Spider records from East Macedonia and Thrace (NE Greece)

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Abstract. The present study summarises spider records from East Macedonia and Thrace (NE Greece). Spiders were mainly collected by hand sampling and to a smaller extent by pitfall trapping during field trips in 2002, 2004, 2007, 2008 and 2009. 171 species from 23 families were sampled. *Pelecopsis pavida* (O. P.-Cambridge, 1872) (Linyphiidae) and *Xysticus kaznakovi* Utochkin, 1968 (Thomisidae) were new to the European spider fauna and ten further species, *Diaea livens* Simon, 1876, *Heriaeus graminicola* (Doleschall, 1852), *Meioneta ressli* Wunderlich, 1973, *Oedothorax retusus* (Westring, 1851), *Philodromus albidus* Kulczynski, 1911, *Pocadicnemis pumila* Keyserling, 1880, *Sitticus saltator* (O. P.-Cambridge, 1868), *Stemonyphantes lineatus* (Linnaeus, 1758), *Synageles scutiger* Prószynski, 1979 and *Thanatus coloradensis* Keyserling, 1880, could be added to the Greek fauna for the first time. 21 and 38 species were new to East Macedonia and Thrace, respectively. Based on previous work, plus the present study, the Greek spider fauna now includes 1,108 species.

Keywords: Araneae, Balkan, Nestos, Thassos

The Balkan Peninsula is a biodiversity hotspot (Hubenov 2004, Krystufek & Reed 2004, Popov & Fet 2007) which comprises a very species rich spider fauna (Deltshev 1999, 2005). Northern Greece – part of the Balkan Peninsula – is situated in the transition zone of the European, Mediterranean and the Ponto-Anatolian biogeographical regions, which results in a high biodiversity (Jerrentrup et al. 1989, Schröder et al. 2011). Despite an increasing number of faunistic surveys (Buchholz 2007, Van Keer et al. 2010, Schröder et al. 2011) as well as taxonomic works (for an extensive compilation see Bosmans & Chatzaki 2005 and Van Keer et al. 2010) the spider fauna of Northern Greece, and especially Thrace, is still poorly investigated and thus remains underestimated (Chatzaki 2008). The present study summarises spider data which were recorded in the Eastern part of Northern Greece, namely East Macedonia and Thrace, and thus is intended to enhance current knowledge concerning spider distribution in this region.

Study area

Data were collected in the region of East Macedonia (prefectures Drama, Kavála, Thassos) and Thrace (prefectures Evros, Rhodopi, Xanthi) (Tab. 1, Fig. 1) which are situated in the north-eastern part of Greece and separated by the Nestos river. The study area is delimited by the Bulgarian border to the north and the Turkish border or Evros river to the east, while the coastline of the Thracian Sea forms the southern border.

The northern part of north-east Greece is characterised by mountain ranges such as the Greek Rhodope massif along the Greek–Bulgarian border reaching altitudes of about 1950 m above sea level as well as the Pangaion, Menoikon, Lekani and Falakron mountains; the latter reaches the highest altitudes (2232 m a.s.l.). Towards the east, a lower mountainous area with altitudes not exceeding 650 m a.s.l. exists in the area of the Dadia nature reserve. In a southern and south-eastern direction the landscape becomes gradually lower and, via a belt of cultivated land, changes into the coastal plain of the Aegean Sea. Near the coast the landscape is formed by level to slightly undulated lowlands about 20 m above sea level. In the study area two rivers (Nestos, Evros) form deltas which are largely cultivated, but also still contain many natural habitats such as lagoons, salt marshes and remnants of floodplain forests. The Nestos delta includes the lagoon areas of Keramotí and Agiasma, and the eastward situated Lakes Vistonis and Mitrikou form the east Macedonian-Thracian wetland belt, which comprises a considerable number of natural lagoons and salt marshes.

The climate of the coastal plains is Mediterranean, although continental impacts become effective. Impacts manifest themselves as huge fluctuations in yearly temperature, with summer maxima of 40 °C

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Tab. 1: Geographical information on the sampling localities.

