirby). Warncke (1975): 100: *Halictus (Calchalcitrus) malachurus* (Kirby). Ebmer (1976): 248: *Lasioglossum (Evylaeus) malachurum* (Kirby) & *Lasioglossum (Evylaeus) malachurum sharificus* Cockerell is a synonym new. Ebmer (1976), Linzer Biologische Beiträge, 8/2:400: *Lasioglossum (Evylaeus) malachurum* (Kirby). El-Akkad (1993): 90

(key to females); 96 (key to males); 130 - 133 (Synonymy & re – description; 2 specimens examined): *Lasioglossum (Evylaeus) malachurum* (Kirby). Pauly (2012): (Distribution: Western Palaearctic, North Africa from the Canary Islands, Morocco, Tunisia, to Egypt; Middle East , very common in Turkey, rare in Syria, Israel and Jordon): *Lasioglossum (Evylaeus) malachurum* (Kirby).

22- *Lasioglossum (Evylaeus) masculum* (Pérez, 1895)

= *Halictus masculus* Pérez, 1895, Espéces nouvelle de Mellifères Barbaria: 55, ♀.

Published records from Egypt:

Blüthgen (1924), Konowia, 3:58 (key to females); 262 (key to males): *Halictus leucopymatus* Dalla Torre & *Halictus leucopymatus* var. *numidus* Blüthgen. Bytinski-Salz & Ebmer (1974): 187 (Distribution) & 201: Original description of male of *Lasioglossum (Evylaeus) masculum* (Pérez). Ebmer (1976): 250: *Lasioglossum (Evylaeus) masculum* (Pérez). El-Akkad (1993): 91 (key to females); 96 (key to males); 137 - 140 (Re – description; 10 specimens examined): *Lasioglossum (Evylaeus) masculum* (Pérez). Pauly (2012): (Distribution: West Palaearctic, Morocco, Algeria, Egypt, Israel, Jordon and Syria): *Lasioglossum (Evylaeus) masculum* (Pérez).

23- *Lasioglossum (Evylaeus) mariuticum* (Blüthgen, 1934)

= *Halictus mariuticus* Blüthgen, 1934: 196- 197, ♀.

Published records from Egypt:

Blüthgen (1934): 196 – 197 Original description of *Halictus mariuticus* sp. n. El-zoheiry & Mohamed (1949): 75: *Halictus mariuticus* Blüthgen. Shalaby (1958): 53: *Halictus mariuticus* Blüthgen. Bytinski -- Salz & Ebmer (1974): 192 *Lasioglossum (Evylaeus) mariuticum* (Blüthgen). El-Akkad (1993): 95 (key to females), 139 – 141 (Re – description of female; Holotype examined): *Lasioglossum (Evylaeus) mariuticum* (Blüthgen). Pauly (2012): (Distribution: Egypt) *Lasioglossum (Evylaeus) mariuticum* (Blüthgen).

24- *Lasioglossum (Evylaeus) mesosclerum* (Pérez, 1903)

= *Halictus mesosclerus* Pérez, 1903, Espéces nouvelles de Mellifères (58): 43, ♀.

Published records from Egypt:

Blüthgen (1933): 19: *Halictus mesosclerus* Pérez. Blüthgen (1934): 190: *Halictus mesosclerus* Pérez. El-zoheiry & Mohamed (1949): 75: *Halictus mesosclerus* Pérez. Shalaby (1958): 53: *Halictus mesosclerus* Pérez. Ebmer (1974), Acta Musei Moravia, 59: 202: *Lasioglossum (Evylaeus) mesosclerum* (Pérez). Warncke (1975): 91: *Halictus (Evylaeus) mesosclerum* (Pérez). Ebmer (1976), Linzer Biologische Beiträge, 8/2:404: *Lasioglossum (Evylaeus) mesosclerum* (Pérez). El-Akkad (1993): 98 (key to females), 102 (key to males), 146 – 149 (Synonymy, re – description and 4 specimens

examined (3♀♀ & 1♂): *Lasioglossum (Evylaeus) mesosclerum* (Pérez). Pauly (2012): (Distribution: Lybia and Egypt): *Lasioglossum (Evylaeus) mesosclerum* (Pérez).

25- *Lasioglossum (Evylaeus) minutissimum* (Kirby, 1802)

= *Melitta minutissima* Kirby, 1802, Monographia Apum Anglia, Vol. II: 63, ♂♀.

