

**COLLECTIONS OF ORIBATID MITES FROM SOUTHERN PORTUGAL,
WITH DESCRIPTION OF A NEW SPECIES OF *ORIBATULA*
(ACARI: ORIBATIDA: ORIBATULIDAE)**

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ABSTRACT: In the course of studies of oribatid mites from 12 localities of southern Portugal we found representatives of 121 species, 77 genera, and 45 families, of which 63 species/subspecies are registered for the first time for Portugal. A checklist, collection localities and known distribution of these species are presented. A new species, *Oribatula polytuberculata* sp. n., is described and illustrated; it is clearly distinguishable from all other species of the genus by having a tuberculate notogastral surface.

KEY WORDS: Oribatida, *Oribatula*, new species, fauna, checklist, southern Portugal

INTRODUCTION

The oribatid fauna of Portugal is relatively poorly known, compared to that of other European countries (Dias Bello 1949; Sellnick 1952; Baeta Neves and Brandão da Graça 1957; Gil and Subías, 1990; Subías and Gil 1990, 1991; Gil et al. 1991; Subías and Gil-Martín 1995; Subías 2000; Subías and Mínguez 2001; Weigmann 2008, 2009a, b, 2010, 2011; Ermilov et al. 2012). Herein, we report the results from studying the oribatid mite specimens collected from several localities in southern Portugal. A checklist is presented, along with specific locality data and the known distribution of all recorded taxa. One previously undescribed species of *Oribatula* Berlese, 1896 (Oribatulidae) was among this material, and it is described below as *Oribatula polytuberculata* sp. n.

MATERIALS AND METHODS

All specimens reported here were collected by L.S. Subías on 04 March 1983. They originated from 12 localities in southern Portugal, as follows.

1. Silves (37°11'13" N, 8°26'20" W): soil under *Ceratonia siliqua*.
2. Barranco do Velho (37°14'0" N, 7°56'0" W): soil under *Ceratonia siliqua*.
3. Aguiar (41°7'21" N, 8°31'52" W): soil under *Quercus suber*.
4. Vila do Bispo (37°5'0" N, 8°53'0" W): soil under *Quercus coccifera*.
5. Monte Gordo (37°10'56" N, 7°26'57" W): soil in pine forest.
6. Luzianes (37°35'0" N, 8°29'0" W): soil under *Quercus suber*.

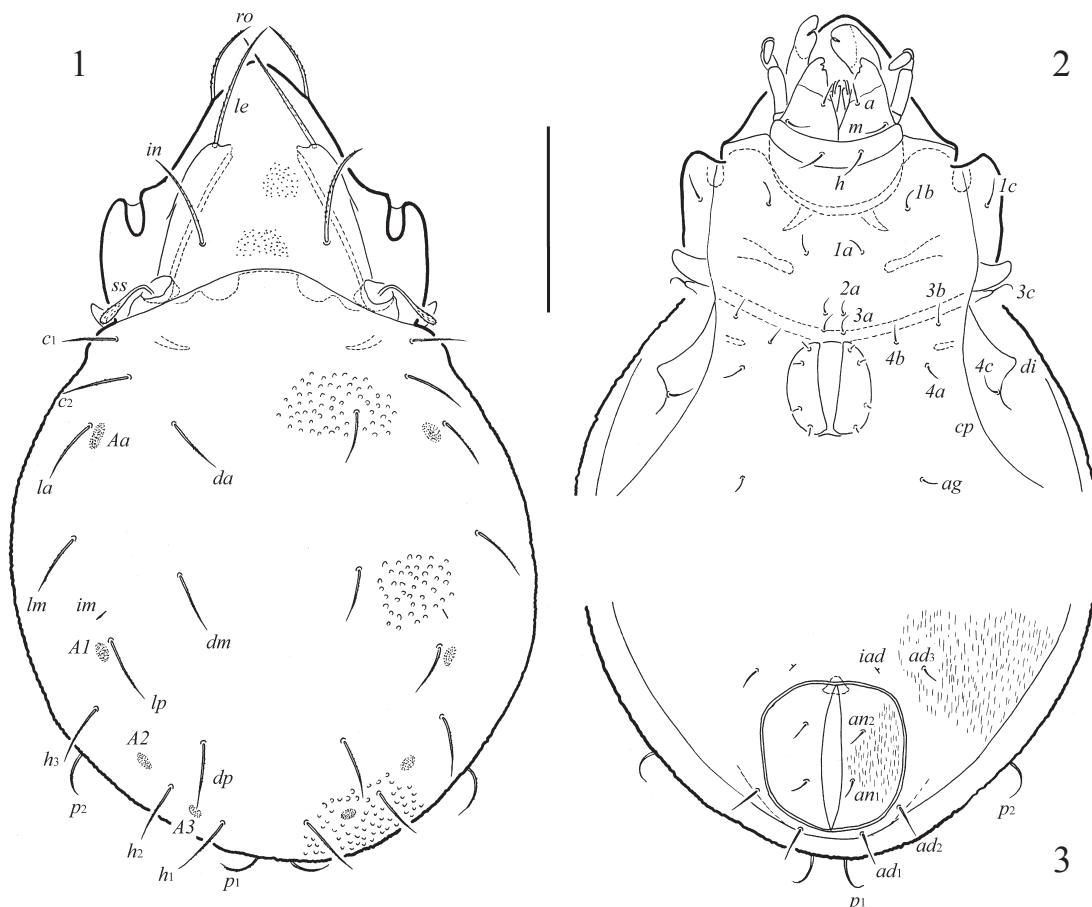
7. Abela (38°0'0" N, 8°34'0" W): soil under *Quercus ilex*.
8. San Luiz (37°42'53" N, 8°39'53" W): soil under *Cistus ladaniferus*.
9. Sines (37°55'48" N, 8°46'12" W): soil of mattole on dunes.
10. Almadena (37°6'0" N, 8°46'0" W): soil in ruit garden.
11. Monchique (37°19'04" N, 8°33'21" W): soil in *Quercus* forest.
12. Marco (37°19'02" N, 8°33'21" W): moss in *Quercus* forest.

