New species and new records of ant-eating spiders from Mediterranean Europe (Araneae: Zodariidae)

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New species and new records of ant-eating spiders from Mediterranean Europe (Araneae: Zodariidae)

Robert Bosmans, Paolo Pantini, Pamela Loverre & Rocco Addante

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Abstract. The following new *Zodarion* species are described from Italy: *Zodarion pantaleonii* Bosmans & Pantini **spec. nov.** and *Z. pseudonigriceps* Bosmans & Pantini **spec. nov**., both from Sardinia, *Z. montesacrense* Bosmans **spec. nov.** and *Z. valentii* Bosmans, Loverre & Addante **spec. nov**., both from Puglia, *Z. valentii* also occurs in Sicily. *Zodarion* sp., described from Greece in 2009, is the unknown female of *Zodarion zorba* Bosmans, 2009. *Zodarion gracilitibiale* Denis, 1934 is new for Italy. New records for 43 other European *Zodarion* species are presented.

Keywords: distribution, faunistics, Greece, Italy, new species, *Zodarion*

Zusammenfassung. Neue Arten und Neunachweise Ameisen fressender Spinnen aus dem mediterranen Europa (Araneae: Zodariidae). Folgende neue *Zodarion*-Arten werden aus Italien beschrieben: *Zodarion pantaleonii* Bosmans & Pantini **spec. nov.** und *Z. pseudonigriceps* Bosmans & Pantini **spec. nov.**, beide von Sardinien, *Z. montesacrense* Bosmans **spec. nov.** und *Z. valentii* Bosmans, Loverre & Addante **spec. nov.**, beide aus Apulien, *Z. valentii* kommt auch auf Sizilien vor. *Zodarion* sp., 2009 aus Griechenland beschrieben, ist das unbekannte Weibchen von *Zodarion zorba* Bosmans, 2009. *Zodarion gracilitibiale* Denis, 1934 ist neu für Italien. Neue Funde 43 weiterer europäischer *Zodarion*-Arten werden präsentiert.

The genus *Zodarion* Walckenaer, 1833 has a Palaearctic distribution and currently consists of 163 species (World Spider Catalog 2018). Especially the Mediterranean region appears to be rich in species of this genus. In the western part (Iberian Peninsula), 32 species have been reported (Bosmans 1994, Pekár et al. 2003, Pekár & Cardoso 2005). In the Central Mediterranean region (France, Italy) 19 species have been reported (Bosmans 1997) and in the Balkans 42 species (Bosmans 2009). In the present contribution, four new species are described including new distribution data for 43 other species.

Material and methods

Most of the material was collected by the first author during different collecting trips to the Mediterranean region. The material from Sardinia is the result of a project on faunal studies in Sardinia and was collected by M. Verdinelli and A. Sassu. The material from Greece originates from fieldwork included in a faunistic project (SPIDOnetGR, ARISTEIA II Programme, NSRF 2007–2013) lead by M. Chatzaki. A few colleagues sent material for identification, and these data are included as well.

Specimens were examined and illustrated using a Nikon SMZ1270 stereomicroscope. Further details were studied using an Olympus CH-2 stereoscopic microscope with a drawing tube. Photographs were taken with a Moticam 5MP camera attached to a Realux stereoscopic microscope. Somatic morphology measurements were taken using a scale reticule in the eyepiece of the stereo microscope and are in mm. Measurements of the legs are taken from the dorsal side. Taxonomic descriptions follow the format of Bosmans (1994, 1997, 2009).

Left structures of palps are depicted. Eye measurements were based on the lens at its widest point. Female genitalia were excised using sharpened needles. These where then transferred to clove oil for examination under the microscope. Male palps were detached and transferred to glycerol for examination under the microscope. Later, palps and epigynes were returned to 70 % ethanol.

Type material and important reference material is deposited in different museums as listed in the descriptions of the species, the other material is deposited in the collection of the collectors or in one of the collections listed below.

Collections

BMNH	British Museum of Natural History, London, UK
CAR-S	Collection Anthony Russell-Smith
CKT	Collection Konrad Thaler
CNR	Istituto per lo Studio degli Ecosistemi, Sassari, Italy
CRB	Collection Robert Bosmans
CSP	Collection Stano Pekár
DiSSPA	Department of Soil, Plant and Food Sciences, University of Bari "A. Moro", Italy
KBIN	Koninklijk Belgisch Instituut voor Natuurwetenschappen, Belgium (L. Baert)
MCSNB	Museo Civico di Scienze Naturali, Bergamo, Italy
NBCL	Naturalis Biodiversity Centre, Leiden, the Netherlands (P. van Heldingen)
NHMC	Natural History Museum of Crete, Greece
SMF	Senckenberg Museum, Frankfurt am Main, Germany (P. Jäger)

Abbreviations

Legs: Co, Fe, Pa, Ti, Mt, Ta = coxa, femur, patella, tibia, metatarsus, tarsus

Eyes and their position: AM = anterior median eyes; diameter taken as base for all other calculations, always = 1.0; the absolute diameter is given between brackets. AL, PM, PL = anterior lateral eyes, posterior median and posterior lateral eyes; diameters expressed as fraction of AM diameter. a, b, c, d = distance between eyes: a = AM-AM, b = AM-AL, c = PM-PM, d = PM-PL, all expressed as fraction of AM diameter. MOQ = median ocular quadrangle, AW = anterior width, PW = posterior width, L = length

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Results

Description of new species

***Zodarion montesacrense* Bosmans spec. nov.** (Fig. 1a–e)

Type material. Holotype ♂ from Italy, Puglia, Gargano, Mattinata, Monte Sacro (N41°45' E16°02'), 24.IV.2011, P. J. van Helsdingen leg.; deposited in NBCL.

Etymology. The name of the species is derived from the type locality, adjective.

Diagnosis. This small *Zodarion* species is a member of the *pusio* group as defined by Bosmans (1997) and is closely related to *Zodarion emarginatum* (Simon, 1873). The species is easily distinguished by the terminally bifid tibial apophysis of the male palp.

Description. Measurements: Male: Total length 1.54; prosoma 0.82 long 0.62 wide.

Colour (Fig. 1a): The holotype is recently moulted and the natural colours are not fully developed yet. Prosoma pale yellowish, margin, foveal spot and anastomosing striae darkened and eye region black; opisthosoma dark sepia, venter and oval spot above spinnerets whitish.

Eyes: AM = 1 (0.69); AL = PL = 0.47; PM = 0.5; a = 0.38; b = d = 0.19; c = 1; d = 0.3; MOQ: AW = 0.91PW; L = 0.87 PW.

Opisthosoma: with a row of 17 spines before the spinnerets, not much thicker than the normal hairs.

Palp (Fig. 1b–e): Tibial apophysis longer than the tibia's diameter with short pointed dorsal apophysis a longer, slightly curved, terminally incised median apophysis and a shorter rounded ventral apophysis; median apophysis reversed U-shaped, distal branch pointed and longer than basal branch; embolus gradually narrowing, with tip pointed, in antero-ventral view with distinct concavity.

Female: Unknown.

Distribution. Only known from the type locality in Puglia (Italy). The species was mentioned as *Zodarion* sp. in IJland et al. (2012).

***Zodarion pantaleonii* Bosmans & Pantini spec. nov.**

(Fig. 2a–n)

Type material. Holotype ♂, 4 ♂♂, 6 ♀♀ paratypes from ITALY, Sardinia, Medio Campidano, Guspini, Montevecchio, Piccalinna (N39°33'24" E8°34'06"), Mediterranean maquis, 5 ♂♂ 18.V.–3.VI.2009, 2 ♀♀ 3.–15.VI.2009, 4 ♀♀ 15.–30.VI.2009, pitfall traps, A. Sassu and M. Verdinelli leg. Deposition: holotype ♂, 2 paratypes ♂♂, 4 paratypes ♀♀ in MCSNB, 1 ♂, 1 ♀ paratypes in CNR, 1 ♂, 1 ♀ paratypes in CRB.

Other material examined. ITALY: Sardinia: Medio Campidano, Arbus, Ingurtosu, Narcauli 200 m a.s.l. (N39°30'53"E8°29'33"), garrigue, 1 ♂ 5.–19.V.2009, pitfall traps, A. Sassu and M. Verdinelli leg. (MCSNB); Guspini, Montevecchio, Piccalinna (N39°33'24", E8°34'06") Mediterranean maquis, 1 ♀ 18.V.–3.VI.2009, 7 ♂♂ 3.–15.VI.2009, 2 ♀♀ 30.VI.–13.VII.2009 (MCSNB).

Etymology. The species is dedicated to Roberto Pantaleoni, Director of CNR, Istituto per lo Studio degli Ecosistemi Sassari which supports and promotes faunistic studies in Sardinia.

Diagnosis. *Zodarion pantaleonii* **spec. nov.** belongs to the *italicum* group of *Zodarion*. Males differ from other species in this group by the distal branch of the median apophysis being twice as long as the basal branch, equal to slightly longer in all other species (Fig. 2i); females by the trapezoid median plate in the epigyne (Fig. 2j–k).

Description. Measurements: Male: Total length 2.0–2.4; prosoma 1.02–1.21 long, 0.71–0.90 wide. Female: Total length 2.7–2.8; prosoma 1.22–1.24 long, 0.84–0.86 wide.

Colour (Fig. 2a–c): Prosoma yellowish brown with darkened eye region and greyish brown anastomosing striae; patellae pale yellowish, femora yellowish orange with pale base, other segments orange brown; opisthosoma sepia, venter for a small or greater part whitish.

Eyes: AM = 1 (0.1); AL = 0.5; PM = 0.5; PL = 0.6; a = 0.5; b = 0.2; c = 1.3; d = 0.3; MOQ: AW = 1.1PW; L = 0.9 PW.

Opisthosoma: With a of row of 10–22 bristles before the spinnerets, thicker and only slightly longer than the scattered hairs on the rest of the venter; in several specimens many bristles have been lost and in the two females only one and three bristles are present.

Palp (Fig. 2d–g): Tibial apophysis elongated, slightly curved, longer than the tibia's diameter, narrow from its base, with small denticule at prolateral margin, terminally strongly pointed; median apophysis with distal branch longer than basal branch, strongly pointed terminally; embolus abruptly narrowing in distal third, terminally strongly pointed.

Epigyne (Fig. 2j–k): With relatively large trapezoid median plate, clear white, contrasting with the lateral and anterior borders of the epigyne.

Vulva (Fig. 2l–n): Spermathecae oval, separated by twice their diameter.

Distribution. Probably an endemic species of Sardinia (Italy).