No.	N	E	m a.s.l.	Location /Area	Region	Prefecture
1	41°18'01.36"	24°04'42.31"	1950	Falakron	East Macedonia	Drama
2	41°00'46.62"	24°17'03.30"	70	Philippi	East Macedonia	Kavála
3	41°02'51.14"	24°38'41.66"	190	Stenopos	East Macedonia	Kavála
4	40°51'13.53"	24°43'30.33"	0	Nestos Delta	East Macedonia	Kavála
5	40°50'58.25"	24°47'48.94"	0	Nestos estuary	East Macedonia	Kavála
6	40°46'40.86"	24°43'12.16"	120	Thassos	East Macedonia	Thassos
7	41°00'27.72"	24°42'24.39"	20	Aladjagiola	East Macedonia	Kavála
8	41°01'37.76"	24°38'04.75"	360	N Zarkadia	East Macedonia	Kavála
9	41°05'49.18"	24°45'10.85"	60	Nestos canyon	Thrace	Xanthi
10	41°08'56.73"	24°42'18.21"	460	Ano Livera	Thrace	Xanthi
11	41°06'57.70"	24°44'52.37"	760	Galani/Nestos view	Thrace	Xanthi
12	41°08'46.16"	24°53'04.24"	160	N Xanthi	Thrace	Xanthi
13	41°15'58.72"	24°48'45.96"	430	W Oreo	Thrace	Xanthi
14	41°02'00.92"	25°04'16.25"	20	Nea Kessani	Thrace	Xanthi
15	41°00'29.09"	25°08'48.95"	0	Lake Vistonis	Thrace	Xanthi
16	40°59'28.32"	25°18'23.91"	10	Lake Mitrikou	Thrace	Rhodopi
17	41°00'30.27"	25°07'13.74"	0	Porto Lagos	Thrace	Xanthi
18	41°00'12.62"	25°10'29.98"	5	SW Glykoneri	Thrace	Rhodopi
19	41°08'23.80"	25°12'37.69"	40	Kompsatos river	Thrace	Rhodopi
20	41°17'56.73"	26°01'16.01"	350	Roussa	Thrace	Evros
21	41°07'19.97"	26°13'40.10"	100	Dadia	Thrace	Evros

Fig. 1: Map of study area and location of sampling sites in East Macedonia (west of the Nestos river) and Thrace (east of the Nestos river) (pale area = lowland, grey area = mountain range). For further geographical information see Tab. 1.

and winter minima of -20 °C. The annual average amount of precipitation is 600-700 mm (Jerrentrup et al. 1989), whereas the average annual temperature is 11 °C (Lienau 1989). The climate of the mountain ranges shows typical Central European characteristics with snow from November to May (Volpers 1988). The potential natural vegetation along the coast is the Ostryo-Carpinion followed by Quercion frainetto-zone up to altitudes of 1000 meters above sea level (Horvat et al. 1974). At about 1000 meters the oak-zone changes into a beech-zone with spruce (*Picea abies*) and fir (*Abies*) (Volpers 1988, Lienau 1989).

Methods

Spiders were mainly collected by hand sampling and to a lesser extent by pitfall traps during field trips in 2002, 2004, 2007, 2008 and 2009. A broad variety of habitat types were sampled in 21 locations in East Macedonia and Thrace (Tab. 1, Fig. 1). Nomenclature and information on zoogeographical distribution of species were taken from Helsdingen (2012) and Platnick (2013) and more detailed literature on local elements. Bosmans & Chatzaki (2005), Buchholz (2007), Chatzaki (2008), Bosmans (2009), Bosmans et al. (2009), Van Keer et al. (2010) and Schröder et al. (2011) were consulted to identify those new records (indicated by 'nr' in Tab. 2) that the present study added to the list of known species in Greece, Macedonia and Thrace. By contrast, the '+' sign in Tab. 2 indicates species that were already recorded in the area.