Specimens of the new species were studied and illustrated in lactic acid, mounted on temporary cavity slides for the duration of the study. All body measurements are presented in micrometers. Body length was measured in lateral view. Notoastral width refers to the maximum width in dorsal aspect. Formulae for leg setation are given in parentheses according to the sequence trochanter–femur–genu–tibia–tarsus (famulus included). Formulae for leg solenidia are given in square brackets according to the sequence genu–tibia–tarsus.

RESULTS

We found representatives of 121 species, 77 genera, and 45 families of oribatid mites of which 63 species/subspecies are registered for the first time for Portugal. Appendix indicates the specific localities where they were collected, and notes their overall known distribution.

At present, 218 species, 120 genera and subgenera, 59 families (including data of this paper) are recorded for Portugal. The geographical analy-



Figs. 1–3. *Oribatula polytuberculata* sp. n., adult: 1 — dorsal view, legs not shown; 2 — gnathosomal, epimeral and genital regions, ventral view, legs not shown; 3 — anal region, ventral view. Scale bar 100 µm.

sis of Portuguese oribatid mites of studied region has shown that widespread species (with cosmopolitan, semicosmopolitan, holarctic and palearctic distributions) comprise only one-third of the fauna (40 species). The majority of species (> 50%) are included in the Mediterranean oribatid mite group. This group comprises Mediterranean (23), West Mediterranean (7), Iberian (27) and South European (4) species. The other groups are presented by species with southern palearctic (10), western palearctic (6), southern holarctic (2) and tropical (2) distribution. In our data, the rate of endemism of species is 22%. It is consistent with previous results (Gil and Subías 1990) concerning southern Portugal (endemism near 21%).

Description of *Oribatula polytuberculata* Ermilov, Shtanchaeva, Subías et Orobítov sp. n.

Figs. 1–7

Diagnosis. This species is distinguished from other members of *Oribatula* by the following combination of character states: body size 440–525 × 275–345; body color light brown to dark brown; prodorsal surface with poorly visible microtubercles; notogastral surface tuberculate; ano-