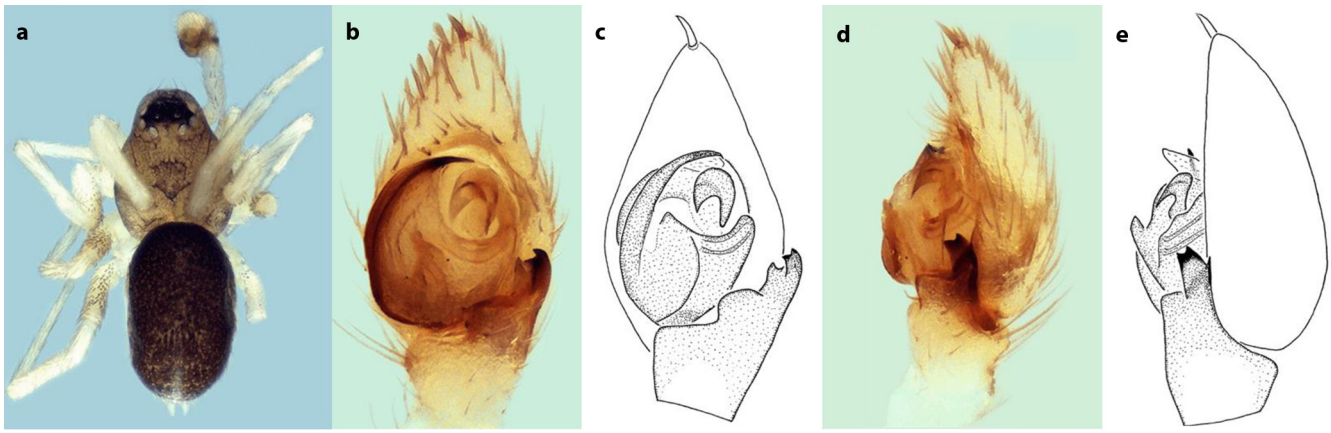

Fig. 1a–e: *Zodarion montesacrense* Bosmans **spec. nov.** male holotype: **a.** Male, dorsal view; **b, c.** Male palp, ventral view; **d, e.** Idem, retrolateral view

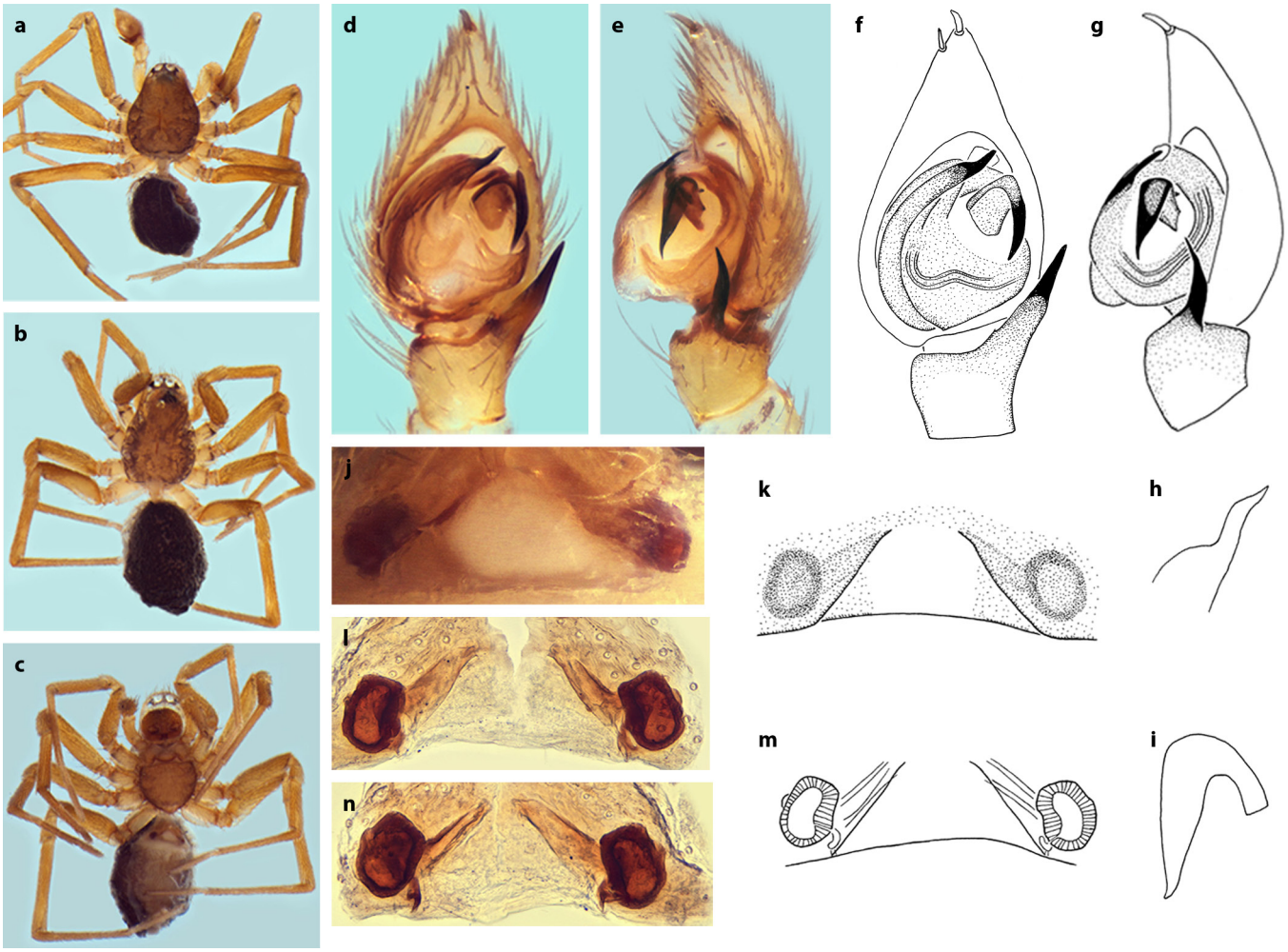

Fig. 2a–n: *Zodarion pantaleonii* Bosmans & Pantini **spec. nov.** male holotype, female paratype: **a.** Male, dorsal view; **b.** Female, dorsal view; **c.** Female, ventral view; **d, f.** Male palp ventral view; **e, g.** Idem retrolateral view; h. Tip of embolus, antero-ventral view; **i.** Median apophysis, ventral view (in unexpanded palp); **j, k.** Epigyne ventral view; **l.** Vulva, ventral view; **m, n.** Idem, dorsal view

***Zodarion pseudonigriceps* Bosmans & Pantini spec. nov.**
(Fig. 3a–m)

Type material. Holotype ♂, 11 paratype ♂♂, 2 paratype ♀♀ from ITALY, Sardinia, Medio Campidano, Guspini, Montevecchio, Piccalinna 260 m a.s.l. (N39°33'24" E8°34'06"), Mediterranean maquis, 5.–18.V.2009, pitfall traps, A. Sassu and M. Verdinelli leg. Deposition: ♂ holotype, 10 ♂♂, 1 ♀ paratype in MCSNB, 1 ♂, 1 ♀ paratype in CRB, 1 ♂ paratype in CNR.

Other material examined. ITALY: Sardinia, Medio Campidano, Arbus, Ingurtosu, Narcauli 120 m a.s.l. (N39°30'53"E8°29'33"), Mediterranean maquis, 1 ♀ 8.–22. IX.2009, pitfall traps, A. Sassu and M. Verdinelli leg. (MCSNB).

Etymology. The specific name refers to the close relationship to *Zodarion nigriceps* (Simon, 1873).

Diagnosis. *Zodarion pseudonigriceps* **spec. nov.** belongs to the *italicum* group. By the needle-like tibial apophysis (Fig. 3 f, g) the male is very close to *Z. nigriceps*, also occurring in Sardinia but this species has a bicoloured contrasting prosoma. Females are distinguished by the simple trapezoid plate in the epigyne (Fig. 3 j, k).

Description. Measurements: Male (n = 4): Total length 2.5–2.8; prosoma 1.02–1.45 long, 0.72–1.02 wide. Female (n = 3): Total length 3.0–3.2; prosoma 1.38–1.64 long, 1.02–1.17 wide.

Colour (Fig. 3a-c): Prosoma yellowish brown, clypeus and two stripes converging towards the fovea grey; patellae pale yellowish, femora yellowish orange with pale base, other segments orange brown; opisthosoma dark sepia with large, elongate postero-dorsal whitish spot, venter whitish.

Eyes large: AM = 1 (0.1); AL = 0.5; PM = 0.6; PL = 0.6; a = 0.5; b = d = 0.4; c = 1.8; MOQ: AW = 1.1 PW; L = 1.1 PW.

Opisthosoma with a row of 14–15 bristles before spinnerets, more than twice as wide as normal hairs.

Palp (Fig. 3d-i): All palps are expanded, so drawings show the bulb and the median apophysis in an abnormal position. Tibial apophysis needle-like as long as the tibia's diameter with subterminal bend forming an angle of 30° with base of the tibial apophyis; median apophysis relatively small, basal branch slightly shorter than the pointed distal branch; embolus with relatively broad base gradually narrowing with blunt tip.

Epigyne (Fig. 3 j–k): With trapezoid median plate.

Vulva (Fig. 3l–m): Spermathecae small and rounded, separated by more than 5 times their diameter.

Distribution. Probably an endemic species of Sardinia (Italy).

***Zodarion valentii* Bosmans, Loverre & Addante spec. nov.**
(Figs 4a–f, 5a–e)

Enyo algirica; Simon 1870: 99 (misidentification of material from Sicily).

