

## UPDATE ON THE SPIDERS (ARACHNIDA, ARANEAE) OF CALABRIA, ITALY

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### ABSTRACT

During the spring of 2017, spiders of 203 identified species were collected in the region of Calabria, Southern Italy. A list of collected species is given. Fifty five species are new records for Calabria. Five species are reported as new for Italy: *Pardosa paludicola* (Clerck, 1757), *Evarcha michailovi* Logunov, 1992, *Heliophanus simplex* Simon, 1868, *Dipoena umbratilis* (Simon, 1873), and *Xysticus macedonicus* Šilhavý, 1944. Some species could not be identified as yet: *Spermophorides* spec., *Diplocephalus* spec., *Lepthyphantes* s.l. spec., *Pelecopsis* spec., and *Xysticus* spec. The status of *Platnickina nigropunctata* (Lucas, 1946) is discussed.

Key words: Araneae, faunistics, Calabria, Italy, southern Italy

### INTRODUCTION

This paper is the fourth in a series on the spider fauna of southern Italy. The first dealt with a field trip to Gargano in 2011, the second with the surroundings of Castellabate, province Salerno in the region Campania in 2013, the third with the borderland of the regions Basilicata and Calabria in 2015 (see IJland et al. 2012, 2014, 2016) and finally the present paper dealing with a field trip to the provinces of Cosenza and Catanzaro in Calabria in 2017. Fieldwork was carried out during the period 7-19 May 2017 (PvH) and 7-13 May 2017 (SIJ). In total 1059 spiders were collected (437 males, 606 females and 16 juveniles (of recognizable species)). Altogether 202 species could be identified, five of which are new for Italy and 55 new for Calabria. Six species could not be identified as yet.

The localities where we collected are listed below and shown on a map (fig. 1). The material of the present report is divided between the private collection of Steven IJland and the collection of Naturalis Biodiversity Centre at Leiden, the Netherlands.

Coordinates are given as WGS84. The Fauna Europaea database (Van Helsdingen, 2018) was used as source of information on species distributions in Europe. The online checklist of Pantini and Isaia was used for species distribution information within Italy (Pantini & Isaia, 2018). For occurrence of species in Calabria the recent publication by Pantini and Mazzoleni (Pantini & Mazzoleni, 2018) was used.

### THE SPIDER FAUNA OF ITALY

In previous publications we stated that the spider fauna of southern Italy appeared to be very rich but seriously understudied. In 2018, Pantini and Mazzoleni (Pantini & Mazzoleni 2018) summarized the current knowledge on the arachnofauna of Calabria, based on publications and unpublished records. They reported 456 species, 213 genera and 41 families for the region. The number of species seems to be very low for a diverse region like Calabria. As a result of just two weeks of collecting in 2017, we could add 55 species new to the fauna of Calabria, five of which are new to the fauna of Italy. Besides, some specimens were found which likely belong to species new to science, although in this paper we refrain from formal descriptions for reasons indicated.

The region is best characterized as agricultural landscape (olive orchards, pastures) with forested areas. Calabria has a considerable variety of habitats and reaches from the coast up to the highest top of the Calabrian Apennines, the Serra Dolcedorme (2.267 m a.s.l.) (not visited by us).

We hope our studies inspire other arachnologists to visit the southern parts of Italy, where still is much to learn and discover.

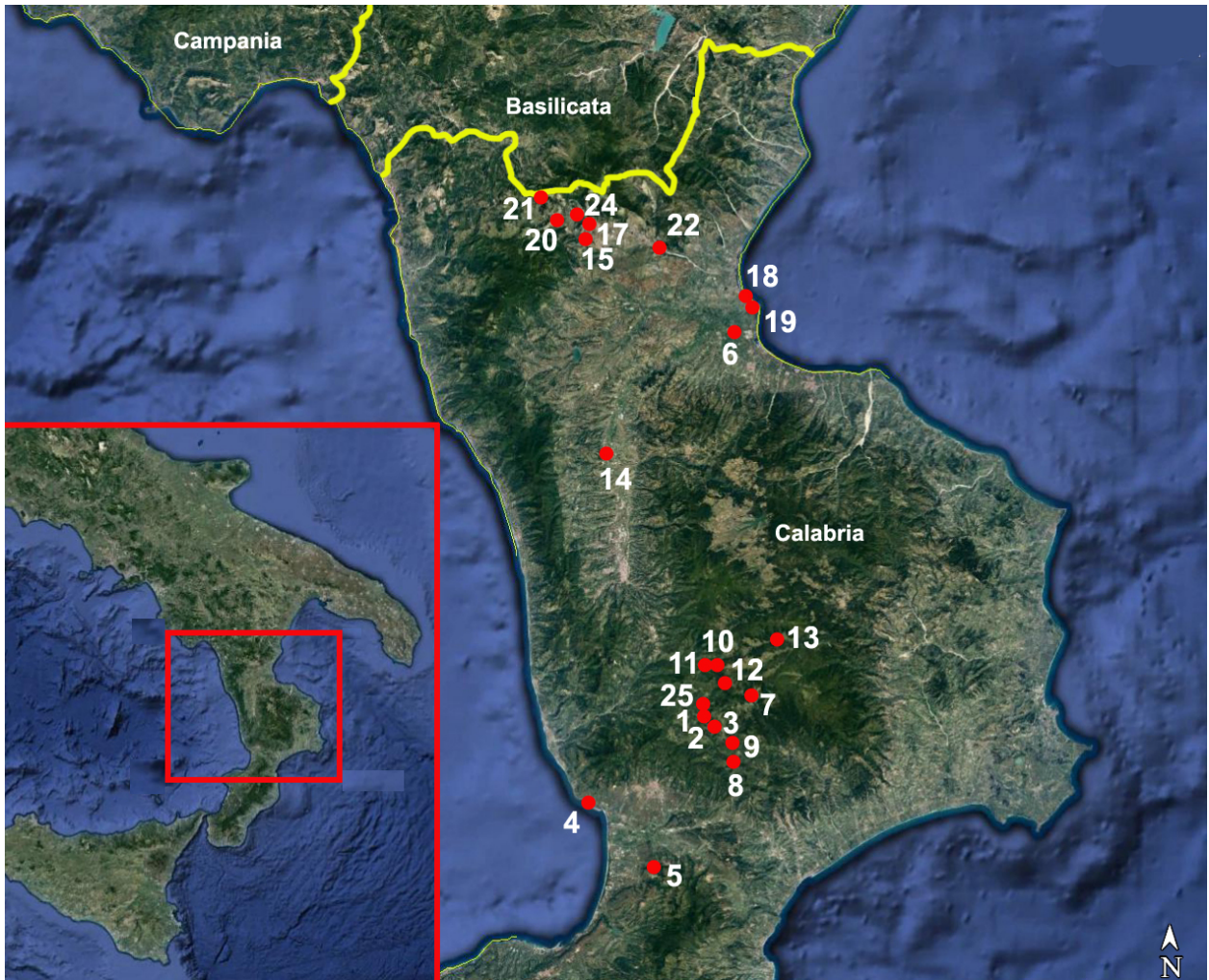


Fig. 1. Map showing collection localities.

