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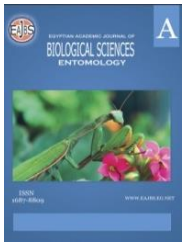

Survey and Taxonomic Notes on The Hymenopterous Insect Fauna of the New Valley, Egypt.Part II. wasps

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ABSTRACT

A survey of the wasps (Hymenoptera) was carried out in the New Valley governorate (Egypt), using mainly sweeping nets during a period covered all the seasons of the years 2017- 2018. The survey resulting 103 species under 68 genera belonging to 13 wasp families, of which 53 species are recorded for the first time in this area. Notes on the abundance of the species in the area of study, together with their economic status and their distribution in different geographical regions in Egypt are provided.

INTRODUCTION

The New Valley governorate is the largest governorate in Egypt, covering an area of 458,000 square kilometers (about one-fifth of the total surface area of Egypt). It extends in the north as far as Marsa Matrouh, in the south as far as Sudan and in the west as far as Libya. In the east, it is coterminous with the governorates of Assiut, Qena, and Aswan. The New Valley has a desert climate that is hot and dry and was one of the most important agricultural areas of Ancient Egypt (Janick, 2002). The hymenopterous fauna of this important region was not perfectly studied and very little is known about the abundance and diversity of these insects in this area. Scattered records of the wasps in the New Valley Governorate were provided by some authors such as Mellor, 1927; Mochi, 1938; Priesner, 1958; Kaschef, *et al.*, 1964; Sayed *et al.*, 1964; Shaumar, 1966; El Kady, 1980; Zalat *et al.*, 1992; Roche and Gdallah Neven, 1999; AL Gamal *et al*., 2001; Saleh *et al.*, 2003; Soliman, 2004 and 2010; Aufy, 2005; El Azab, 2007; Farghaly, 2011; Rahman and Soliman 2011 and Abu Alsood, 2014. El Morsy *et al.*, (1996) in their work "Biological diversity of Egypt" provided the distribution of all recorded insects at the time in Egypt, including the insects of order Hymenoptera.

The aim of the present work was to survey and study the hymenopterous insect fauna structure of this poorly studied region, to get the basic information about the most important species and to assist in different aspects of Plant Protection in this area. It is hoped to be of assistance for more detailed and prospective studies.

MATERIALS AND METHODS

The present survey was carried out at the New Valley governorate using mainly sweeping nets during two years (2017 – 2018), covering different districts of the New Valley region. The surveyed areas were cultivated with variable field crops, vegetables, and fruit trees. Captured insects were sorted out into species, identified and recorded, then listed in alphabetical order according to Families, Genera and Species. Data obtained are presented in a table showing the recent scientific names and synonyms of each species as the most recent taxonomic work. The economic status of the species together with their abundance in the area of study are given. The recorded distribution of the species in the zoogeographical zones of Egypt is also presented together with the new records in the area of study.

Identification of species with updates of nomenclature and species position were carried out in the Insect Identification and Classification Department (IICD), in the Plant Protection Research Institute (PPRI), Agricultural Research Center (ARC), Egypt.

RESULTS AND DISCUSSION

The present survey recorded a total of 103 species belonging to 68 genera of 13 families (Braconidae, Chalcididae, Chrysididae, Crabronidae, Eumenidae, Evaniidae, Ichneumonidae, Mutellidae, Pompilidae, Pteromalidae, Scoliidae, Sphecidae and Vespidae). The survey also indicated that the largest number of species was belonged to family Crabronidae (21 species), followed by family Ichneumonidae (14 species), then family Mutillidae (11 species). Family Pompilidae came after with 10 species, then family Sphecidae (9 species). Families Pteromalidae and Scoliidae, each of 8 species. Other families were represented by a fewer number of species i.e. Chrysididae (7 species), Eumenidae (6 species), families, Braconidae and Chalcididae (every 4 species). Only one species was recorded for each of the families Evaniidae and Vespidae. The table also indicated that 53 species are recorded for the first time in the area of study.