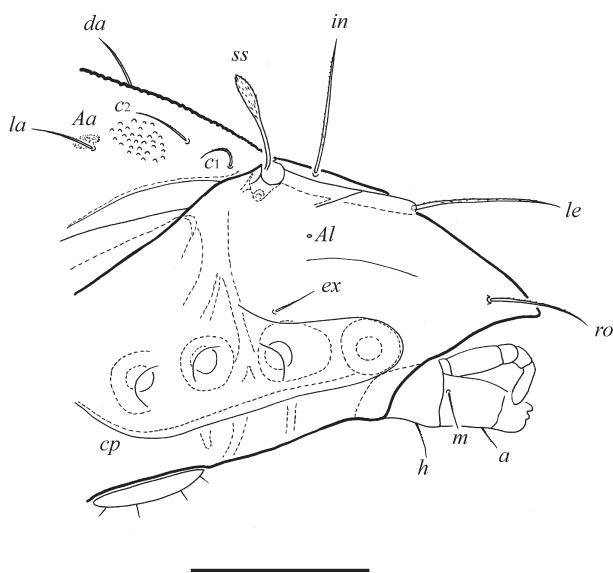
genital region and anal plates with short, longitudinal striae; lamella broad, slightly widened anteriorly, pair converging anteriorly; sensillus with long stalk and oblong, rounded or distally narrowed head; 13 pairs of notogastral setae setiform, of medium size; four pairs of oval porose areas on notogaster.

Description. Measurements. Body length 445 (holotype, female), 440–525 (24 paratypes); body width 280 (holotype), 275–345 (24 paratypes).

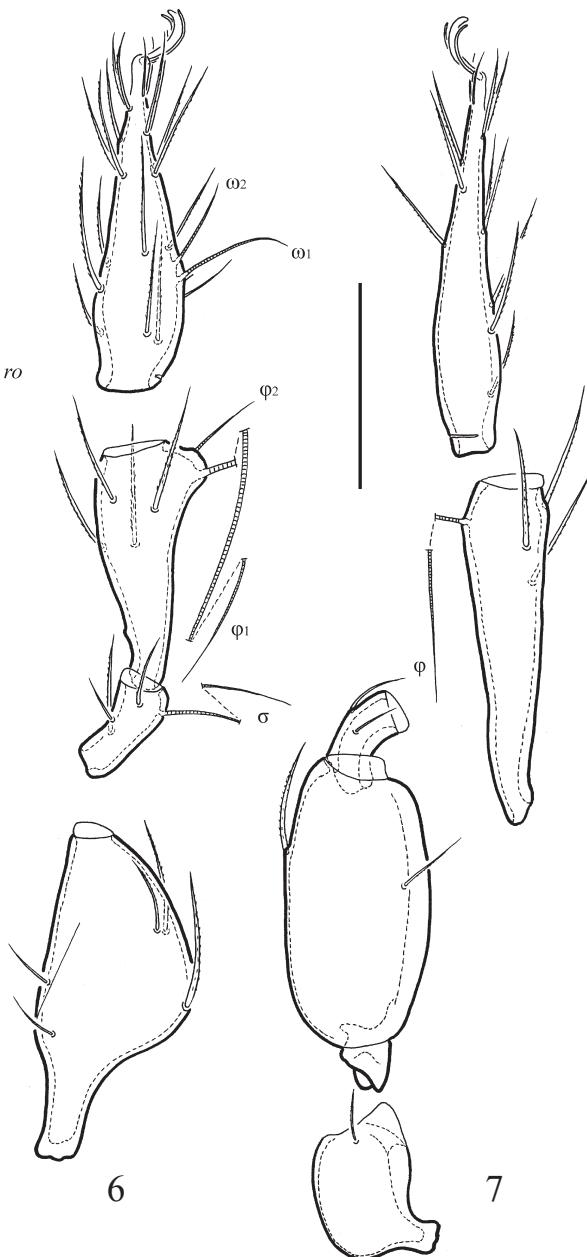
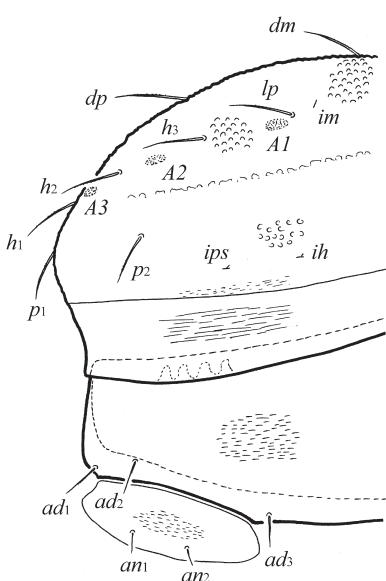
Integument (Figs. 1, 3). Body color light to dark brown. Prodorsal surface with microtubercles. Notogaster surface densely tuberculate (up to 6 in diameter). Anogenital region and anal plates with dense, short, longitudinal striae. Epimeral region and genital plates smooth.

