

New records for the Italian spider fauna (Arachnida, Araneae)

Новые находки пауков в Италии (Arachnida, Araneae)

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КЛЮЧЕВЫЕ СЛОВА: обновление списка пауков Италии, завозные виды, *Macrothele calpeiana*, *Cicurina japonica*, *Erigone autumnalis*, аутэкология, распространение в Италии.

ABSTRACT. We provide new data on Italian fauna, with 5 unpublished new records and additional information on the Italian distribution and autoecology of 38 lesser known or interesting species. We include data on first Italian records of three alien species, *Macrothele calpeiana* (Walckenaer, 1805), *Erigone autumnalis* Emerton, 1882 and *Cicurina japonica* (Simon, 1886). Illustrations of diagnostic features are provided for the latter. A list of 74 species, not included or published after the publication of the last national check-list, is also included. Since year 2005, the Italian spider fauna increased from 1534 species to the current 1613.

РЕЗЮМЕ. Приведены новые данные по аранеофауне Италии, в том числе и сведения о 6 новых для фауны видах и дополнительные сведения о распространении пауков в Италии и об аутэкологии 38 малоизученных и интересных пауков. Включены данные о первых находках трёх интродуцированных видов *Macrothele calpeiana* (Walckenaer, 1805), *Erigone autumnalis* Emerton, 1882 and *Cicurina japonica* (Simon, 1886). Приводятся иллюстрации для последнего вида. Дается также список из 74 видов, не включенных в предыдущий чек-лист итальянских пауков, либо опубликованных после. С 2005 года число видов пауков в фауне Италии возросло с 1534 видов до 1613.

Introduction

The only paper dealing with the general distribution of Italian spiders is the old and outdated “Catalogo degli Araneidi Italiani”, published by Canestrini and Pavesi in 1868 and 1870. In their work, that represents the first list of Italian spiders ever published, the two authors indicate for each species the Italian distribution at regional level. After more than one hundred years, Pesarini [1994] published the “Check-list of the species of the Italian fauna” with a few general infor-

mation on the distribution of the species on the Italian territory. The check-list recently published by Trotta [2005] is much more updated but it does not take into consideration any information on the distribution of the species at national level.

The information concerning the geonemy of Italian spiders is scattered in hundreds of publications. It is thus particularly hard and strenuous to find data in this sense. Moreover, just a few summarizing catalogs have been published: among these we mention the catalog of cave dwelling spiders by Brignoli [1972;1985], the catalog of Italian Salticids by Hansen [1985], the work on the spider fauna of Alto Adige by Noflatcher [1996] and the new comprehensive catalog of spider species of Piemonte and Lombardia recently published by Isaia *et. al.* [2007]. A wide frame of reference of the Italian arachnological studies during XX century is illustrated by Tongiorgi [2000].

In this work we present some information on the distribution of some rare or lesser known species of Italian spiders and we provide 5 new records for the Italian fauna. A list of 74 species not included or published after the last national check-list by Trotta [2005] is also provided (Table 1). Thanks to our new records and to the above-mentioned list, the total up-to-date number of species recorded in Italy increases from 1534 [Trotta, 2005] to 1613.

If not specified, all material cited in the text is stored at Museo civico di Scienze Naturali “E. Caffi” of Bergamo. Abbreviations: CFG: Fulvio Gasparo collection; MSNVR: collection of Museo civico di Storia Naturale of Verona. In the material section (small font) we report region, locality and province (in brackets) of occurrence, notes on the habitat of sample locality, legit, date and sex of specimens. For each species we report a few comments on the Italian distribution and information on the autoecology of the species according to literature. For several records, belonging to poorly known species, we list the most important identification sources. Nomenclature follows Platnick [2008].

Table 1. New records for the Italian fauna not included in the last national check list [Trotta, 2005] or published after 2005.
Таблица 1. Новые находки для итальянской фауны не включённые в предыдущий чек-лист [Trotta, 2005] или указания опубликованные после 2005 г.

	Reference
Araneidae	
<i>Gibbaranea ullrichi</i> (Hahn, 1835)	Zangheri, 1966 (sub <i>Araneus ullrichii</i>); Brignoli, 1979b
Clubionidae	
<i>Clubiona juvenis</i> Simon, 1878	Minelli & Mannucci, 1979 (sub <i>Sitticus littoralis</i>); Hansen, 2002
<i>Clubiona pseudoneglecta</i> Wunderlich, 1994	Isaia <i>et al.</i> , 2007
Dictynidae	
<i>Dyctina kosiorowiczi</i> Simon, 1873	Zangheri, 1966
Dysderidae	
<i>Dysdera arganoi</i> Gasparo, 2004	Gasparo, 2004
Gnaphosidae	
<i>Cryptodrassus hungaricus</i> (Balogh, 1935)	Isaia <i>et al.</i> , 2007
<i>Gnaphosa alpica</i> Simon, 1878	Isaia <i>et al.</i> , 2007
<i>Gnaphosa inconspicua</i> Simon, 1878	Hansen, 2007
<i>Gnaphosa nigerrima</i> L. Koch, 1877	Noflatscher, 1996
<i>Haplodrassus soerenseni</i> (Strand, 1900)	Noflatscher, 1996
<i>Micaria pallipes</i> (Lucas, 1846)	Groppali & Pesarini, 2002 (sub <i>M. septempunctata</i>)
<i>Zelotes pluridentatus</i> Marinaro, 1967	di Franco, 1993
Linyphiidae	
<i>Agyneta ramosa</i> Jackson, 1912	Isaia <i>et al.</i> , 2007; Steinberger, 2007
<i>Allomengea vidua</i> (L. Koch, 1879)	Noflatscher, 1996
<i>Araeoncus crassiceps</i> (Westring, 1861)	Steinberger, 2005b
<i>Caviphantes saxetorum</i> (Hull, 1916)	Isaia <i>et al.</i> , 2007
<i>Centromerus arcanus</i> (O. P.-Cambridge, 1873)	Noflatscher, 1996
<i>Centromerus subcaecus</i> Kulczynski, 1914	Steinberger, 2005a
<i>Diplocephalus arnoi</i> Isaia, 2005	Isaia, 2005
<i>Entelecara erythropus</i> (Westring, 1851)	Hansen, 2002
<i>Entelecara congenera</i> (O. P.-Cambridge, 1879)	Steinberger, 2007
<i>Erigone alettris</i> Crosby & Bishop, 1928	Isaia <i>et al.</i> , 2007
<i>Erigone dentigera</i> O. P.-Cambridge, 1874	Di Franco & Benfatto, 2002 (sub <i>Erigone capra</i>)
<i>Hypocephalus dahl</i> (Lessert, 1909)	Noflatscher, 1996; Zingerle, 1997
<i>Lepthyphantes insignis</i> O. P.-Cambridge, 1913	Thaler & Zapparoli, 1993; Noflatscher, 1996; Di Franco & Benfatto, 2002
<i>Mansuphantes pseudoarciger</i> Wunderlich, 1985	Isaia <i>et al.</i> , 2007
<i>Maro lepidus</i> Casimir, 1961	Noflatscher, 1996
<i>Meioneta innotabilis</i> (O. P.-Cambridge, 1863)	Isaia <i>et al.</i> , 2007
<i>Micrargus apertus</i> (O. P.-Cambridge, 1871)	Isaia <i>et al.</i> , 2007
<i>Micrargus georgescuae</i> Millidge, 1976	Noflatscher, 1996
<i>Milleriana inerrans</i> (O. P.-Cambridge, 1885)	Steinberger, 2007
<i>Monocephalus castaneipes</i> (Simon, 1884)	Noflatscher, 1996
<i>Mycula mossakowskii</i> Schikora, 1994	Schikora, 1994
<i>Notioscopus sarcinatus</i> (O. P.-Cambridge, 1872)	Heidt <i>et al.</i> , 1998
<i>Oedothorax gibbosus</i> (Blackwall, 1841)	Noflatscher, 1996; Marcuzzi <i>et al.</i> , 1977 (sub <i>O. tuberosus</i>)
<i>Pelecopsis mengei</i> (Simon, 1884)	Di Franco & Benfatto, 2002
<i>Pocadicnemis juncea</i> Locket & Millidge, 1953	Isaia <i>et al.</i> , 2007
<i>Porrhomma oblitum</i> (O. P.-Cambridge, 1871)	Noflatscher, 1996