Results and discussion

In total, 171 species from 23 families were recorded (Tab. 2). Two species – *Pelecopsis pavida* (O. P.-Cambridge, 1872) (Linyphiidae) (det. R. Bosmans) and *Xysticus kaznakovi* Utochkin, 1968 (Thomisidae) (det. D. Logunov) – proved to be new for the European spider fauna. *Pelecopsis pavida* was hitherto only known from its type locality in Palestine (Bosmans 1994). During the present study, one male was sampled in a grey dune habitat in the Nestos delta. *Xysticus kaznokovi* has been recorded in Central Asia (Marusik & Logunov 1990) and Turkey, where it was collected under stones and on the ground in grass (Demir et al. 2009). One male was caught in a dry and sparse vegetated habitat.

Twenty-one and thirty-eight species were new to East Macedonia and Thrace, respectively. In addition to *Pelecopsis pavida* and *Xysticus kaznakovi*, ten further species could be added to the Greek fauna for the first time:

Oedothorax retusus, *Pocadicnemis pumila* and *Stemonyphantes lineatus* are widespread across Europe (Nentwig et al. 2013) and inhabit a broad variety of habitats (Hänggi et al. 1995).

Sitticus saltator is also an element of the European fauna (Nentwig et al. 2013), but its occurrence seems to be restricted to dry habitats such as dry grassland, heathland and dunes (Bauchhenß 1995, Merkens 2002, Buchholz & Kreuels 2009, Buchholz & Schirmel 2011) and accordingly three females were found in a white dune of the Nestos delta.

Meioneta ressli (det. R. Bosmans) and *Thanatus coloradensis* (det. C. Muster) are high mountain species (Muster 2001, Nentwig et al. 2013). While the latter was found in meadows of the European mountains (Alps, Pyrenees, Carpathians, Caucasus) (Nentwig et al. 2013), *Meioneta ressli* was hitherto considered an endemic species of the Alps (Muster 2001) inhabiting alpine grass heaths and as far down as the valley (Thaler 1995, Muster 2001, Höfer et al. 2010). In the present study, *Thanatus coloradensis* was sampled in dry grasslands of the Falakron mountain while *Meioneta ressli* was found at the same habitat type in the Nestos canyon.

Philodromus albidus (det. C. Muster), which was sampled from rocks, is mainly distributed in Western and Central Europe (Nentwig et al. 2013, Platnick 2013) but was also recorded in Bulgaria (Lazarov 2007) and Turkey (Bayram et al. 2013).

Diaea livens has been found in Western, Central and Southern Europe (Lazarov 2007, Bayram et al. 2013, Nentwig et al. 2013) as well as in the Caucasus (Otto & Tramp 2011, Nentwig et al. 2013) but was also introduced into the USA (Platnick 2013). *Diaea livens* is arboreal (mainly oaks) (Nentwig et al. 2013) and accordingly this species was caught in dwarf-shrubs.

Heriaeus graminicola is distributed in Central, Eastern and South-Eastern Europe (Deltshev et al. 2004, Nentwig et al. 2013) and according to Hänggi et al. (1995) and Nentwig et al. (2013) it inhabits dense vegetated and humid habitats (e.g., reedy marsh). By contrast, a number of individuals were sampled in different and mostly dry habitats.

Synageles scutiger (det. D. Logunov) has been rarely recorded. According to Logunov & Marusik (2000) and Platnick (2013) it was only found in

Tab. 2: Species list (nomenclature follows Platnick 2013). Abbreviations: biogeogr = biogeographical type: Blk = Balkan, Ci-Me = Circum-Mediterranean, EaMe = East-Mediterranean, Eu = European, Gr = Greek, Tur = Turanian (species with western limits of distribution formed by the Italian and Balkan peninsulas, respectively, and ranging as far as Central Asia), Tur-Eu = European species whose ranges extend eastward to Central Asia, Tur-Me = Mediterranean species whose ranges extend eastward to Central Asia, Wi = widely distributed species (cosmopolitan, palaearctic, holarctic); Gr = Greece, Ma = East Macedonia, Th = Thrace (nr = new record, + = species already recorded, ; m/f = number of sampled males and females, respectively; habitat types: A = building, B = dry grassland, C = dry habitat with sparse vegetation, D = dwarf shrub, E = fallow land, F = floodplain forest, G = fringe, H = gravel bank, I = grey dune, J = humid meadow, K = meadow, L = *Pinus*-forest, M = pseudo maquis, N = reed, O = riparian strip, P = rocks, Q = salt meadow, R = sandy shore, S = semi-dry grassland, T = tall-forb vegetation, U = white dune.

