

NEW SPIDER SPECIES RECORDS FOR SARDINIA (ARACHNIDA: ARANEAE)

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ABSTRACT

The spider fauna of the Italian island Sardinia is only superficially known. A short visit to the island resulted in 24 additional species, while 31 species formerly recorded from the island could be confirmed. The total amount of species recorded from Sardinia is now raised to 310. The transfer of Levy and Amitai's record of *Simitidion simile* to *S. lacuna* is rejected.

Key words: Sardinia, spiders

INTRODUCTION

Our knowledge of the spider fauna of the Mediterranean islands is relatively poor. Sardinia in this respect is no exception. When preparing the spider dataset for the Fauna Europaea database I found two papers on the spider fauna of the Italian island of Sardinia. Wunderlich (1995) published a list of the spiders of Corsica (France) and Sardinia (Italy) followed by the description of eight new species for Sardinia. Also available was the Italian check list of the Italian fauna, for which the spiders were compiled by Pesarini (1994). He listed all Italian species and indicated their distributions over mainland Italy and the two major islands Sicily and Sardinia. A list of the spiders fauna of Sardinia thus can easily be extracted from the general check list. Subsequently (Pesarini, 2003) the list was placed on the internet. The spider list on the website of Fauna Italiana, which is extremely obsolete in its taxonomy and nomenclature and obviously missed a lot of literature. Sardinia is entered as a separate geographic unit. Of course we also have the World Catalogue of Spiders by Norman Platnick (Platnick, 2005), but it is not possible to simply extract the Sardinian spiders because the distribution often is put as "Mediterranean" or "Spain, Italy". All three sources have their merits and flaws, but by putting the three together I could compose a general list as complete as possible according to the latest state of affairs. The final result, of course, can be examined under "Fauna Europaea" on the website of the European Society of Arachnology (Van Helsdingen, 2005).

COMPOSITION OF THE SPIDER FAUNA

The check list for Sardinia comprises 286 valid species names amongst which two nomina dubia. As to be expected for a Mediterranean island the number of endemics is large (34), while a small number of species is shared with Corsica or Sicily only. Other species have a more general Mediterranean or European distribution. Even after adding a number of species in this paper (see below) the list certainly is far from complete. Salticidae and Theridiidae are well-represented, as is to be expected in the Mediterranean Region. However, it is hardly plausible that only one Clubionid species (added in this paper) occurs on Sardinia. Dictynidae were lacking completely (now three species) and the absence of Oecobiidae and of certain genera of the Linyphiidae show how unbalanced the list was. Sardinia is a large island (24,000 sq. km) with a great variety of habitats from lowland to mountains. Since Sardinia is a favourite holiday resort for many I expect that the list will soon grow.

SHORT INVENTORY TRIP IN 2005

In the spring of 2005 a short trip was made to the province of Nuoro in the eastern part of Sardinia. All localities mentioned below lie in that province. Not much time was available for inventoring the spider fauna and it probably was not the most favourable period of the year. Nevertheless I have tried to fill in apparent gaps in the existing list resulting in an additional set of 24 species not mentioned before for Sardinia, while 31 species could be confirmed (table 1). This brings the list of spiders of Sardinia to 310, the two nomina dubia included.

COMMENTS ON SOME SPECIES

***Larinioides suspicax* (O. P.-Cambridge)**

Material collected: 1♀ - 3.v.2005, Orosei, in the centre of the city.

Not rare in central and southern Europe.

***Clubiona vegeta* Simon**

Material collected: 1♀ - 25.iv.2005, wasteland plot in Santa Maria de Navarese.

C. vegeta is widely distributed in the Mediterranean area and lacks in the northern temperate region.

***Phrurolithus corsicus* (Simon)**

Material collected: 1♂ 1♀ - 5.v.2005, Monti Albi at the margin of a field with stones and shrubs.

The species was originally described from Corsica and subsequently recorded from Spain (not in Platnick, 2005), Macedonia and Romania. The present Sardinian record nicely fits in with the known distribution.