### COLLECTING LOCALITIES

#### Locality 1

7.v.2017, Calabria, Cosenza, Morachi, south of Bianchi, forest on slope with *Quercus spec.*, *Erica arborea*, *Ilex spec.*, 806 m a.s.l., N 39°05.08' E 16°24.97' (fig. 2).

#### Locality 2

7.v.2017, Calabria, Catanzaro, Bivio Bonacci, northeast of Bivio Bonacci, along small stream, 723 m a.s.l., N 39°03.95' E 16°25.17' (fig. 3).

#### Locality 3

7.v.2017, Calabria, Catanzaro, Castagna, north of Castagna, slope with mixed forest and open spaces, 853 m a.s.l., N 39°03.78' E 16°26.30'.

#### Locality 4

8.v.2017, Calabria, Catanzaro, Mortilla, west of Mortilla, westcoast; mixed forest (*Pinus*, *Eucalyptus*, *Pistacea*); 1 m a.s.l., N 38°56.63' E 16°10.94' (fig. 4).

#### Locality 5

8.v.2017, Calabria, Catanzaro, Curinga, north of Curinga, along path through forest on slope; 190 m a.s.l., N 38°50.61' E 16°18.64'.

#### Locality 6

9.v.2017, Calabria, Catanzaro, Lago Passante, east of Villagio Lagomar, eastside of lake, sifted from litter in coniferous forest; 1149 m a.s.l., N 39°06.75' E 16°30.81' (fig. 5).





Fig. 2. Locality 1, Morachi.



Fig. 3. Locality 2, Bivio Bonacci.

#### Locality 7

9.v.2017, Calabria, Catanzaro, Lago Passante, east of Villagio Lagomar, eastside of lake, along lake margin; 1155 m a.s.l., N 39°06.79' E 16°30.80'.

#### Locality 8

10.v.2017, Calabria, Catanzaro, Cicala, southwest of Cicala, wasteland along road; 625 m a.s.l., N 39°00.81' E 16°28.60'.

#### Locality 9

10.v.2017, Calabria, Catanzaro, Cicala, north of Cicala; open area with *Pteridium aquilinum* and some *Castanea sativa* trees; 883 m a.s.l., N 39°02.18' E 16°28.63' (fig. 6).

#### Locality 10

11.v.2017, Calabria, Cosenza, Parenti, river bed with stones; 729 m a.s.l., N 39°09.84' E 16°25.38' (fig. 7).

#### Locality 11

11.v.2017, Calabria, Cosenza, Parenti, wasteland; 742 m a.s.l., N 39°09.86' E 16°25.10' (fig. 8).

#### Locality 12

11.v.2017, Calabria, Cosenza, Favali, south of Favali; coniferous forest; 1275 m a.s.l., N 39°08.13' E 16°27.37'.

#### Locality 13

12.v.2017, Calabria, Cosenza, Caporosa, west of Caporosa, south of Strada Provinciale 216; grassland along stream with violets (*Viola aethnensis*) in bloom, wet areas in the lower parts of the grassland with narcissus (*Narcissus poeticus*); 1285 m a.s.l., N 39°11.84' E 16°33.58' (fig. 9).

#### Locality 14

13.v.2017, Calabria, Cosenza, Marinella, river bed east of Bisignano; 83 m a.s.l., N 39°29.46' E 16°13.03' (fig. 10).

#### Locality 15

13.v.2017, Calabria, Cosenza, Morano Calabro, east of Morano Calabro; deserted olive grove with *Asphodeline*; 534 m a.s.l., N 39°50.04' E 16°10.39' (fig. 11).



Fig. 4. Locality 4, Mortilla



Fig. 5. Locality 6, Lago Passante.



Fig 6. Locality 9, Cicala. Fig. 7. Locality 10, Parenti riverbed. Fig. 8. Locality 11, Parenti, wasteland.

#### Locality 16

14.v.2017, Calabria, Cosenza, Cantinella, northeast of Cantinella; plot with *Ferula communis*; 7 m a.s.l., N 39°40.97' E 16°28.59'.

#### Locality 17

15.v.2017, Calabria, Cosenza, Morano Calabro, eastnortheast of Morano Calabro, slope of Monzone, shrubs (*Pistacia*), *Asphodeline*; 594 m a.s.l., N 39°51.19' E 16°10.94'.

#### Locality 18

16.v.2017, Calabria, Cosenza, Laghi di Sibari, waste land along Collettore gli Stombi, southeast of Marina di Sibari; *Ferula communis*; 0 m a.s.l., N 39°44.01' E 16°30.37'.

#### Locality 19

16.v.2017, Calabria, Cosenza, Laghi di Sibari, along road with vegetation of *Mimosa*, *Pistacia*, *Ferula communis*; 0 m a.s.l., N 39°43.49' E 16°30.74'.

#### Locality 20

17.v.2017, Calabria, Cosenza, Cutura, north of road SP241, 4 km west of Morano Calabro; 826 m a.s.l., N 39°51.49' E 16°06.97'.

#### Locality 21

18.v.2017, Calabria, Cosenza, along road just south of border Basilicata-Calabria and south of Parco Nazionale della Pollino; 1.478 m a.s.l., N 39°53.64' E 16°05.00'.

#### Locality 22

19.v.2017, Calabria, Cosenza, Civita, west of Marano Torrente Raganello; stony river bed; 200-340 m a.s.l.; N 39°48.93' E 16°19.42'.

#### Locality 23

19.v.2017, Calabria, Cosenza, Morano Calabro, eastnortheast of Morano Calabro, slope of Monzone, shrubs (*Pistacia*), *Asphodeline*; 746 m a.s.l., N 39°52.19' E 16°10.27'.

#### Locality 24

17-19.v.2017, Calabria, Cosenza, Morano Calabro, 2 km north of Morano Calabro, on and inside bungalow; 664 m a.s.l., N 39°52.00' E 16°09.67'.

#### Locality 25

7-12.v.2017, Calabria, Cosenza, Morachi, on and inside house; 808 m a.s.l., N 39°05.82' E 16°24.85'.



Fig. 9. Locality 13, Caporosa



Fig. 10. Locality 14, Marinella Calabro



Fig. 11. Locality 15, Morano Calabro

## LIST OF COLLECTED SPECIES

## AGELENIDAE

- Eratigena fuesslini* (Pavesi, 1873): Locality 24; 1♂.  
*Pireneitega garibaldii* (Kritscher, 1969): Locality 1; 1♂.  
 Italian endemic.

## AMAUROBIIDAE

- Amaurobius ferox* (Walckenaer, 1830): Locality 5; 1♀.