Prodorsum (Figs. 1, 4, 8, 9). Rostrum rounded in dorsal view. Lamella broad, slightly widened anteriorly, pair converging anteriorly. Translamella absent, without rudiments. Rostral (ro: 53–61), lamellar (le: 73–86) and interlamellar (in: 69–73) setae setiform, barbed. Rostral seta inserted on small tubercle. Sensillus (ss: 48–58) with long stalk (24–28) and oblong, rounded or distally narrowed, barbed head (24–30).

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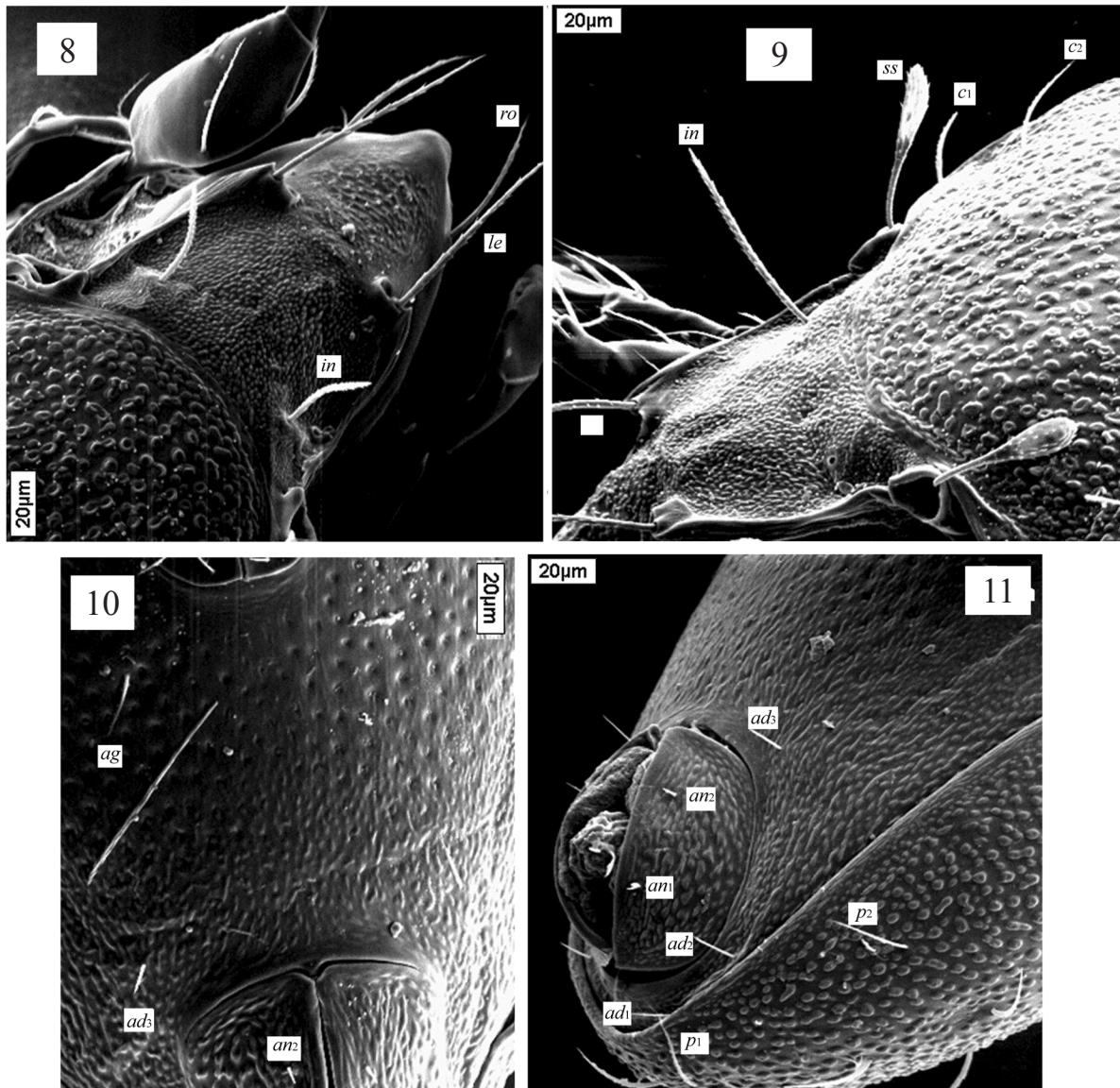
Figs. 4–7. *Oribatula polytuberculata* sp. n., adult: 4 — prodorsum, lateral view, epimeral setae and legs not shown; 5 — notogaster partially, lateral view; 6 — leg I, without trochanter, left, antiaxial view; 7 — leg IV, left, antiaxial view. Scale bar 100 μm (4, 5); scale bar 50 μm (6, 7).