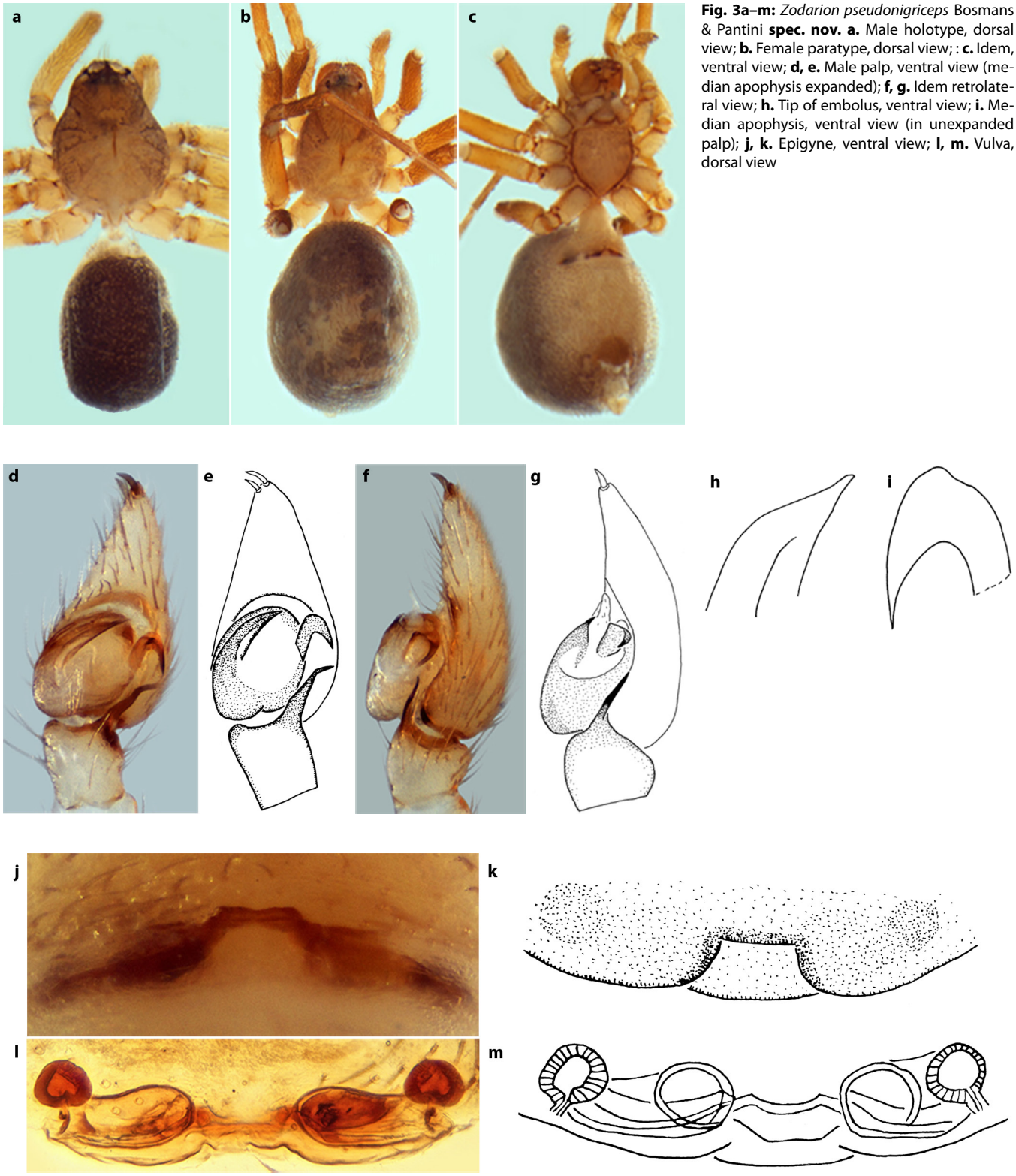

Fig. 3a–m: *Zodarion pseudonigriceps* Bosmans & Pantini **spec. nov. a.** Male holotype, dorsal view; **b.** Female paratype, dorsal view; : **c.** Idem, ventral view; **d, e.** Male palp, ventral view (median apophysis expanded); **f, g.** Idem retrolateral view; **h.** Tip of embolus, ventral view; **i.** Median apophysis, ventral view (in unexpanded palp); **j, k.** Epigyne, ventral view; **l, m.** Vulva, dorsal view

Type material. Holotype ♂, 3 paratypes ♂♂, 3 paratypes ♀♀ from ITALY, Puglia, Bari, Valenzano N41°01'19" E16°53'15"), 122 m a.s.l., pitfalls in abandoned olive grove, 24.VIII.2010, P. Loverre leg. Deposition: MCSNB.

Comparative material examined. *Zodarion algiricum* (Lucas, 1846): ALGERIA: 3 ♂♂ (MNHN AR 1540). ALGERIA: Alger: El Harrach, jardin de l'Institut national d'Agronomie, 25 m, 24 ♂♂, 5 ♀♀, 25.I.–22.VI.1983, and 175 males 61 females, 16.V.1985–1.VI.1986, pitfalls in park, R. Bosmans leg. (CRB).

Other material examined. 3 ♂♂, misidentified as *Zodarion algiricum*, together with 3 ♂♂ of *Z. algiricum* (MNHN AR 1540); probably from Sicily (ITALY). ITALY: Puglia: Bari district, Valenzano, 124 m a.s.l. (N41°01'23" E16°54'19"), olive grove, 1 ♂, 2.VII.2003, R. Addante leg.; 3 ♀♀, 5.IX.2003, R. Addante leg.; 1 ♀, 5.IX.2003, R. Addante leg. (MCSNB); 1 ♂, 5.IX.2003, R. Addante leg. (MCSNB); 1 ♂, 7.VII.2010, P. Loverre leg.; 18 ♀♀ 10 ♂♂, 22.VII.2010, P. Loverre leg.; 2 ♂♂, 4.VIII.2010, P. Loverre leg.; 62 ♀♀ 42 ♂♂, 24.VIII.2010, P. Loverre leg.; 2 ♀♀, 7.IX.2010, P. Loverre leg.; 1 ♂, 18.I.2011,

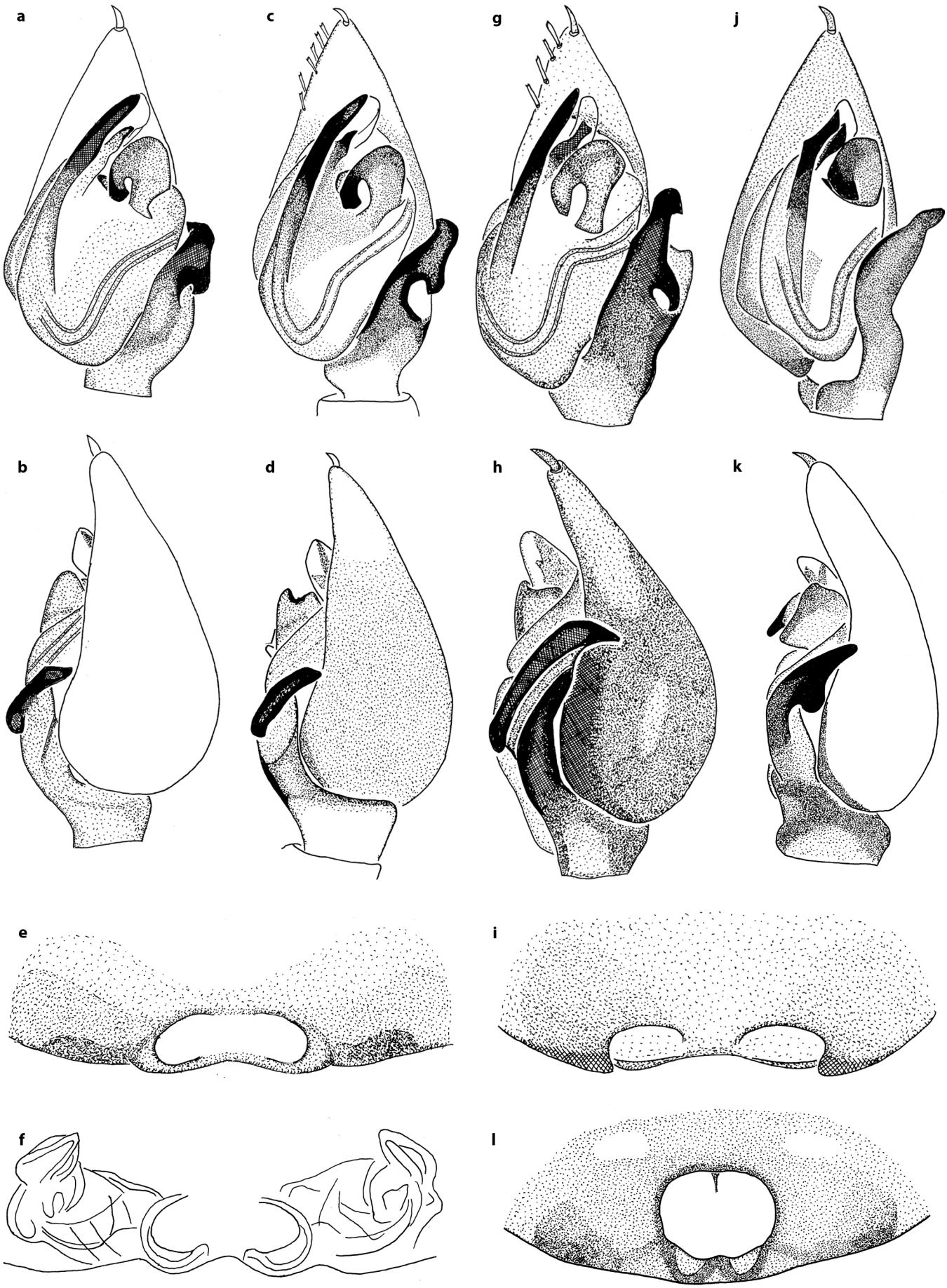

Fig. 4a–l: a–f. *Zodarion valentii* Bosmans, Loverre & Addante **spec. nov. a.** Male palp of holotype, ventral view; **b.** Idem, retrolateral view; **c.** Male palp, ventral view (Col. Simon, probably from Sicily); **d.** Idem, retrolateral view; **e.** Epigyne of paratype, ventral view; **f.** Idem, vulva. **g–i.** *Zodarion affine* (Simon, 1870) (Spain); **g.** Male palp, ventral view; **h.** Idem, retrolateral view; **i.** Epigyne, ventral view. **j–l.** *Zodarion algiricum* (Lucas, 1846) (Algeria); **j.** Male palp, ventral view; **k.** Idem, retrolateral view; **l.** Epigyne, ventral view

P. Loverre leg.; 2 ♂♂, 17.II.2011, P. Loverre leg.; 8 ♀♀ 14 ♂♂, 24.III.2011, P. Loverre leg.; 4 ♀♀, 12 ♂♂, 7.IV.2011, P. Loverre leg.; 3 ♀♀, 2 ♂♂, 7.IV.2011, P. Loverre leg. (CSP); 7 ♀♀, 6 ♂♂, 20.IV.2011, P. Loverre leg.; 2 ♀♀, 1 ♂, 24.IV.2011, P. Loverre leg.; 7 ♀♀, 9 ♂♂, 11.V.2011, P. Loverre leg.; 5 ♀♀, 3 ♂♂, 27.V.2011, P. Loverre leg.; 6 ♀♀, 2 ♂♂, 10.VI.2011, P. Loverre leg. Bari district, Conversano, Gravina di Monsignore, 117 m a.s.l. (N41°00'31" E17°07'12"), Mediterranean scrub, 1 ♀, 22.II.2011, R. Addante leg.; 1 ♂, 5.V.2011, R. Addante leg.; 5 ♀♀, 2 ♂♂, 30.V.2011, R. Addante leg.; 2 ♂♂, 1.VIII.2011, R. Addante leg.; 3 ♀♀, 7.IX.2011, R. Addante leg. Bari district, Conversano, Sassano Lake, 194 m a.s.l. (N40°58'07" E17°05'50"), 1 ♀, 5.V.2011, R. Addante leg.; 1 ♂, 30.V.2011, R. Addante leg.; 1 ♀, 4.VII.2011, R. Addante leg. All the material was collected by pitfall traps and deposited in DiSSPA.

Comments. Studying the Simon collection in the MNHN, the first author examined a tube labelled '*Zodarion algiricum* Alger AR1540'. It contained material of two closely related species. The first species (three males) is identical to the abundant material of *Z. algiricum* collected by the first author near Alger (see: Comparative material examined). In the same tube, 3 other males are identical to the material collected by P. Loverre in Puglia. It is well known that Simon used to mix material from different localities in the same tube, so it can be assumed that these males are from Sicily, mentioned as a locality of *Z. algiricum* by Simon (1870). Other localities mentioned for *Z. algiricum* (Morocco, South Spain) must also be doubted.

