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The distribution and biogeography of Pompilidae in Turkey (Hymenoptera: Aculeata)

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Faunistic studies on Pompilidae from Turkey are reviewed and the distribution and biogeography of the Turkish pompilid fauna is analyzed. A total of 200 species and 5 subspecies belonging to 35 genera of the subfamilies Ceropalinae, Pepsinae and Pompilinae have been recorded from Turkey. Species composition, diversity and proportion of endemism vary considerably between the biogeographic subregions of the country.
Keywords: Hymenoptera, Pompilidae, distribution, biogeography, Turkey.

La distribution biogéographique des Pompilides de Turquie est analysée; 205 espèces et sous-espèces appartenant à 35 genres des sous-familles Ceropalinae, Pepsinae et Pompilinae sont prises en compte. La composition spécifique et la proportion des endémiques varient considérablement selon les sous-régions biogéographiques.
Mots-clés: Hymenoptera, Pompilidae, distribution, biogéographie, Turquie.

1. INTRODUCTION

Biogeography is the branch of biology that studies the geographical distribution of animals and plants. Biogeographic regions are usually defined separately for floral and faunal communities and are largely restricted to the terrestrial areas of the Earth. Turkey is generally divided into seven geographical regions. These geographical regions were separated according to their climate, location, flora and fauna, human habitat, agricultural diversities, transportation, topography and so on. Four regions were named after the seas bordering them: the Aegean Region, the Black Sea Region, the Marmara Region and the Mediterranean Region. The other three regions were named in accordance with their location in the whole of Anatolia: Central, Eastern and Southeastern Anatolia Regions (Figure 1).

Turkey is mountainous mass averaging about 1.000 meters in height. The topographic and climatic structure gives the country the opportunity to host a rich and diverse fauna. It is one of the most interesting countries from the viewpoint of Hymenoptera taxonomy and biogeography. Economically, aesthetically and biologically there are few groups of animals that are as important to man as the Hymenoptera. It is one of the four great orders of insects, the other three being Coleoptera, Lepidoptera, and Diptera. Each order includes over 100.000 described species around the world (Goulet & Hubner 1993).

Turkey occupies Asia Minor between the Mediterranean Sea and the Black Sea and stretches into continental Europe. Turkey has long been known to possess a rich fauna of Pompilidae in comparison with others countries of the Mediterranean region. Well known for its high biodiversity. Turkey is one of the most interesting countries located in West Palaearctic region, where most of the insect families including Pompilidae are found. Thus, many faunistic and systematic studies on Pompilidae have been conducted by both foreign and native researchers in Turkey.

In this work, the studies on the Pompilidae in Turkey were reviewed (Moczar 1978, 1986a,b, 1987, 1988, 1989, 1991; Priesner 1955, 1966,

1967, 1973; Wolf 1960, 1966a, b, 1970, 1986, 1987, 1990, 1999; Madl 1997; Özbek *et al*. 1999, 2000; Smissen 2003; Anlaş *et al*. 2005; Kırpık 2005, 2009; Kırpık & Tüzün 2005; Yıldırım 2008; Yıldırım & Wahis, 2010, and Wahis (1986, 1997, 1998, 2002, 2006, 2009) and the distribution and biogeography of the Turkish fauna of Pompilidae is analyzed.

2. RESULT AND DISCUSSION

As a result, a total of 200 species and 5 subspecies from 35 genera belonging to three subfamilies: Ceropalinae, Pepsinae and Pompilinae were recorded from Turkey. Among them, the type localities of 23 species and one subspecies in Pompilidae are situated in Turkey. Separately, 19 species are considered endemic (Table 1, 2, 3).

There are great differences in species composition and richness between the biogeographic regions of Turkey (Figure 2): 146 species and subspecies have been recorded from Eastern Anatolia, 129 from Central Anatolia, 105 from Mediterranean, 76 from Black Sea, 68 from the Aegean, 58 from Southeastern Anatolia and 51 from Marmara region (Figure 3).

Apparently, species diversity is higher in the Eastern and Central Anatolian region than in other regions. An analysis of faunal similarities among the regions demonstrates the existence of two major clusters. The first is formed by the Eastern Anatolian, Central Anatolian and Mediterranean regions, the second by Black Sea, Aegean, Southeast Anatolian and Marmara region.

The endemism of Pompilidae in biogeographic regions of Turkey is analyzed. The proportion of endemic species varies considerably between these regions. A total of 19 species, 14 from Eastern Anatolia, 10 from Central Anatolia, eight from Mediterranean, four from Black Sea, two from Aegean, and 1 from Southeastern Anatolia were recorded (Figure 3). Eastern Anatolia region has the richest fauna and highest level of endemism. Southeastern Anatolia and Aegean have very low levels of endemism.