***Trachelas minor* O. P.-Cambridge**

Material collected: 1♀ - 4.v.2005, near Orosei, in grassland along the mouth of the river.

T. minor is generally distributed in the Mediterranean Region and more eastward. There are records from Spain, continental France and Corsica, mainland Italy and Greece and thus the occurrence in Sardinia is not surprising.

***Marilynia bicolor* (Simon)**

Material collected: Juvs - 7.iv.2005, in debris on the sandy deposits at the mouth of the Rio Girasole near Santa Maria de Navarese.

The species has been mentioned for many European countries but seems to lack in northern and northwestern countries. Since the available material only comprises juvenile specimens it is impossible to decide whether they belong to the nominate subspecies or to *M. bicolor littoralis* (Denis, 1959) described from the coastal area in France.

***Nigma puella* (Simon)**

Material collected: 1♀ - 29.iv.2005, near Ardali, W. of Santa Maria de Navarese, in shrubs along a little stream; 1♀ - 3.v.2005, Tiscali.

The species has a wide distribution throughout Europe but appears to be more common in the South and even occurs on Madeira, the Canary Islands and the Açores.

***Nigma walckenaerius* (Roewer)**

Material collected: 1♀ - 26.iv.2005, West of Santa Maria de Navarese, in the valley of the Rio Pramaera near Lotzorai.

The specimen had built its web on a cactus (*Opuntia ficus-indica*) which form a very characteristic landscape element in the lowland region of the island. *N. walckenaerius* can be called a common species in most of Europe, again lacking in northern countries.

***Haplodrassus dalmatensis* (L.Koch)**

Material collected: 2♀ - 28.iv.2005, in coastal drift on the shore near Donigala.

A common Palaearctic species and therefore not surprisingly found on Sardinia.

***Haplodrassus signifer* (C.L.Koch)**

Material collected: 1♀ - 5.v.2005, Monti Albi at the margin of a field with stones and shrubs.

A Holarctic species commonly found in nearly all European countries.

***Frontinellina frutetorum* (C.L.Koch)**

This was one of the clearly missing species on the available check lists. Indeed, as expected, it appeared to be a common species on the island and can be found in its usual habitat, such as shrubs and lower branches of trees. Specimens have been seen around Santa Maria de Navarese, Ardali, Orosei, Tiscali, and Monti Albi. At the end of April and the beginning of May they were just going through their last moult and many couples were mating.

***Maso gallicus* Simon**

Material collected: 1♂ 2♀ - 4.v.2005, Orosei, in grassland along the mouth of the river.

The species is widely distributed but rare throughout Central Europe and also known from the Mediterranean Region (Spain, France (mainland and Corsica), Italy).

***Nerienne furtiva* (O. P.-Cambridge)**

Material collected: 2♀ - 29.iv.2005, near Ardali, W. of Santa Maria de Navarese, in shrubs along a little stream.

Not a single *Nerienne* species was mentioned before from Sardinia. *N. furtiva* indeed was to be expected on this mediterranean island.

***Pelecopsis bucephala* (O. P.-Cambridge)**

Material collected: 1♂ 2♀ - 25.iv.2005, wasteland plot in Santa Maria de Navarese; 1♂ 1♀ - 28.iv.2005, Ardali W of Santa Maria de Navarese.

Known from Portugal, Spain, Balearic Islands, France, Corsica, Italy, and North-Africa (Algeria, Morocco) (Bosmans & Abrous, 1992).

***Cheiracanthium mildei* L. Koch**

Material collected: 1♀ - 25.iv.2005, wasteland plot in Santa Maria de Navarese.

C. mildei is generally distributed throughout the Mediterranean Region and Central-Europe.

***Cheiracanthium pennyi* O. P.-Cambridge**

Material collected: 1♂ - 25.iv.2005, wasteland plot in Santa Maria de Navarese.

C. pennyi is slightly a more Central-European species than the former one and has not been found so far on Corsica, Sicily or in Greece.