## ANYPHAENIDAE

- Anyphaena accentuata* (Walckenaer, 1802): Localities 1, 2, 9, 13; 3♂4♀.  
*Anyphaena sabina* L. Koch, 1866: Localities 5, 20; 3♀. **New for Calabria.**

## ARANEIDAE

- Aculepeira ceropegia* (Walckenaer, 1802): Localities 13, 23; 1♂1juv.  
*Agalenatea redii* (Scopoli, 1763): Localities 11, 16; 3♀.  
*Araneus triguttatus* (Fabricius, 1775): Localities 4, 11; 2♂. **New for Calabria.**  
*Araniella cucurbitina* (Clerck, 1757): Localities 4, 16, 18, 20, 22, 23; 9♂5♀.  
*Araniella opisthographa* (Kulczyński, 1905): Localities 16, 17; 1♂1♀. **New for Calabria.**  
*Cercidia prominens* (Westring, 1851): Localities 1, 3, 5, 8, 13; 1♂5♀1juv.  
*Cyclosa conica* (Pallas, 1772): Localities 1, 2, 5, 12, 20; 4♂4♀.  
*Cyclosa sierrae* Simon, 1870: Locality 15; 1♂.  
*Gibbaranea bituberculata* (Walckenaer, 1802): Localities 2, 3, 11, 15, 19; 2♂6♀.  
*Gibbaranea gibbosa* (Walckenaer, 1802): Localities 1, 15; 3♂1♀.  
*Hypsosinga albiovittata* (Westring, 1851): Localities 4, 17; 1♂1♀.  
*Hypsosinga sanguinea* (C. L. Koch, 1844): Localities 5, 13; 2♀.  
*Larinioides suspicax* (O.P.-Cambridge, 1872): Locality 14; 2♂.  
*Mangora acalypha* (Walckenaer, 1802): Localities 1, 2, 3, 4, 5, 8, 9, 10, 14, 15, 17, 18, 19, 20, 21, 22; 24♂19♀.  
*Neoscona adianta* (Walckenaer, 1802): Localities 14, 22; 4♂2♀2juv.  
*Singa hamata* (Clerck, 1757): Locality 13; 3♂2♀.  
*Singa nitidula* C.L. Koch, 1844: Locality 13; 6♂9♀. **New for Calabria.**  
*Zilla diodia* (Walckenaer, 1802): Localities 1, 2, 3, 4, 5, 21, 22; 4♂7♀.  
*Zygiella x-notata* (Clerck, 1757): Locality 15; 1♀.

## CHEIRACANTHIIDAE

- Cheiracanthium macedonicum* Drensky, 1921: Locality 21; 1♀.  
*Cheiracanthium mildei* L. Koch, 1864: Localities 2, 4; 1♂3♀.  
*Cheiracanthium pelasgicum* (C.L. Koch, 1837): Localities 3, 11, 15; 1♂2♀.

## CLUBIONIDAE

- Clubiona comta* C. L. Koch, 1839: Localities 1, 6, 8, 9, 17; 24♀.  
*Clubiona corticalis* (Walckenaer, 1802): Localities 1, 6, 9, 21; 1♂20♀1juv.  
*Clubiona hilaris* Simon, 1878: Locality 6; 1♀. **New for Calabria.**  
*Clubiona terrestris* (Westring, 1851): Locality 6; 1♀.  
*Porrhoclubiona vegeta* (Simon, 1918): Locality 17; 1♀. **New for Calabria.**

## DICTYNIDAE

- Brigittea cf innocens* (O.P.-Cambridge, 1872): Localities 9, 11; 2♂. **New for Calabria.**  
 See "Remarks on species" below.  
*Brigittea latens* (Fabricius, 1775): Localities 18, 19; 2♂.  
*Dictyna arundinacea* (Linnaeus, 1758): Localities 12, 13; 13♂25♀.  
*Lathys stigmatisata* (Menge, 1869): Locality 24; 1♀. **New for Calabria.**  
*Nigma flavescens* (Walckenaer, 1830): Localities 3, 9, 19, 21; 11♂8♀.  
*Nigma puella* (Simon, 1870): Localities 1, 17, 22; 4♂.

## DYSDERIDAE

- Dasumia diomedea* Caporiacco, 1947; Locality 25; 1♂. **New for Calabria.**  
 Italian endemic.

*Dysdera arganoi* Gasparo, 2004; Localities 2, 8; 2♂1♀.

Italian endemic.

*Dysdera paganettii* Deeleman-Reinhold, 1988: Locality 6; 1♂.

Italian endemic.

*Parachtes siculus* (Caporiacco, 1949): Locality 6; 6♂6♀.

Italian endemic (mainland and Sicily)

#### FILISTATIDAE

*Pritha nana* (Simon, 1886): Locality 24; 1♀1juv. **New for Calabria.**

Legittimo et al. recently clarified the taxonomic status of the Italian species of *Pritha* (Legittimo et al., 2017), and made it possible to determine the species of this difficult genus. Our specimens were collected from cracks in a brick wall. The vulva was extracted with a needle and cleared in lactic acid. This is the first record for Calabria.

#### GNAPHOSIDAE

*Callilepis schuszeri* (Herman, 1879): Localities 9, 21; 2♀. **New for Calabria.**

*Drassodes lapidosus* (Walckenaer, 1802): Localities 7, 10, 14, 20; 3♂4♀.

*Haplodrassus dalmatensis* (Koch, 1866): Locality 15; 1♀.

*Haplodrassus signifer* (C.L. Koch, 1839): Localities 15, 20; 2♂.

*Micaria albobittata* (Lucas, 1846): Locality 7; 1♂. **New for Calabria.**

*Micaria fulgens* (Walckenaer, 1802): Locality 10; 1♀.

*Nomisia excerpta* (O.P.-Cambridge, 1872): Locality 20; 1♂2♀.

*Nomisia exornata* (C. L. Koch, 1839): Localities 4, 10; 3♂.

*Scotophaeus blackwalli* (Thorell, 1871): Locality 4; 1♂. **New for Calabria.**

*Trachyzelotes pedestris* (C.L. Koch, 1837): Locality 9; 1♀.

*Zelotes apricorum* (L. Koch, 1876): Locality 13; 1♀.

*Zelotes tenuis* (L. Koch, 1866): Locality 10; 4♂.

#### LINYPHIIDAE

*Agyneta innotabilis* (O.P.-Cambridge, 1863): Locality 6; 1♂. **New for Calabria.**

*Agyneta rurestris* (C. L. Koch, 1836): Localities 17, 21; 1♂1♀.

*Araeoncus humilis* (Blackwall, 1841): Locality 14; 1♀.

*Centromerus pabulator* (O.P.-Cambridge, 1875): Locality 6; 1♀.

*Diplocephalus* sp.: Locality 2; 1♀.

One female of *Diplocephalus* was collected which could not be identified. It might be a new species, but will not be described before the male also has been collected.

*Diplocephalus cristatus* (Blackwall, 1833): Locality 17; 2♀. **New for Calabria.**

*Diplocephalus picinus* (Blackwall, 1841): Locality 6; 4♀.

*Entelecara acuminata* (Wider, 1834): Localities 1, 10, 21; 2♂3♀. **New for Calabria.**

*Erigone dentipalpis* (Wider, 1834): Localities 13, 14; 2♂.

*Frontinellina frutetorum* (C.L. Koch, 1834): Localities 2, 3, 4, 8, 9, 10, 15, 20, 21, 24; 5♂12♀1juv.