Table 1 (continuing)
Таблица 1 (продолжение)

<i>Scotinotylus evansi</i> (O. P.-Cambridge, 1894)	Noflatscher, 1996
<i>Silometopus elegans</i> (O. P.-Cambridge, 1872)	Noflatscher, 1996
<i>Trichoncus saxicola</i> (O. P.-Cambridge, 1861)	Noflatscher, 1996
<i>Troglohyphantes bornensis</i> Isaia & Pantini, 2007	Isaia & Pantini, 2007
<i>Walckenaeria unicornis</i> O. P.-Cambridge, 1861	Steinberger, 2005a
Liocranidae	
<i>Agroeca inopina</i> O. P.-Cambridge, 1886	Isaia <i>et al.</i> , 2007
Lycosidae	
<i>Acantholycosa norvegica</i> (Thorell, 1872)	Noflatscher, 1996
<i>Allocosa oculata</i> (Simon, 1876)	Garneri, 1902 (sub <i>Lycosa oculata</i>)
<i>Arctosa similis</i> Schenkel, 1938	Buchar <i>et al.</i> , 2006
<i>Lycosa bedeli</i> Simon, 1876	Pesarini, 1994
<i>Pardosa cincta</i> (Kulczynski, 1887)	Noflatscher, 1996
<i>Pardosa fulvipes</i> (Collett, 1876)	Steinberger, 2007
<i>Pardosa schenkeli</i> Lessert, 1904	Isaia, 2005
<i>Pyrenecosa rupicola</i> (Dufour, 1821)	Marcuzzi, 2003 (sub <i>Acantholycosa rupicola</i>)
Philodromidae	
<i>Philodromus bistigma</i> Simon, 1870	Muster <i>et al.</i> , 2007
<i>Philodromus buchari</i> Kubcova, 2004	Sassu <i>et al.</i> , 2008
<i>Philodromus fuscolimbatus</i> Lucas, 1846	Muster <i>et al.</i> , 2007
<i>Philodromus lividus</i> Simon, 1875	di Caporiacco, 1950 (sub <i>Philodromus aureolus lividus</i>); Grill <i>et al.</i> , 2005; Muster & Thaler, 2004
<i>Philodromus longipalpis</i> Simon, 1870	Zangheri, 1966 (sub <i>Philodromus aureolus longipalpis</i>); Muster & Thaler, 2004
<i>Philodromus ruficapillus</i> Simon, 1885	Muster <i>et al.</i> , 2007
<i>Thanatus rayi</i> Simon, 1875	Noflatscher, 1996
Pisauridae	
<i>Dolomedes clercki</i> Simon, 1937	Krauss, 1955
<i>Pisaura novicia</i> (L. Koch, 1878)	Brignoli, 1984 (sub <i>Pisaura</i> "form B")
Salticidae	
<i>Chalcoscirtus alpicola</i> (L. Koch, 1876)	Noflatscher, 1996
<i>Chalcoscirtus pseudoinfimus</i> Ovtsharenko, 1978	Heidt <i>et al.</i> , 1998
<i>Heliophanus dampfi</i> Schenkel, 1923	Noflatscher, 1996
<i>Icius nebulosus</i> (Simon, 1868)	Krauss, 1955; Zangheri, 1966
Segestridae	
<i>Segestria fusca</i> Simon, 1882	Denis, 1963; Marcuzzi, 2003
Tetragnathidae	
<i>Tetragnatha striata</i> L. Koch, 1862	Hansen, 2002
Theridiidae	
<i>Theridula opulenta</i> (Walckenaer, 1842)	Brignoli, 1967; Kritscher, 1968; Groppali <i>et al.</i> , 1999
Thomisidae	
<i>Coriarachne depressa</i> (C. L. Koch, 1837)	Isaia <i>et al.</i> , 2007
<i>Xysticus brevidentatus</i> Wunderlich, 1995	Jantscher, 2003
<i>Xysticus laetus</i> Thorell, 1875	Logunov, 2006
Uloboridae	
<i>Polenecia producta</i> (Simon, 1873)	Brignoli, 1979a
Zoridae	
<i>Zora alpina</i> Kulczynski, 1915	Noflatscher, 1996
<i>Zora silvestris</i> Kulczynski, 1897	Noflatscher, 1996

Family Amaurobiidae

Eurocoelotes microlepidus (de Blauwe, 1973)

Coelotes m. de Blauwe, 1973: 67, f. 57 (♀).