species	biogeogr	Gr	Ma	Th	m/f	sampling location	habitat type
Scytodidae							
Scytodes thoracica (Latreille, 1802)	Wi	+	+	+	1/0	21	P
Pholcidae							
Holocnemus pluchei (Scopoli, 1763)	Eu	+	+	+	0/1	9	P
Dysderidae							
Harpactea babori (Nosek, 1905)	EaMe	+	+	.	1/0	4	F
Mimetidae							
Mimetus laevigatus (Keyserling, 1863)	Tur-Me	+	+	.	1/0	4	F
Eresidae							
Eresus kollari Rossi, 1846	Tur-Eu	+	+	+	5/0	2, 3, 7, 9	B
Oecobiidae							
Oecobius maculatus Simon, 1870	Tur-Me	+	+	nr	0/1	21	P
Uloboridae							
Uloborus walckenaerius Latreille, 1806	Wi	+	+	+	1/1	4	I
Theridiidae							
Enoplognatha penelope Hippa & Oksala, 1982	Blk	+	+	.	0/2	7	E
Euryopis episinoides (Walckenaer, 1847)	Tur-Me	+	+	.	0/1	4	Q
Euryopis sexalbomaculata (Lucas, 1846)	Ci-Me	+	+	.	3/0	6	M
Kochiura aulica (C. L. Koch, 1838)	Wi	+	+	.	1/0	7	M
Latrodectus tredecimguttatus (Rossi, 1790)	Tur-Me	+	+	+	1/0	4	I
Paidiscura dromedaria (Simon, 1880)	Wi	+	nr	.	0/2	4	U
Phylloneta impressa (L. Koch, 1881)	Wi	+	+	+	1/1	7	E
Steatoda triangulosa (Walckenaer, 1802)	Wi	+	+	+	0/1	21	A
Linyphiidae							
Erigone atra Blackwall, 1833	Wi	+	.	nr	1/0	12	A
Erigone dentipalpis (Wider, 1834)	Wi	+	+	.	1/0	4	Q
Frontinellina frutetorum (C. L. Koch, 1834)	Wi	+	+	+	0/7	4, 20	K, P
Gnathonarium dentatum (Wider, 1834)	Wi	+	+	.	0/1	7	N
Gongylidium rufipes (Linnaeus, 1758)	Wi	+	+	.	0/1	4	F
Maso gallicus Simon, 1894	Wi	+	+	.	0/1	4	K
Maso sundevalli (Westring, 1851)	Wi	+	+	.	7/0	4	F
Mecopisthes peusi Wunderlich, 1972	Eu	+	+	.	0/9	4, 9	K, R
Meioneta fuscipalpa (C. L. Koch, 1836)	Wi	+	+	nr	6/0	4, 9, 21	K, R, T
Meioneta ressli Wunderlich, 1973	Eu	nr	nr	.	1/0	9	B
Metopobactrus prominulus (O. P.-Cambridge, 1872)	Wi	+	+	.	0/1	4	J
Oedothorax apicatus (Blackwall, 1850)	Wi	+	+	.	1/3	7	N,S
Oedothorax retusus (Westring, 1851)	Wi	nr	nr	.	0/1	2	P
Pelecopsis elongata (Wider, 1834)	Eu	+	+	.	0/1	4	F
Pelecopsis inedita (O. P.-Cambridge, 1875)	Ci-Me	+	nr	.	0/2	4	F, I
Pelecopsis pavida (O. P.-Cambridge, 1872)	Tur	nr	nr	.	1/0	4	I