***Oecobius maculatus* Simon**

Material collected: 2♂ 4♀ - 1-6.v.2005, Orosei, inside house; 1♀ 4j - 26.iv.2005, Santa Maria de Navarese.

It was, of course, unthinkable that the Oecobiidae would be absent from Sardinia. It appeared that in houses and on the outside of buildings *Oecobius* specimens were present in large numbers, running over the walls and hiding in cracks and fissures. It is a common mediterranean species.

***Chalcoscirtus infimus* (Simon)**

Material collected: 1♂ - 5.v.2005, Monti Albi; 1 juvenile specimen - 28.iv.2005, Donigala, in drift.

A Central-European and southern species, lacking in the northern countries. Sardinia fits into this distribution pattern.

***Euophrys gambosa* (Simon)**

Material collected: 3♂ - 4.v.2005, Orosei, in grassland along the mouth of the river.

A southern-European and Central-European species. Its occurrence on Sardinia is not surprising.

***Pseudeuophrys vafra* (Blackwall)**

Material collected: 1♂ - 1-6.v.2005, Orosei, inside house; 4♂ 1♀ - 26.iv.2005, Santa Maria de Navarese, inside house.

A Central-European and southern species, lacking in the northern countries.

***Anelosimus vittatus* (C.L. Koch)**

Material collected: 2♀ - 5.v.2005, Monti Albi.

A common European species.

***Neottiura herbigrada* (Simon)**

Material collected: 1♂ - 25.iv.2005, wasteland plot in Santa Maria de Navarese.

Known from many countries in the Mediterranean Region, e.g. from Corsica.

***Simitidion simile* (C.L. Koch)**

Material collected: 3♀ - 3.v.2005, Tiscali.

This species is widespread over Europe, also in the Mediterranean Region. The dorsal abdominal pattern is very variable. Two of the specimens collected at Tiscali have a round white dot as shown in the illustration by Levy & Amitai (1982: fig. 17), while the third one has a simple brownish-black longitudinal band without any trace of white. Most specimens of northern Europe have a white, dented median band.

It is not clear why Wunderlich (1992: 418) transferred Levy and Amitai's record of *S. simile* to a new species (*S. lacuna*) described from the Canary Islands (La Palma) and Spain. The main distinguishing feature given for female specimens is the width of the epigyneal aperture, which would measure 0.9-0.11 mm in *lacuna* against 0.14-0.18 mm in *similis*. In the specimens from Sardinia the width of the epigyneal aperture measures just slightly over 0.14 mm. It is well possible that *Simitidion* consists of an assemblage of species in the mediterranean area one of which occurs more wide-spread in the rest of Europe, but it is quite clear that the conclusion given by Wunderlich is premature and inadequately worked-out. The transfer of Levy and Amitai's *S. simile* to *S. lacuna* is therefore rejected. *S. lacuna* Wunderlich nevertheless may constitute a separate species on the Canary Islands.

***Theridion mystaceum* L. Koch**

Material collected: 2♀ 1(♀) - 26.iv.2005, Santa Maria de Navarese, inside house.

A common species in Europe. Its occurrence on Sardinia is not surprising.

***Ozyptila bicuspis* Simon**

Material collected: 1♂ - 4.v.2005, Orosei, in grassland along the mouth of the river.

This species has been recorded from France (Pyrenees) and Spain (Tarragona). A rare species.

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Table 1. Spider species collected on Sardinia for the first time (N) or earlier record confirmed (C).