Coelotes m. Deltshv, 1990: 38, f. 7.1–4, 8.1–2 (♂♀).

MATERIAL EXAMINED. *Trentino Alto Adige*: Valsugana Borgo (Trento), 22.IX.1965 1 ♂, 1 ♀ (MCSNVR). *Veneto*: Cesiomaggiore (Belluno), Val Canzoi, hygrophilous wood, m 590, in pitfall traps, leg. Museo BG, 14.X.2002–27.III.2003 1 ♀; Grezzana (Verona), Casette, m 500, leg. Francese G., 2.XII.1989 1 ♂ (MCSNVR); Laghi (Vicenza) beech wood c/o Cavallaro, m 600, in pitfall traps, leg. Museo BG, 9.VIII–8.X.2002 1 ♂; 8.X.2002–27.III.2003 1 ♂, 1 ♀; 27.III–12.VI.2003 1 ♀. Schio (Vicenza), Monte Summano, Possa de Balan, m 470, leg. Fontana P., 23.IV.1998, 1 ♀.

REMARKS. This lesser known species was previously recorded in Veneto (Montebelluna, Verona) and Trentino Alto Adige by De Blauwe [1973, 1975] and in Lombardia (Anfo, Brescia) by Isaia *et al.* [2007]. In Europe it was recorded in the mountains of Sar Planina, Macedonia [Kommenov, 2002] and in Bulgaria, Zemen canyon [Deltshv, 1990].

E. microlepidus is generally found among detritus and wood litter [Isaia *et al.*, 2007].

Urocoras munieri (Simon, 1880)

Coelotes m. de Blauwe, 1973: 70, f. 58–60 (♂♀).

MATERIAL EXAMINED. *Friuli Venezia Giulia*: Muggia (Trieste), Punta Ronco, m 40, in pitfall traps, leg. Colombetta G., 2.X–14.XI.2000 3 ♂♂, 2 ♀♀; Monte d'Oro grassland, m 160, in pitfall traps, leg. Colombetta G. 25.VII–28.VIII.2000 1 ♀ (CFG); 24.IX–12.XI.2000 17 ♂♂ (CFG); 16.XI.2000–3.I.2001 2 ♂♂ (CFG); S. Floriano, Forte Olmi, pine wood, m 105, in pitfall traps, leg. Colombetta G., 2.X–14.XI.2000 1 ♂ (CFG); S. Floriano, Rio Ronchi valley, oak wood, m 70, leg. Colombetta G. 23.VII–22.VIII.2000 1 ♀ (CFG).

REMARKS. Known for Croatia and Slovenia [van Helsing, 2007], our data represent the first record for the Italian fauna.

According to our findings *U. munieri* is preferably found among vegetal debris and litter of different woods in North Eastern Italy.

Family Dictynidae

Cicurina japonica (Simon, 1886)

C. j. Wunderlich & Hänggi, 2005: 20, f. 1–11 (♂♀).

MATERIAL EXAMINED. *Lombardia*: Bariano (Bergamo), river pebbles, m 120, in pitfall traps, leg. Ciocca S., 15.X–1.XI.2002 1 ♂, 20.XII.2002–31.I.2003 2 ♂♂, 22.IV–21.V.2003 1 ♀; untilled land, m 120, 8.III–8.IV.2002 1 ♂, 14.V–16.VI.2002 1 ♂, 1.XI.2002–31.I.2003 3 ♂♂, 7 ♀♀, 31.I–14.III.2003 5 ♀♀. Bonate Sotto (Bergamo), dry grassland, m 175, in pitfall traps, leg. Ciocca S., 31.X–17–XII.2002 1 ♂.

REMARKS. Despite its far-eastern origin, this alien species has been recently recorded in Germany and Switzerland by Wunderlich & Hänggi [2005]. The data here reported assess a general trend of expansion in Europe. See Fig. 1A for data on current Italian distribution.

According to our data *C. japonica* seems to prefer river pebbles, dry and open places.

Diagnostic features are illustrated in Fig. 2.

Family Dysderidae

Dasumia laevigata (Thorell, 1873)

D. l. Alicata, 1966: 477, f. 8–11, 27–30 (♂♀).

MATERIAL EXAMINED. *Liguria*: San Lorenzo a Mare (Imperia), Inferno river m 70, in pitfall traps, leg. Fabbri R., 27.IV–3.VI.2006 1 ♂, 1 ♀. Imperia, Prino m 50, in pitfall traps, leg. Fabbri R., 27.IV–3.VI.2006 7 ♂♂, 2 ♀♀.

REMARKS. New record for the Italian fauna; the species was only recorded in Provence (South-Eastern France) by Le Peru [2007].

According to Simon [1914] this species is mainly found among vegetal debris in pine woods.

Harpactea longobarda Pesarini, 2001

H. l. Pesarini, 2001a: 300, f. 18–19 (♂♀).

MATERIAL EXAMINED. *Veneto*: Verona, Giusti garden, urban area, in pitfall traps, leg. Ballarin F., 12.IV–16.V.2006 1 ♂.

REMARKS. The species was recently described by Pesarini [2001] on specimen collected in Pavia (Central Northern Italy) in urban environment. This record widens the current known distribution of this Italian endemic species to the Eastern side of the Po plain (Fig. 1B).

Family Gnaphosidae

Leptodrassus albidus Simon, 1914

L. a. Di Franco & Pantini, 2000: 479, f. 1–2 (♂).

L. a. Chatzaki, Thaler & Mylonas, 2002a: 589, f. 64–65, 72 (♂♀).

MATERIAL EXAMINED. *Sicilia*: Montallegro (Agrigento), Platani river, m 30, light trap, leg. Pantini P. Valle M., 18.V.1995 1 ♂.

REMARKS. Western Mediterranean species. Italian records refer to Capraia Island (Toscana) [Di Franco & Pantini, 2000] and to Sicilia [Di Franco, 2001].

According to Le Peru [2007] *L. albidus* is found in salt marshes and estuaries.

Zelotes nilicola (O.P.-Cambridge, 1874)

MATERIAL EXAMINED. *Liguria*: Diano Castello (Imperia), Varcavello, grassland, m 100, in pitfall traps, leg. Fabbri R., 2.VI–15.VII.2004 1 ♂, 1 ♀.