species	biogeogr	Gr	Ma	Th	m/f	sampling location	habitat type
Prinerigone vagans (Audouin, 1826)	Wi	+	+	+	1/6	4, 6, 9, 15	F, K, M, Q, T
Pocadicnemis juncea Locket & Millidge, 1953	Wi	+	+	.	0/28	4	Q
Pocadicnemis pumila (Blackwall, 1841)	Wi	nr	nr	.	1/0	7	N
Stemonyphantes lineatus (Linnaeus, 1758)	Wi	nr	nr	.	0/1	4	Q
Styloctetor romanus (O. P.-Cambridge, 1872)	Wi	+	+	.	0/9	4	I
Tenuiphantes tenuis (Blackwall, 1852)	Wi	+	+	nr	0/1	20	C
Trichoncus hackmani Millidge, 1955	Eu	+	+	.	0/1	7	E
Walckenaeria alticeps (Denis, 1952)	Tur-Eu	+	+	.	0/1	4	F
Walckenaeria vigilax (Blackwall, 1853)	Wi	+	+	.	1/0	4	J
Tetragnathidae							
Tetragnatha extensa (Linnaeus, 1758)	Wi	+	+	+	1/0	20	O
Tetragnatha montana Simon, 1874	Wi	+	+	.	1/0	7	S
Tetragnatha obtusa C. L. Koch, 1837	Wi	+	+	nr	1/0	15	T
Araneidae							
Araneus angulatus Clerck, 1757	Wi	+	+	+	3/19	7	G, M, S
Araniella cucurbitina (Clerck, 1757)	Wi	+	+	+	0/2	3	K
Araniella opisthographa (Kulczyński, 1905)	Tur-Eu	+	+	+	2/4	7, 19, 20	H, M, O
Argiope bruennichi (Scopoli, 1772)	Wi	+	+	+	8/9	7	E, G, M, N, S
Argiope lobata (Pallas, 1772)	Wi	+	+	+	0/3	17	K
Cyclosa sierrae Simon, 1870	Tur-Eu	+	nr	+	0/12	7, 20, 21	K, L, M
Gibbaranea bituberculata (Walckenaer, 1802)	Wi	+	+	+	0/3	7, 20	B, C
Hypsosinga albovittata (Westring, 1851)	Wi	+	+	+	0/4	6, 7	E, P, T
Hypsosinga pygmaea (Sundevall, 1831)	Wi	+	+	.	0/1	7	S
Larinioides cornutus (Clerck, 1757)	Wi	+	+	nr	1/9	4, 7, 16	E, I, J, K, N, S
Mangora acalypha (Walckenaer, 1802)	Wi	+	+	+	8/46	7, 10, 20, 21	B, C, E, G, K, M, N, O, S
Neoscona adianta (Walckenaer, 1802)	Wi	+	+	+	29/76	7, 16, 18	E, G, J, K, M, N, S
Lycosidae							
Alopecosa albofasciata (Brullé, 1832)	Tur-Me	+	+	+	6/8	7, 9, 18, 19, 20, 21	B, E, H, K, L, P
Alopecosa cuneata (Clerck, 1757)	Wi	+	+	+	0/2	1	B
Arctosa cinerea (Fabricius, 1777)	Wi	+	+	+	2/2	5, 7, 20	O, R, U
Arctosa leopardus (Sundevall, 1833)	Wi	+	+	+	3/0	7	J, N
Aulonia kratochvili Dunin, Buchar & Absolon, 1986	Tur-Me	+	+	+	1/0	7	J
Geolycosa vultuosa (C. L. Koch, 1838)	Tur-Me	+	+	+	0/10	3, 7, 9	B, S
Pardosa agricola (Thorell, 1856)	Tur-Eu	+	+	nr	1/4	20	K
Pardosa atomaria (C. L. Koch, 1847)	Blk	+	+	+	0/2	20	O
Pardosa blanda (C. L. Koch, 1833)	Wi	+	+	.	3/3	1	B
Pardosa cribrata Simon, 1876	Ci-Me	+	+	.	4/3	7	J, N
Pardosa hortensis (Thorell, 1872)	Wi	+	+	+	0/5	7, 10, 20	B, K
Pardosa monticola (Clerck, 1757)	Wi	+	+	.	0/1	1	B
Pardosa paludicola (Clerck, 1757)	Wi	+	+	.	1/1	1, 7	J, S
Pardosa prativaga (L. Koch, 1870)	Tur-Eu	+	+	.	1/2	7	J, N
Pardosa proxima (C. L. Koch, 1847)	Wi	+	+	+	2/0	7	J
Pirata latitans (Blackwall, 1841)	Tur-Eu	+	+	+	0/2	4	F
Trochosa ruricola (De Geer, 1778)	Wi	+	+	+	3/2	7	J, N
Xerolycosa miniata (C. L. Koch, 1834)	Wi	+	+	nr	0/1	20	K