It is also found that 4 species were found to be much abundant, these are: *Philanthus triangulum* (Crabronidae), *Pteromalus puparum* (Pteromalidae), *Campsomeriella collaris* (Scoliidae) and *Polistes gallica* (Vespidae). 31 species were found in considerable numbers, whereas, 68 species are rare. From the economic point of view, 44 species are considered predators and 59 species are parasitoids (2 egg parasites, 23 larval parasites, 4 pupal parasites, 27 kleptoparasites, and 3 hyperparasitoids).

On the other hand, and according to the records of distribution for the recorded species in the geographical regions of Egypt, it is noticed that 47 of the surveyed species were recorded from the coastal region, 52 species were previously recorded from the western desert, in addition to 53 species recorded in the present work from this region, 62 species from lower Egypt, 52 species from Upper Egypt, 13 species from Eastern desert, 23 species from Gebel Elba and 31 species from Sinai peninsula. It is found also that, five species are found inhabiting all the geographical regions in Egypt, these are: *Stilbum cyanurum* (Chrysididae), *Bembix dahlbomi* (Crabronidae), *Pareiocurgus calidus* (Pompillidae), *Campsomeriella thoracica* (Scoliidae) and *Sceliphron spirifex* (Sphecidae), 8 species were collected from 6 regions, 10 species were recorded from 5 regions, 25 species from four regions, 14 species from 3 regions, 17 species from 2 regions and 24 species from only one region.

Table 1: Hymenopterous wasps as surveyed in the New Valley, Egypt, together with their abundance, economic status and distribution in Egypt

Taxa	Abundancy	Economic status								Distribution in Egypt						
			Parasitoid													
		Predator	Ecto	Endo.	Egg	Larval	Pupal	Klept	Hyperparasite	N. coast	W. desert	Delta	U. Egypt	E. desert	Red sea	Sinai
Family Braconidae																
Bracon lefroyi (Dudgeon and Gough, 1914)	+			*		*				*	x					
Cotesia ruficrus (Haliday, 1834) (= *Apanteles ruficrus* Haliday, 1834)	+			*		*					*		*			