*Gnathonarium dentatum* (Wider, 1834): Locality 2; 1♀.

*Hypomma cornutum* (Blackwall, 1833): Locality 1; 2♀. **New for Calabria.**

*Improphantes decolor* (Westring, 1861): Locality 6; 1♀. **New for Calabria.**

*Leptyphantes* sp.: Locality 6; 1♀.

One female of *Leptyphantes* s.l., probably *Mansuphantes*, was collected which could not be identified. It probably is a new species, but will not be described until a male specimen has been collected.

*Linyphia hortensis* Sundevall, 1830: Localities 6, 12, 13, 21; 5♂14♀.

*Linyphia mimonti* Simon, 1884: Locality 17; 1♀.

*Maso gallicus* Simon, 1894: Locality 8; 2♂. **New for Calabria.**

*Metopobactrus verticalis* (Simon, 1881): Locality 8; 1♂.

*Micrargus herbigradus* (Blackwall, 1854): Locality 1; 1♀.

*Nematogmus sanguinolentus* (Walckenaer, 1842): Localities 9, 11; 3♂1♀. **New for Calabria.**

*Neriere furtiva* (O.P.-Cambridge, 1871): Localities 9, 11; 2♂. **New for Calabria.**

*Neriere peltata* (Wider, 1834): Localities 6, 13; 2♀.

*Oedothorax retusus* (Westring, 1851): Localities 2, 10; 4♀. **New for Calabria.**

*Oedothorax paludigena* Simon, 1926: Locality 14; 1♀.

*Pelecopsis* sp.: Locality 5; 1♀.

One female of *Pelecopsis* was collected which could not be identified. It might belong to *Pelecopsis digitulus* Bosmans & Abrous, 1992, a North African species which recently has been reported from Corsica

(Lissner 2016). Without collected male we are, however, not sufficiently confident and leave the specimen as undetermined.

- Pelecopsis elongata* (Wider, 1834): Locality 6; 4♀. **New for Calabria.**  
*Pocadicnemis juncea* Locket & Millidge, 1953: Locality 9; 1♀.  
*Silometopus elegans* (O.P.-Cambridge, 1872): Locality 6; 2♀. **New for Calabria.**  
*Sintula corniger* (Blackwall, 1856): Locality 6; 1♀. **New for Calabria.**  
*Syedra nigrotibialis* Simon, 1884: Locality 8; 1♀.  
*Tenuiphantes flavipes* (Blackwall, 1854): Localities 1, 6; 3♂8♀.  
*Tenuiphantes herbicola* (Simon, 1884): Locality 6; 3♀.  
*Tenuiphantes mengei* (Kulczyński, 1887): Locality 6; 1♀.  
*Tenuiphantes tenuis* (Blackwall, 1852): Localities 1, 4, 6, 13, 21; 5♂7♀.  
*Trichoncus affinis* Kulczyński, 1894: Locality 5; 1♂2♀. **New for Calabria.**  
*Trichoncus sordidus* Simon, 1884: Localities 4, 15; 4♀.  
*Walckenaeria antica* (Wider, 1834): Locality 1; 1♀.  
*Walckenaeria acuminata* Blackwall, 1833: Localities 1, 6; 1♀. **New for Calabria.**

#### LIOCRANIDAE

- Liocranum rupicola* (Walckenaer, 1830): Locality 6; 2♀.

#### LYCOSIDAE

- Alopecosa albofasciata* (Brullé, 1832): Localities 8, 20, 24; 1♂2♀.  
*Alopecosa cuneata* (Clerck, 1757): Localities 6, 13; 4♂1♀. **New for Calabria.**  
*Alopecosa pulverulenta* (Clerck, 1757): Localities 1, 20; 1♂1♀.  
*Arctosa cinerea* (Fabricius, 1777): Localities 10, 14; 3♂1♀.  
*Arctosa leopardus* (Sundevall, 1833): Localities 13, 14; 4♂2♀.  
*Aulonia albimana* (Walckenaer, 1805): Localities 8, 10; 2♂2♀.  
*Pardosa bifasciata* (C.L.Koch, 1834): Locality 13; 1♂. **New for Calabria.**  
*Pardosa hortensis* (Thorell, 1872): Localities 7, 8, 9, 10, 11, 13; 7♀.  
*Pardosa lugubris* (Walckenaer, 1802): Localities 1, 9; 6♂2♀.  
*Pardosa lugubris*-group: Females from the *Pardosa lugubris*-group (relevant species here are *Pardosa alacris*, *Pardosa lugubris* and *Pardosa saltans*) are difficult to identify without accompanying males. Therefore we just report some females as belonging to this group in case no males were collected from the same site.  
 Localities 6, 21; 7♀.  
*Pardosa monticola* (Clerck, 1757): Locality 13; 6♂2♀.  
*Pardosa paludicola* (Clerck, 1757): Locality 13; 1♂1♀. **NEW FOR ITALY.**  
 See "Remarks on species" below.  
*Pardosa prativaga* (L. Koch, 1870): Localities 6, 7, 12, 13; 6♂8♀.  
*Pardosa saltans* Töpfer-Hofmann, 2000: Localities 1, 6, 12, 13; 6♂13♀.  
*Pardosa wagleri* (Hahn, 1822): Locality 10; 1♂8♀.  
*Piratula latitans* (Blackwall, 1841): Locality 2; 2♂2♀.  
*Trochosa hispanica* Simon, 1870: Localities 7, 9; 2♂1♀.  
*Trochosa ruricola* (De Geer, 1778): Locality 10; 1♀.  
*Trochosa terricola* Thorell, 1856: Locality 5; 2♀.

#### MIMETIDAE

- Mimetus laevigatus* (Keyserling, 1863): Locality 20; 1juv.

#### MITURGIDAE

- Zora manicata* Simon, 1878: Locality 1; 1♀. **New for Calabria.**  
*Zora nemoralis* (Blackwall, 1861): Localities 1, 9; 5♂. **New for Calabria.**  
*Zora spinimana* (Sundevall, 1833): Locality 1; 1♂. **New for Calabria.**

#### OXYOPIDAE

- Oxyopes heterophthalmus* (Latreille, 1804): Localities 8, 9, 11, 15, 17; 13♂1♀4juv.  
*Oxyopes nigripalpis* Kulczyński, 1891: Localities 4, 17; 2♂.

#### PHILODROMIDAE

- Philodromus aureolus* (Clerck, 1757): Locality 18; 1♂.  
*Philodromus buxi* Simon, 1884: Locality 17; 2♀. **New for Calabria.**  
*Philodromus fuscolimbatus* Lucas, 1846: Locality 4; 1♂.



- Philodromus rufus* Walckenaer, 1826: Localities 9, 20; 2♀.  
*Pulchellodromus bistigma* (Simon, 1870): Localities 4, 15; 2♀.  
*Pulchellodromus pulchellus* (Lucas, 1846): Localities 4, 15; 1♂2♀. **New for Calabria.**  
*Tibellus macellus* Simon, 1875: Localities 8, 11, 15, 17, 20, 22, 23; 6♂5♀.  
*Tibellus oblongus* (Walckenaer, 1802): Locality 13; 1♂1♀.