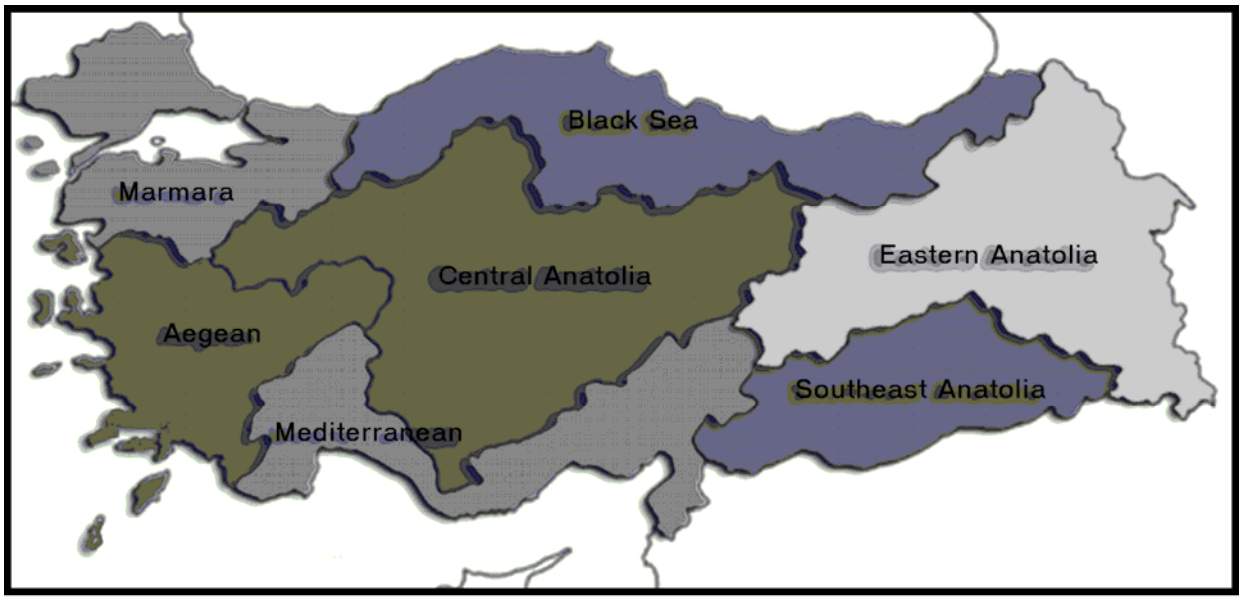

Figure 1: Administrative map of biogeographical regions of Turkey.

Table 1: Distribution of Pompilidae (Hymenoptera) to Biogeography Regions in Turkey.
Abbreviations: **EA** - Eastern Anatolia, **SA** - Southeastern Anatolia, **BS** - Black Sea, **CA** - Central Anatolia, **MD** - Mediterranean, **A** - Aegean, **M** - Marmara, **E** - Endemic species and subspecies; * - The type locality is Turkey.