Notogaster (Figs. 1, 4, 5, 8, 9, 11). Dorsosejugal furrow slightly convex. Humeral projections distinct. Thirteen pairs of setiform, barbed notogastral setae present. Setae *p₃* absent in all specimens. Setae *p₁* and *p₂* curved, others more or less straight. Setae *c₁*, *p₁* and *p₂* (30–34) little shorter than others (36–41). Four pairs of oval porose areas developed dorsally: *Aa* 16–20 \times 10–12, *A1* 12–16 \times 8, *A2* 10–12 \times 6, and *A3* 8–10 \times 6. Opisthonotal gland opening and lyrifissures developed in typical arrangement for genus, but only *im* well visible.

Lateral part of body (Fig. 4, 5). Exobothridial seta (24–28) setiform, thin, barbed. A thin, poorly

visible line present in the place of localization of a tutorium. Sublamellar line distinct. Sublamellar porose area (*Al*) very small (2–4), rounded. Porose area *Ah* not found. Discidium (*di*) and circumpedal carina (*cp*) well developed. Lyrifissures *ih* and *ips* distinct.

Gnathosoma (Figs. 2, 4). Subcapitulum longer than wide: 102 \times 73. Hypostomal and adoral setae setiform, slightly barbed; *h* and *m* (both 24) longer than *a* (20) and *or₁*, *or₂* (12). Length of palp 77. All setae (except distal ones on tarsi) barbed. Length of chelicera 102. Cheliceral setae setiform, slightly thickened, barbed, *cha* (32) longer than *chb* (20).



Figs. 8–11. *Oribatula polytuberculata* sp. n., SEM micrographs of adult: 8 — prodorsum and anterior part of notogaster, dorsal view; 9 — prodorsum and anterior part of notogaster, dorso-lateral view; 10 — anogenital region, ventral view; 11 — anogenital region, lateral view. Scale bar 20 µm.

Table. Leg setation and solenidia of *Oribatula polytuberculata* sp. n.

Leg	Trochanter	Femur	Genu	Tibia	Tarsus
I	v'	$d, (l), bv'', v''$	$(l), v', \sigma$	$(l), (v), \varphi_1, \varphi_2$	$(ft), (tc), (it), (p), (u), (a), s, (pv), v', (pl), l'', e, \omega_1, \omega_2$
II	v'	d, l'_1, l'_2, bv'', v''	l', v', σ	$(l), (v), \varphi$	$(ft), (tc), (it), (p), (u), (a), s, (pv), \omega_1, \omega_2$
III	l', v'	d, l', ev'	l', σ	$l', (v), \varphi$	$(ft), (tc), (it), (p), (u), (a), s, (pv)$
IV	v'	d, ev'	d, l'	$l', (v), \varphi$	$ft'', (tc), (p), (u), (a), s, (pv)$

Epimeral region (Fig. 2). All epimeral setae (16–20) setiform, slightly barbed. Seta 3c inserted on oblong cylindrical tubercle. Sejugal epimeral border complete.

Anogenital region (Figs. 2, 3, 5, 10, 11). Four pairs of genital setae (8–12), one pair of aggenital setae (*ag*, 12–16), two pairs of anal setae (*an*₁, *an*₂ 8–12), three pairs of adanal setae (*ad*₁, *ad*₂, *ad*₃

16); all setiform, slightly barbed. Lyrifissures *iad* in preanal position.

Legs (Figs 6, 7). Tarsi with three simple claws, median claw obviously thicker than lateral claws. Formulae of leg setation and solenidia: I (1–5–3–4–20) [1–2–2], II (1–5–2–4–15) [1–1–2], III (2–3–1–3–15) [1–1–0], IV (1–2–2–3–12) [0–1–0]; homology of setae and solenidia indicated in Table.

Material examined. Holotype (female), paratypes (24 specimens) were obtained from Locality 8 (see *Material and Methods* section).

Type deposition. The holotype and 22 paratypes are deposited in the collection of the Complutense University, Madrid, Spain; two paratypes are in the collection of the Zoological Institute of the Russian Academy of Sciences, St. Petersburg, Russia.