Family	Genus	Species	Author and year	New	Confirmed
Agelenidae	Agelena	labyrinthica	(Clerck, 1757)		C
Agelenidae	Lycosoides	coarctata	(Dufour, 1831)		C
Araneidae	Agalenatea	redii	(Scopoli, 1763)		C
Araneidae	Cyrtophora	citricola	(Forskäl, 1775)		C
Araneidae	Hypsosinga	pygmaea	(Sundevall, 1831)		C
Araneidae	Larinioides	susplicax	(O. P.-Cambridge, 1876)	N	
Araneidae	Mangora	acalypha	(Walckenaer, 1802)		C
Araneidae	Zygiella	x-notata	(Clerck, 1757)		C
Clubionidae	Clubiona	vegeta	Simon, 1918	N	
Corinnidae	Liophrurillus	flavitaris	(Lucas, 1846)		C
Corinnidae	Phrurolithus	corsicus	(Simon, 1878)	N	
Corinnidae	Trachelas	minor	O. P.-Cambridge, 1872	N	
Dictynidae	Marilynia	bicolor	(Simon, 1870)	N	
Dictynidae	Nigma	puella	(Simon, 1870)	N	
Dictynidae	Nigma	walckenaerius	(Roewer, 1951)	N	
Filistatidae	Filistata	insidiatrix	(Forskäl, 1775)		C
Gnaphosidae	Drassodes	lpidosus	(Walckenaer, 1802)		C
Gnaphosidae	Haplodrassus	dalmatensis	(L. Koch, 1866)	N	
Gnaphosidae	Haplodrassus	signifer	(C.L. Koch, 1839)	N	
Gnaphosidae	Setaphis	carmeli	(O. P.-Cambridge, 1872)		C
Gnaphosidae	Zelotes	femellus	(L. Koch, 1866)		C
Gnaphosidae	Zelotes	sardus	(Canestrini, 1873)		C
Linyphiidae	Frontinellina	frutetorum	(C.L.Koch, 1834)	N	
Linyphiidae	Maso	gallicus	Simon, 1894	N	
Linyphiidae	Neriene	furtiva	(O. P.-Cambridge, 1871)	N	
Linyphiidae	Pelecopsis	bucephala	(O. P.-Cambridge, 1875)	N	
Linyphiidae	Prinerigone	vagans	(Audouin, 1826)		C
Lycosidae	Allopecosa	albofasciata	(Brullé, 1832)		C
Lycosidae	Arctosa	leopardus	(Sundevall, 1833)		C
Lycosidae	Pardosa	proxima	(C.L. Koch, 1847)		C
Mimetidae	Ero	aphana	(Walckenaer, 1802)		C
Miturgidae	Cheiracanthium	mildei	L. Koch, 1864	N	
Miturgidae	Cheiracanthium	pennyi	O. P.-Cambridge, 1873	N	
Oecobiidae	Oecobius	maculatus	Simon, 1870	N	
Philodromidae	Thanatus	vulgaris	Simon, 1870		C
Pholcidae	Holocnemus	pluchei	(Scopoli, 1763)		C
Salticidae	Chalcoscirtus	infimus	(Simon, 1868)	N	
Salticidae	Cyrba	algerina	(Lucas, 1846)		C
Salticidae	Euophrys	gambosa	(Simon, 1868)	N	
Salticidae	Heliophanus	apiatus	(Simon, 1868)		C
Salticidae	Heliophanus	rufithorax	(Simon, 1868)		C
Salticidae	Phlegra	bresnieri	(Lucas, 1846)		C
Salticidae	Pseudeuophrys	vafra	Blackwall, 1867)	N	
Salticidae	Salticus	mutabilis	Lucas, 1846		C
Theridiidae	Anelosimus	vittatus	(C.L. Koch, 1836)	N	
Theridiidae	Euryopis	episinooides	(Walckenaer, 1847)		C
Theridiidae	Kochiura	aulica	(C.L. Koch, 1838)		C
Theridiidae	Neottiura	herbigrada	(Simon, 1873)	N	
Theridiidae	Neottiura	uncinata	(Lucas, 1846)		C
Theridiidae	Simitidion	simile	(C.L. Koch, 1836)	N	
Theridiidae	Theridion	mystaceum	L. Koch, 1870	N	
Thomisidae	Ozyptila	bicuspis	Simon, 1932	N	
Thomisidae	Synema	globosum	(Fabricius, 1775)		C
Uloboridae	Uloborus	walckenaerius	Latreille, 1806		C
Zodariidae	Zodarion	nigriceps	(Simon, 1873)		C