The male palp and epigyne of *Z. algiricum* are quite different from the palp and epigyne of *Z. valentii*, as can be seen in Fig. 4j–l. A detailed redescription of *Z. algiricum* is in preparation. All existing figures of this species are erroneous.

Etymology. The specific name derives from the Latin name *Valentius*, referring to the village of Valenzano, in which the type specimens were collected.

Diagnosis. *Zodarion valentii* **spec. nov.** is closely related to *Z. affine* (Simon, 1870) from the south of Spain. Males differ by the longer tibial apophysis and the longer, oblique lateral groove in *Z. affine* (Fig. 4c–d versus 4g–h). Moreover, the length of the whole tibia, including tibial apophysis, is only half the length of cymbium, whereas in *Z. affine* it reaches about three quarters. Females differ by the sausage-shaped postero-median depression in the epigyne of *Z. valentii* (Fig. 4e), nearly separated into two depressions in *Z. affine* (Fig. 4i). The species is quite different from *Z. algiricum* (Fig. 4j–l).

Description. Measurements (n = 6): Male: Total length 2.2–3.0; prosoma 1.02–1.30 long 0.95–1.12 wide.

Colour: Prosoma yellowish clypeus and two oblique stripes converging towards the fovea grey; chelicerae sternum and legs pale yellowish; opisthosoma dorsally dark grey posterdorsally with three oval spots and one terminal whitish spot; venter also whitish.

Eyes: AM = 1 (0.1); AL = 0.9; PM = 0.45; PL = 0.8; a = 0.8; b = 0.55; c = 235; d = 0.7; MOQ: AW = 0.80 PW; L = 0.95 PW.

Palp (Figs 4a–d, 5b–d): Tibia twice as long as wide with large apophysis separated from the basal part by an oblique groove; distal part with anterior and posterior knob in ventral view recurved in antero-lateral direction; median apophysis reversed U-shaped distal part more slender than basal part; embolus straight terminally rounded at retrolateral side accompanied by a shorter tooth.

Epigyne (Figs 4e, 5e): With large, sausage-shaped postero-median depression.

Vulva (Fig. 4f): Median depression with two elongate pockets at postero-median corners; spermathecae separated by about 3 times their diameter; copulation ducts complicated.

Phenology. Adults were collected all through the year, including winter. Their number peaked in July.

Distribution. Italy (Puglia and Sicily).

New records of European *Zodarion* species

Zodarion algarvense Bosmans, 1994

Zodarion algarvense Bosmans, 1994: 120, figs 10–12, 87–88 (descr. ♂, ♀).

Material examined. PORTUGAL: Setúbal: Alcochete NW, 37 ♂♂, 4 ♀♀, pitfalls in salt marsh, 14.–22.IV.2013, R. Bosmans leg. (CB).

Distribution. Until now only known from one locality in the Algarve in Portugal (Bosmans 1994), and here cited much more to the north from Setúbal.

Zodarion arachnaio Bosmans, 2009

Zodarion arachnaio Bosmans, 2009: 266, figs 128–129, 158–159 (descr. ♂, ♀).

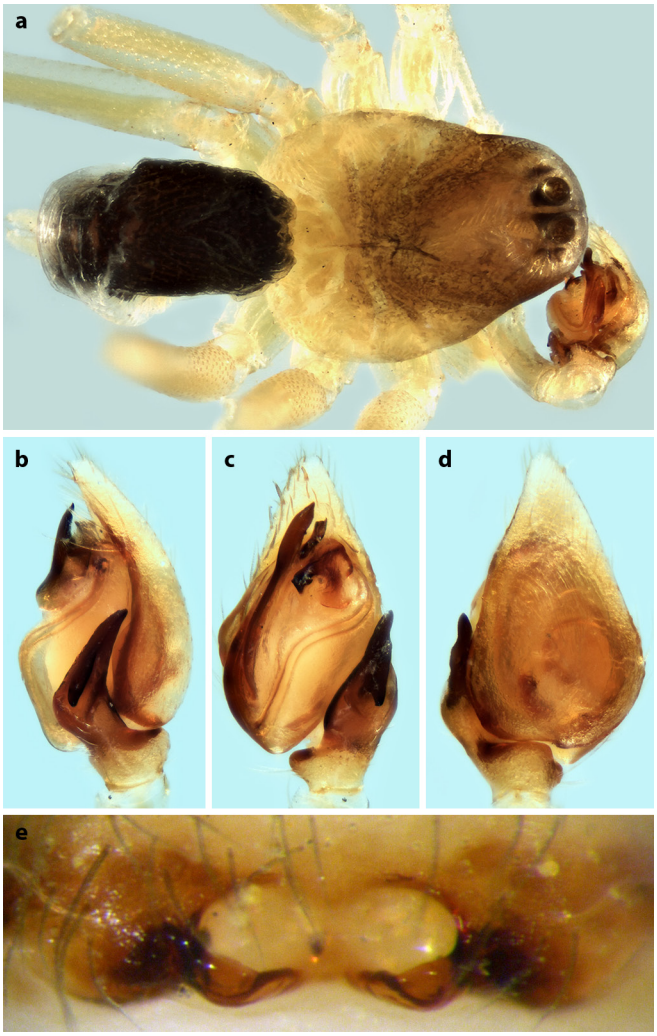

Fig. 5a–e: *Zodarion valentii* Bosmans, Loverre & Addante **spec. nov. a.** Male holotype, dorsal view; **b.** Male palp, lateral view; **c.** Idem, ventral view; **d.** Idem, dorsal view; **e.** Epigyne, ventral view

Material examined. GREECE: Peloponnisos: Argolis: Achladokambos (N37°32'44" E22°31'10"), 1000 m, 1 ♀, under stones, 26.IV.2016 (CRB).
Distribution. Until now, only known from Argolida in the Peloponnisos. A second locality in the same region is presented.

***Zodarion aurora* Weiss, 1982** (Fig. 6a–b)
Zodarion aurorae Weiss, 1982: 77, figs 1–8, figs 10–12 (descr. ♂, ♀); Bosmans 2009: 229, figs 35–36, 62–63 (descr. ♂, ♀).
Material examined. ROMANIA: Tulcea: Letea, 1 ♂, 28.V.1998, P. J. van Helsdingen leg. (NBCL).
Description of male palp. The type material of this species was not available, so it could not be redescribed by Bosmans (2009). Furthermore, the male palp figured by Weiss (2002) was expanded, which does not facilitate a correct identification. A recently collected male allows us to present new figures of the male palp. The tibial apophysis is elongated, more than twice as long as wide, gradually narrowing with median bend; tegulum bulging, with rounded boss; median apophysis with wide base, distally with terminal and prolateral tooth (Fig. 6a).
Distribution. Until now the species was only known from Galati in the Moldovia province in Romania. It is here also cited in Letea in the Tulcea province in the Danube delta.

***Zodarion beroni* Komnenov & Chatzaki, 2016**
Zodarion beroni Komnenov & Chatzaki, in Komnenov et al., 2016: 41, figs 97–111 (descr. ♂, ♀).
Material examined. GREECE: Makedonia**:** Chalkidiki, Sithonia, Elia Nikitis, 1 ♂, pitfalls in *Pinus* forest with maquis, 12.VI.–6.VIII.2014, Kaltsas & Mettouris leg. (NMHC). Thessalia: Larissa, Delta Pineio, 1 ♂, pitfalls in *Platanus* forest, 18.VI.–9.VIII.2014, Kaltsas & Mettouris leg. (CRB).
Distribution. Until now, this species was only known from the Dadia National Park (Komnenov et al. 2016). A second and a third locality in the north of Greece are added here.

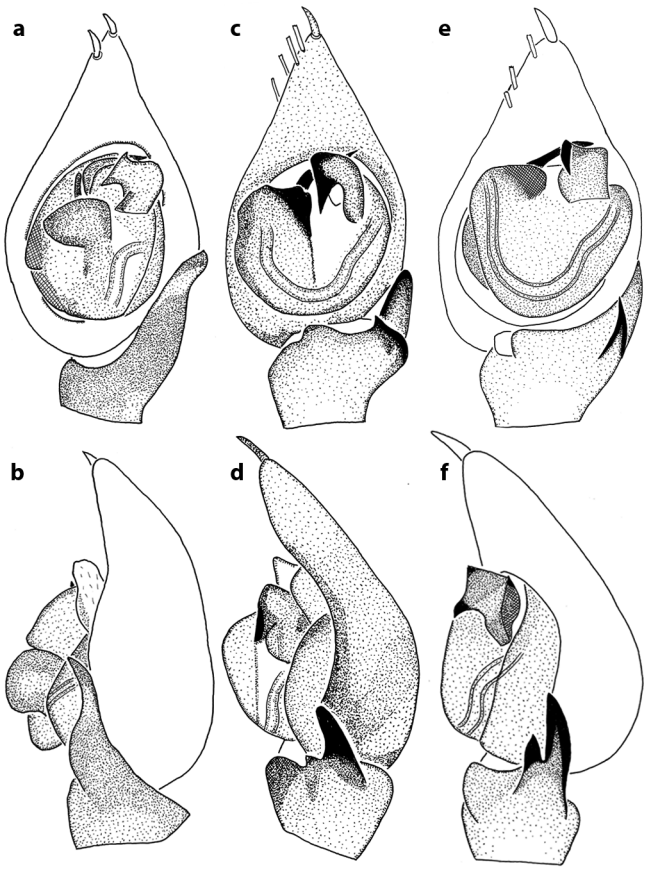

Fig. 6a–f: a–b: *Zodarion aurorae* Weiss, 1982. **a.** Male palp, ventral view; **b.** Idem, retrolateral view. **c–f:** *Z. isabellinum* (Simon, 1870). **c.** Male palp, ventral view; **d.** Idem, retrolateral view; **e.** Male palp (abnormal form), ventral view; **f.** Idem, retrolateral view

***Zodarion beticum* Denis, 1957**
Zodarion beticum Denis, 1957: 291, figs 15–16 (descr. ♂); Bosmans 1994: 129, figs 45–47, 107–108 (descr. ♂, ♀).
Material examined. SPAIN: Almería: Cabo de Gata, stones and litter in dunes, 2 ♀, 5.IV.1996; ditto, 4 ♂♂, 1 ♀, pitfalls in dunes, 15.IV.1999; Carboneras, 10m, stones in maquis near the beach, 2 ♀♀, 7.IV.1997, R. Bosmans leg. (CRB); Ruescas, 2 ♂♂, 9.IV.1998, 3 ♂♂, 1 ♀, 15.IV.1999, pitfalls in dunes, R. Bosmans leg. (CRB). Granada: Bubión, 1 ♀, 13.V.2001, K. De Smet leg. (CRB). Cabo de Gata, Ruescas, 2 ♂♂, 9.IV.1998, R. Bosmans leg. (CRB);
Distribution. Only known from Spain from Almería and Granada, and recollected in these two provinces.