Habrobracon hebetor (Say, 1836) (≡ *Bracon hebetor* Say, 1836) (= *Bracon juglandis* Ashmead, 1889) (= *Habrobracon asiaticus* Telenga, 1936) (= *Habrobracon beneficientior* Viereck, 1911) (= *Habrobracon breviantennatus* Stefani, 1919) (= *Habrobracon brevicornis* Wesmael, 1838) (= *Habrobracon brunneus* Szepligeti, 1901) (= *Habrobracon dorsator* Say, 1836) (= *Habrobracon flavus* Telenga, 1936) (= *Habrobracon juglandis* Ashmead, 1889)	++		*			*					*	*	*			
Meteorus leviventris Wesmael, 1835	+			*		*				*	*	*	*			
Family Chalcididae																
Brachymeria aegyptiaca Masi, 1931	++			*		*				*	*	*	*			
Brachymeria inermis (Fonscolombe, 1840) (= *Chalcis inermis* Fonscolombe, 1840) (= *Chalcis punctulata* Forster, 1859)	+			*		*					x					
Brachymeria kassalensis Kirby (= *Chalcis kassalensis* Kirby, 1886)	+			*		*					x				*	*
Chalcis biguttata Spinola, 1808 (= *Chalcis macleanii* Curtis, 1833) (= *Chalcis melanuris* Dalman, 1818) (≡ *Smiera biguttata* Spinola, 1808) (= *Smiera macleanii* Curtis, 1833) (= *Smiera melanuris* Dalman, 1818)	+			*		*					*					
Family Chrysididae																
Chrysis albipilis Mocsary, 1889	+							*		*	*	*	*			
Chrysis atechka Buysson, 1898	+							*			*	*	*			*
Chrysis ehrenbergi (Dahlbom, 1845) (= *Blatycelia ehrenbergi* (Dahlbom, 1845)	+							*		*	*	*	*			
Chrysis laetabilis Buysson, 1887 (= *Chrysis scutellata* Mocsary, 1890) (= *Chrysis nyansana* Mocsary, 1912)	+							*		*	*	*	*			*
Chrysis viridissima Klug, 1845 (= *Chrysis fasciolata* Klug, 1845) (= *Chrysis praestigiatrix* Balthasar, 1953)	+							*			*	*	*			
Philoctetes deflexus Abeille, 1878 (= *Elampus difficilis* Tournier, 1889)	+							*		*	*	*	*			
Stilbum cyanurum (Forster, 1771) (= *Chrysis splendidum* Fabricius,1775) (= *Chrysis amethystinum* Fabricius,1775) (= *Chrysis nobile* Sulzer, 1776) (= *Chrysis calens* Fabricius, 1781) (= *Chrysis punctatissimum* Villers, 1789) (= *Stilbum wesmaeli* Dahlbom, 1845) (= *Stilbum westermanni* Dahlbom, 1845) (= *Chrysis spinolae* Montrousier, 18640 (= *Stilbum variolatum* Costa, 1864)	++							*		*	*	*	*	*	*	*
Family Crabronidae																
Bembix dahlbomi Handlirsch, 1893	+	*								*	*	*	*	*	*	*
Bembix nilotica Priesner, 1958	++	*								*	x	*				
Cerceris fischeri Spinola, 1838	+	*								*	x	*	*			
Cerceris sabulosa (Panzer, 1799) (= *Cerceris emarginata* (Panzer, 1799)	+	*								*	x					
Cerceris tricolorata Spinola, 1839 (= *Cerceris vidua* Klug, 1845)	++	*									x	*				