Etymology. The specific name “*polytuberculatus*” refers to the numerous tubercles on the notogaster.

Remarks. *Oribatula polytuberculata* sp. n. is most similar morphologically (body size, structure lamella, morphology of porose areas, prodorsal and notogastral setae and ventral side of body) to *Oribatula tibialis* (Nicolet, 1855), but differs from latter and also from the other species of *Oribatula* by the presence of numerous and dense tubercles on notogaster (tubercles absent in the other species).

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APPENDIX

Oribatid mites collected from southern Portugal

Oribatid taxa	Locality (see text)												Distribution ¹
	1	2	3	4	5	6	7	8	9	10	11	12	
Acaronychidae Grandjean, 1932									X				
Acaronychus Grandjean, 1932													
1. <i>Acaronychus traegardhi</i> Grandjean, 1932*									X				Holarctica south
Ctenacaridae Grandjean, 1954													
Beklemishevia Zachvatkin, 1945													
2. <i>Beklemishevia hispaniola</i> Pérez-Íñigo, 1997*										X			Mediterranea west
Ctenacarus Grandjean, 1939										X		X	Tropics
3. <i>Ctenacarus araneola</i> (Grandjean, 1932)*	X	X											
Brachychthoniidae Thor, 1934													
Brachychthonius Berlese, 1910													
4. <i>Brachychthonius pseudoimmaculatus</i> Subías and Gil-Martín, 1991					X								Mediterranea
Liochthonius Hammen, 1959													
5. <i>Liochthonius brevis</i> (Michael, 1888)									X				Holarctica
6. <i>Liochthonius propinquus</i> Niedbała, 1972*				X									Palearctica west
Poecilochthonius Balogh, 1943													
7. <i>Poecilochthonius italicus</i> (Berlese, 1910)			X										Holarctica
Sellnickochthonius Krivolutsky, 1964										X			
8. <i>Sellnickochthonius fuentesi</i> Ruiz, Subías and Kahwash, 1991*											X		Mediterranea
9. <i>Sellnickochthonius furcatus</i> (Weis-Fogh, 1948)*				X									Palearctica west
10. <i>Sellnickochthonius jacoti</i> (Evans, 1952)*			X										Holarctica
Cosmochthoniidae Grandjean, 1947													
Cosmochthonius Berlese, 1910													
11. <i>Cosmochthonius foliatus</i> Subías, 1982			X						X	X			Mediterranea west
12. <i>Cosmochthonius perezinigoi</i> Morell, 1988*								X					Iberia
13. <i>Cosmochthonius semifoveolatus</i> Subías, 1982*	X												Iberia
Haplochthoniidae Hammen, 1959													
Haplochthonius Willmann, 1930													
14. <i>Haplochthonius sanctaeluciae</i> Bernini, 1973*									X				Semicosmopolitan
Sphaerochthoniidae Grandjean, 1947													
Sphaerochthonius Berlese, 1910													
15. <i>Sphaerochthonius splendidus</i> (Berlese, 1904)										X			Cosmopolitan
Lohmanniidae Berlese, 1916													
Papillacarus Kunst, 1959													
16. <i>Papillacarus pseudoaciculatus</i> Mahunka, 1980										X	X		Mediterranea west
Euphthiracaridae Jacot, 1930													
Acrotritia Jacot, 1923													

¹ See Subías (2004, online version 2011)