***Zodarion caporiaccoi* Roewer, 1942**
Zodarium denisi Caporiacco, 1940: 12, fig. 2 (descr. ♂, preoccupied name).
Zodarion caporiaccoi Roewer, 1942: 366 (replacement name); Bosmans 1997: 281, figs 49–52 109–110 (descr. ♂, ♀).
Material examined. ITALY: Abruzzo: Teramo: Roseto degli Abruzzi, Parco della Tenuta Mazzarosa 27♂♂, 11 ♀♀, 11.VI.–4.VII.2007, pitfalls, R. Fabbri leg. (MCSNB); Roseto degli Abruzzi, loc. Mazzarosa, torrente Borsacchio, 1 ♂, 1 ♀, 11.VI.–14.VII.2007, 2 ♂♂, 3 ♀♀, 4.VII.–30.VIII.2007, pitfalls, R. Fabbri leg. (MCSNB). Toscana: Firenze: Near Londa, 1 ♀, river meadow, 11.IV.2006, A. Schönhofer leg. (SMF).
Distribution. Known only from Italy, from the provinces Abruzzo and Veneto (Bosmans 1997). The species is recorded for the first time in Toscana.

***Zodarion costablancae* Bosmans, 1994**
Zodarion costablancae Bosmans, 1994: 135, figs 74–76, 127–128 (descr. ♂, ♀).
Material examined. SPAIN: Alicante: Sierra de Aitana, Partagad, 1 ♂, M. Perez leg. (CRB). Tarragona: L'Ampolla, Cap Roig, stones in olive groove, 1 ♀, 6.VIII.2000, R. Bosmans leg. (CRB). Valencia: Bellús N., 1 ♂, 2 ♀♀, around water pools in dry river bed, 7.IV.1999, R. Bosmans leg. (CRB); Devesa del Saler, 1 ♂, 1 ♀, 3.VI.2004, S. Montagud leg. (CRB).
Distribution. Until now, the species was only known from the Costa Brava in Alicante, Spain. The distribution area of *Zodarion costablancae* is here extended to the north by records in the provinces Tarragona and Valencia. It was erroneously cited from Coimbra in Portugal (Crespo 2008); these specimens appeared be a new species, *Zodarion costapratae* Pekár, 2011 (Pekár et al. 2011).

***Zodarion costapratae* Pekár, 2011**
Zodarion costapratae Pekár, 2011, in Pekár et al., 2011: 24, figs 7–10 (descr. ♂, ♀).
Material examined. PORTUGAL: Vila Real: Ponte de Olo S., 1 ♂, litter at border of *Quercus* forest along Rio Olo, 10.V.2017, R. Bosmans leg. (CRB).

Distribution. Previously only known from the Coimbra district, here first cited from mountainous areas in the north east of Portugal.

***Zodarion diatretum* Denis, 1935**
Zodarion diatretum Denis, 1935a: 66, figs 11–12, 16 (descr. ♂, non ♀ = *Z. pseudoelegans*).
Zodarion diatretum; Bosmans 1997: 127, figs 36–38, 101–102, 137 (descr. ♂, ♀).
Material examined. SPAIN: Murcia: Alhama de Murcia W., Sierra de la Espuña, 3 ♂♂, 1 subadult ♀, at night in open *Pinus* forest, 4.IV.2010, S. Huber & A. Schönhofer leg. (SMF); between Mazarrón and La Pinilla; 3 ♂♂, 3 ♀♀, 30.X.1999, J. Van Keer leg. (CRB).
Distribution. This species occurs in Almería and Murcia and there are some doubtful citations from Alicante and Tarragona (Bosmans 1997). Two new localities in Murcia are added here.

***Zodarion elegans* (Simon, 1873)**
Enyo elegans Simon, 1873: 56 (descr. ♂♀).
Zodarion elegans; Bosmans 1997: 267, figs 1–3, 77–78 (descr. ♂, ♀).
Material examined. ITALY: Abruzzo: Teramo: Roseto degli Abruzzi, Parco della Tenuta Mazzarosa 11 ♂♂, 25 ♀♀, 4.VII.–30.VII.2007, pitfalls, R. Fabbri leg. (MCSNB); Puglia: Foggia: Mattinata Lido, 1 ♂, stones in camping site, 9.VI.2002, R. Bosmans leg. (CRB). Toscana: Livorno: Isola di Pianosa, 1 ♀, 21.IX.1955 (SMF), 3 ♂♂, 7 ♀♀, 13.VI.1966, P. Tongiorgi leg. (MCSNB). Sardinia: Nuoro: Siniscola, Santa Lucia, 1 ♀, pitfalls in Pinus forest, 19.–26.IV.2003, F. Magnati, P. Pantini leg. (MCSNB); Oristano: Cabras W., Punta is Arutas, 1 ♀, in Quercus litter, 14.IV.2014 (CRB). SPAIN: Balearic Islands: Menorca: Es Castell, Cala San Esteban, 2 ♂♂, 1 subadult ♂, 30.X.1970, D. J. Clarck leg. (BMNH).
Distribution. NE Spain, SE France, Corsica, Italy, Croatia and Tunisia. Firstly recorded here on the Balearic Islands from Menorca.

***Zodarion emarginatum* (Simon, 1873)**
Enyo emarginata Simon, 1873: 61 (descr. ♂, ♀).
Zodarion emarginatum; Bosmans 1997: 276, figs 20–21 (descr. ♂); Bosmans 2009: 221 (descr. ♂).
Material examined. GREECE: Peloponnisos: Achaia: Kalogria, 2 ♂♂, pitfalls in closed dunes, III.2006, Anastasiou leg. (NMHC); Oros Panachaico, 3 ♂♂, 7.VI.–13.VI.2006, Anastasiou leg. (CRB, NHMC). ITALY: Sardinia: Olbia-Tempio: Marazzino, 1 ♂, pitfalls in cherry orchard, 23.V.2007, ISE leg. (MCSNB).
Distribution. The south of France, Corsica, Malta and Greece. This is the second record in Sardinia and Italy.

***Zodarion evvoia* Bosmans, 2009**
Zodarion evvoia Bosmans 2009: 267, figs 130–131 (descr. ♂).
Material examined. GREECE: Thessalia: Magnisia: Portaria, 2 ♂♂, pitfalls in phrygana, 24.IV.–28.VI.2014, Kaltzas leg. (CRB).
Distribution. This species was only known from the island Evvoia and is cited here also in Thessalia. It is the second locality for the species.
Distribution. This species is known from Continental Greece and the south of Bulgaria.

***Zodarion frenatum* Simon, 1884**
Zodarium frenatum Simon 1884: 336 (descr. ♂).
Zodarion frenatum; Bosmans 1997: 271, figs 12–13, 85–86 (descr. ♂, ♀); Bosmans 2009: 286, figs 192–193, 198–199 (descr. ♂, ♀).
Material examined. GREECE: Attiki: Methana, Kaimeni Chora NE (N37°36'38" E23°20'23"), 350 m, 1 ♀, grassland and hedges, 22.IV.2016 (CRB). Makedonia: Kozani: 6.5 km S. Siatista, 1 ♀, pitfalls, 2.VII.2014, Anastasiou leg. (NHMC). Peloponnisos: Arkadia: Kriovrissi SE, Profitis Ilias chapel (N36°35'51" E22°58'52"), 480 m 1 ♀, stones in small Quercus forest, 24.IV.2016 (CRB). Sterea Elada: Aitoloakarnania: Stylia, 2 ♀♀, 28.III.2006, A. Schönhofer leg. (SMF). Thraki: Evros: Kelempek Mts, near Neda, 1 ♀, 7.V.1968, O. van Helsersen leg. (SMF). ITALY: Campania: Salerno: Conturisi Terme, fiume Sele, 100 m, 1 ♂, 2.VIII.2000, M. Valle leg. (MCSNB).
Distribution. Italy, Bulgaria, Greece, Albania, Macedonia and Turkey. A common species all over Greece.

***Zodarion germanicum* (C. L. Koch, 1837)**
Lucia germanica C. L. Koch, 1837: 20 (descr. ♂, ♀).
Zodarion germanicum; Bosmans, 2009: 273, figs 16–17, 87–88, map 2.
Material examined. HUNGARY: Tolna: Simontornya, 1 ♂, C. Roewer leg. (SMF).
Distribution. Central Europe.

***Zodarion gracilitibiale* Denis, 1933**
Zodarion gracilitibiale Denis, 1933: 270, figs 107 (descr. ♂); Bosmans 1997: 270, figs 4–5 (descr. ♂); Dierkens 2011: 86, figs 1–2 (descr. ♀).
Material examined. ITALY: Puglia: Bari, Valenzano, 115 m, 4 ♂♂, 4 ♀♀, pitfall traps in olive grove, 24.VIII.2010, R. Addante leg. (MCSNB, CRB).
Distribution. The male was described from the Var Department in France (Denis 1933), and redescribed by Bosmans (1997). The female was first discovered by Dierkens (2011) from the nearby Bouches du Rhone department. It is here cited for the first time in Puglia, Italy.

***Zodarion graecum* (C. L. Koch, 1843)**
Enyo graeca C. L. Koch, 1843: 811 (descr. ♀).
Zodarion graecum; Bosmans, 2009: 261, figs 124–125, 154–155 (descr. ♂, ♀).
Material examined. CROATIA: Splitko-Dalmatinska: Blokovo, Best, 1 ♀, stones in grassland, 5.IX.2009, A. Schönhofer leg. (SMF). GREECE: Attiki: Oros Parnitha, 20 ♂♂, 14 ♀♀, pitfalls, 3.V.–6.IX.2005, Anastasiou leg. (NHMC). Makedonia: Grevena: Anoixi, 10 ♂♂, 1 ♀, pitfalls, 17.VI.–8.VIII.2014, Anastasiou leg. (NHMC). Kozani: Siatista, 6.5 km SE, 1 ♀, pitfalls, 29.VI.–4.VII.2014, Anastasiou leg. (NHMC). Thessaloniki: Lake Koronia, 2 ♀♀, pitfalls, 28.VI.–26.VII.2012, Navarrete leg. (NHMC). Peloponnisos: Achaia: Kalogria, 14 ♂♂, 12 ♀♀, pitfalls, V.–VIII.2006, Anastasiou leg. (NHMC); Oros Erimanthos, 1600m, 2 ♂♂, 2 ♀♀, pitfalls, without date, Anastasiou leg. (NHMC); Oros Panachaiko, 3 ♂♂, 1 ♀, pitfalls, 7.VI.–4.VIII.2008, Anastasiou leg. (NHMC). Argolis: Epidavros ruins, 330 m,1 ♂, stones in *Pinus* forest 21.IV.2016 (CRB). Arkadia: Kriovrissi, SE Profitis Ilias chapel, 480 m, 1 ♂ stones in small *Quercus* forest, 24.IV.2016 (CRB); Me-

galopoli, 1 ♀, pitfalls, 28.VI.–12.VII.2009, Anastasiou leg. (NHMC); Oros Chelmos, 5 ♂♂, pitfalls, 7.–20.VI.2008, Anastasiou leg. (NHMC); Oros Mainalo, 1600m, 2 ♂♂, 1 ♀, pitfalls, 3.VII.–4.VIII.1996, Anastasiou leg. (NHMC). Ileia: Lapithas, 1 ♀, pitfalls, 1.–15.VI.2009, Anastasiou leg. (NHMC). Lakonia: Oros Taigetos, 6 ♀♀, pitfalls, 6.VII.1997, Anastasiou leg. (NHMC). Sterea Elada: Aitolo-Akarnania: Acheloos, 1 ♀, pitfalls, 9.IV.–5.VI.2014, Anastasiou leg. (NHMC). Thessalia: Magnisia: Agios Onoufrios, 16 ♂♂, 1 ♀, pitfalls, 23.IV.–28.VI.2014, Anastasiou leg. (NHMC); Kouri, 7 ♂♂, 2 ♀♀, pitfalls, 28.VI.–2.VII.2009, Anastasiou leg. (NHMC); Mikrothives, 5 ♂♂, 5 ♀♀, pitfalls, 23.IV.–29.VI.2014, Anastasiou leg. (NHMC).