(= *Cerceris insignis* Klug, 1845) (= *Cerceris congesta* Giordani Soika, 1942)																
Larra anthema (Rossi, 1790) (= *Sphex anathema* Rossi, 1790) (= *Larra ichneumoniformis* Fabricius, 1793) (= *Larra teutona* Fabricius, 1804) (=*Tachytes anathema* Rossi, 1790) (=*Tachytes grandis* Chevrier, 1872)	+	*									x					
Miscophus alfierii Honoré, 1944	+	*								*	x	*	*			
Oxybelus fischeri Spinola, 1839 (= *Oxybelus africanus* Kohl, 1884)	++	*									x					
Oxybelus lamellatus Oliveri, 1812	++	*									x					
Philanthus triangulum (Fabricius, 1775) (= *Philanthus abdelcader* Lepeletier, 1845) (= *Philanthus apivorus* Latreille, 1799) (= *Philanthus discolor* Panzer, 1799) (= *Philanthus pictus* Panzer, 1797)	++	*									x	*				
Philanthus minor Kohl, 1891	+	*								*	x					
Philanthus variegatus Spinola, 1839	++	*									x	*				
Stizus bizonatus Spinola, 1839 (= *Stizus transcaspicus* Radoszkowski, 1893)	++	*									x	*				
Stizus cheops Morice, 1897 (=*Tachysphex cheops* Beaumont, 1940)	+	*									x					
Stizus fuliginosus (Klug, 1845)	+	*									x					
Stizus savignyi Spinola, 1839 (= *Larra succinea* Klug, 1845) (= *Stizus succineus* Klug, 1845)	++	*									x					
Stizus strigatus Mochi, 1939 (= Stizus ruficornis strigatus Mochi, 1939)	+	*									x					
Stizus vespoides (Walker, 1871) (= *Larra vespoides* Walker, 1871) (= *Larra magnifica* Smith, 1873) (= *Larra argentea* Taschenberg, 1875)	++	*									x					
Tachysphex albocinctus (Lucas, 1849) (= *Tachysphex dusmeti* Giner Marí, 1934) (= *Tachysphex heliopolites* Kohl, 1888) (= *Tachysphex peculator* Nurse, 1909) (= *Tachysphex ruficrus* Dufour, 1854) (= *Tachysphex syriacus* Kohl, 1888) (= *Tachytes ruficrus* Dufour, 1854)	+	*								*	x	*	*			
Tachytes concinnus Smith, 1856 (= *Tachytes argyrofacies* Strand, 1910) (= *Philanthus concinus* Smith, 1856)	++	*									x					
Tachytes niloticus Turner, 1918 (= *Tachytes curiosus* Gussakovskij, 1952) (= *Philanthus niloticus* Turner, 1918)	++	*									x					
Family Eumenidae																
Chlorodynerus chloroticus (Spinola, 1838) (= *Euodynerus chloroticus* Spinola, 1838) (= *Odynerus chloroticus* Spinola, 1838) (= *Odynerus testacea* Saussure, 1852)	++	*									x	*	*			*
Delta campaniforme (Fabricius, 1775) (= *Eumenes tricolor* Cameron, 1906)	++	*								*	*	*				
Eumenis maxillosus (De Geer, 1773)	++	*									x					
Eumenis pomiformis Fabricius, 1781) (= *Eumenes turcicus* Giordani Soika, 1951) (= *Eumenis heri* Kriechbaumer, 1879) (≡ *Vespa pomiformis* Fabricius, 1781)	+	*									x					*
Odontodynerus cingulifer (Walker, 1871) (= *Odynerus cingulifer* Walker, 1871)	+	*									x					
Tachyancistrocerus serenus Soika, 1935 (= *Ancistrocerus serenus* Soika, 1935)	+	*									*					*
Family Evaniidae																
Evania appendigaster Linnaeus, 1758 (= *Evania affinis* Le Guillou, 1841) (= *Evania laevigata* Olivier, 1792) (= *Evania unicolor* Say, 1824) (≡ *Ichneumon appendigaster* Linnaeus, 1758) (= *Ichneumon niger* Goeze, 1780)	+			*	*					*	x	*	*			
Family Ichneumonidae																
Barylypa rufa Holmgren, 1857 (= *Anomalon rufum* Holmgren, 1857) (= *Laphyctes rufus* Schmiediknicht, 1903)	+		*	*		*	*			*	x	*	*			