## PHOLCIDAE

*Spermophorides* sp: Locality 5; 1♂7♀.

Seven females and one male were collected, likely not all belonging to the same species. These species will be dealt with in a separate paper, including *Spermophorides* collected on previous excursions in Campania (IJland & van Helsdingen, 2014) and Calabria (IJland & van Helsdingen, 2016).

## PHRUROLITHIDAE

- Phrurolithus festivus* (C.L.Koch, 1835): Localities 1, 2, 8, 10; 6♀.  
*Phrurolithus minimus* C.L.Koch, 1839): Localities 7, 10, 11; 2♂1♀.  
*Phrurolithus nigrinus* (Simon, 1878): Localities 8, 10, 14, 24; 3♂1♀. **New for Calabria.**

## PISAUROIDAE

- Pisaura mirabilis* (Clerck, 1757): Localities 11, 20; 1♂1♀.  
*Pisaura novicia* (Koch, 1878): Localities 4, 20; 4♀.

## SALTICIDAE

- Ballus chalybeius* (Walckenaer, 1802): Localities 4, 19; 1♂6♀.  
*Bianor albobimaculatus* (Lucas, 1846): Locality 14; 3♀. **New for Calabria.**  
*Carrhotus xanthogramma* (Latreille, 1819): Localities 1, 20; 2♀ 1juv.  
*Euophrys frontalis* (Walckenaer, 1802): Localities 6, 8, 9, 20; 2♂2♀.  
*Euophrys herbigrada* (Simon, 1871): Locality 11; 1♂. **New for Calabria.**  
*Euophrys rufibarbis* (Simon, 1868): Localities 20, 24; 1♀.  
*Evarcha arcuate* (Clerck, 1757): Locality 11; 1♀.  
*Evarcha jucunda* (Lucas, 1846): Localities 4, 5, 9; 1♂7♀.  
*Evarcha michailovi* Logunov, 1992: Localities 8, 11; 1♂1♀. **NEW FOR ITALY.**

Before its description in 1992 (Logunov, 1992) from Tuva, southern Siberia, Russia, *Evarcha michailovi* has been confused with the similar *E. laetabunda*. Since then the species has been reported from other territories in Russia, Ukraine, Greece, Macedonia, Slovenia, Germany, Belgium, France and Spain. Its occurrence in Italy was therefore to be expected and not surprising.

*Evarcha falcata* (Clerck, 1757): Locality 9; 1♀.

See "Remarks on species" below.

- Heliophanus cupreus* (Walckenaer, 1802): Localities 1, 3, 8, 9, 10, 11, 21; 14♂14♀.  
*Heliophanus equester* L. Koch, 1867: Localities 4, 14, 18; 6♀. **New for Calabria.**  
*Heliophanus flavipes* (Hahn, 1832): Localities 3, 11, 17; 1♂3♀.  
*Heliophanus kochii* Simon, 1868: Localities 15, 22; 1♂1♀.  
*Heliophanus lineiventris* Simon, 1868: Localities 14, 18; 3♀.  
*Heliophanus melinus* L. Koch, 1867: Locality 23; 2♀.  
*Heliophanus simplex* Simon, 1868: Locality 11; 1♀. **NEW FOR ITALY.**

See "Remarks on species" below.

- Heliophanus tribulosus* Simon, 1868: Localities 10, 15, 18, 19, 20, 22, 23; 6♂11♀.  
*Icius hamatus* (C. L. Koch, 1846): Localities 14, 19, 22; 2♂3♀.  
*Macaroeris nidicolens* (Walckenaer, 1802): Localities 17, 20; 1♂1♀.  
*Neon levis* (Simon, 1871): Localities 1, 5; 2♂. **New for Calabria.**  
*Pellenes nigrociliatus* (Simon, 1875): Locality 20; 1♀. **New for Calabria.**  
*Pellenes seriatus* (Thorell, 1875): Locality 15; 1♀.  
*Philaeus chrysops* (Poda, 1761): Localities 3, 10, 17, 20; 5♂5♀ 5juv.  
*Phlegra fasciata* (Hahn, 1826): Locality 13; 1♂.  
*Pseudeuophrys erratica* (Walckenaer, 1826): Localities 1, 2, 9, 13; 8♂1♀.  
*Saitis barbipes* (Simon, 1868): Locality 5; 2♂5♀.  
*Salticus unciger* (Simon, 1868): Localities 4, 17, 20, 22, 25; 5♂1♀.  
*Sibianor aurocinctus* (Ohlert, 1865): Locality 11; 1♂. **New for Calabria.**

## SCYTODIDAE

*Scytodes thoracica* (Latreille, 1802): Locality 24; 1♂1♀.



## TETRAGNATHIDAE

*Metellina mengei* (Blackwall, 1869): Localities 1, 2, 3, 5, 6, 7, 9, 13; 9♂10♀.

*Pachygnatha degeeri* Sundevall, 1830: Locality 13; 3♀.

*Tetragnatha intermedia* Kulczyński, 1891: Localities 1, 2, 4, 5, 18, 19, 22; 15♂19♀.

*Tetragnatha extensa* (Linnaeus, 1758): Localities 10, 13, 14; 2♂3♀.

*Tetragnatha nigrita* Lendl, 1886: Locality 14; 4♂2♀. **New for Calabria.**

*Tetragnatha obtuse* C. L. Koch, 1837: Locality 4; 2♀.

## THERIDIIDAE

*Anatolidion gentile* (Simon, 1881): Locality 22; 1♀. **New for Calabria.**

*Anelosimus vittatus* (C. L. Koch, 1836): Localities 1, 4, 11, 20; 5♂6♀.

*Asagena phalerata* (Panzer, 1801): Localities 4, 7; 2♂.

*Crustulina stricta* (O. P.-Cambridge, 1861): Locality 24; 1♂.

*Diplocephala melanogaster* (C.L. Koch, 1837): Locality 3; 2♂.

*Diplocephala umbratilis* (Simon, 1873): Locality 9; 1♂. **NEW FOR ITALY.**

See "Remarks on species" below.

*Enoplognatha afrodite* Hippa & Oksala, 1983: Locality 20; 1♀.

*Enoplognatha thoracica* (Hahn, 1833): Localities 5, 7; 1♂1♀.

*Episinus maculipes* Cavanna, 1876: Locality 5; 1♀.

*Euryopsis episinoides* (Walckenaer, 1847): Localities 8, 15, 17; 1♂2♀.

*Kochiura aulica* (C. L. Koch, 1838): Localities 2, 3, 4, 15, 16, 18, 19, 22; 5♂15♀.

*Neottiura uncinata* (Lucas, 1846): Locality 4; 1♀.

*Phycosoma inornatum* (O.P.-Cambridge, 1861): Locality 20; 1♀. **New for Calabria.**

*Phylloneta impressa* (L. Koch, 1881): Localities 4, 16; 3♂.

*Phylloneta sisypbia* (Clerck, 1757): Locality 21; 10♂4♀.