Distribution. SE Europe, Lebanon and Israel. One of the commonest *Zodarion* species in Greece.

***Zodarion granulatum* Kulczyński, 1908**

Zodarion granulatum Kulczyński 1908: 59 pl. 2, figs 4, 10 (descr. ♂); Bosmans 2009: 275, figs 170–171, 178–179 (descr. ♂, ♀).

Material examined. GREECE: Attiki: Methana, Kaimeni Chora (N37°37'2" E23°19'35"), 200 m litter and stones in *Pinus* forest, 22.IV.2016 (CRB). Crete: Chania: Lefka Ori; 800 m, 1 ♀, 8.VI.1991 (NHMC). Lasithi: Kefalovrissi spring, Kalamafka, 1 ♀, sieving litter, 30.III.2007, A. Schönhofer leg. (SMF). Peloponnisos: Arkadia: Kriovrissi SE, Profitis Ilias chapel (N36°35'51" E22°58'52"), 480 m, 1 ♀, stones in small *Quercus* forest, 24.IV.2016 (CRB).

Distribution. Greece, Turkey, Cyprus, Lebanon and Israel.

***Zodarion hamatum* Wiehle, 1964**

Zodarion hamatum Wiehle, 1964: 641 (descr. ♂); Wunderlich 1980: 116 (descr. ♀); Bosmans 1997: 283, figs 53–56, 111–112 (descr. ♂, ♀).

Material examined. ITALY: Friuli Venezia Giulia: Udine: Drenchia, Paciuch, 370 m, 1 ♀, 25.V.1996, P. Pantini, M. Valle leg. (MCSNB). Toscana: Firenze: Near Londa, 1 ♀, river meadow, 11.IV.2006, A. Schonhöfer leg. (SMF). Veneto: Padova: Teolo, San Rocco, 140 m, 2 ♀♀, pitfalls in *Fagus* forest, 27.III.–12.VI.2003 (MCSNB).

Distribution. N Italy, Slovenia, Croatia.

***Zodarion hauseri* Brignoli, 1984**

Zodarion hauseri Brignoli, 1984: 312, figs 40 (descr. ♀); Bosmans 2009: 251, figs 92–95, 144–145 (descr. ♂, ♀).

Material examined. GREECE: Attiki: Athens, Akropolis, 2 ♀♀, VI.1926, Roewer leg. (SMF). Makedonia: Florina: Prespes, 9 km SW Agios Germanos, 3 ♂♂, pitfall traps in oak forest, 24.VI.–29.VI.2014, Nentwig coll. and leg. (CRB, NHMC). Grevena: Anoixi, 1 ♀, pitfalls in oak forest, 17.VI.–8.VIII, Kaltsas & Mettouris leg. (CRB). Thessaloniki: Lake Koronia, 1 ♀, pitfalls in shrub pasture, 28.VI.–23.VII.2012, Navarrete leg. (NHMC).

Distribution. Continental Greece, Macedonia and recently also in Bulgaria (Naumova et al. 2017). New Greek records in Attiki and Makedonia are added.

***Zodarion isabellinum* (Simon, 1870)** (Fig. 6c–f)

Enyo isabellina Simon, 1870: 104 (descr. ♂).

Zodarion isabelinum; Bosmans 1994: 136, figs 77–78, 129–130 (descr. ♂, ♀).

Material examined. SPAIN: 1 ♂, labelled 'Spanien, coll. Franz, sp. 961', and 1 ♀, 1 subadult labelled 'Spanien, coll. Franz, sp. 658', without further information (SMF). Cádiz: Medina Sidonia NW, 150 m, 1 ♂, stones in grassland, 3.IV.1997, R. Bosmans leg. (CRB). Málaga: El Churro, 1 ♂, stones along rivulet, 10.IV.1999, R. Bosmans leg. (CRB); Periana, Cortijo Blanco, 1 ♀, under stones in rough grassland, 21.X.1993 (CAR-S); Valle de Abdallajís, pitfalls in degraded *Quercus suber* forest, 1 ♂, 15.IV.1999, R. Bosmans leg. (CRB).

Comments. The first author examined two tubes present in the SMF with an unidentified male and female from an unknown locality in Spain ('sp. 961, male, sp. 658, female'). The male palpal bulb is identical to the one of *Z. isabellinum*, but the tibia has a strange supplementary basal tooth on the apophysis (cfr. Fig. 6c–d, compared with Fig. 6e–f). Until further material is discovered, and also because the exact locality is unknown, this is considered an abnormality in the male palp.

Distribution. In Spain known from the southern provinces Alicante, Cádiz, Granada and Málaga The new records are within the known distribution area of the species.

***Zodarion italicum* (Canestrini, 1868)**

Enyo italica Canestrini, 1868: 196 (descr. ♀).

Zodarion italicum; Bosmans 1994: 284, figs 57–60, 113–114, map 11 (descr. ♂, ♀).

Material examined. BELGIUM: Oost-Vlaanderen: Gent Dampoort, 16 ♂♂, 8 ♀♀, pitfalls along railroad slope, 19.IV.–1.VIII.2006, R. Bosmans leg. (CRB). GERMANY: Baden-Württenberg: Kaiserstuhl, 1 ♀, sieving litter in *Fagus* forest, 7.X.2005, J. Martens & A. Schönhofer leg. (SMF). ITALY: Emilia Romagna: Ferrara: Mesola, Bosco della Fasanara, 2 ♂♂, pitfalls in *Quercus* forest, 23.V.–16.VI.2013, R. Fabbri leg. (MCSNB); Mesola Bosco della Mesola, Parco Duchessa 2 ♂♂, pitfalls in *Quercus* forest, 23.V.–16.VI.2013, R. Fabbri leg. (MCSNB). Parma: Bedonia, Passo di Montevacà, 800 m, 2 ♂♂, pitfalls, IX.1991.–V.1992, G. Buttarelli, R. Cerbino, P. Pantini, M. Valle leg. (MCSNB); Ravenna: Mezzano vasche dell'ex zuccherificio, 28 ♂♂, 10 ♀♀, pitfalls, 27.V.–3.VII.2006 R. Fabbri, Pezzi leg. (MCSNB). Lombardia: Brescia: Erbusco, Montorfano N side, 300 m, 1 ♂, pitfalls, 2.–29.IV.2010, W. Zucchelli leg. (MCSNB); Cologne, Montorfano 1 ♀, 5.V.2012, P. Pantini, L. Vergani leg. (MCSNB).

Distribution. France, Great Britain, Belgium, Germany, Switzerland, Austria, Italy, Slovenia and Croatia.

***Zodarion jozefienae* Bosmans, 1994**

Zodarion jozefienae Bosmans, 1994: 120, figs 7–9 (descr. ♂ not ♀, = *Z. styliferum*); Pekár, Cardoso & Meierrose, 2003: 391, figs 8, 13–14, 23, 31 (descr. ♂, ♀).

Material examined. SPAIN: Cáceres: Torrejón el Rubio, 1 ♂, 2 ♀♀, pitfalls, 7.VIII.1996, U. Stengele leg. (CRB); Talaván, Finca el Baldio, 11 ♂♂, 19 ♀♀, pitfalls, 7.VIII.1996, U. Stengele leg. (CRB).

Distribution. Described from Faro in Portugal and Huelva in Spain (Bosmans 1994), later cited by Pekár et al. (2003) from Beja and Évora in Portugal. From Spain further cited from Toledo (Morano 2001), Ciudad Real (Barriga et al. 2006) and Málaga (Lecigne 2012).

***Zodarion konradi* Bosmans, 2009**
Zodarion konradi Bosmans, 2009: 268, figs 132–133, 160–161 (descr. ♂, ♀).
Material examined. GREECE: Attiki: Oros Parnitha, 13 ♂♂, 10 ♀♀, pitfalls, 3.V.–10.VIII.2005, Anastasiou leg. (NHMC). Peloponnisos: Arkadia: Megalopoli, 32 ♂♂, 10 ♀♀, pitfalls, 1.VI.–12.VII.2009, Anastasiou leg. (NHMC). Ileia: Lapithas, 1 ♀, pitfalls, 28.VI.–12.VII.2009, Anastasiou leg. (NHMC). Korinthia: Sofiko NW, 420 m (N37°48'30" E23°1'47"), in litter near church yard, 21.IV.2016 (CRB). Messinia: Oros Taigetos, 2 ♂♂, 6 ♀♀, pitfalls, 1.VI.–28.VI.2005, Anastasiou leg. (NHMC).
Distribution. Only known from Greece.

***Zodarion machadoi* Denis, 1939**
Zodarion machadoi Denis, 1939: 90, figs 1–4 (descr. ♂, ♀); Bosmans 1994: 135, figs 71–73, 125–126 (descr. ♂, ♀).
Material examined. PORTUGAL: Lisbon: Abelheira, Mosquiera da Cima, 1 ♂, 1 ♀, 17.V.2001, G. Telfer leg. (CRB). Viana do Castelo: Britelo NW, 160 m, 1 ♂, 1 ♀, litter at edge of Quercus forest, 4.V.2017, R. Bosmans leg. (CRB). SPAIN: Pontevedra: Puerto de Fuentefría, 1 ♀, litter in *Pinus* forest, 13.VI.1994, R. Bosmans leg. (CRB).
Distribution. In Portugal, this species was known from the districts Braga, Porto, Viana do Castelo and the Azores, in Spain from Alicante, Madrid, Santander and Vila Real. The species is recorded for the first time in the districts Lisbon in Portugal and Pontevedra in Spain.

***Zodarion maculatum* (Simon, 1870)**
Enyo maculata Simon, 1870: 146 (descr. ♀).
Zodarion maculatum; Denis 1935b: 67, figs 79–80 (descr. ♂, ♀); Bosmans 1994: 127, figs 39–41, 103–104 (descr. ♂, ♀).
Material examined. PORTUGAL: Faro: Salema, Boca do Rio, 1 ♂, 7 ♀♀, stones in ruins, 14.II.2006, R. Bosmans leg. (CRB); Burgau, 1 ♂, stones bordering fields, 15.II.2006, R. Bosmans leg. (CB). SPAIN: Alicante: Crevilente, 2 ♀♀, stones in wasteland, 8.IV.1998, R. Bosmans leg. (CRB). Balearic Islands: Ibiza: Sant Carles de Peralta E., Cala Boix, 15 m, 1 ♀, sieving litter in *Pinus* forest, 15.IV.2018, R. Bosmans leg. (CRB).
Distribution. In Portugal known from Faro, Évora, Lisbon and Setúbal (Bosmans 1994; Pekár et al. 2011), in Spain from Alicante, Almería, Cádiz and Málaga (Bosmans 1994) and one record more in the north in Zaragoza (Melic 2000). The species is new to Ibiza and the Balearic Islands, the other new records all fall within its known distribution area.