Published records from Egypt:

Blüthgen (1933): 19: *Halictus minutissimus* var. *hollandi* Saundier, 1904. Bytinski - Salz & Ebmer (1974): 193 *Lasioglossum (Evylaeus) minutissimum* (Kirby). Warncke (1975): 86: *Halictus (Microhalictus) minutissimus* (Kirby). El-Akkad(1993): 97 (key to females), 103 (key to males); 150– 153 (Synonymy, re – description and 13 specimens examined (10♀♀ & 3♂♂)): *Lasioglossum (Evylaeus) minutissimum* (Kirby). Pauly (2012): *Lasioglossum (Evylaeus) minutissimum* (Kirby).

26- *Lasioglossum (Evylaeus) nabardicum* (Blüthgen, 1931)

= *Halictus nabardicus* Blüthgen, 1931, Mitt. Zool. Mus. Berlin, 17: 367 – 368, ♀; Type locality: Nubian Desert.

Published records from Egypt:

Blüthgen (1933): 19: *Halictus nabardicus* Blüthgen. Bytinski -- Salz & Ebmer (1974): 193: new description of male of *Lasioglossum (Evylaeus) nabardicum* (Blüthgen); Sinai: Wadi Herban. El-Akkad (1993): 97 (key to females), 99 (key to males); 154 – 157 (Re – description): *Lasioglossum (Evylaeus) nabardicum* (Blüthgen). Pauly (2012): (Distribution: Sudan [Nobian desert], Sinai, Israel): *Lasioglossum (Evylaeus) nabardicum* (Blüthgen).

27- *Lasioglossum (Evylaeus) transitorium* (Schenck, 1869)

= *Halictus transitorius* Schenck, 1869, Jahr. Nassau. Für Naturk., 21/22:309, ♀.

Published records from Egypt:

Ebmer (1971): 116: *Lasioglossum (Evylaeus) transitorium planulum* (Pérez). Bytinski - - Salz & Ebmer (1974): 191: this species occurs in a separate subspecies namely *Lasioglossum (Evylaeus) transitorium planulum* (Pérez)] in the Western Mediterranean. El-Akkad (1993): 97 (key to females), 102 (key to males); 158 – 161 (Synonymy, re – description): *Lasioglossum (Evylaeus) transitorium planulum* (Pérez). Pauly (2012) mentioned that there are three subspecies belonging to this species namely: *L. (Evylaeus) transitorium transitorium* (Schenck, 1869); *L. (Evylaeus) transitoriumplanulum* (Pérez, 1903) and *L. (Evylaeus) transitorium uncinum* (Vachal); the last subspecies represented in eastern Mediterranean (Cyprus, Southern Asia Minor, Syria, Israel, Jordan and Egypt).

28- *Lasioglossum (Evylaeus) villosulum* (Kirby, 1802)

= *Melitta villosula* Kirby, 1802, Monographia Apum Anglia, Vol. II: 62. ♂.

= *Melitta punctulata* Kirby, 1802, Monographia Apum Anglia, Vol. II: 62. ♀.

Published records from Egypt:

Blüthgen (1933): 19 *Halictus villosulus* (Kirby). Blüthgen (1934): 190: *Halictus villosulus* (Kirby). El-zoheiry & Mohamed (1949): 75: *Halictus villasulus* K. Shalaby (1958): 54: *Halictus villasulus* W. K. Bytinski -- Salz & Ebmer (1974): 188 – 189: *Lasioglossum (Evylaeus) villosulum* (Kirby). Warncke (1975): 91: *Halictus (Evylaeus) villosulus* (Kirby). Ebmer (1976): 253: *Lasioglossum (Evylaeus) villosulum* (Kirby). Ebmer (1976), Linzer Biologische Beiträge, 8/2: 402: *Lasioglossum (Evylaeus) villosulum* (Kirby) belonging to *villosulum* group. El-Akkad (1993): 98 (key to females), 102 (key to males); 162 – 165 (Synonymy, re – description; specimens examined 9 ♀♂): [*Lasioglossum (Evylaeus) villosulum* (Kirby)]. Ebmer (2008), Linzer Biologische Beiträge, 40 (1): 549 – 579: Original description of *Lasioglossum (Evylaeus) villosulum arabicum* Ebmer. Saini & Vikram (2012): 156 (Distribution): *Lasioglossum (Evylaeus) villosulum* (Kirby). Pauly (2012): (Synonymy & distribution): *Lasioglossum (Evylaeus) villosulum* (Kirby).

Subgenus: *Lasioglossum* Curtis, 1833, British Entomology, Pl. 448.