species	biogeogr	Gr	Ma	Th	m/f	sampling location	habitat type
Pisauridae							
Pisaura mirabilis (Clerck, 1757)	Wi	+	+	+	0/13	7, 9, 20, 21	B, E, J, K, P, S
Pisaura novicia (L. Koch, 1878)	Tur-Me	+	nr	.	0/1	3	K
Oxyopidae							
Oxyopes heterophthalmus (Latreille, 1804)	Wi	+	+	+	4/8	3, 7, 20, 21	E, G, J, K, R, T
Oxyopes lineatus Latreille, 1806	Wi	+	+	+	6/6	7, 9, 20, 21	B, C, K, R, T
Oxyopes nigripalpis Kulczyński, 1891	Ci-Me	+	+	nr	5/0	21	T
Agelenidae							
Agelena orientalis C. L. Koch, 1837	Tur-Me	+	+	.	0/1	7	M
Maimuna vestita (C. L. Koch, 1841)	EaMe	+	+	+	0/4	6, 21	L, M, P
Tegenaria angustipalpis Levy, 1996	EaMe	+	+	.	0/1	6	P
Tegenaria parietina (Fourcroy, 1785)	Wi	+	+	nr	0/1	13	A
Dictynidae							
Devade indisticta (O. P.-Cambridge, 1872)	Ci-Me	+	nr	.		4	Q
Dictyna arundinacea (Linnaeus, 1758)	Wi	+	+	+	12/22	7, 20	E, G, J, N, O, R, S
Titanoecidae							
Nurscia albomaculata (Lucas, 1846)	Tur-Eu	+	+	.	0/1	6	P
Zodariidae							
Zodarion blagoevi Bosmans 2009	Blk	+	+	.	10/0	7	R
Zodarion epirense Brignoli, 1984	Blk	+	+	.	0/4	7	G, P
Zodarion frenatum Simon, 1884	EaMe	+	+	.	2/12	4	B, K, P, Q, U
Zodarion granulatum Kulczyński, 1908	EaMe	+	nr	.	1/0	7	G
Zodarion hauseri Brignoli, 1984	Gr	+	+	.	1/0	7	R
Zodarion morosum Denis, 1935	Eu	+	+	.	2/0	4, 7	E
Zodarion pirini Drensky, 1921	Blk	+	nr	.	3/0	4	K, R
Zodarion thoni Nosek, 1905	Tur-Eu	+	nr	.	4/0	4, 7	B, U
Gnaphosidae							
Callilepis cretica (Roewer, 1928)	Tur-Me	+	+	+	1/0	19	H
Drassodes lapidosus (Walckenaer, 1802)	Wi	+	+	+	1/1	8, 19	K, P
Drassodes lutescens (C. L. Koch, 1839)	Tur-Me	+	+	nr	0/4	6, 19, 20, 21	C, P
Gnaphosa lucifuga (Walckenaer, 1802)	Wi	+	+	+	2/4	4, 20	O, Q
Gnaphosa lugubris (C. L. Koch, 1839)	Tur-Eu	+	+	.	0/1	1	B
Haplodrassus dalmatensis (L. Koch, 1866)	Wi	+	+	nr	1/0	14	A
Haplodrassus signifer (C. L. Koch, 1839)	Wi	+	+	+	0/1	21	A
Nomisia exornata (C. L. Koch, 1839)	Tur-Eu	+	+	nr	7/8	6, 9, 19, 20, 21	B, C, H, L, M, S
Nomisia pariensis (O. P.-Cambridge, 1872)	Tur	+	+	+	4/0	4, 6, 18	K, P, S
Trachyzelotes barbatus (L. Koch, 1866)	Tur-Me	+	+	.	0/1	9	B, P
Trachyzelotes lyonneti (Audouin, 1826)	Tur-Me	+	+	.	0/1	4	Q
Trachyzelotes malkini Platnick & Murphy, 1984	Eu	+	+	.	2/1	4, 7	B, K, S
Zelotes argoliensis (C. L. Koch, 1839)	Blk	+	+	+	0/1	9	R
Zelotes caucasius (L. Koch, 1866)	Tur-Eu	+	+	nr	3/0	21	P
Zelotes cingarus (O. P.-Cambridge, 1874)	EaMe	+	+	nr	0/1	21	P
Zelotes tenuis (L. Koch, 1866)	Ci-Me	+	+	.	1/1	4	I, Q