REMARKS. Mediterranean species. Data concerning Italian distribution is lacking. Recorded only in Giglio Island (Toscana) [de Dalmas, 1922], Lazio [Di Franco, 1992] and Sicilia [Di Franco, 2001]. New record for Liguria.

Le Peru [2007] refers about findings in dunes and gardens. Di Franco [2001] found it in pine woods and in coastal dunes with *Salicornia*.

Zelotes parocolus Simon, 1914

Z. p. Di Franco, 1995: 125, f. 1–4 (♂♀).

MATERIAL EXAMINED. *Liguria*: San Lorenzo al Mare (Imperia), Inferno river, m 40, in pitfall traps, leg. Fabbri R., 27.IV–3.VI.2006 2 ♂♂.

REMARKS. Described on French material (imprecise locality), *Z. parocolus* is known in Italy from a few localities of Lazio and Umbria [Di Franco, 1995, 1997], and from



Fig. 1. Italian records of *Macrothele calpeiana* and *Cicurina japonica* (A), *Centromerus cottarelli* and *Harpactea longobarda* (B), *Erigone autumnalis* (C), *Tapinocyba maureri* and *Centromerus pasquinii* (D). Black symbols refer to literature data, white to new records.

Рис. 1. Находки *Macrothele calpeiana* и *Cicurina japonica* (A), *Centromerus cottarelli* и *Harpactea longobarda* (B), *Erigone autumnalis* (C), *Tapinocyba maureri* и *Centromerus pasquinii* (D) в Италии. Черные кружки относятся к литературным данным, белые кружки – новые находки.

Capraia Island (Toscana) [Di Franco & Pantini, 2000]. New record for Liguria.

According to Di Franco [1995] and Di Franco & Pantini [2000] the species is mainly found in Mediterranean forests and shrublands.

Family Hexathelidae

Macrothele calpeiana (Walckenaer, 1805)

M. c. Snazell & Allison, 1989: 65, f. 1–4, 8 (♂♀).

MATERIAL EXAMINED. *Lombardia*: Almè (Bergamo), urban environment, leg. Broccio A., VII.2007 1 ♂. *Veneto*: Sommacampagna (Verona), in a private garden, 28.V.2004 (MCSN-VR) 1 ♂.

REMARKS. This remarkable mygalomorph, endemic of Southern Spain [Snazell & Allison, 1989] is recorded for the first time in Italy after its possible importation through the commerce of ornamental olive trees. Specimens collected in Almè (Bergamo) were found on a paved road in the nearby of the garden of a detached house, where a big olive tree had just been planted. The species is in fact cited in the Bern Convention (Convention on the Conservation of European Wildlife and Natural Habitats; Bern, 1979) and in the Habitat Directive 92/43. Appendix II of Bern Convention lists the species for which the Contracting Parties shall take appropriate and necessary legislative and administrative measures to ensure their special protection. In particular Art. 6 states the prohibition of capturing and keeping or killing specimens; the prohibition of damaging or destroying breeding or resting sites; the prohibition of disturbance during the period of breeding, rearing and hibernation; the prohibition of the possession and international trading with these animals, dead or alive. Furthermore *M. calpeiana* is cited in Appendix IV of Habitat Directive 92/43 reporting a list of species of communitarian importance requiring measures of conservation. The spreading of this species out of its natural environment could create concern, especially according to the effect of its bite (very painful but not harmful to human population) and the possible colonization of private or public green areas. The records of *M. calpeiana* in Italy are illustrated in Fig. 1A.

Family Linyphiidae

Areoncus altissimus Simon, 1884

A. a. Pesarini, 1996: 414, f. 1–2, 8 (♂♀).

MATERIAL EXAMINED. *Sicilia*: Randazzo (Catania), Alcantara springs m 850, leg. Pantini P. Valle M., 23.V.1995 1 ♂.

REMARKS. New locality for this species, previously recorded in Italy only by Pesarini [1996].

Simon [1884] found *A. altissimus* among river pebbles on a river bank, in the Eastern Pyrenees (France).

Bolyphantes kolosvary (di Caporiacco, 1936)

B. k. van Helsdingen et al., 2001: 8, f. 37–47, 74 (♂♀).

MATERIAL EXAMINED. *Emilia Romagna*: Bobbio (Piacenza), Road to Monte Penice m 1400, in pitfall traps, leg. Pantini P., 19.IX.2002–20.III.2003 9 ♂♂, 19 ♀♀.

REMARKS. Known for Switzerland, Italy, Slovenia, Montenegro and Bulgaria, this species was described by di Caporiacco [1936] on a subadult male from the Tuscan Apennin. The species has been lately re-described and recorded in Trentino Alto Adige, Lombardia, Toscana [van

Helsdingen et al., 2001], Veneto, Friuli Venezia Giulia [Hansen & Vanin, 2004] and more recently it was found in Piemonte [Isaia et al., 2007]. New record for Emilia Romagna.

B. kolosvary is mainly found in low vegetation [van Helsdingen et al., 2001].

Centromerus cottarelli Brignoli, 1979

C. c. Brignoli, 1979ñ: 24, f. 48–52 (♂♀).

MATERIAL EXAMINED. *Piemonte*: Sampeyre (Cuneo), Chiotti, leg. Rania, 13.XI.2006 1 ♂, 4 ♀♀.

REMARKS. This species, apparently troglodyphyl, was previously known for the only type locality, Pignone Cave, in Liguria, Northern Italy [Brignoli, 1979ñ]. See Fig. 1B for the current known Italian distribution.

Centromerus pasquinii Brignoli, 1971

C. p. Brignoli, 1979ñ: 26, f. 37–39 (♂♀).

MATERIAL EXAMINED. *Liguria*: Andora (Savona), Marina di Andora wood m 60, in pitfall traps, leg. Fabbri R., 23.IV.2005–2.VI.2006 1 ♂; grassland m 40, in pitfall traps, leg. Fabbri R., 26.IV–2.VI.2006 1 ♀. Diano Castello (Imperia), Varcavello olive tree groove m 115, in pitfall traps, leg. Fabbri R., 24.IX.2005–27.IV.2006 1 ♂; grassland with northerly aspect m 120, in pitfall traps, leg. Fabbri R., 27.IV–3.VI.2006 1 ♀. Imperia (Imperia) Prino grassland with eucalyptus trees m 50, in pitfall traps, leg. Fabbri R., 24.IX.2005–27.IV.2006 3 ♂♂. San Lorenzo al Mare (Imperia) Inferno river, wood m 70, in pitfall traps, leg. Fabbri R., 24.IX.2005–27.IV.2006 5 ♂♂, 27.IV–3.VI.2006 1 ♀; wood margin m 40, in pitfall traps, leg. Fabbri R., 27.IV–3.VI.2006 1 ♀. *Lazio*: Subiaco (Roma) Pozzo al Monta Taleo, leg. Papi F., 16.XI.2003 1 ♀.