Subfamily, genus, species and subspecies of Pompilidae	**EA**	**SA**	**BS**	**CA**	**MD**	**A**	**M**	**E**
CEROPALINAE								
CEROPALINI								
Ceropales Latreille 1796								
Ceropales albicincta (Rossius 1790)	+	-	+	+	+	-	+	-
Ceropales albicincta seraxensis Radoszkowski 1893	-	+	-	-	-	-	-	-
****Ceropales albicincta wolfi*** Moczar 1978	+	-	-	+	+	-	+	-
Ceropales bipartita Haupt 1962	+	+	-	-	+	-	-	-
Ceropales bipartita flava Moczar 1987	-	-	-	-	+	-	-	-
Ceropales cribrata Costa 1881	+	+	+	+	+	-	-	-
Ceropales helvetica Tournier 1889	+	-	+	+	+	-	-	-
Ceropales maculata (Fabricius 1775)	+	-	+	-	-	-	-	-
Ceropales maroccana Beaumont 1947	-	+	-	-	-	-	-	-
Ceropales ruficornis Gussakovskij 1931 (= *gilva* Haupt 1962)	-	+	-	+	+	-	-	-
****Ceropales tectigera*** Moczar 1987	-	-	-	-	-	+	-	-
Ceropales variegata (Fabricius 1798)	+	-	-	+	-	-	+	-
PEPSINAE								
PEPSINI								
Caliadurgus Pate 1946								
Caliadurgus fasciatellus (Spinola 1808)	+	-	+	-	-	-	-	-
Cryptocheilus Panzer 1806								
Cryptocheilus albosignatus Sustera 1924	+	+	-	+	-	+	-	-
Cryptocheilus alternatus (Lepeletier 1845) (= *annulatilis* Richards 1935)	+	-	-	+	-	+	-	-
Cryptocheilus alternatus caspius Gussakovskij 1952	+	+	+	+	-	-	-	-
Cryptocheilus bequaerti Sustera 1924	-	+	-	-	-	-	-	-
Cryptocheilus discolor (Fabricius 1793)	+	-	+	+	+	+	-	-
Cryptocheilus egregius (Lepeletier 1845)	+	-	+	+	-	+	+	-
Cryptocheilus elegans (Spinola 1806)	-	-	-	+	-	-	-	-
Cryptocheilus exiguus Sustera 1924	+	+	-	+	+	-	+	-
Cryptocheilus fabricii (Vander Linden 1827)	+	-	+	+	+	-	+	-
Cryptocheilus fischeri (Spinola 1855) (= *confinis* Haupt 1926, *fallax* Priesner 1965)	+	+	+	+	+	+	+	-
Cryptocheilus freygessneri (Kohl 1883)	+	-	-	+	+	-	-	-
Cryptocheilus gazella Haupt 1862	-	-	+	-	+	-	-	-
Cryptocheilus guttulatus (Costa 1887)	+	+	-	+	+	-	+	-
Cryptocheilus hebraeus Sustera 1924	-	+	-	+	+	-	-	-
Cryptocheilus ichneumonoides (Costa 1874)	+	-	-	+	+	+	+	-
Cryptocheilus infumatus (Palma 1869)	-	+	-	-	-	-	-	-
Cryptocheilus nigroferrugineus (Sustera 1924)	+	-	-	-	-	-	-	-
Cryptocheilus notatus (Rossius 1792)	+	+	+	+	+	+	-	-
Cryptocheilus octomaculatus (Rossius 1790)	+	-	-	+	+	+	+	-
****Cryptocheilus propodeonitens*** Wolf 1999	+	-	-	-	-	-	-	+
Cryptocheilus pseudonotatus Sustera 1913	+	+	-	-	-	+	-	-
Cryptocheilus richardsi Moczar 1953	+	+	-	-	-	-	-	-
Cryptocheilus rubellus (Eversmann 1846)	+	-	-	+	+	-	+	-
****Cryptocheilus rufatus*** Priesner 1967	+	-	+	+	+	+	-	+
****Cryptocheilus setiger*** Wolf 1999	-	-	-	+	-	-	-	+
Cryptocheilus susterai Haupt 1962	-	-	-	+	+	-	-	-
****Cryptocheilus stygium*** Priesner 1967	+	-	-	+	+	-	-	+

Cryptocheilus tredecimmaculatus Haupt 1962	-	-	-	+	+	-	-	-
Cryptocheilus variabilis (Rossius 1790)	+	+	+	+	+	+	+	-
Cryptocheilus variipennis Sustera 1924	+	+	+	+	+	+	-	-
Cryptocheilus versicolor (Scopoli 1763)	+	-	+	+	+	+	+	-
Cyphononyx Dahlbom 1845								
Cyphononyx bretonii (Guérin 1843)	-	-	-	-	+	-	-	-
Dipogon Fox 1897								
****Dipogon sinan*** Wolf 1999	+	-	-	+	-	-	-	+
Dipogon variegatus (Linnaeus 1758)	+	-	+	+	+	+	-	-
Hemipepsis Dahlbom 1843								
Hemipepsis brunnea (Klug 1834)	-	+	-	-	+	+	-	-
Hemipepsis mauritanica (Linnaeus 1767) (= *barbara* Lepeletier 1845)	-	-	-	-	+	-	-	-
Priocnemis Schioedte 1837								
Priocnemis agilis (Shuckard 1837)	+	-	+	+	-	+	-	-
Priocnemis confusor Wahis 2006 (= *gracilis* Haupt 1927)	+	-	+	+	+	-	-	-
Priocnemis coriacea Dahlbom 1843	+	-	-	-	+	+	-	-
Priocnemis costai Costa 1887	-	-	-	-	+	-	-	-
Priocnemis diversa Junco 1946	-	+	-	+	+	+	-	-
Priocnemis exaltata (Fabricius 1775)	+	-	-	-	-	-	-	-
Priocnemis fahringeri Wolf 1963	+	-	-	-	+	+	+	-
Priocnemis fallax Verhoeff 1922	+	-	+	+	+	+	+	-
Priocnemis fastigiata Haupt 1934	+	-	+	+	+	-	-	-
Priocnemis fennica Haupt 1927	+	-	-	-	-	-	-	-
Priocnemis hankoi Moczar 1944	+	-	-	-	-	-	-	-
Priocnemis hyalinata Fabricius 1793	-	-	+	-	-	-	-	-
Priocnemis massaliensis Soyer 1945 (= *costata* Wolf 1963)	-	-	-	+	-	-	-	-
Priocnemis minuta (Vander Linden 1827)	+	+	+	+	+	-	+	-
Priocnemis parvula Dahlbom 1845	+	-	+	+	+	-	-	-
Priocnemis perturbator (Harris 1776)	-	-	+	+	+	-	+	-
Priocnemis pillichi Priesner 1960	+	-	-	-	-	-	-	-
Priocnemis propinqua (Lepeletier 1847)	-	+	-	+	+	-	-	-
Priocnemis pusilla (Schioedte 1837)	+	-	-	-	-	-	-	-
Priocnemis rufozonata Costa 1887)	-	-	-	+	-	-	-	-
Priocnemis rugosa Sustera 1922	-	-	-	-	-	+	+	-
Priocnemis schioedtei Haupt 1927	+	-	-	-	+	-	-	-
Priocnemis sulci Balthasar 1943	+	+	+	+	+	-	-	-
Priocnemis vulgaris (Dufour 1841)	+	-	+	+	+	+	+	-
AGENIELLINI								
Auplopus Spinola 1841								
Auplopus albifrons (Dalman 1823)	+	-	-	+	+	-	-	-
Auplopus carbonarius (Scopoli 1763)	+	+	+	+	+	+	-	-
Auplopus rectus (Haupt 1927)	+	+	+	+	+	+	+	-
Poecilagenia Haupt 1927 (= *Podagenia* Priesner 1973)								
Poecilagenia sculpturata (Kohl 1898)	-	-	+	-	-	-	-	-
Poecilagenia crassipes (Priesner 1973)	+	+	+	-	-	-	-	-
POMPILINAE								
Agenioideus Ashmead 1902								
Agenioideus apicalis (Vander Linden 1827)	+	+	-	+	-	-	-	-
Agenioideus ciliatus (Lepeletier 1845)	+	+	+	+	-	-	-	-
Agenioideus cinctellus (Spinola 1808)	-	-	+	+	-	-	+	-
Agenioideus excisus (Morawitz 1890)	+	+	+	+	+	+	+	-
Agenioideus nubecula (Costa 1874)	+	+	-	+	+	+	+	-
Agenioideus oasis (Haupt 1962)	-	-	-	+	-	-	-	-
Agenioideus rhodosoma (Kohl 1886)	-	-	-	-	+	-	-	-