Diadegma areolaris (Holmgren, 1860) (= *Angitia areolaris* Holmgren, 1860)	+					*				*	*			*		
Diplazon laetatorius Fabricius, 1781 (= *Ichneumon laetatorius* Fabricius, 1781) (= *Diplazon albovarius* Wollaston, 1858) (= *Diplazon cinctipes* Holmgren, 1868) (= *Diplazon generosus* Cameron, 1898) (= *Diplazon senegalensis* Ferriere, 1925) (= *Diplazon terminalis* Davis, 1895) (= *Diplazon varipes* Smith, 1878) (= *Diplazon venustulus* Saussure, 1892)	++				*	*				*	*	*	*		*	*
Enicospilus repentinus (Holmgren, 1860) (= *Ophion repentinus* Holmgren, 1860)	++					*					*					
Enicospilus ramidulus Linnaeus, 1758. (= *Ophion ramidulus* Linnaeus, 1758) (= *Ophion combustus* Gravenhoest, 1829)	+					*					*					
Exetastes syriacus Schmiediknicht, 1910 (= *Exetastes ruficoxalis* Cushman, 1937)	+					*					x	*				
Itoplectis maculator Fabricius, 1775 (= *Ichneumon maculator* Fabricius, 1775)	+					*					x					
Netelia arabs (Strand, 1911)	+					*					x					
Netelia ocellaris (Thomson, 1888) (= *Paniscus ocellaris* Thomson, 1888) (= *Paniscus formosanus* Matsumura, 1912) (= *Paniscus unicolor* Kato, 1937) (= *Ophion ocellaris* Kim, 1957)	+					*				*	*				*	*
Pimpla spuria Gravenhorst, 1829	+					*					x	*				
Pycnocryptus bovei (Brulle, 1846) (= *Cryptus bovei* Brulle, 1846)	+					*					*	*	*		*	
Pycnocryptus inculcator (Linnaeus, 1758) (= *Ichneumon inculcator* Linnaeus, 1758) (= *Cryptus sponsor* Fabricius, 1804) (= *Cryptus quadrilineatus* Gravenhorst, 1829)	+					*					x					
Pycnocryptus titillator (Shaumer, 1966) (= *Cryptus titillator orientator* Shaumer, 1966)	+					*					x					
Sinophorus xanthostomus Gravenhorst, 1829 (= *Campoplex xanthostomus* Gravenhorst, 1829) (= *Limneria xanthostoma* Thomson, 1887) (= *Limnerium xanthostoma* Dalla Torre, 1901)	+					*				*	*	*	*			
Family Mutellidae																
Dasylabris maura (Linnaeus, 1758) (= *Mutilla maura* Linnaeus, 1758) (= *Mutilla austriaca* Panzer, 1799) (= *Mutilla rubricans* Lepeletier, 1845) (= *Mutilla argentiofascicata* Costa, 1858) (= *Mutilla trisinuosa* Costa, 1858)	++							*		*	*		*			*
Nemka viduata (Pallas, 1773) (= *Mutilla coronata* Fabricius, 1793) (≡ *Mutilla viduata* Pallas, 1773) (= *Smicromyrme protunensis* Skorikov, 1935) (= *Tiphia stridula* Rossi, 1790)	++							*		*	*					
Omotilla conjuncta (Klug, 1829) (= *Mutilla conjuncta* Klug, 1829) (= *Odontotilla conjuncta* Bischoff, 1920)	+							*		*	*	*	*		*	
Psuedophotopsis komarovii (Radoszkowski, 1885) (= *Agama komarovii* Radoszkowski, 1885) (= *Psuedophotopsis oculosa* Skorikov, 1935) (= *Psuedophotopsis inductrix* Skorikov, 1935) (= *Psuedophotopsis asiatica* Suarez, 1965)	+							*		*	*	*	*		*	*
Tricholabiodes aegyptiacus (Radoszkowski, 1876) (= *Mutilla aegyptiacus* (Radoszkowski, 1876)	+							*			*	*	*		*	*
Tricholabiodes craspedopygius Suarez, 1967	+							*			*			*		
Tricholabiodes niloticus Suarez, 1967	+							*			*	*			*	*
Tricholabiodes semistriatus Klug, 1829 (= *Mutilla semistriatus* Klug, 1829) (= *Mutilla pedunculata* Klug, 1829)	+							*		*	*	*	*		*	*
Tricholabiodes sudanensis Suarez, 1967	+							*			*	*	*			
Trogaspidia floralis (Klug, 1829) (= *Mutilla floralis* Klug, 1829) (= *Mutilla interrupta* Olivier, 1811) (= *Mutilla divisa* Smith, 1855) (= *Mutilla aureiventris* Walker, 1871)	+							*		*	*	*	*			
Trogaspidia pavesii (Magretti, 1884) (= *Mutilla pavesii* Magretti, 1884)	+							*			*				*	