This subgenus belongs to *Lasioglossum* series, members of it have the second submarginal crossvein is strong, like the first and unlike the third one. Two species only are represented from Egypt as follows:

29- *Lasioglossum (Lasioglossum) aegyptiellum* (Strand, 1909)

= *Halictus morbillosus* var. *aegyptiellus* Strand, 1909, Arch. Naturg., 75: 11, ♀.

Published records from Egypt:

Blüthgen (1933): 17: *Halictus aegyptiellus* Cockerell. Ebmer (1970), Naturkundliches Jahrbuch der Stadt Linz: 20 (key to females); 25 (key to males); 31-33 (Synonymy & re - description): *Lasioglossum (Lasioglossum) aegyptiellum* (Strand). Bytiniski– Salz & Ebmer (1974): 179 (Distribution): *Lasioglossum (Lasioglossum) aegyptiellum* (Strand). Warncke (1975): 108: *Halictus (Halictus) aegypticola* Strand. Ebmer (1976): 235: *Lasioglossum (Lasioglossum) aegyptiellum* (Strand). Ebmer (1976), Linzer Biologische Beiträge, 8/2: 400 *Lasioglossum (Lasioglossum) aegyptiellum* (Strand). El-Akkad (1993): 161 (key to females and males); 162 - 164 (Synonymy & re – description; 3 specimens examined): *Lasioglossum (Lasioglossum) aegyptiellum* (Strand). Pauly (2012): *Lasioglossum (Lasioglossum) aegyptiellum* (Strand).

30- *Lasioglossum (Lasioglossum) callizonium* (Pérez, 1895)

= *Halictus callizonius* Pérez, 1895, Espèces nouvelle Mellifères Barbaria: 54, ♀.

= *Halictus callizonius* Alfken, 1914, Mém. Soc. Entom. Belgique, 22: 190, ♂.

Published records from Egypt:

Blüthgen (1933): 17: *Halictus callizonius* Pérez. Blüthgen (1934): 189: *Halictus callizonius* Pérez. El-zoheiry & Mohamed (1949): 75: *Halictus callizonius* Pérez.

Shalaby (1958): 53: *Halictus callizonius* Pérez Bytiniski– Salz & Ebmer (1974): 178 (Distribution): *Lasioglossum (Lasioglossum) callizonium* (Pérez). Ebmer (1976): 235: *Lasioglossum (Lasioglossum) callizonium* (Pérez). El-Akkad (1993): 161 (key to females and males); 165- 170 (Re – description; 132 specimens examined): *Lasioglossum (Lasioglossum) callizonium* (Pérez). Pauly (2012): *Lasioglossum (Lasioglossum) callizonium* (Pérez).

Genus: *Sphecodes* Latreille, 1804

Sphecodes Latreille, 1804, Nouveau Dictionnaire d'Histoire Naturelle, Vol. 24: 129 – 200.

The members of the genus *Sphecodes* are usually black with a partly or wholly red metasoma, but sometimes, especially in males, the metasoma entirely black. The genus is widespread on all continents, except Australia. There may be 100 named Palaearctic species (Michener, 2007). El- Akkad & Kamel (2002) illustrated and keyed seven species of *Sphecodes* from Egypt. Warncke (1992) added the species *Sphecodes ephippius* Linné to the Egyptian fauna.

Subgenus: *Sphecodes* Latreille, 1804.

31- *Sphecodes (Sphecodes) albilabris* (Fabricius, 1793).

= *Nomada albilabris* Fabricius, 1793, Entomologia Systematica, Vol 2: 349

Published records from Egypt:

Blüthgen (1933): 22: *Sphecodes fuscipennis* subsp. *rubripes* Spinola. Blüthgen (1934): 190: *Sphecodes rubripes* Spinola. Shalaby (1958): 112: *Sphecodes fuscipennis* Germ. Warncke (1992): 11 (key to females); 13 (key to males); 30 – 31(Synonym & distribution): *Sphecodes fuscipennis* subsp. *rubripes* Spinola. El-Akkad & Kamel (2002): 1583 – 1584 (key to males and females); 1584 – 1585 (Synonym, re-description & 7 specimens examined (5 ♀♀ + 2 ♂♂)): *Sphecodes (Sphecodes) albilabris* subsp. *rubripes* Spinola. Bogusch & Straka (2012): 3: (key to females); 6 (key to males); 7 -8 (Synonym, distribution, Biology and taxonomic notes); 19 (Hosts): *Sphecodes (Sphecodes) albilabris* (Fabricius).