*Platnickina tincta* (Walckenaer, 1802): Localities 4, 9, 15, 23; 3♂5♀. See "Remarks on species" below.

*Rhomphaea nasica* (Simon, 1873): Locality 4; 3♀ 2juv.

*Simitidion simile* (C.L. Koch, 1836): Localities 3, 8, 15, 17, 21, 22, 23; 5♂8♀.

*Theridion betteni* Wiehle, 1960: Locality 21; 1♂2♀. **New for Calabria.**

*Theridion melanurum* Hahn, 1831: Locality 17; 1♂.

*Theridion mystaceum* L. Koch, 1870: Locality 24; 1♀.

*Theridion varians* Hahn, 1833: Localities 4, 5, 24; 15♂2♀.

## THOMISIDAE

*Ebrechtella tricuspadata* (Fabricius, 1775): Localities 3, 4, 14; 3♂. **New for Calabria.**

*Heriaeus hirtus* (Latreille, 1819): Localities 8, 11; 1♂2♀.

*Misumena vatia* (Clerck, 1757): Locality 5; 1♀.

*Monaeses paradoxus* (Lucas, 1846): Localities 4, 18; 1♂2♀.

*Synema globosum* (Fabricius, 1775): Localities 2, 3, 4, 5, 9, 15, 17, 18, 20, 22, 23; 18♂15♀.

*Thomisus onustus* Walckenaer, 1805: Localities 9, 5, 18; 2♂1♀.

*Tmarus piger* (Walckenaer, 1802): Localities 5, 17; 11♀. **New for Calabria.**

*Xysticus* spec.: Locality 16; ♀.

A female *Xysticus* was collected at locality 16 which is very close to *Xysticus nubilus*, two females of which were collected at locality 4. The specimen might belong to *Xysticus nubilus*, too, but it might represent a different, possibly new, species as well. Without a male we leave the specimen as undetermined.

*Xysticus acerbus* Thorell, 1872: Localities 4, 13; 1♂1♀. **New for Calabria.**

*Xysticus cor* Canestrini, 1873: Localities 3, 8, 20, 23; 5♀.

*Xysticus cristatus* (Clerck, 1757): Localities 2, 17; 1♂1♀.

*Xysticus kochi* Thorell, 1872: Localities 4, 8, 9, 11; 4♂1♀.

*Xysticus lanio* C.L. Koch, 1835: Localities 1, 3, 9, 21; 3♂3♀.

*Xysticus macedonicus* Šilhavý, 1944: Localities 1, 9, 21; 6♂3♀. **NEW FOR ITALY.**

See "Remarks on species" below.

*Xysticus nubilus* Simon, 1875: Locality 4; 2♀. **New for Calabria.**

*Xysticus robustus* (Hahn, 1832): Locality 9; 1♀. **New for Calabria.**

## ULOBORIDAE

*Uloborus walckenaerius* Latreille, 1806: Localities 9, 5, 15, 17; 2♂1♀.

## REMARKS ON SPECIES

*Brigittea innocens* (O.P.-Cambridge, 1872)

Localities 9, 11; 2♂.

This species has been reported by us (IJland et al. 2012) from Gargano, Apulia as *Dictyna innocens*, the then official name. In 2015 Marusik et al. (Marusik et al. 2015) transferred the species – after some discussion about the status of the genus – to *Brigittea*. There is some taxonomic confusion around this species, and in the aforementioned paper we also considered *Dictyna kosiorowiczi* Simon, 1873 as a possibility. At the time no adequate illustrations were available. Bosselaers, however, recently published a paper (Bosselaers 2018) with good illustrations of the genitalia of *Dictyna kosiorowiczi*. The male palp of our specimens from Calabria, though superficially similar to *Dictyna kosiorowiczi*, show clear differences, especially as to the ctenidia on the male palpal tibia. In our *Brigittea innocens* the ctenidia are clearly bipartite, while hook-shaped in *Dictyna kosiorowiczi*. This hook-shaped ctenidium is actually the only recognizable feature of the palp which Simon depicted in his key to the species of *Dictyna* (Simon 1914, fig. 105). This, together with our specimen having a bipartite cribellum and thus fitting into the genus *Brigittea* while in *D. kosiorowiczi* according to Simon it is undivided, supports our present identification as well as the earlier one from Gargano.

*Pardosa paludicola* (Clerck, 1757)

Locality 13; 1♂1♀.

Tongiorgi (Tongiorgi, 1966) states that although there are numerous literature references for the presence of this species in Italy, he never collected any and the specimens he checked did not belong to *P. paludicola*. Based on this information the species was not included in the checklist of Italian spiders of Pantini and Isaia (Pantini & Isaia, 2018). So with our finding in Calabria of one male and one female, the species can be included once again. *P. paludicola* is known from almost all European countries and occurs also in Kazakhstan and China. The presence in Italy is therefore not surprising.

*Pardosa paludicola* occurs in damp areas. This corresponds with the habitat where we collected our specimens, the lower, wet areas of a meadow draining to a small stream.