Family Pompilidae																
Agenoideus rutilus (Klug, 1834) (= *Pompilus rutilus* Klug, 1834)	++							*		*	x	*	*		*	*
Anoplius fuscus (Linden, 1827) (= *Pompilus sugillatus* Klug, 1843) (= *Pompilus fuscus* Walker, 1871)	++							*		*	*	*	*		*	*
Anoplius infuscatus (Vander Linden, 1827) (= *Pompilus infuscatus* (Vander Linden, 1827) (= *Anoplius minor* Herrich-Schaeffer, 1830) (= *Anoplius petulans* Haupt, 1962) (= *Pompilus sericatus* Shuckard, 1835) (= *Pompilus difformis* Schiodte, 1837) (= *Pompilus dispar* Dahlbom, 1843) (= *Pompilus sabulicola* Thomson, 1874) (= *Pompilus meticulosus* Costa, 1882) (= *Pompilus stellatus* Tourner, 1890) (= *Pompilus vivtus* Tourner, 1890) (= *Paracyphononyx cinctellus* Haupt, 1962)	+							*		*	*	*	*			
Anospilus compactus Priesner, 1955	+							*			x	*	*			
Auplopus bizonatus (Walker, 1871) (= *Agenia bizonatus* (Walker, 1871) (= *Pseudogenia bizonata* Priesner, 1955)	+							*			x	*	*	*		*
Cyphononyx antarctica (Linnaeus, 1758) (= *Cyphononyx flavicornis* Fabricius, 1781) (= *Pepsis flavicornis* Fabricius, 1781)	+							*		*	x	*	*		*	*
Cyphononyx bretonii (Guérin, 1843) (= *Cryptochilus bretoni* Guérin, 1843) (= *Pompilus bretoni* Guérin, 1844) (= *Salius bretonii* Guérin, 1843)	++							*			x	*	*			
Dicyrtomellus dentiprivus Priesner, 1955	+							*			*	*		*		*
Pareiocurgus calidus (Guerin, 1812) (= *Pompilus calidus* Guerin, - Savigny 1812) (= *Pompilus teterrimus* Gribodo, 1884) (= *Pompilus atrohirtus* Kohl, 1886) (= *Pompilus intactus* Tournier, 1889) (= *Preiocurgus calidus* Haupt, 1962	+							*		*	*	*	*	*	*	*
Tachyagetes ruras Priesner, 1955 (= *Anoplius ruras* Priesner, 1955) (= *Evagetes ruras* Priesner, 1955)	+							*			x	*				
Family Pteromalidae																
Anisopteromalus calandrae (Howard, 1881) (=*Anisopteromalus mollis* Ruschka, 1912) (= *Meraporus vandinei* Tucker, 1910) (= *Aplactomorpha pratti* Crawford, 1913) (= *Aplastomorpha vandinei* Tucker, 1921) (= *Aplactomorpha calandrae* Howard, 1923) (= *Neocatolaccus indicus* Ayyar & Mani, 1937)	+		*			*				*	x	*	*		*	
Cyclogastrella simplex (Walker, 1834) (= *Cyclogastrella deplanata* Nees, 1834) (= *Pteromalus deplanatus* Nees, 1834 (= *Pteromalus domesticus* Walker, 1835 (= *Pteromalus artemon* Walker, 1839 (= *Pteromalus merope* Walker, 1839 (= *Pteromalus phases* Walker, 1848 (= *Pteromalus acco* Walker, 1848 (= *Pteromalus androbius* Walker, 1848	+						*		*		*					
Cyrtoptyx latipes (Randani, 1874) (= *Pteromalus latipes* (Randani, 1874) (= *Dinarmus dacicida* Masi, 1907 (= *Dinarmus virescens* Masi, 1908 (= *Dinarmus lesbiacus* Masi, 1922 (= *Picroscytus albicrus* Masi, 1934	++					*					*		*		*	*
Nasonia vitripennis (Walker, 1836) (= *Pteromalus vitripennis* (Walker,1836) (= *Pteromalus muscarum* Hartig, 1838 (= *Pteromalus abnormis* Bohman, 1858 (= *Mormoniella brevicornis* Ashmead, 1904 (= *Nasonia brevicornis* Ashmead, 1904 (= *Mormoniella vitripennis* (Gahan,1927)	++			*			*			*	*	*	*		*	
Pachyneuron aphidis (Bouche, 1834) (= *Diplolepis aphidis* (Bouche, 1834) (= *Pteromalus minutissmus* Forster, 1841 (= *Pachyneuron pruni* Walker, 1850	++								*	*	*	*	*			
Pachyneuron concolor (Forster, 1841)	+								*		*	*				*