Agenioideus ruficeps (Eversmann 1886) (= *dichrous* (auct. nec Brullé 1840)	+	+	-	+	+	+	-	-
Agenioideus rytiphorus (Kohl 1886)	+	-	-	+	+	+	+	-
Agenioideus sericeus (Vander Linden 1827)	+	+	-	+	+	+	-	-
Agenioideus usurarius (Tournier 1889)	+	-	+	+	+	-	-	-
Agenioideus vesanus (Kohl 1870)	+	-	-	-	-	-	-	-
Amblyellus Day 1981								
Amblyellus hasdrubal (Kohl 1884)	+	-	-	+	-	-	-	-
Anoplius Dufour 1834								
Anoplius caviventris (Aurivillius 1907)	+	-	-	+	-	-	-	-
Anoplius concinnus (Dahlbom 1843)	+	+	+	+	+	+	-	-
Anoplius infuscatus (Vander Linden 1827) (= *aeruginosus* (Tournier 1890), *meticulosus* (Costa 1882)	+	+	+	+	+	+	+	-
Anoplius nigerrimus (Scopoli 1763)	+	+	+	+	-	-	-	-
Anoplius piliventris (Morawitz 1889)	-	-	-	-	+	-	-	-
Anoplius samariensis (Pallas 1771)	+	-	+	+	+	-	-	-
Anoplius schlettereri (Radoszkowski 1888)	+	+	+	+	-	+	+	-
Anoplius viaticus (Linnaeus 1758)	+	+	+	+	+	+	+	-
Anospilus Haupt 1929								
Anospilus orbitalis (Costa 1863)	-	-	-	+	+	+	+	-
Aporinellus Banks 1911								
Aporinellus moestus (Klug 1834)	+	+	-	+	-	+	-	-
Aporinellus sexmaculatus (Spinola 1805)	+	+	+	+	+	+	+	-
Aporus Spinola 1808								
Aporus bicolor Spinola 1808	+	-	-	-	+	-	-	-
Aporus pollux (Kohl 1888)	+	-	+	-	-	-	-	-
Arachnospila Kincaid 1900								
Arachnospila anceps (Wesmael 1851)	+	-	+	+	-	-	-	-
****Arachnospila angorana*** (Wolf 1990)	+	-	-	+	-	-	-	+
Arachnospila ausa (Tournier 1890)	-	-	-	-	-	+	+	-
Arachnospila clericalis (Morawitz 1889)	+	-	+	-	-	-	-	-
Arachnospila colpostoma (Kohl 1886)	+	-	-	-	-	-	+	-
Arachnospila conjungens (Kohl 1898)	-	-	-	-	+	-	-	-
Arachnospila consobrina (Wof 1966)	+	-	-	+	-	-	-	-
Arachnospila esau (Kohl 1886)	+	+	-	+	-	-	-	-
Arachnospila fumipennis (Zetterstedt 1838)	+	-	-	-	-	-	-	-
Arachnospila fuscomarginata (Thomson 1870)	+	-	+	+	-	-	-	-
Arachnospila gibbomima (Haupt 1929)	+	-	+	-	-	-	-	-
Arachnospila hedickei (Haupt 1929) (= *pseudabnormis* (Wolf 1965))	+	-	+	+	-	-	-	-
Arachnospila holomelas (Costa 1882)	+	-	-	+	+	-	-	-
Arachnospila ionica (Wolf 1964)	+	-	-	+	+	-	-	-
Arachnospila minutula (Dahlbom 1842)	+	-	+	+	-	-	+	-
****Arachnospila osmana*** (Wolf 1999)	+	-	-	-	-	-	-	+
Arachnospila pamira (Haupt 1930)	-	+	-	-	-	-	-	-
Arachnospila rufa (Haupt 1927)	+	-	-	+	-	-	-	-
Arachnospila silvana (Kohl 1886)	+	-	-	-	-	-	-	-
Arachnospila sogdianoides (Wolf 1964) (= *sogdiana* auct.nec Morawitz 1893)	+	-	-	+	+	+	-	-
Arachnospila spissa (Schioedte 1837)	+	-	+	+	-	-	-	-
Arachnospila trivialis (Dahlbom 1843)	+	-	+	+	+	+	-	-
Arachnospila valesabnormis (Wolf 1965)	+	-	+	+	-	-	-	-
Arachnotheutes Haupt 1927								
Arachnotheutes leucurus (Morawitz 1891) (= *europaeus* (Priesner 1965))	+	+	-	+	-	+	+	-
Arachnotheutes minor (Priesner 1955)	+	-	-	-	-	-	-	-
Arachnotheutes rufithorax (Costa 1887)	+	-	+	+	-	-	-	-