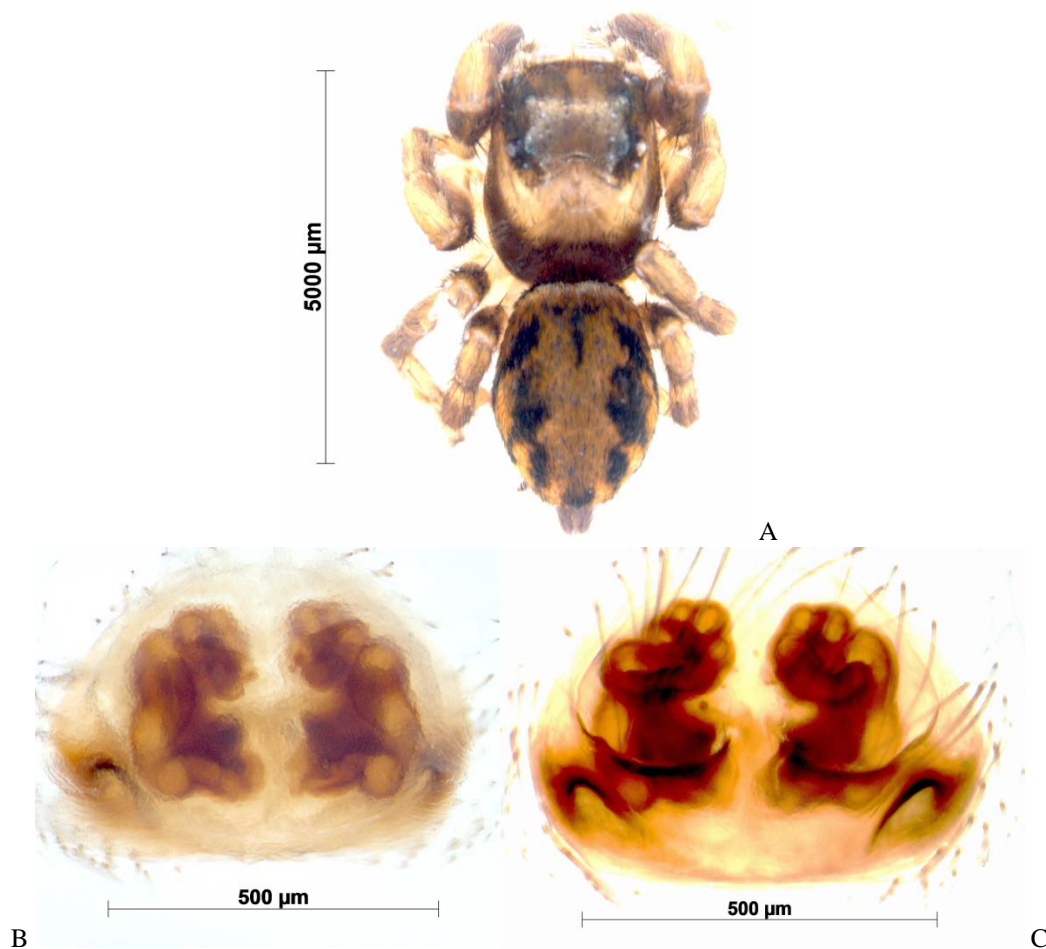


Fig. 12. *Evarcha falcata* (or closely related species). A, habitus of female; B, vulva, ventral view; C, vulva, dorsal view.

***Evarcha falcata* (Clerck, 1757)**

One female specimen from site 9 (North of Cicala) is provisionally identified as *E. falcata*. *Evarcha* does not pose many problems in the temperate regions but southwards speciation confronts us with a larger variety of forms or species. The dorsal abdominal pattern is quite striking and the vulval structure deviates from the available illustrations to such extent that we expect it to represent a new species.

Jerzy Prószyński (pers. comm.) agrees that it “belongs to *Evarcha* s. str. (formerly *E. falcata* group of species). It resembles *E. falcata*, but differs distinctly. It could be described as a new species if the male is known. For the male we have to wait and see what a next trip will bring or what another collector will find. Figure 12 shows habitus of female and ventral and dorsal view of vulva.

***Heliophanus simplex* Simon, 1868**

Locality 11; 1♀. New for Italy.

A single female specimen from a wasteland area near Parenti enlarges the range of this species westward into Italy. *Heliophanus simplex* is a Central-European species the range of which reaches as far as southern Russia and the Asian part of Turkey in the East. Earlier Italian records from the Appenine mountains (Kritscher, 1956) were recognized as misidentifications by Hansen (unpublished by him but made public by Pantini & Isaia (Pantini & Isaia 2018, remark on p. 71).

There has been some more confusion about the distribution of this species because some records were subsequently recognized as misidentifications and deleted from the distribution map. Simon (Simon 1937, footnote 3 on p. 1248) declared his *H. simplex* Simon, 1868 from Corfu to be a variety of *H. cupreus*; he could not find the original material (“les types”) anymore. In the meantime many arachnologists apparently had recognized the species and used the name (see the World Spider Catalog). The species is, therefore, based on the description of the male as described by Simon and recognized by others, although the author Simon subgraded the (sub)species to a variety of another species. Consequently France did not fall into the distribution range any longer. Harm (Harm 1971; 78) in her monography of *Heliophanus* stated that *H. simplex* does not occur “in unserem Gebiet” (post-war Germany) and neither is this species to be found on the site with German distribution maps (Arages 2019). I am not aware of any records from Germany in the past. Still Prószyński in his database on the Salticidae of the world (Prószyński 2016) mentions France and Germany in his summary of the distribution of *H. simplex*. It shows how difficult it is to keep track of all faunistic changes and corrections for periodical updates.

For the ventral view of the vulva of the collected female, see figure 13.

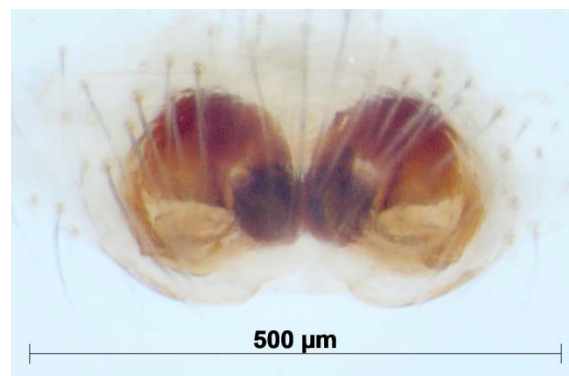


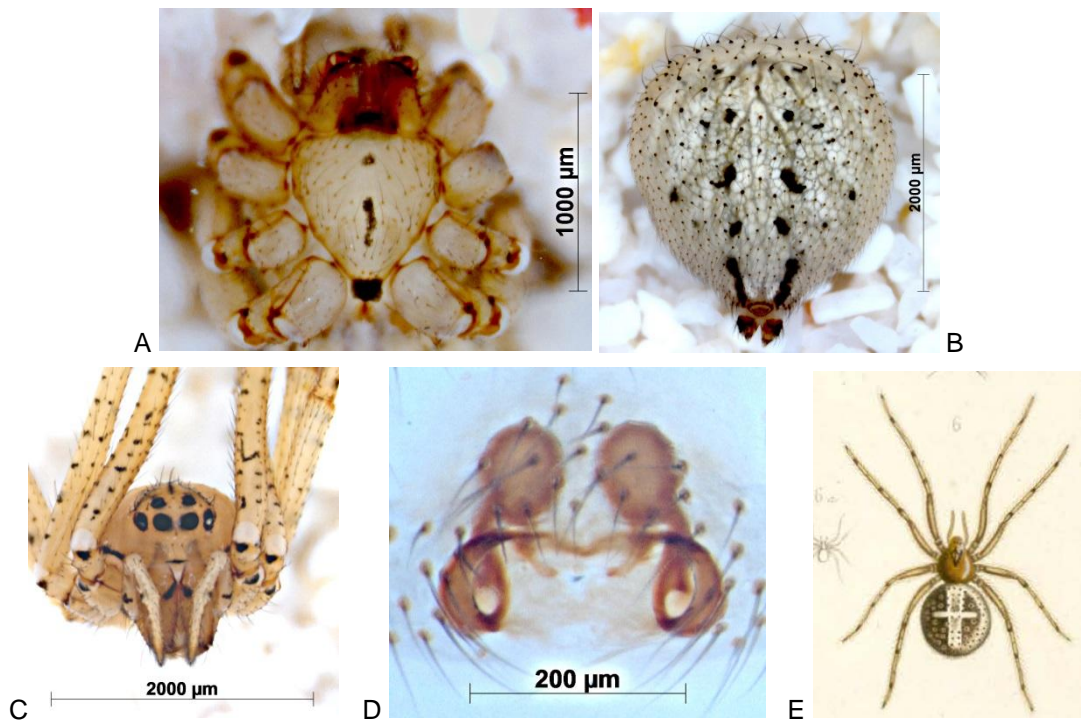
Fig. 13. *Heliophanus simplex*, vulva, ventral view.

***Platnickina tincta* (Walckenaer, 1802)**

Localities 4, 9, 15, 23; 3♂6♀.