REMARKS. All records in literature refer essentially to a few specimens collected in caves in Piemonte, Liguria, Marche, Toscana and Lazio (Brignoli, 1985).

According to our data the species seems to also show a general preference for moist epigeal habitats. See Fig. 1D for the current known Italian distribution.

Ceratinella scabrosa (O.P.–Cambridge, 1871)

MATERIAL EXAMINED. *Emilia Romagna*: Mesola (Ferrara), Panfilia wood, leg. Fabbri R., 11.V–10.VI.1996 1 ♀; Parco della Duchessa live-oak wood, leg. Fabbri R., 11.V–10.VI.1996 1 ♀.

REMARKS. The species is widely distributed in Central-northern Europe in Italy it was only known for Lombardia, Piemonte [Pesarini, 1997; Arnò, 2001; Isaia et al., 2007] and Alto Adige [Steinberger, 2005a, 2007]. New record for Emilia Romagna.

Mainly found at ground level in the litter of moist woods [Heimer & Nentwig, 1991].

Collinsia inerrans (O. P.–Cambridge, 1885)

MATERIAL EXAMINED. *Val d'Aosta*: Gressoney (Aosta), leg. Negro M., alpine pastures, 2000 m., 30.VI.2006 1 ♂

REMARKS. *C. inerrans* is widely distributed in Central-northern Europe in Italy it was only known for Alto Adige [Steinberger, 2007]. New record for Valle d'Aosta.

C. inerrans is mainly found in moss at ground level [Heimer & Nentwig, 1991].

Diplocentria bidentata (Emerton, 1882)

MATERIAL EXAMINED. *Val d'Aosta*: Torgnon (Aosta), leg. Negro M., margin of larch wood, 1800 m., 30.VI.2006 3 ♂♂, 2 ♀♀.

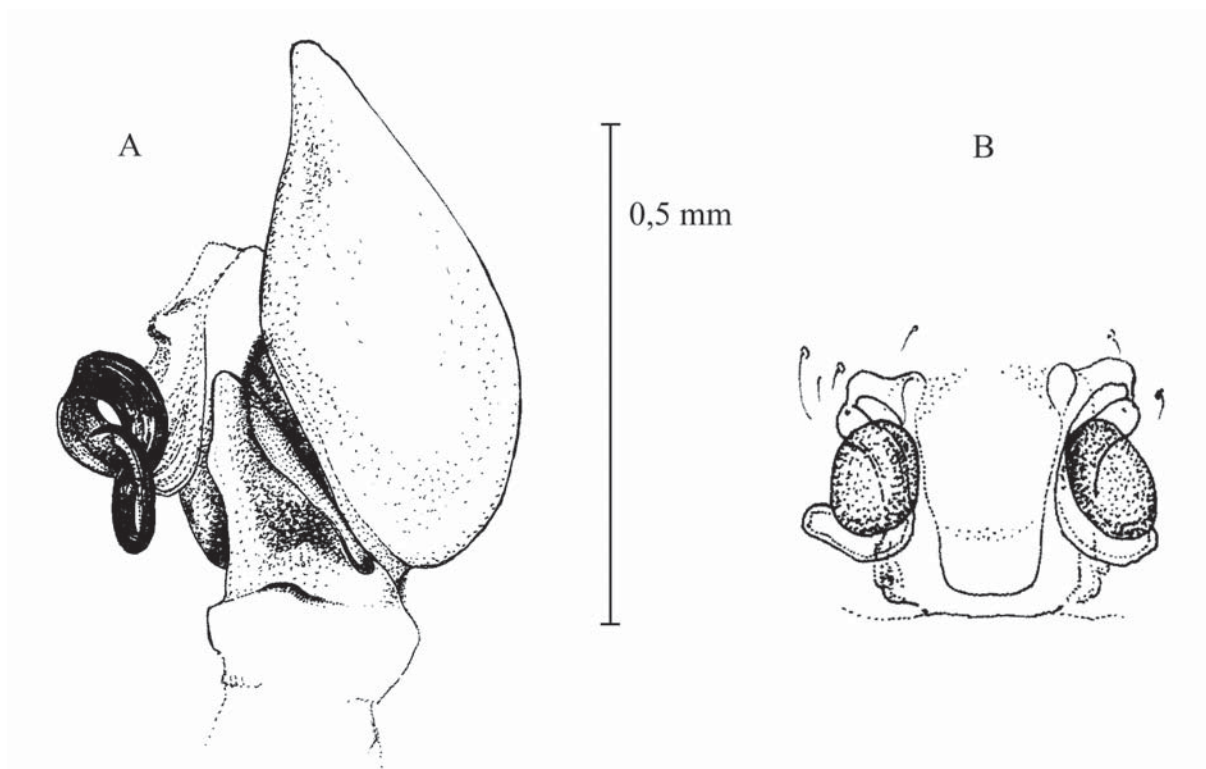


Fig. 2. *Cicurina japonica* (Simon, 1886): left male palp, retrolateral view (A) and vulva (B).

Рис. 2. *Cicurina japonica* (Simon, 1886): левая пальпа самца, ретролатерально (A) и вульва (B).

REMARKS. Widely distributed in Northern-central Europe and previously recorded in Italy (Trentino Alto Adige) by Noflatscher [1996] and Zingerle [2000]. New record for Valle d'Aosta.

The species lives preferably in mountainous areas, under stones or among moss at ground level [Heimer & Nentwig, 1991].

Diplocephalus alpinus (O. P.-Cambridge, 1872)

MATERIAL EXAMINED. *Veneto*: Susegana (Treviso), loc. Costa Buona, Costa Buona cave VTV5680, leg. Forte V. Vanin S., 15.II.2003, 1 ♀, 13.IV.2003 1 ♂, 1 ♀; loc. Costa Buona, Tubo Catodico cave VTV5681, leg. Forte V. Vanin S., 27.VII.2002 1 ♂, 8 ♀♀.