Arachnotheutes signatipennis (Klug 1834)	-	-	-	+	-	-	-	-
Arachnotheutes squalidus (Haupt 1962)	+	-	-	+	-	-	-	-
Batozonellus Arnold 1937								
Batozonellus lacerticida (Pallas 1771)	+	-	+	+	+	+	+	-
Ctenagenia Saussure 1892								
****Ctenagenia ozbeki*** Wahis 2002	-	-	-	-	+	-	-	-
Ctenagenia vespiformis (Klug 1834)	-	-	-	-	+	+	-	-
Dicyrtomellus Gussakovskij 1935								
Dicyrtomellus dubitabilis (Saunders 1901)	+	-	-	-	-	-	-	-
Dicyrtomellus kizilkumii (Radoszkowski 1877)	+	-	-	-	-	-	-	-
Dicyrtomellus tingitanus (Wolf 1966) (= *argenteus* Wahis 1992)	+	+	+	+	+	+	-	-
Dicyrtomellus tomentosus (Priesner 1955).	-	+	-	-	-	-	-	-
Entomobora Gistel 1857								
Entomobora crassitarsis (Costa 1887)	-	-	-	-	-	+	+	-
Entomobora fuscipennis (Vander Linden 1827)	-	-	-	-	-	+	-	-
Entomobora vomeriventris (Costa 1861)	-	-	-	-	+	+	+	-
Eoferreola Arnold 1935								
****Eoferreola anatolica*** Priesner 1973	+	-	+	-	+	+	-	+
Eoferreola anomala (Priesner 1955)	-	-	-	-	+	-	-	-
Eoferreola erythraea (Pallas 1973)	-	-	-	-	+	-	-	-
Eoferreola manticata (Pallas 1771)	+	+	+	+	+	+	+	-
Eoferreola rhombica (Christ 1791)	+	-	+	+	-	+	-	-
Eoferreola syraensis (Radoszkowski 1888)	+	-	-	+	+	+	-	-
Eoferreola thoracica (Rossius 1794)	+	-	-	-	-	+	-	-
Episyron Schioedte 1832								
Episyron albonotatum (Vander Linden 1827)	+	-	+	+	+	+	+	-
Episyron arrogans (Smith 1783)	-	-	-	-	-	-	+	-
Episyron candiotum Wahis 1966	+	-	+	+	+	-	+	-
Episyron coccineipes (Saunders 1904)	-	-	-	+	-	+	-	-
Episyron funerarium (Tournier 1889)	-	-	+	-	-	-	-	-
Episyron gallicum (Tournier 1889)	+	-	+	+	+	+	-	-
Episyron rufipes (Linnaeus 1758)	+	-	+	+	+	+	+	-
Evagetes Lepeletier 1845								
****Evagetes anatolicus*** Smissen 2003	+	-	+	-	-	-	-	+
Evagetes crassicornis (Shuckard 1837)	-	-	+	-	+	-	-	-
Evagetes dubius (Vander Linden 1827)	+	-	+	+	+	+	-	-
Evagetes elongatus (Lepeletier 1845)	+	-	-	+	+	+	-	-
Evagetes gibbulus (Lepeletier 1845)	+	-	-	-	-	-	-	-
****Evagetes gusenleitneri*** Wolf 1988	+	-	-	+	-	-	-	+
****Evagetes iconionus*** Wolf 1970	+	-	-	+	-	-	-	+
Evagetes pectinipes (Linnaeus 1758)	+	-	+	+	-	-	-	-
Evagetes pectinipes trispinosus (Kohl 1886)	+	+	+	+	+	+	+	-
Evagetes pontomoravicus (Sustera 1938)	+	+	-	+	+	-	-	-
Evagetes proximus (Dahlbom 1845)	+	-	-	+	-	-	-	-
Evagetes siculus (Lepeletier 1945)	+	-	+	+	-	-	-	-
Evagetes tumidosus (Tournier 1890)	+	+	+	+	+	+	+	-
Ferreola Lepeletier 1845								
Ferreola diffinis (Lepeletier 1845)	+	-	-	-	+	-	-	-
Ferreola sagax (Kohl 1886)	-	-	-	-	+	-	-	-
Homonotus Dahlbom 1843								
Homonotus sanguinolentus (Fabricius 1793) (= *balcanicus* Haupt 1927)	+	+	-	+	+	+	+	-
Microphadnus Cameron 1904								
****Microphadnus insperatus*** Priesner 1967	-	+	-	-	+	-	+	-
Microphadnus pumilus (Costa 1882)	-	+	-	+	+	+	-	-
Nanoclavelia Priesner 1955								