species	biogeogr	Gr	Ma	Th	m/f	sampling location	habitat type
Sparassidae							
Micrommata ligurina (C. L. Koch, 1845)	Tur-Me	+	+	+	0/1	16	K
Philodromidae							
Philodromus albidus Kulczyński 1911	Eu	nr	nr	.	0/1	8	P
Philodromus glaucinus Simon, 1870	Ci-Me	+	+	.	0/1	7	T
Philodromus lunatus Muster & Thaler, 2004	EaMe	+	+	nr	2/1	7, 20, 21	C, M, P
Philodromus pulchellus Lucas, 1846	Ci-Me	+	+	.	0/1	4	E, S
Thanatus atratus Simon, 1875	Wi	+	+	nr	10/11	4, 6, 7, 10, 20	B, E, N, O, P, S
Thanatus coloradensis Keyserling, 1880	Wi	nr	nr	.	1/2	1	B
Thanatus pictus L. Koch, 1881	Wi	+	nr	nr	3/0	4, 16	K, U
Thanatus vulgaris Simon, 1870	Wi	+	+	.	0/3	4, 7	S, U
Tibellus oblongus (Walckenaer, 1802)	Wi	+	+	nr	8/20	7, 9	B, F, G, K, N, O, S
Thomisidae							
Diaea livens Simon, 1876	Tur-Eu	nr	nr	.	1/0	8	D
Heriaeus graminicola (Doleschall, 1852)	Tur-Eu	nr	nr	nr	8/0	7, 20	C, G, K, S
Heriaeus setiger (O. P.-Cambridge, 1872)	Wi	+	+	nr	2/0	4, 21	B, T
Misumena vatia (Clerck, 1757)	Wi	+	+	nr	0/4	7, 21	S, T
Monaeses israeliensis Levy, 1973	Tur-Me	+	+	.	1/0	7	G
Ozyptila confluens (C. L. Koch, 1845)	EaMe	+	+	.	1/0	4	A
Runcinia grammica (C. L. Koch, 1837)	Wi	+	+	+	20/1	7, 21	E, G, N, S, T
Synema globosum (Fabricius, 1775)	Wi	+	+	+	5/3	15, 21	K, T
Synema plorator (O. P.-Cambridge, 1872)	Tur-Me	+	+	.	0/1	8	P
Thomisus onustus Walckenaer, 1805	Wi	+	+	+	8/0	9, 20, 21	B, K, P, T
Tmarus piger (Walckenaer, 1802)	Wi	+	+	+	2/0	4, 7	F, R
Xysticus caperatus Simon, 1875	Ci-Me	+	+	.	1/0	6	M, P
Xysticus kaznakovi Utochkin, 1968	Tur	nr	nr	.	1/0	4	C
Xysticus kochi Thorell, 1872	Wi	+	+	+	1/3	7, 9	B, E, G, J
Xysticus laetus Thorell, 1875	Tur-Me	+	+	nr	4/1	4, 21	F, T
Xysticus lanio C. L. Koch, 1835	Wi	+	.	+	0/2	20	C, O
Xysticus tristrami (O. P.-Cambridge, 1872)	Tur-Me	+	.	nr	3/1	21	P
Salticidae							
Aelurillus luctuosus (Lucas, 1846)	Tur-Me	+	.	nr	0/1	21	P
Bianor albobimaculatus (Lucas, 1846)	Tur-Me	+	+	+	0/1	9	R
Chalcoscirtus nigritus (Thorell, 1875)	Wi	+	+	.	1/0	4	K
Cyrba algerina (Lucas, 1846)	Wi	+	.	nr	1/1	9, 19	B, P
Evarcha arcuata (Clerck, 1757)	Wi	+	+	+	3/2	7	N, S
Evarcha jucunda (Lucas, 1846)	Ci-Me	+	+	nr	5/0	9, 19, 21	B, H, L, P
Heliophanus equester L. Koch, 1867	Tur-Me	+	+	+	1/5	7, 16, 20	E, N, S, T
Heliophanus flavipes (Hahn, 1832)	Wi	+	+	+	1/0	7	N
Heliophanus kochii Simon, 1868	Wi	+	+	+	0/1	20	K
Heliophanus melinus L. Koch, 1867	Wi	+	+	+	8/2	9, 10, 19, 20, 21	B, C, P
Heliophanus tribulosus Simon, 1868	Tur-Eu	+	+	.	1/0	6	M
Icius hamatus (C. L. Koch, 1846)	Wi	+	+	nr	1/1	18	K
Macaroeris nidicolens (Walckenaer, 1802)	Tur-Eu	+	+	nr	2/0	20, 21	C, L
Menemerus semilimbatus (Hahn, 1829)	Wi	+	+	nr	3/2	2, 4, 6, 15	P, T, U
Menemerus taeniatus (L. Koch, 1867)	Tur-Me	+	+	nr	0/1	18	K
Mogrus neglectus (Simon, 1868)	Tur-Me	+	+	nr	2/4	4, 7, 9	B, G, P, S, U
Neaetha membrosa (Simon, 1868)	Eu	+	+	.	1/0	9	B, P