REMARKS. New data for this south European species, previously recorded in Italy for a few localities in Lombardia [Pesarini, 1996; Isaia *et al.*, 2007], Alto Adige [Noflatscher, 1996], Friuli Venezia-Giulia [Gasparo & Thaler, 2000] and Veneto [Hansen, 1995]. Subtroglophyl species.

Diplocephalus graecus (O. P.-Cambridge, 1872)

MATERIAL EXAMINED. *Liguria*: Cervo (Imperia), Borgata Steri, river bed m 80, leg. Fabbri R., 26.IV.2006 1 ♀.

REMARKS. The Italian distribution of this Mediterranean species is relatively poorly known. Recorded in Emilia Romagna [Zangheri, 1966], Toscana [Millidge, 1979; Brignoli, 1975], Lazio [Denis, 1966; Thaler & Zapparoli, 1993] and Puglia [Brignoli, 1972]. New record for Liguria.

D. graecus is mainly found on coastal dunes, under stones on river banks and in agricultural fields [Le Peru, 2007].

Diplocephalus helleri (L. Koch, 1869)

MATERIAL EXAMINED. *Trentino-Alto Adige*: Moso in Passiria (Bolzano), Monteneve, leg. Ghilardi E. Valle M., 11.VII.1990 5 ♀♀. *Friuli-Venezia Giulia*: Malborghetto Valbruna (Udine), Ghilardi E. Valle M., 24.VII.1990 1 ♀.

REMARKS. Central European species. Previous Italian records refers to Valle d'Aosta and Piemonte [Pesarini, 1996]; Trentino- Alto Adige [Noflatscher, 1996; Zingerle, 2000], Friuli Venezia Giulia [Gasparo, 1997] and Veneto [Hansen & Vanin, 1985].

The species is mainly found in mountainous areas over 2000 m [Heimer & Nentwig, 1991].

Erigone autumnalis Emerton, 1882

MATERIAL EXAMINED. *Liguria*: Cervo (Imperia), Borgata Steri, m 60, leg. Fabbri R., 2.VI.2006 1 ♂. Diano Castello (Imperia), Varcavello, m 100, leg. Fabbri R. 24.IX.2005 1 ♀.

REMARKS. North-American species, recorded for the first time in Europe in Switzerland by Hännigi [1990]. Currently known for Switzerland, Azores Islands and Italy, where it has been found in Piemonte and Lombardia [Isaia *et al.*, 2007]. New record for Liguria.

Mainly found among vegetation at ground level [Isaia *et al.*, 2007].

Janetschekia monodon (O. P.-Cambridge, 1872)

J. m. Pesarini, 1996: 422, f. 38–39 (♂♀).

MATERIAL EXAMINED. *Liguria*: Cervo (Imperia), Borgata Steri, river bed m 80, leg. Fabbri R., 23.IX.2005 1 ♂.

REMARKS. Alpine and Apenninic endemic species. In Italy it is known for Piemonte and Lombardia [Isaia *et al.*, 2007], Alto Adige [Steinberger, 2005a], Friuli Venezia Giulia [Heidt *et al.*, 1998] and Basilicata [Pesarini, 1996]. New record for Liguria.

The species prefers the moist habitat of moss, litter and low vegetation at ground level [Isaia *et al.*, 2007].

Mansuphantes pseudoarciger Wunderlich, 1985

Lepthyphantes p. Wunderlich, 1985d: 117, f. 1–4 (♂).

Lepthyphantes p. Heimer & Nentwig, 1991: 192, f. 521 (♂♀).

MATERIAL EXAMINED. *Valle d'Aosta*: Torgnon (Aosta), leg. Negro M., in larch woods, 1980 m, 30.VI.2006 1 ♀.

REMARKS. Western-alpine species described on specimen from Wallis (Switzerland). Known for France [Le Peru, 2007] and recently recorded in Italy [Isaia *et al.*, 2007]. New record for Valle d'Aosta.

The species is preferably found in mosses and litter, especially in pine woods [Heimer & Nentwig, 1991].

Mioxena blanda (Simon, 1914)

MATERIAL EXAMINED. *Emilia Romagna*: Mesola (Ferrara), Elciola live-oak tree, in pitfall traps, leg. Fabbri R., 31.I–21.II.1996 1 ♀, 16.I–19.II.1997 1 ♂.

REMARKS. Widely distributed in Europe. Italian records refer to Piemonte and Lombardia [Pesarini, 1996; Isaia *et al.*, 2007] and Alto Adige [Noflatscher, 1991; 1996]. New record for Emilia Romagna.

Found in several habitats, especially at ground level among low vegetation [Heimer & Nentwig, 1991].

Ouedia rufithorax (Simon, 1881)

MATERIAL EXAMINED. *Lazio*: Tarquinia (Viterbo), Sant'Agostino, river outlet of Mignone, coastal dune at sea level, in pitfall traps, Pavesi L., Mariotti D., 17.III.2004 1 ♀.

REMARKS. Mediterranean species, known for Algeria [Bosmans & Abrous, 1992], France, Corsica, Portugal and Italy [van Helsing, 2007], where it is recorded from Lazio [Millidge, 1979].

O. rufithorax prefers sandy habitats [Wunderlich, 1994].

Lepthyphantes quadrimaculatus Kulczyński, 1898

MATERIAL EXAMINED. *Piemonte*: Pecceto di Valenza (AL), poplar plantations and fruit orchards, in pitfall traps, leg. Incitti T., 5.V.2005 2 ♂♂, 1 ♀.

REMARKS. Mainly found in Eastern Europe [van Helsing, 2007], our records indicate the presence of this species in Italy for the first time.

The species shows preference for dry places like dry grasslands and heaths [Heimer & Nentwig, 1991].

Palliduphantes longiseta (Simon, 1884)

Lepthyphantes l. Müller & Heimer, 1991c: 109, f. 1–8 (♂♀).