(= *Pteromalus concolor* (Forster, 1841) (= *Pachyneuron psyllaephaga* Mani, 1939																
Pteromalus puparum (Linnaeus, 1758) (= *Ichneumon puparum* Linnaeus, 1758) (= *Pteromalus latifrons* Walker, 1835 (= *Pteromalus cephalotes* Walker, 1936 (= *Pteromalus ornis* Walker, 1845 (= *Pteromalus nigricans* Walker, 1872 (= Pteromalus nigritulus Dalla Torre, 1898	++			*			*			*	*	*	*			
Stenoselma nigrum Delucchi, 1956	+					*					*	*	*			
Family Scoliidae																
Campsomeriella collaris Fabricius, 1775 (= *Dieles collaris* Fabricius, 1775)	++	*									x	*				
Campsomeriella thoracica Fabricius, 1787 (= *Scolia thoracica* Fabricius, 1787)	++	*								*	*	*	*	*	*	*
Megascolia bidens (Linnaeus, 1767) (= Scolia bidens Linnaeus, 1767)	+									*	*	*		*		*
Micromeriella hyalina (Klug, 1832) (= *Scolia hyalina* Klug, 1832) (= *Dieles hyalina* Klug, 1832) (= *Scolia antennata* Klug, 1832) (= *Dieles antennata* Klug, 1832	+	*								*	*	*	*	*		*
Scolia erythrocephala Fabricius, 1798	++	*								*	*	*	*	*		*
Scolia erythrocephala infuscata (Klug, 1832) (= *Scolia infuscata* (Klug, 1832)	+	*								*	x	*	*			
Scolia hortorum hortorum Fabricius, 1787 (= *Scolia interstincta* Klug, 1810)	+	*								*	*	*	*	*		
Scolia hortorum mendica Klug, 1832 (= *Scolia funereal* Klug, 1832)	+	*								*	*	*				
Family Sphecidae																
Ammatomus coarctatus Spinola, 1808 (= *Gorytes coarctatus* Spinola, 1808)	+	*									x					
Ammophila dubia Kohl, 1901	+	*									x				*	*
Eremochares luteus (Taschenberg, 1869) (= *Ammophila lutea* Taschenberg, 1869)		*									x					
Eremnophila binodis (Fabricius, 1798) (= *Ammophila abbreviata* Fabricius, 1804) (= *Ammophila oxystoma* Cameron, 1912 (= *Pelopoeus abbreviatus* Fabricius, 1804)	++	*									x					
Podalonia affinis (Kirby, 1798) (= *Ammophila ariasi* Mercet, 1906) (= *Ammophila affinis* Kirby, 1798)	++	*								*	x		*		*	*
Podalonia dispar Taschenberg, 1869 (= *Psammophila dispar* Taschenberg, 1869) (= *Ammophila dispar* Taschenberg, 1869)	+	*									x	*	*			
Podalonia tydei Le Guillou, 1841 (= *Ammophila tydei* Le Guillou, 1841)	++	*								*	x	*	*			*
Sceliphron spirifex Linnaeus, 1758 (= *Sphex spirifex* Linnaeus, 1758) (= *Pelopaeus spirifex* Linnaeus, 1758) (= *Sphex aegyptius* Linnaeus, 1758) (= *Sphex flavipes* Christ, 1791) (= *Sceliphron aegyptiacum* Klug, 1801)	+	*								*	*	*	*	*	*	*
Tackysphex albocinctus (Lucas, 1849) (= *Tachysphex heliopolites* Kohl, 1888) (= *Tachysphex peculator* Nurse, 1909) (= *Tachysphex ruficrus* Dufour, 1854) (= *Tachysphex syriacus* Kohl, 1888) (= *Tachytes ruficrus* Dufour, 1854)	+	*								*	x	*	*			
Family Vespidae																
Polistes gallica (Linnaeus, 1761) (= *Polistes gallicus* (Linnaeus, 1761) (= *Polistes foederatus* Kohl, 1898) (= *Polistes omissus* Weyrauch, 1938)	++	*									*	*				

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