32- *Sphecodes (Sphecodes) alternatus* Smith, 1853

= *Sphecodes alternatus* Smith, 1853, Catalogue Hymen. British Mus. I: 36, n.9.

Published records from Egypt:

Blüthgen (1933): 22: *Sphecodes alternatus* Smith. Blüthgen (1934): 191: *Sphecodes alternatus* Smith. El-zoheiry & Mohamed (1949): 75: *Sphecodes alternatus* Smith. Shalaby (1958): 111: *Sphecodes alternatus* Smith. Warncke (1992): 11 (key to females); 14 (key to males); 26 (Synonym & distribution): *Sphecodes alternatus algeriensis* Alfken- Stat. n. El-Akkad & Kamel (2002): 1583 – 1584 (key to males and females); 1585 – 1586 (Re-description& 16 specimens examined (9 ♀♀ + 7 ♂♂)):

Sphecodes (Sphecodes) alternatus Smith. Bogusch & Straka (2012): 4: (key to females); 6 (key to males); 8 (Synonymy; distribution & biology); 19 (Hosts): *Sphecodes (Sphecodes) alternatus* Smith.

33- *Sphecodes (Sphecodes) ephippius* (Linné, 1767)

= *Sphex ephippia* Linné, 1767, Systema Naturae, Editio 12: 944.

Published records from Egypt:

Warncke (1992): 11 (key to females); 15 (key to males); 20 (Synonymy & distribution: North Africa, from Morocco to Egypt): *Sphecodes ephippius* Linné. Bogusch & Straka (2012): 4: (key to females); 6 (key to males); 10 (Synonymy, Distribution & Biology); 20 (Hosts): *Sphecodes (Sphecodes) ephippius* Linné.

Note: This species is not represented by any specimens in the Egyptian Insect Collections.

34- *Sphecodes (Sphecodes) gibbus* (Linné, 1758)

= *Sphex gibba* Linnaeus, 1758, Systema Naturae, Editio 1: 571.

= *Sphecodes gibbus* Latreille, 1809, Genera Crustaceorum Insectorum, 4: 153.

Published records from Egypt:

Blüthgen (1933): 22: *Sphecodes gibbus* L. Blüthgen (1934): 191: *Sphecodes gibbus* L. El-zoheiry & Mohamed (1949): 75: *Sphecodes gibbus* L. Shalaby (1958): 112: *Sphecodes gibbus* L. Warncke (1992): 11 (key to females); 13 (key to males); 29 - 30 (Synonymy & distribution: North Africa from Morocco to Israel): *Sphecodes gibbus rufispinosus* Meyer (Stat. n.). El-Akkad & Kamel (2002): 1583 – 1584: (key to males and females); 1587 (Re-description& 5 specimens examined (2 ♀♀ + 3 ♂♂): *Sphecodes (Sphecodes) gibbus* L. Bogusch & Straka (2012): 4: (key to females); 6 (key to males); 11 (Synonymy, diststribution & biology); 20 (Hosts): *Sphecodes (Sphecodes) gibbus* L. Saini & Vikram (2012): 162: (Distribution): *Sphecodes (Sphecodes) gibbus* L.

35- *Sphecodes (Sphecodes) hirtellus* Blüthgen, 1923

= *Sphecodes hirtellus* Blüthgen, 1923, Deutsh. Entom. Zeitschr.: 502: ♂ & ♀.

Published records from Egypt:

Blüthgen (1934): 191: *Sphecodes hirtellus* Blüthgen: new recorded from Egypt.

El-zoheiry & Mohamed (1949): 75: *Sphecodes hirtellus* Blüthgen. Shalaby (1958): 112: *Sphecodes hirtellus* Blüthgen. Warncke (1992): 9 (key to females); 15 (key to males); 18 (Distribution: Madrid (Spain), Tanger (Morocco), Algeria and Egypt): *Sphecodes hirtellus* Blüthgen. El-Akkad & Kamel (2002): 1583: (key to males and females); 1588 (one female re-described and examined): *Sphecodes (Sphecodes) hirtellus* Blüthgen.

36- *Sphecodes (Sphecodes) olivieri* Lepeletier, 1825

- = *Sphecodes olivieri* Lepeletier, 1825, Encycl. method. Insect, X: 448 n. 2.
 = *Sphecodes verticalis* Hagens, 1882, Deutsh. Entom. Zeitschr 26: 219.