17. <i>Acrotritia ardua monodactyla</i> (Niedbała, 2002)*	X										X	Holarctica south
18. <i>Acrotritia hyeroglyphica</i> (Berlese, 1916)										X		Semicosmopolitan
Phthiracaridae Perty, 1841												
Hoplophthiracarus Jacot, 1933												
19. <i>Hoplophthiracarus illinoiensis</i> (Ewing, 1909)										X		Semicosmopolitan
Phthiracarus Perty, 1841												
20. <i>Phthiracarus laevigatus</i> (Koch, 1841)										X		Palearctica
Steganacarus Ewing, 1917												
21. <i>Steganacarus applicatus</i> (Sellnick, 1920)*					X			X				Palearctica west
22. <i>Steganacarus magnus</i> (Nicolet, 1855)										X		Holarctica
Hermannilliidae Grandjean, 1934												
Hermannilla Berlese, 1908												
23. <i>Hermannilla picea</i> (Koch, 1839)*	X											Holarctica
Licnodamaeidae Grandjean, 1954												
Licnoliodes Grandjean, 1931												
24. <i>Licnoliodes adminensis</i> Grandjean, 1933										X	X	Mediterranea west
25. <i>Licnoliodes andrei</i> Grandjean, 1931*											X	Palearctica
Licnobelbidae Grandjean, 1965												
Licnobelba Grandjean, 1931												
26. <i>Licnobelba latiflabellata</i> (Paoli, 1908)										X		Palearctica west
Gymnodamaeidae Grandjean, 1954												
Adrodamaeus Paschoal, 1984												
27. <i>Adrodamaeus hispanicus</i> (Grandjean, 1928)							X	X		X		Palearctica south
Jacotella Banks, 1947												
28. <i>Jacotella</i> sp.										X		Iberia
Damaeidae Berlese, 1896												
Belba Heyden, 1826												
29. <i>Belba corynopus</i> (Hermann, 1804)	X									X		Holarctica
Metabelbella Bulanova-Zachvatkina, 1967												
30. <i>Metabelbella janae</i> Pérez-Íñigo jr., 1991							X			X		Iberia
Porobelba Grandjean, 1936												
31. <i>Porobelba grandjeanica</i> Subías, 1977*								X				Iberia
Neolioididae Sellnick, 1928												
Neoliodes Berlese, 1888												
32. <i>Neoliodes theleproctus</i> (Hermann, 1804)*	X											Semicosmopolitan
33. <i>Neoliodes</i> sp.	X											Iberia
Compactozetidae Luxton, 1988												
Cepheus Koch, 1835												
34. <i>Cepheus latus</i> Koch, 1835							X	X		X		Holarctica
Zetorchestidae Michael, 1898												
Microzetorchestes Balogh, 1943												
35. <i>Microzetorchestes emeryi</i> (Coggi, 1898)	X									X	X	Palearctica south
Ceratoppiidae Kunst, 1971												
Ceratoppia Berlese, 1908												
36. <i>Ceratoppia bipilis</i> (Hermann, 1804)										X		Holarctica
Gustaviidae Oudemans, 1900												

Collections of oribatid mites from southern Portugal

Gustavia Kramer., 1879									X		Palearctica west
37. <i>Gustavia fusifer</i> (Koch, 1841)											
Liacaridae Sellnick, 1928											
Adoristes (Gordeeviella) Shtanchaeva, Subías y Arillo, 2010						X					Mediterranea
38. <i>Adoristes (Gordeeviella) krivolutskyi</i> Shtanchaeva, Subias and Arillo, 2009											
Liacarus (Dorycranosus) Woolley, 1969								X			Palearctica south
39. <i>Liacarus (Dorycranosus) splendens</i> (Coggi, 1898)*											
40. <i>Liacarus (Dorycranosus) zachvatkini</i> Kulijev, 1962*									X		Mediterranea
Xenillidae Woolley e Higgins, 1966											
Xenillus Robineau-Desvoidy, 1839											
41. <i>Xenillus clypeator</i> Robineau-Desvoidy, 1839			X					X			Holarctica
42. <i>Xenillus ybarrai</i> Morell, 1987*									X		Iberia
Ctenobelbidae Grandjean, 1965											
Ctenobelba Balogh, 1943							X	X	X	X	Iberia
43. <i>Ctenobelba pulchellula</i> Gil-Martin and Subías, 1997*						X					
Ameridae Bulanova-Zachvatkina, 1957											
Amerus Berlese, 1896								X	X		Mediterranea
44. <i>Amerus cuspidatus</i> Avanzati, Salomone, Baratti and Bernini, 2003*											
Oribellidae Kunst, 1971											
Oribella Berlese, 1908					X						Holarctica
45. <i>Oribella pectinata</i> (Michael, 1885)*											
Oppiidae Sellnick, 1937											
Graptoppia Balogh, 1983											
46. <i>Graptoppia paraanalisis</i> Subías and Rodríguez, 1985*								X			Palearctica west
Ramusella (R.) Hammer, 1962											
47. <i>Ramusella (R.) clavipectinata</i> (Michael, 1885)							X				Cosmopolitan
48. <i>Ramusella (R.) junonis</i> Pérez-Íñigo, 1986									X		Mediterranea west
49. <i>Ramusella (R.) sengbuschi</i> Hammer, 1968*							X				Tropics
50. <i>Ramusella (R.)</i> sp. 1	X								X		Iberia
51. <i>Ramusella (R.)</i> sp. 2									X		Iberia
Ramusella (Rectoppia) Subías, 1980											
52. <i>Ramusella (Rectoppia) eduardoi</i> Arillo and Subías, 1996*				X							Iberia
Ramuselloppia Subías y Rodríguez, 1986											
53. <i>Ramuselloppia anomala</i> Subías and Rodríguez, 1986*			X			X					Iberia
Rhinoppia Balogh, 1983											
54. <i>Rhinoppia media</i> (Mihelčić, 1956)*							X		X		Mediterranea
55. <i>Rhinoppia obsoleta curtiramosa</i> Subías and Shtanchaeva, 2011*									X		Iberia
56. <i>Rhinoppia subpectinata</i> (Oudemans, 1900)								X			Holarctica
Serratoppia Subías and Minguez, 1985											