MATERIAL EXAMINED. *Toscana*: Isola di Capraia (Livorno), house m 340, in pitfall traps, leg. Pantini P. Valle M., VII–XII.1992 1 ♀, XII.1992–IV.1993 1 ♂, IV–VI.1993 6 ♂♂, 4 ♀♀; il Laghetto m 320, in pitfall traps, leg. Pantini P. Valle M., XII.1992–IV.1993 16 ♂♂, 9 ♀♀, IV–VI.1993 5 ♂♂, 1 ♀, VII–XII.1993 1 ♀; il Piano m 100, in pitfall traps, leg. Pantini P. Valle M., XII.1992–IV.1993 19 ♂♂, 4 ♀♀, IV–VI.1993 4 ♂♂, 1 ♀, VII–XII.1993 12 ♂♂, 8 ♀♀; l'Aghiale m 100, in pitfall traps, leg. Pantini P. Valle M., XII.1992–IV.1993 6 ♂♂, 3 ♀♀, IV–VI.1993 12 ♂♂, 8 ♀♀,

VII–XII.1993 3 ♂♂, 2 ♀♀; Pollaio m 150, in pitfall traps, leg. Pantini P. Valle M., XII.1992–IV.1993 2 ♂♂, 1 ♀; Vado del Porto m 10, in pitfall traps, leg. Pantini P. Valle M., XII.1992–IV.1993 4 ♂♂, 4 ♀♀, IV–VI.1993 2 ♂♂, 3 ♀♀, VII–XII.1993 1 ♀; on the way to Laghetto m 280, in pitfall traps, leg. Pantini P. Valle M., IV–VI.1993 4 ♂♂, 6 ♀♀, VII–XII.1993 1 ♂, 1 ♀.

REMARKS. Described by Simon on specimen collected in Corsica. Recently the species has been re-described (again on Corsican specimen) by Müller & Heimer, [1991]. One female has been recorded out of Corsica by Brignoli [1979] in a cave of the Elba island (Toscana). Our data attest the presence of *L. longiseta* on the Capraia island (Toscana).

Mediterranean shrublands and litter of Mediterranean forest are the favourite habitats of this species [Müller & Heimer, 1991].

Tapinocyba maureri Thaler, 1991

T. m. Thaler, 1991: 180, f. 50–55 (♂♀).

MATERIAL EXAMINED. *Emilia Romagna*: Mesola (Ferrara), Elciola, live-oak wood, in pitfall traps, leg. Fabbri R., 26.III–17.IV.1996 5 ♂♂, 19.II–19.III.1997 1 ♂. Panfilia, wetland, in pitfall traps, leg. Fabbri R., 26.III–17.IV.1996 8 ♂♂, 3 ♀♀, 17.IV–11.V.1996 5 ♂♂, 18.IX–23.X.1996 1 ♂, 28.XI.1996–16.I.1997 1 ♀, 19.II–19.III.1997 5 ♂♂, 3 ♀♀; Parco della Duchessa, live-oak wood, in pitfall traps, leg. Fabbri R., 22.XI–20.XII.1995 1 ♂, 26.III–17.IV.1996 4 ♂♂, 17.IV–11.V.1996 2 ♂♂, 19.II–19.III.1997 4 ♂♂, 2 ♀♀.

REMARKS. New records for this endemic Italian species that widens its distribution southwards. Previously recorded for Trentino Alto Adige [Thaler, 1991; Noflatscher, 1991 and 1996], Valle d'Aosta [Pesarini, 2000], Lombardia and Piemonte [Isaia *et al.*, 2007]. New record for Emilia Romagna. See fig. 1D for the current known Italian distribution.

Preferably found among moss and low vegetation in moist habitats [Isaia *et al.*, 2007].

Tenuiphantes herbicola (Simon, 1884)

MATERIAL EXAMINED. *Liguria*: Cervo (Imperia), Borgata Steri, olive grove, m 80, leg. Fabbri R., 2.VI.2004 1 ♂, in pitfall traps 2.VI–15.VII.2004 5 ♂♂. Andora (Savona), Marina di Andora, wood, m 60, leg. Fabbri R., 23.IX.2005 1 ♀, in pitfall traps, 23.IX.2005–26.IV.2006 1 ♂, 1 ♀. Imperia (Imperia), Prino, m 50, in pitfall traps, leg. Fabbri R., 27.IV–3.VI.2006 1 ♂, 2 ♀♀. San Lorenzo al Mare (Imperia), Valle Inferno, m 40–70, in pitfall traps, leg. Fabbri R., 2.VI–15.VII.2004 2 ♂♂ 2 ♀♀, 24.IX.2005–27.IV.2006 1 ♂, 1 ♀, 27.IV–3.VI.2006 1 ♂, 3 ♀♀. Diano Castello (Imperia), Varcavello, m 120, in pitfall traps, leg. Fabbri R., 27.IV–3.VI.2006 1 ♂.

REMARKS. Mediterranean species, previously recorded in Spain, France, Corsica and Croatia. The Italian distribution is poorly known, previous records refer to Lazio [Thaler & Zapparoli, 1993], Pantelleria Island [Hansen, 1991] and Giglio Island (Toscana) [Pesarini, 1995]. New record for Liguria.

According to Le Peru [2007] the species is generally found on river banks, pine wood and dry places.

Walckenaeria stylifrons (O. P.-Cambridge, 1875)

MATERIAL EXAMINED. *Emilia Romagna*: Mesola (Ferrara), Elciola, grassland, in pitfall trap, leg. Fabbri R., 21.II–26.III.1996 1 ♂, 1 ♀, 26.III–17.IV.1996 1 ♀.

REMARKS. European species, known in Italy for Alto Adige [Noflatscher, 1990, 1991 and 1996; Zingerle, 1997], Lombardia [Pesarini, 1996] and Veneto [Hansen, 1995, 1996; Celano & Hansen, 1999]. New record for Emilia Romagna.

The species prefers dry and warm places [Heimer & Nentwig, 1991].

Family Mimetidae

Ero flammeola Simon, 1881

E. f. Thaler et al., 2004: 362, f. 4, 17–18, 20, 26, 32, 41–42, 49–50, 54–55 (♂♀).

MATERIAL EXAMINED. *Liguria*: Diano Castello (Imperia), Varcavello, on an olive tree, m 115, in pitfall traps, leg. Fabbri R., 24.IX.2005–27.IV.2006 1 ♀.

REMARKS. New data on this Mediterranean species, previously recorded in Italy only in three localities in Liguria, Veneto and Trentino [Thaler et al., 2004].