In Spiders of Europe (Nentwig et al. 2019) two species of *Platnickina* are mentioned with short descriptions and illustrations copied from selected literature sources. The supplied information, however, is hardly supportive to distinguish between the two species since they stress some differences in coloration and show the genitalia, but the differences in the latter are not clarified. And one striking difference is not mentioned at all: a completely different abdominal pattern. Let us consult the sources, i.e. the original descriptions of the two species.

The description of *Aranea tincta* by Walckenaer (Walckenaer 1802) is very scanty (“Abdomen globuleux, demi-cercle noir à la partie postérieure du dos; partie postérieure blanche, taches de rouge.”). With the first “partie postérieure” he may have meant the black, fronto-dorsal double-dot on the abdomen. According to the



Figs 14. *Platnickina tincta*. Specimen from Morano Calabro: A, sternum, B, abdomen, C, frontal aspect, D, vulva, E, figure out of Lucas 1846, pl. 16 fig. 6.

title of his publication (“Faune Parisienne, insectes. ou histoire abrégée des insectes des environs de Paris”) the type-locality is “the surroundings of Paris”.

*Platnickina nigropunctata* was described as *Theridion nigropunctatum* by Lucas (Lucas 1846) after a single female from Algeria (at a Jewish cemetery). The description is more detailed with emphasis – as traditional at that time – on colour patterns and arrangement of eyes. No mention is made of the shape or appearance of the epigyne. The dorsal colour pattern of the abdomen is described and depicted as “globuleux, . . . jaunâtre, et teinté de brun clair vers son milieu; il présente une large bande médiane droite, blanche, et coupée au milieu par une autre bande, également droite et blanche, mais plus étroite, transversale, et dont les extrémités n’atteignent pas les bords latéraux de l’abdomen; ces deux bandes forment une croix, dont les branches antérieures et postérieures sont larges, et les latérales étroites . . . “. This dorsal pattern is quite characteristic and in our opinion quite different from that of *P. tincta*; see Lucas’ illustrations (plate 16 fig. 6), copied here.

In our experience *P. tincta* is quite variable as to its coloration and colour patterns. On the dorsal side of the cephalotorax the blackish median triangle between fovea and eye-region can be very black or faintly greyish; the blackish triangle or moustache-shaped marking on the clypeus can be distinct or very small, nearly absent. The markings on the sternum vary from small lateral dots at the level of the gap between the coxae and a small, isolated, black central dot and a small black median streak on the posterior half reaching between coxae IV to specimens have which have the lateral spots connected by a narrow or wider lateral grey or black lateral margin. The dorsal abdominal pattern varies from the black double-dot marking type to a much lighter dorsal surface with white blotches and two parallel rows of black dots. The legs are slender and show many black dots on a whitish integument. All variations described here occur in series from one locality. All the females have the same epigyne and vulva.

We, therefore, fail to see differences between the specimens with different colour patterns which might convince us that we are dealing with two different species, *P. tincta* and *P. nigropunctata*. Using the key of “Araneae Spiders of Europe” either descriptions of the two species fit specimens of our material. Therefore, we here identify them all with *Platnickina tincta*, being the senior name of the two. We are also puzzled why the so striking character mentioned by Lucas, the dorsal white cross on the abdomen (fig. 14E), has disappeared from the description in “Araneae Spiders of Europe”. It appears that Simon (Simon 1873) interpreted the description by Lucas in a slightly different way, putting emphasis on rows of black dots (not mentioned in Lucas’ original description) and referring to the white cross by suggesting “♀ Elle a été très-bien décrite par M. H. Lucas; elle diffère surtout du mâle par la bande transverse d’un blanc mat qui coupe le sommet de son abdomen” and thus giving a strange interpretation of Lucas’ illustration (fig. 14E). Later he (Simon 1914) distinguishes the two species on differences in colour patterns without referring to anything resembling a white cross on the abdomen.



In our opinion *Theridion nigropunctatum* as described by Lucas has been misunderstood since Simon and because of Simon's interpretation. Simon possibly interpreted the large colour variation within *Platnickina tincta* as representing two different species, using *tincta* for the darker specimens and *nigropunctata* for the lighter ones, even though the illustration of Lucas shows more resemblance to the darker *tincta* than to "*nigropunctata*". This, in our opinion, strongly suggests that *P. nigropunctata* is a (junior) synonym of *P. tincta*, but of course this suggestion has to be followed up by more fundamental research, morphological as well as biochemical.

***Dipoena umbratilis*** (Simon, 1873)

Locality 9; 1♂. New for Italy.

The species appears to be new for Italy since the only earlier record from the country (from Firenze, Di Caporiacco 1923) has been found to be a misidentification (= *Dipoena braccata*) (see Pantini & Isaia 2018: 72). Therefore, this is the first record for Calabria and for Italy.

The male palp is very similar, almost identical to *Phycosoma inornatum* (O. Pickard-Cambridge, 1861), the easiest way to distinguish these species is the abdominal pattern: grey-yellow to almost black for *Phycosoma inornatum*, with chevrons for *Dipoena umbratilis* (see figure 15).

The presently know distribution can be stated as Western Mediterranean. The former record from Italy having been removed, the distribution was restricted to France (départements Ardèche, Var, Vaucluse, and Corse) and Portugal, and outside Europe from Algeria (Simon 1914). Le Peru (Le Peru 2011) also mentions Spain (according to his map 693 on p. 443) but we have not been able to find the source for this record. Le Peru may have had some fresh material. Neither do Cardoso and Morano mention any Spanish record (Cardoso & Morano 2010). Nentwig (Nentwig et al. 2019) follows Le Peru and shows Spain within the species range.

So the number of known specimens is low. Information on habitat is scanty: forest, in moss. It is a rare species.



Fig. 15. *Dipoena umbratilis*. Male, abdomen, dorsal view.

***Xysticus macedonicus*** Šilhavý, 1944

Localities 1, 9, 21: 6♂3♀. New for Italy.

The species was originally described from Macedonia by Šilhavý (Šilhavý 1944). Subsequently mentioned from the Shar Mountains, Macedonia by Komnenov (Komnenov 2017) and Breitling (Breitling 2018). The species is not rare on the Balkans, especially in Bulgaria (Pirin Mountains). We have published a record from northern Greece (Gramos, 1.157m a.s.l., Kastoria Province) (Van Helsdingen, IJland & Komnenov 2015). More to the West and North it has been recorded from Germany (Bavarian Alps: Mangfall Mountains and Karwendel) (Jantscher 2001), Austria (many records from Steiermark and Kärnten) and Switzerland (eastern Kanton Graubünden) (Hänngi 2003).

*Xysticus macedonicus* is a species of sub-montane and montane altitudes. The newly collected material comes from 806m, 883m, and 1,478m a.s.l. and thus fits in well with the general pattern as e.g. presented by Jantscher in her thesis (Jantscher 2001, grey literature). We assume that the species occurs also on the southern slopes of the Alps and possibly in the northern, central, and southern Appenine mountains of which the Calabrian mountains or Calabrian Appenines form the southern continuation or tip.

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