***Zodarion merlijni* Bosmans, 1994**
Zodarion merlijni Bosmans, 1994: 127, figs 33–35 (descr. ♂); Pekár et al. 2003, figs 24, 32 (descr. ♀).
Material examined. SPAIN: Sevilla: El Ronquillo, 200 m, 3 ♀♀, stones in grassland, 6.IV.1994, R. Bosmans leg. (CRB). Huelva: Valverde del Camino, 270 m, 4 ♀♀, stones in *Eucalyptus plantation*, 2.IV.1997, R. Bosmans leg. (CRB).
Distribution. Originally described from Huelva in Spain, later also cited from Beja and Évora in Portugal (Pekár et al. 2003, Pekár & Cardoso 2005, Pekár et al. 2011). A new record in the Spanish province Sevilla is presented.

***Zodarion minutum* Bosmans, 2009**
Zodarion minutum Bosmans, 2009: 132, figs 63–64, 119–120, 142 (descr. ♂, ♀).
Material examined. SPAIN: Almería: Cabo de Gata, 2 ♂♂, 4 ♀♀, litter in tamarisk marsh, 9.IV.1998, R. Bosmans leg. (CRB). Balearic Islands: Ibiza: Ses Salines, 1 ♂, pitfalls in salt marsh, 15.IV.2018, R. Bosmans leg. (CRB).
Distribution. This species is only known from Spain (Almería, Málaga, Murcia and Mallorca). The species is new for Ibiza and a second locality in Almería is given.

***Zodarion modestum* (Simon, 1870)**
Enyo modesta Simon, 1870: 145 (descr. ♂).
Zodarion modestum; Denis 1933: 555 (descr. ♂, ♀); Bosmans 1994: 136, figs 79–80, 131–132 (descr. ♂, ♀).
Material examined. SPAIN: Cádiz: San Roque Torre Guadiano, 1 ♂, 1 ♀, on slopes to the coast, 4.IV.1997, R. Bosmans leg. (CRB). Granada: Atalbéitar near Pitres, 1 ♀, under stones in garden, 11.IX.2010 (CAR-S); between Atelbéitar and Buzquistar, 1 ♂, under stones along path, 11.IX.2010 (CAR-S); Bubión, 1 ♂, K. De Smet leg. (CRB). Málaga: Valle de Abdallajís, 425 m, 25 ♂♂, 10 ♀♀, pitfalls in degraded *Quercus suber* forest, 10.IV.1997, R. Bosmans leg. (CRB).
Distribution. The species is currently known from the Spanish provinces Almería, Cádiz, Málaga, Murcia and Sevilla. New records are given in Cádiz, Granada and Málaga.

***Zodarion morosum* Denis, 1935**
Zodarion morosum; Denis 1935b: 78, figs 22–24 (descr. ♂, ♀); Bosmans 2009: 236, figs 20–22, 54–55 (descr. ♂, ♀).
Material examined. GREECE: Ipeiros: Ioannina: hill of Perama cave, 1 ♀, 12.VIII.2009, S. Huber & A. Schönhofer leg. (SMF). Makedonia: Chalkidiki: Sithonia, Elia Nikitis, 1 ♂, 12.VI.–6.VIII.2014, pitfalls, Anastasiou leg. (NHMC). Florina: Agios Germanos, 1 ♂, 1 ♀, pitfalls, 24.VI.–29.VI.2014, Anastasiou leg. (NHMC); Prespes, 2 ♂♂, ♀♀, pitfalls, 26.VI.2014, Anastasiou leg. (NHMC); Kozani: Aiani 2.5 km NW, pitfalls, 2.VII.2014, Anastasiou leg. (NHMN); Siatista 6.5 km SE, 1 ♂, pitfalls, 29.VI.–4.VII.2014, Anastasiou leg. (NHMC). Thessalia: Larisa: Tempe Valley, 1 ♂, *Platanus* forest, 21.III.1963, Kinzelbach leg. (SMF). Thraki: Evros: near Maronia, 1 ♀, under stones, 18.VIII.2009, S. Huber & A. Schönhofer leg. (SMF); Dioni, 1 ♀, dry stream valley, 18.VIII.2009, S. Huber & A. Schönhofer leg. (SMF).
Distribution. Bulgaria, Greece, Albania, Macedonia, Turkey and Ukraine.

***Zodarion murphyorum* Bosmans, 1994**
Zodarion murphyorum Bosmans, 1994: 129, figs 42–44, 105–106 (descr. ♂, ♀).
Material examined. SPAIN: Almería: El Pozo de los Frailes (N36°47'17" W02°06'48"), 70 m, night catch, 19.X.2017, S. Huber leg. (CRB).
Distribution. Until now only known from the Spanish province Almería.

***Zodarion musarum* Brignoli, 1984**
Zodarion musarum Brignoli, 1984: 315, figs 48–49 (descr. ♂); Bosmans 2009: 230, figs 40–43, 66–67 (descr. ♂, ♀).
Material examined. GREECE: Attiki: Oros Parnitha, 78 ♂♂, 41 ♀♀, pitfalls, 3.V.–24.VIII.2005, Anastasiou leg. (NHMC). Makedonia: Grevena: Anoixi, 10 ♂♂, 12 ♀♀, pitfalls in oak forest, 17.VI.–8.VIII.2014, Anastasiou leg. (NHMN); Zakas 3.2 km E., 1 ♂, pitfalls, 1.VI.–15.VII.2014, Anastasiou leg.

(NHMC). Peloponnisos: Achaia: Oros Chelmos, 27 ♂♂, 7 ♀♀, 10.VII.–2.VII.1998, 70 ♂♂, 4 ♀♀, 7.VI.–4.VII.2008, pitfalls, Anastasiou leg. (NHMC), Oros Panachaiko, 11 ♂♂, 4 ♀♀, pitfalls, 7.VI.–4.VIII.2008, Anastasiou leg. (NHMC). Arkadia: Mainalo E., 93 ♂♂, 11 ♀♀, pitfalls, 6.VI.–1.VIII.2008, Anastasiou leg. (NHMC); Mainalo W., 4 ♂♂, 4 ♀♀, pitfalls, 6.VI.–19.VII.2008, Anastasiou leg. (NHMC); Megalopoli, 299 ♂♂, 55 ♀♀, pitfals, 1.VI.–15.VI.2009, Anastasiou leg. (NHMC). Ileia: Lapithas, 37 ♂♂, 4 ♀♀, pitfalls, 15.VI.–28.VI.2009, Anastasiou leg. (NHMC); Messinia: Taigetos, 55 ♂♂, 18 ♀♀, pitfalls, 1.VI.–22.VII.2009, Anastasiou leg. (NHMC). Thessalia: Magnisia: Afetai, 1 ♂, 1 ♀, pitfalls, 24.IV.–29.VI.2014, Anastasiou leg. (NHMC); Portaria, 1 ♀, pitfalls, 24.VI.–28.VI.2014, Anastasiou leg. (NHMC).

Distribution. Greece. The species is very abundant in the highlands of the Peloponnisos.

***Zodarion noordami* Bosmans, 2009**

Zodarion noordami Bosmans, 2009: 256, figs 104–107, 148–149 (descr. ♂, ♀).

Material examined. GREECE: Peloponnisos: Achaia: Kalogria, 1 ♂, pitfalls in oak forest, V.2006, 1 ♂, pitfalls in pine forest, VI.2006, Anastasiou leg. (NHMC & CRB).

Distribution. Until now, this species was only known from its type locality in Fokida, Sterea Ellada in Greece (Bosmans 2009). The species appears to occur also in the Peloponnisos.

***Zodarion ohridense* Wunderlich, 1973**

Zodarion ohridense Wunderlich, 1973, figs 11–13 (descr. ♂); Lazarov 2007: 133 (descr. ♂, ♀); Bosmans 2009: 256, figs 108–111, 150–151(descr. ♂, ♀).

Material examined. GREECE: Peloponnisos: Achaia: Oros Erimanthos, 1600 m, 31 ♂♂, pitfalls, 11.VII.–11.X. 1997, Anastasiou leg. (CRB, NHMC).

Distribution. This species is known from Bulgaria, Croatia, Macedonia, the north of Greece (Bosmans 2009) and the Czech Republic (Krejčí at al. 2017). The new locality in the Peloponnisos expands its distribution in Greece far to the south.

***Zodarion pseudoelegans* Denis, 1933**

Zodarion marginiceps pseudoelegans Denis, 1933: 555 (descr. ♂, ♀).

Zodarion pseudoelegans; Bosmans 1994: 124, figs 22–26, 95–96 (elevated to species rank).

Material examined. SPAIN: Barcelona: El Bruc, 350 m, 1 ♂, stones in maquis, 9.IV.1997, R. Bosmans leg. (CRB); Sant Pere de Riudebitlles, 1 ♀, stones bordering fields, 3.VIII.2000, R. Bosmans leg. (CRB); Sant Quint de Mediona, 330 m, 1 ♀, stones bordering fields, 4.VIII.2000, R. Bosmans leg. (CRB). Castellon: L'Alcra N., 30.V.2010, 2 ♀♀, stones at wall, S. Huber & A. Schönhofer leg. (SMF). Girona: La Jonquera, 110 m, stones in maquis, 1 ♀, 9.IV.1997, R. Bosmans leg. (CRB).

Distribution. Known from Barcelona, Girona, Huesca and Tarragona in Spain and the neighbouring Pyrénées Orientales in France. New localities in Barcelona and Girona are added here.

***Zodarion pusio Simon*, 1914**

Zodarion pusio Simon, 1914: 229, 235 (descr. ♂, non ♀); Bosmans 1997: 274, figs 18–19, 89–90 (descr. ♂, ♀).

Material examined. ITALY: Sardinia: Tottubella SW., 50 m, 5 ♂♂, 23 ♀♀, pitfalls in *Cistus* maquis, 12.–19.IV.2014, R. Bosmans leg. (CRB).

Distribution. Coastal areas of France, Italy, Croatia and Bosnia and Herzegovina.

***Zodarion rubidum* Simon, 1914**

Zodarion rubidum Simon, 1914: 233 (descr. ♂, ♀); Bosmans 1997: 277, figs 30–32, 95–96, 101–102 (descr. ♂, ♀).

Material examined. CZECH REPUBLIC: Znojmo: near Znojmo catacombs, 1 ♂, under stones, 26.VIII.2015 R. Bosmans leg. (CRB). ITALY: Lombardia: Bergamo: Sorisole, Gres, 1 ♀, 5.IX.1998, Maretti leg. (MCSNB). SPAIN: Girona: Collado d'Ares, 1 ♀, 2.VIII.2000, R. Bosmans leg. (CRB).