Nanoclavelia leucoptera (Dahlbom 1845)	+	-	+	+	-	-	-	-
Pedinpompilus Wolf 1961 (= *Arctoclavelia* Haupt 1930)								
****Pedinpompilus atatuerki*** (Wolf 1970)	-	-	-	-	+	-	-	+
Pedinpompilus obscurus (Haupt 1962) (= *soikai* Wolf 1966)	-	-	-	+	-	-	-	-
Pedinpompilus orbitalis (Haupt 1962)	-	-	-	+	+	+	-	-
****Pedinpompilus paulinus*** (Wolf 1970)	-	-	-	-	+	-	-	+
Pedinpompilus wolfi (Priesner 1965)	+	+	-	+	+	-	+	-
Pompilus Fabricius 1798								
Pompilus cinereus (Fabricius 1775)	+	-	+	+	+	+	+	-
Pseudopompilus Costa 1887								
Pseudopompilus humboldti (Dahlbom 1845)	+	-	-	-	-	-	-	-
Schistonyx Saussure 1890								
****Schistonyx modestus*** Priesner 1967	-	-	-	-	+	-	-	+
Schistonyx perezi (Tournier 1895)	+	-	-	-	+	-	-	-
Tachyagetes Haupt 1930								
Tachyagetes aegyptiacus (Priesner 1955)	+	+	-	+	-	-	+	-
Tachyagetes alicantus Wolf 1987	-	-	-	+	-	-	-	-
Tachyagetes bytinskii Haupt 1962	+	-	-	+	-	+	-	-
****Tachyagetes exortivus*** Wolf 1987	+	+	-	+	+	-	-	+
Tachyagetes filicornis (Tournier 1890)	+	+	+	+	+	+	+	-
Tachyagetes furvescens Wahis 1970	+	-	-	-	-	+	-	-
Tachyagetes gratiosus (Radoszkowski) 1893 (= *kasakstanus* Wolf 1987)	-	-	-	+	-	-	-	-
****Tachyagetes gusenleitneri*** (Priesner 1973)	-	-	-	-	+	-	-	+
Tachyagetes gussakovskiji Wolf 1988	-	-	-	+	-	-	-	-
Tachyagetes kebdanus Wolf 1987	-	-	-	+	-	-	-	-
****Tachyagetes konyanus*** Wolf 1987	+	-	+	+	-	-	-	+
Tachyagetes kusdasi Priesner 1965	+	-	+	-	-	-	+	-
Tachyagetes leucocnemis Haupt 1930	+	+	-	+	+	-	-	-
Tachyagetes navalperalus Wolf 1987	+	-	-	-	-	-	-	-
****Tachyagetes nomadaschwarzi*** Wolf 1987	+	-	-	-	-	-	-	+
****Tachyagetes turcoturanicus*** Wolf 1986	+	-	-	+	-	-	-	+
Telostegus Costa 1887 (= *Elaphrosyron* Haupt 1929)								
Telostegus excisus (Haupt 1930)	+	-	-	+	-	-	-	-
Telostegus fumigatus (Klug 1834)	+	-	-	+	-	-	+	-
Telostegus heinrichi Haupt 1930	+	-	-	-	-	-	-	-
Telostegus inermis (Brullé 1832)	+	+	+	+	+	+	-	-
Xenaporus Ashmead 1902								
****Xenaporus schmidti*** Priesner 1967	+	+	-	+	+	-	-	-
Total species and subspecies	**146**	**58**	**76**	**129**	**105**	**68**	**51**	**19**