Family Theridiidae

Enoplognatha afrodite Hippa & Oksala, 1983

MATERIAL EXAMINED. *Liguria*: Diano Castello (Imperia), Varcavello river, m 100, leg. Fabbri R., 2.VI.2004 1 ♂.

REMARKS. Despite its wide distribution in the Mediterranean area, *E. afrodite* was previously recorded only in Sardinia [Pesarini, 2000].

According to Bosman & De Keer [1985] the species could be found on bushes on river banks. Le Peru [2007] refers on the presence of *E. afrodite* in beech forests, Mediterranean shrublands and grasslands. Hippa & Oksala [1983] found it under stones in alpine area.

Neottiura suaveolens (Simon, 1879)

MATERIAL EXAMINED. *Toscana*: Marradi (Firenze), Monte Bruno m 1089, leg. Usvelli A., 26.V.2003 1 ♂.

REMARKS. Data on the Italian distribution of this European species are lacking. Previously known only for Northern Italy (Piemonte and Alto Adige) [Pesarini, 2000; Noflatscher, 1991 respectively], our data extend the current Italian distribution to Central Italy (Toscana).

The species is mainly found among low vegetation of dry and warm grasslands [Heimer & Nentwig, 1991].

Pholcomma gibbum (Westring, 185)

MATERIAL EXAMINED. *Basilicata*: Viggianello (Potenza), Torno m 650, in pitfall traps, leg. Buttarelli G. Ghilardi E. Pantini P. Valle M., VI.1990–VI.1991 1 ♂. *Emilia Romagna*: Bedonia (Parma), Passo di Montevacà, in pitfall traps, leg. Buttarelli G. Pantini P. Valle M., IX.1991–V.1992 1 ♀. *Liguria*: Andora (Savona), Marina di Andora, wood, m 60, in pitfall traps, leg. Fabbri R., 23.IV.2005–26.IV.2006 1 ♂. *Marche*: Castelsantangelo sul Nera (Macerata), Gualdo, in pitfall traps, leg. Pantini P. Valle M., I–VI.1992 2 ♂♂. Fiuminata (Macerata), on the road to Cornello pass, in pitfall traps, leg. Buttarelli G. Pantini P. Valle M., VI–XII.1991 1 ♂, I–VI.1992 3 ♂♂, 1 ♀. Visso (Macerata) Monte la Bandita, in pitfall traps, leg. Pantini P. Valle M., VI.1990–VI.1991 1 ♂. *Toscana*: Isola di Capraia (Livorno), Vado del Porto, m 10, in pitfall traps, leg. Pantini P. Valle M., XII.1992–IV.1993 1 ♂. *Umbria*: San Giustino (Perugia), Parnacciano, in pitfall traps, leg. Pantini P. Valle M., I–VI.1992 1 ♂, VI–IX.1992 1 ♂.

REMARKS. Widely distributed in Europe [van Helsindgen, 2007], data on the Italian distribution are lacking. Previously recorded in Valle d'Aosta, Piemonte, Alto Adige and Sardegna [Pesarini, 2000]. Our data confirm the presence of *P. gibbum* along the entire Italian peninsula.

According to Heimer & Nentwig [1991] the species can be found in mosses and under stones, preferably at the margin of woods up to 1500 meters. Our findings refer on its presence nearly at sea level.

Family Salticidae

Euophrys rufibarbis (Simon, 1868)

MATERIAL EXAMINED. *Liguria*: Diano Castello (Imperia), Varcavello river, m 120, leg. Fabbri R., 24.IX.2005 1 ♂, 1 ♀.

REMARKS. Mediterranean species previously recorded in Italy in Trentino Alto Adige, Liguria, Toscana, Sardegna, Puglia, Calabria and Sicilia [Hansen, 1985].

Le Peru [2007] refers about findings on river banks, estuaries, pine woods, dry grasslands and stony places.

Euophrys sulfurea (L. Koch, 1867)

MATERIAL EXAMINED. *Liguria*: Diano Castello (Imperia), Varcavello river, m 100, in pitfall traps, leg. Fabbri R., 2.VI–15.VII.2004 1 ♂, 5 ♀♀.

REMARKS. Mediterranean species. Italian data referring to this species are found in Hansen [1985]. Moreover, it has been recorded on Monte Pollino [Alicata & Cantarella, 1984] and in Puglia (Porto Cesareo) [Stoch, 2000–2005].

Found generally in dunes and Mediterranean shrublands [Le Peru, 2007].

Heliophanus apiatus Simon, 1868

MATERIAL EXAMINED. *Liguria*: Andora (Savona), Marina di Andora, m 40, leg. Fabbri R., 2.VI.2004 2 ♂♂, 23.IX.2005 1 ♂. Cervo (Imperia), Borgata Steri, m 60–80, leg. Fabbri R., 2.VI.2004 1 ♂, 1 ♀. Diano Castello (Imperia), Varcavello, m 100, leg. Fabbri R., 24.IX.2005 1 ♂. Imperia (Imperia), Prino, m 40, leg. Fabbri R., 27.IV.2006 1 ♂, 1 ♀, 3.VI.2006 1 ♀.

REMARKS. Known in France, Spain and Italy where it has been recorded in Southern regions [Hansen, 1985]. First record for Liguria.

Heliophanus melinus L. Koch, 1867

MATERIAL EXAMINED. *Liguria*: Diano Castello (Imperia), Varcavello, m 120, leg. Fabbri R., 27.IV.2006 2 ♂♂.

REMARKS. South European species, only known in a few localities in Southern Italy [Hansen, 1985]. Our data widen the Italian distribution northwards. New record for Liguria.

According to Metzner [1999], *H. melinus* is generally found on river banks under stones, on bushes and trees.

Family Zoropsidae

Zoropsis oretzeni Dahl, 1901

MATERIAL EXAMINED. *Lazio*: Osteria Nuova (Rieti), small cave in conglomerate, leg. Sbordonni V., 29.XII.2002 1 ♀. *Liguria*: Porto Venere (La Spezia), Palmaria Island m 170, leg. Ciocca S., 24.IV.2003 1 ♀.

REMARKS. Known from Greece, Croatia and Italy [van Helsindgen, 2007]. In Italy this species has been previously recorded in Liguria and Puglia [Thaler & Knoflach, 1998]. New record for Lazio.

Thaler & Knoflach [1998] found *Z. oretzeni* in several habitats like wood litter, mosses, shrublands, grasslands and under stones.

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