Published records from Egypt:

Alfken (1927): 105: *Sphecodes verticalis* Hag. Blüthgen (1933): 22: *Sphecodes olivieri* Lepeletier. Blüthgen (1934): 190: *Sphecodes olivieri* Lepeletier. El-zoheiry & Mohamed (1949): 75: *Sphecodes olivieri*; *Sphecodes olivieri* var. *verticalis* & *Sphecodes verticalis* Hag. Shalaby (1958): 112: *Sphecodes olivieri* & *Sphecodes verticalis* Hagens. Warncke (1992): 10 (key to females); 13 (key to males); 24 (Synonymy and distribution: North Africa from Morocco to Egypt, Israel and Kuakas): *Sphecodes olivieri* Lep. El-Akkad & Kamel (2002): 1583 – 1584: (key to males and females); 1588 - 1589 (Re-description & 128 specimens examined (60 ♀♀ + 68 ♂♂)): *Sphecodes (Sphecodes) olivieri* Lep. Bogusch & Straka (2012): 3: (key to females); 6 (key to males); 14 - 15 (Synonymy, distribution & biology); 21 (Hosts): *Sphecodes (Sphecodes) olivieri* Lep. Saini & Vikram (2012): 163: (Distribution): *Sphecodes olivieri* Lep.

37- *Sphecodes (Sphecodes) puncticeps* Thomson, 1870

- = *Sphecodes puncticeps* Thomson, 1870, Opusc. Entom.: 2 & 99, n. 6.

Published records from Egypt:

Blüthgen (1934): 191: *Sphecodes puncticeps* Thomson; recorded from Egypt for the first time. Warncke (1992): 9 (key to females); 15 (key to males); 18 - 19 (Synonymy and distribution: North Africa from Morocco to Egypt and Israel): *Sphecodes puncticeps* Thomson. El-Akkad & Kamel (2002): 1582 – 1583: (key to males and females); 1589 - 1590 (Re-description & 4 males examined): *Sphecodes (Sphecodes) puncticeps* Thomson. Bogusch & Straka (2012): 4: (key to females); 6 (key to males); 16 (Synonymy, distribution & biology); 22 (Hosts): *Sphecodes (Sphecodes) puncticeps* Thomson.

38- *Sphecodes (Sphecodes) ruficrus* (Erichson, 1835)

- = *Dichroa ruficrus* Erichson, 1835, Waltl: Reise d. Tirol etc. P: 2 & 101.
 = *Sphecodes hispanicus* Wesmael, 1835, Bull. Acad. Sc. Belgique 2: 286.

Published records from Egypt:

Blüthgen (1933): 22: *Sphecodes ruficrus* Erichson. Blüthgen (1934): 191: *Sphecodes ruficrus* Erichson. El-zoheiry & Mohamed (1949): 75: *Sphecodes ruficrus* Erichson. Shalaby (1958): 112: *Sphecodes ruficrus* Erichson. Warncke (1992): 11 (key to females); 14 (key to males); 21 (Synonymy and distribution: North Africa from Morocco to Egypt and Israel): *Sphecodes ruficrus* Erichson. El-Akkad & Kamel (2002): 1582 & 1584: (key to males and females); 1590 – 1591 (Re-description& 16 specimens examined (7 ♀♀ + 9 ♂♂)): *Sphecodes (Sphecodes) ruficrus*

Erichson.Bogusch & Straka (2012): 4: (key to females); 6 (key to males); 17 (Synonymy, distribution & biology); 22 (Hosts): *Sphecodes (Sphecodes) ruficrus* Erichson.

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قائمة تصنيفية لفصيلة هاليكتيدي في مصر (رتبة غشائية الأجنحة)

مع عرض للأبحاث المنشورة لها

١ - تحت فصيلة هاليكتيني

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يقدم هذا البحث قائمة تصنيفية للأنواع التابعة لفصيلة هاليكتيدي في مصر (رتبة غشائية الأجنحة) مكونة من ٦٢ نوعاً تتنتمي إلى أربعة فُصيلات (تحت فصيلة) وإثنى عشر جنساً وثمانية عشرة جنисاً (تحت جنس).

إشتغل البحث على قائمة للأنواع التابعة لفصيلة (تحت فصيلة) هاليكتيني والتي تتكون من أربعة أجناس وأحد عشر جنисاً وثمانية وثلاثون نوعاً مع عرض لجميع الأبحاث المنشورة لهذه الفصيلة. تم إضافة النوع (*Sphecodes ephippius*) (Linné) إلى البيئة المصرية . تم ترتيب القائمة طبقاً لعضوية الأنواع في المراتب التصنيفية العليا وطبقاً لمعظم المراجع التصنيفية الحديثة لفصيلة هاليكتيدي.