Table 2: The present situation of Pompilidae in Turkey

Present in Turkey			Number of species and subspecies		Number with type localities situated in Turkey		
Family	Subfamily	Genus	Species	Subsp	Species	Subsp	Endemic species and subspecies
Pompilidae	**Ceropalinae**	***Ceropales***	9	3	1	1	-
	Pepsinae	***Caliadurgus***	1	-	-	-	-
		Cryptocheilus	30	1	4	-	4
		Cyphononyx	1	-	-	-	-
		Dipogon	2	-	1		1
		Hemipepsis	2	-	-	-	-
		Priocnemis	24	-	-	-	-
		Auplopus	3	-	-	-	-
		Poecilagenia	2	-	-	-	-
	Pompilinae	***Agenioideus***	12	-	-	-	-
		Amblyellus	1	-	-	-	-
		Anoplius	8	-	-	-	-
		Anospilus	1	-	-	-	-
		Aporinellus	2	-	-	-	-
		Aporus	2	-	-	-	-
		Arachnospila	23	-	2	-	2
		Arachnotheutes	5	-	-	-	-
		Batozonellus	1	-	-	-	-
		Ctenagenia	2	-	1	-	-
		Dicyrtomellus	4	-	-	-	-
		Entomobora	3	-	-	-	-
		Eoferreola	7	-	1	-	1
		Episyron	7	-	-	-	-
		Evagetes	12	1	3	-	3
		Ferreola	2	-	-	-	-
		Homonotus	1	-	-	-	-
		Microphadnus	2	-	1	-	-
		Nanoclavelia	1	-	-	-	-
		Pedinpompilus	5	-	2	-	2
		Pompilus	1	-	-	-	-
		Pseudopompilus	1	-	-	-	-
		Schistonyx	2	-	1	-	1
		Tachyagetes	16	-	5	-	5
		Telostegus	4	-	-	-	-
		Xenaporus	1	-	1	-	-
	Total	**35**	**200**	**5**	**23**	**1**	**19**

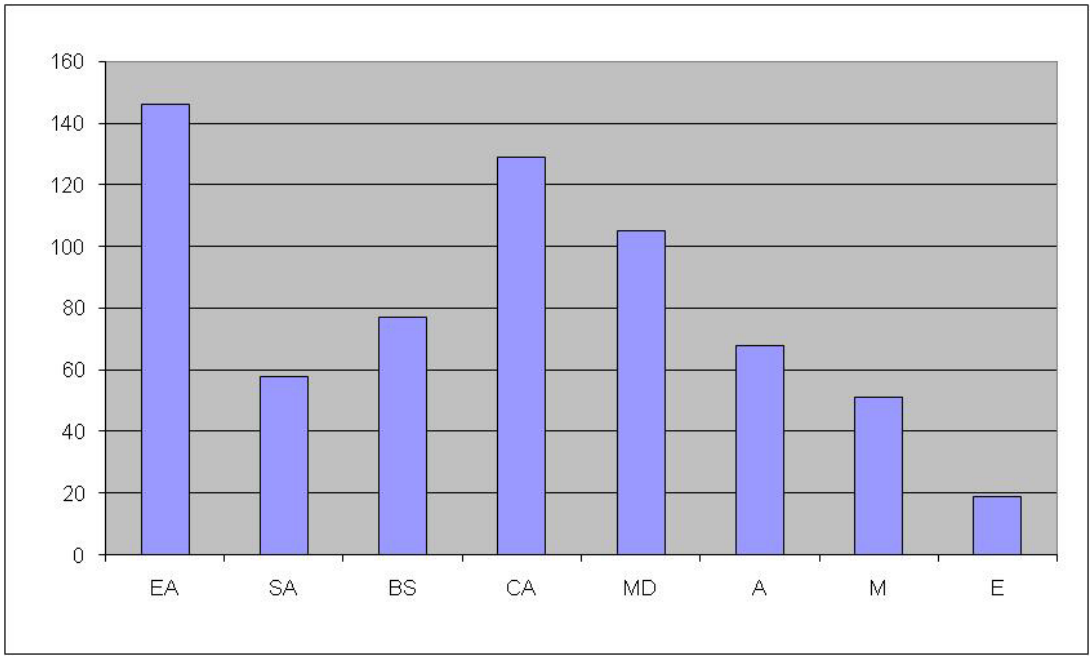

Figure 2: Number of species and subspecies of Pompilidae to Biogeography Regions in Turkey. (EA- Eastern Anatolia (146), SA- Southeastern Anatolia (58), BS- Black Sea (76), CA- Central Anatolia (129), MD- Mediterranean (105), A- Aegean (68), M- Marmara (51), E- Endemic species and subspecies (19)).