Distribution. *Zodarion rubidum* is one of the spider species that enlarged its distribution area considerably recently. Only in 1973 was it cited for the first time outside of France from Austria (Wunderlich 1973). In his revision of the genus, Bosmans (1997) gave further records in NE Spain, Italy, Belgium, Germany, Switzerland, Hungary, the Czech Republic and Slovakia. Since then, the species expanded its range to Danmark (Scharff et al. 2007), Poland (Rozwałka & Gosik 2006), Slovenia (Kuralt & Kostanjšek, 2016), South-East Ukraine (Ponomarev et al. 2016) and Southern European Russia (Ponomarev et al. 2017).

***Zodarion rudyi* Bosmans, 1994**

Zodarion rudyi Bosmans, 1994: 118, figs 4–6, 83–84, 134 (descr. ♂, ♀).

Material examined. SPAIN: Málaga: between Coin and Mijas, 1 ♂, stones in small *Pinus* plantation, 10.IV.1998, R. Bosmans leg. (CRB).

Distribution. Known from the Spanish provinces Cádiz, Granada and Málaga.

***Zodarion segurense* Bosmans, 1994**

Zodarion segurense Bosmans, 1994: 122, figs 13–15, 89–90 (descr. ♂, ♀).

Material examined. SPAIN: Cáceres: Torrejón el Rubio, 6 ♂♂, 2 ♀♀, pitfalls, 23.VIII.1996, U. Stengele leg. (CRB); Talaván, Finca el Baldio, 5 ♂♂, 5 ♀♀, pitfalls, 23.VIII.1996, U. Stengele leg. (CRB). Málaga: Tolox, 1 ♀, pitfalls in *Pinus* forest, 15.IV.1999, R. Bosmans leg. (CRB); Valle de Abdallajís, 1 ♂, 4 ♀♀, pitfalls in degraded *Quercus suber* forest, 15.IV.1999, R. Bosmans leg. (CRB). Murcia: Sierra de Taibilla, 1 ♀, 10.IX.1986, C. Ribera leg. (CRB).

Distribution. Described from Central Spain in the provinces Avila and Segovia, and cited by Barriga et al. (2006) in Ciudad Real, but according to Pekár et al. (2011), this identification is erroneous and refers to *Z. lusitanicum* Cardoso, 2003. New localities in the provinces Cáceres, Málaga and Murcia are added here.

***Zodarion spinibarbe* Wunderlich, 1973**

Zodarion spinibarbe Wunderlich, 1973: 173, figs 4–10 (descr. ♂, ♀); Bosmans 2009: 244, figs 72–75, 136–137).

Material examined. GREECE: Crete: Chania, Meskla, 1 ♀, VI.1926, Roewer leg. (SMF); Kournas, 1 ♀, no further data (SMF); Machia, 1 ♀, stones in pine forest, 24.III.2007, A. Schönhofer leg. (SMF). Iraklio: Pirgos E., Mesara plain,

2 ♂♂, stones in open pine forest, 1.IV.2007, A. Schönhofer leg. (SMF). Lasithi: Sitia 1 ♂, under stones, A. Schönhofer leg., 31.III.2007, 1 ♀, stones in grassland, 21.III.1958, H. Kahman leg. (SMF).
Distribution. An endemic species of Crete (Greece).

***Zodarion styliferum* (Simon, 1870)**
Enyo stylifera Simon, 1870: 104 (descr. ♂, ♀).
Zodarion styliferum; Bosmans 1994: 118, 1–3, 81–82 (descr. ♂, ♀).
Material examined. PORTUGAL: Èvora: Monforte S., 260 m, 2 ♀♀, stones in *Eucalyptus* forest, 8.IV.1996 (CRB); Mourão, 180 m, 2 ♀♀, stones in castle, 24.V.2007 (CRB); Portalegre, 460 m, 1 ♀, stones in grassland in open *Quercus suber* forest, 9.IV.1996 (CRB); Villa Velha de Ródão, 130 m, 1 ♂, 1♀, stones in olive grove, 9.IV.1996 (CRB). Faro: Salema, Boca de Rio, 40 m, 1 ♂, stones in ruins, 14.II.2006 (CRB); Ribeira do Almargem, 5 m, 1 ♂, stones at border of river, 19.II.2006 (CRB). Lisbon: Porto Alto, 15 m, 5 ♂♂, 2 ♀♀, pitfalls in *Quercus suber* forest, 14.–22.IV.2016 (CRB). Madeira: Lombada Velha, Ponta do Pargo, 4 ♂♂, 30.IV.2008, T. Grootaert leg. (CRB). Setúbal: Lagoa de Melides, 3 m, 1 ♂, litter in river mouth, 15.IV.2013 (CRB). SPAIN: Cáceres: Conquista de la Sierra, 1 ♂, 14.IV.1994 (CRB); Monfragüe, Rio Almonte, 8 ♀♀, 15.IV.1994 (CRB); Talaván, Finca el Baldio, 6 ♂♂, 6 ♀♀, 24.VII.1996, U. Stengele leg. (CRB). Badajoz: Peloche, 1 ♂, 3 ♀♀, 12.IV.1994 (CRB); Embalse de la Serena, 1 ♀, 12.IV.1994 (CRB). Córdoba: Alcolea, 1 ♂ 2 ♀♀, 10.IV.1994 (CRB). Burgos: Pancorbo, 635 m, 1 ♀, stones in maquis, 30.III.1997 (CRB). Granada: La Calahorra, 1250 m, 1 ♂ 2 subadult ♀♀, stones on slopes to castle, 5.IV.1996 (CRB); Puerto Camacho, 1230m, 1 ♀, stones in *Pinus* forest, 6.IV.1997 (CRB); Rambla del Baúl, 900m, 5 ♀♀, stones under small *Quercus ilex* bushes, 11.IV.1999 (CRB). Jaén: Puerto de Tiscar, 750 m, 1 ♂, stones in clearing in *Pinus* forest, 12.IV.1999 (CRB). León: Villanova de las Manzanas, 1 ♀, 12.VIII.1994 (CRB). Málaga: Alozaina N., 250 m, 2 ♀♀, stones in *Quercus ilex* forest, 11.IV.1998 (CRB); between Periana and Ventas de Zafarraya, Cortijo Blanco, 1 ♂, stones in rocky fallow, 30.X.1993 (CAR-S). Orense: Larouco, 1 ♀, 12.VIII.1994 (CRB). Segovia: Casla W., 1100 m, 4 ♀♀, stones in grassland, 30.III.1997 (CRB). Tarragona: Santa Magdalena de Pulpis, 150 m, 1 ♀, stones in maquis, 7.IV.1998 (CRB). Toledo: Talavera la Nueva, 370 m, 1 ♂, litter in riverine forest along Tejo, 1.IV.1997 (CRB).
Distribution. The commonest species in the Iberian Peninsula, also occurring in Madeira.

***Zodarion thoni* Nosek, 1905**
Zodarion thoni Nosek, 1905: 128, fig. 10 (descr. ♂); Bosmans 2009: 272, figs 168–169, 176–177 (descr. ♂, ♀).
Material examined. GREECE: Crete: Iraklio: 1 ♀, stony grassland, H. Kahman leg. (SMF); Gouves, 1 ♂, 5.V.2009, H. Eckl leg. (SMF). Makedonia: Florina: Agios Germanos, 6 ♀♀, pitfalls, 24.VI.–29.VI.2014, Anastasiou leg. (NHMC). Kozani: Siatista 6 km SE, 2 ♂♂, 3 ♀♀, pitfalls, 29.VI.–22.VI.2014, Anastasiou leg. (NHMC). Peloponnisos: Arkadia: Oros Mainalo, 1 ♂, pitfalls, 6.VI.–22.VI.2008, Anastasiou leg. (NHMC).
Distribution. Balkans, Turkey, Caucasus, Lebanon and Cyprus.

***Zodarion vankeerorum* Bosmans, 2009**
Zodarion vankeerorum Bosmans, 2009: 259, figs 116–119.
Material examined. GREECE: Peloponnisos: Arkadia: Oros Mainalo West, 1 male, pitfalls at forest line, 6.VI.–22.VI.2008, Anastasiou leg. (CRB).
Distribution. Until now only known from Attiki in Greece, here also cited from Arkadia in the Peloponnisos.

***Zodarion zorba* Bosmans, 2009**
Zodarion zorba Bosmans, 2009: 260, figs 120–123 (descr. ♂); Szinetar et al. 2015: 248.
Zodarion sp.; Bosmans 2009: 290, figs 166–167 (descr. ♀).
Material examined. GREECE: Ipeiros: Ioanina: Metsovo E., Katara pass, 1 ♀, 18.IX.1995, Knoflach & Thaler leg. (CKT). Konitsa: Aoos gorge, 550 m, 1 ♀, 9.IX.1996, Knoflach & Thaler leg. (CKT). Makedonia: Florina: Karies 4.5 km S., 2 ♂♂, 1 ♀, pitfalls, 24.VI.–29.VI.2014, Anastasiou leg. (NHMC); Prespes, Agios Germanos 9 km SW, 3 ♂♂, 1 ♀, pitfalls, 24.VI.–29.VI.2014, Anastasiou leg. (NHMC). Grevena: Anthrakia, 1 ♀, pitfalls, 16.VI.–8.VIII.2014, Anastasiou leg. (NHMC); Ziakas 3.2 km NE, 18 ♂♂, 5 ♀♀, pitfalls, 29.VI.–4.VII.2014 (NHMC); Ziakas, Perivoli 4.3 km S, 1 ♀, pitfalls, Anastasiou leg., 3.VII.2014 (NHMC). Imathia: Vermio, 2 ♂♂, pitfalls, 24.VI.–7.VIII.2014 (NHMC). Kozani: Kastania, 11 ♂♂, 5 ♀♀, pitfalls, 17.VI.–9.VIII.2014 (NHMC). Pieria: Ryakia, 3 ♂♂, pitfalls, Anastasiou leg. 14.VI.–10.VIII.2014 (NHMC). Peloponnisos: Arkadia: Mainalo W., 77 ♂♂, 8 ♀♀, pitfalls, 6.VI.–1.VIII.2008, Anastasiou leg. (CRB, NHMC). Thessalia: Larisa: Delta Pineio, 3 ♂♂, 2 ♀♀, pitfalls, 18.VI.–9.VIII.2014, Anastasiou leg. (NHMC).
Comments. The species described as *Zodarion* sp. by Bosmans (2009) appears to be the unknown female of *Zodarion zorba.* It is closely related to *Z. blagoevi* Bosmans, 2009 and *Z. epirense* Brignoli, 1984 and differs by the trapezoid median plate in the epigyne, surrounded by a much larger pale area. The species was recently also cited from Hungary (Szinetár et al. 2015).
Distribution. This species was described from the Oros Aroania, province Achaia in the Peloponnisos. Here it is cited in large numbers on the Oros Mainalo in the nearby province Arkadia, but also much more to the north in Makedonia and Thessalia.

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