species	biogeogr	Gr	Ma	Th	m/f	sampling location	habitat type
Pellenes brevis (Simon, 1868)	Eu	+	+	.	1/0	7	R
Pellenes diagonalis (Simon, 1868)	EaMe	+	+	.	0/5	6, 7, 8	B, P, S
Pellenes flavipalpis (Lucas, 1853)	EaMe	+	.	nr	1/0	19	P
Pellenes geniculatus (Simon, 1868)	Wi	+	.	nr	2/4	9, 19, 20	B, H, K, P
Pellenes nigrociliatus (Simon, 1875)	Wi	+	+	+	1/0	9	R
Pellenes seriatus (Thorell, 1875)	Tur-Me	+	+	.	0/3	7	E
Philaeus chrysops (Poda, 1761)	Wi	+	+	+	9/1	3, 6, 8, 9, 19, 21	B, H, K, P
Phintella castriesiana (Grube, 1861)	Wi	+	+	.	1/0	4	F
Phlegra fasciata (Hahn, 1826)	Wi	+	+	+	4/2	3, 7, 9, 21	E, L, N, P
Pseudeuophrys obsoleta (Simon, 1868)	Wi	+	+	+	1/0	7	M
Pseudicius picaceus (Simon, 1868)	Tur-Me	+	.	nr	1/0	9	P
Saitis tauricus Kulczyński, 1905	Tur-Me	+	+	nr	1/2	6, 21	A, P
Salticus mutabilis Lucas, 1846	Wi	+	+	nr	1/0	18	K
Salticus noordami Metzner, 1999	Gr	+	.	nr	1/0	9	B, P
Sitticus atricapillus (Simon, 1882)	Eu	+	+	.	0/1	1	B
Sitticus saltator (O. P.-Cambridge, 1868)	Wi	nr	nr	.	0/3	4	U
Synageles dalmaticus (Keyserling, 1863)	Ci-Me	+	+	.	3/0	5, 6	A, P, U
Synageles scutiger Prószynski, 1979	Tur-Eu	nr	nr	.	0/1	4	U

Ukraine and Azerbaijan. One female was caught in a white dune of the Nestos delta.

Knowledge of the distribution patterns and ecology of several of the species caught is still poor, and more faunistic and especially ecological studies are needed to gain a better understanding of the Greek but also of the Eastern Mediterranean spider fauna. However, based on previous work (Bosmans & Chatzaki 2005, Bosmans et al. 2009, Van Keer et al. 2010, Schröder et al. 2011), together with the present study, the Greek spider fauna now includes 1,108 species.

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