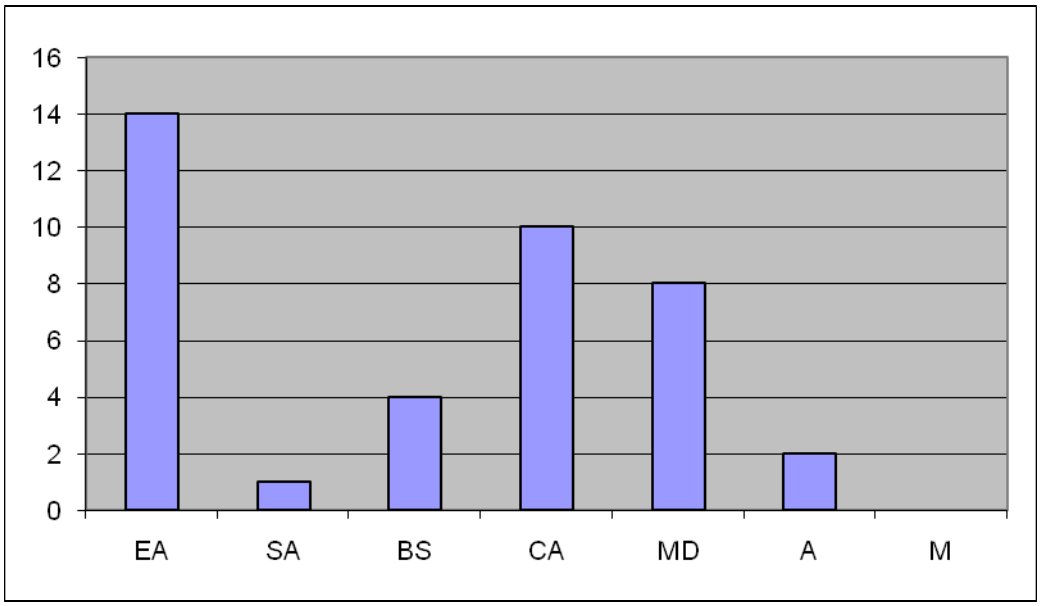

Figure 3: Number of endemic species and subspecies of Pompilidae to Biogeography Regions in Turkey. (EA- Eastern Anatolia (14), SA- Southeastern Anatolia (1), BS- Black Sea (4), CA- Central Anatolia (10), MD- Mediterranean (8), A- Aegean (2), M – Marmara (0)).

Table 3: The present situation of Pompilidae in Turkey, Europe, Greece and Cyprus

Subfamily	Present in Turkey		Present in Europe		Present in Greece		Present in Cyprus	
	Genus	Species and subspecies	Genus	Species and subspecies	Genus	Species and subspecies	Genus	Species and subspecies
Ceropalinae	1	12	1	18	1	3	1	7
Pepsinae	8	66	8	93	5	23	7	21
Pompilinae	26	127	29	203	19	57	20	40
Total	**35**	**205**	**38**	**314**	**25**	**83**	**28**	**68**

This table presents the information accessible in the Gembloux-Mons Data-base. By comparison, they confirm, if necessary, the great richness and diversity of the Turkish fauna.

We analyzed the faunal riches between Turkey, Europe, Greece and Cyprus and examined the composition of the pompilid fauna of Turkey (Table 3). The pompilid fauna of Turkey is known rather well and currently includes 205 species and subspecies in 35 genera. Among them, the type localities of 23 species and 1 subspecies in Pompilidae are situated in Turkey. Separately, 19 species are considered endemic. Separately, 314 species and subspecies in 38 genera from Europe, 83 species and subspecies in 25 genera from Greece, 68 species and subspecies in 28 genera from Cyprus (Table 3). The highest number of species is known from the biogeographical province of Turkey. Turkish pompilid fauna is very rich. There are great differences in species composition and richness between the biogeographic regions of Turkey (Figure 2): 146 species and subspecies have been recorded from Eastern Anatolia, 129 from Central Anatolia, 105 from Mediterranean, 76 from Black Sea, 68 from the Aegean, 58 from Southeastern Anatolia and 51 from Marmara region (Figure 3). Apparently, species diversity is higher in the Eastern and Central Anatolian region than in other regions. An analysis of faunal similarities among the regions demonstrates the existence of two major clusters. The first is formed by the Eastern Anatolian, Central Anatolian and Mediterranean regions, the second by Black Sea, Aegean, Southeast Anatolian and Marmara region.

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