57. <i>Serratoppia</i> sp.	X	X	Iberia	
<i>Berniniella</i> Balogh, 1983				
58. <i>Berniniella conjuncta</i> (Strenzke, 1951)*	X	X	Europe south	
<i>Hypogeoppia</i> Subías, 1981				
59. <i>Hypogeoppia terricola salmanticensis</i> Morell, 1987*	X	Iberia		
<i>Moritzoppia (M.)</i> Subias and Rodríguez, 1988				
60. <i>Moritzoppia (M.) unicarinata</i> (Paoli, 1908)*	X		Holarctica	
<i>Moritzoppia (Moritzoppiella)</i> Gordeeva, 2000				
61. <i>Moritzoppia (Moritzoppiella) neerlandica</i> (Oudemans, 1900)*		X	Holarctica	
<i>Neotrichoppia (Confinoppia)</i> Subías y Rodríguez, 1986				
62. <i>Neotrichoppia (Confinoppia) confinis</i> (Paoli, 1908)*		X	Europe south	
<i>Oppiella</i> Jacot, 1937				
63. <i>Oppiella nova</i> (Oudemans, 1902)		X	Cosmopolitan	
<i>Oxyoppia (Dzarogneta)</i> Kulijev, 1978				
64. <i>Oxyoppia (Dzarogneta) intermedia</i> Subías and Rodríguez, 1986*		X	Iberia	
<i>Quadroppiidae</i> Balogh, 1983				
<i>Quadroppia (Coronoquadroppia)</i> Ohkubo, 1995				
65. <i>Quadroppia (Coronoquadroppia) abchasicica</i> Gordeeva and Tarba, 1990*		X	X	Mediterranea
<i>Suctobelbidae</i> Jacot, 1938				
<i>Suctobelbella</i> Jacot, 1937				
66. <i>Suctobelbella acutidens pilosasetosa</i> Shtanchaeva and Subías, 2009*		X	Mediterranea	
<i>Carabodidae</i> Koch, 1837				
<i>Austrocarabodes</i> Hammer, 1966				
67. <i>Austrocarabodes arrogans</i> Pérez-Íñigo, 1967*	X		Mediterranea	
68. <i>Austrocarabodes ensifer</i> (Sellnick, 1931)		X	Palearctica south	
<i>Carabodes (C.)</i> Koch, 1835				
69. <i>Carabodes (C.) perezinigoi</i> Salinas, 1971*		X	Iberia	
70. <i>Carabodes (C.) quadrangulus</i> Bernini, 1979*	X		Mediterranea	
71. <i>Carabodes (C.) femoralis</i> (Nicolet, 1855)	X		Palearctica	
<i>Carabodes (Klapperiches)</i> Mahunka, 1979				
72. <i>Carabodes (Klapperiches) similis</i> Ruiz, Subías and Kahwash, 1989*	X	X	Mediterranea	
73. <i>Carabodes (Klapperiches) willmanni</i> Bernini, 1975		X	Holarctica	
<i>Odontocepheus</i> Berlese, 1913				
74. <i>Odontocepheus elongatus</i> (Michael, 1879)		X	X	Holarctica
<i>Tectocepheidae</i> Grandjean, 1954				
<i>Tectocepheus</i> Berlese, 1896				
75. <i>Tectocepheus velatus sarekensis</i> Trägårdh, 1910		X	Cosmopolitan	
<i>Cymbaeremaeidae</i> Sellnick, 1928				
<i>Scapheremaeus</i> Berlese, 1910				

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76. <i>Scapheremaeus corniger</i> (Berlese, 1908)					X	X	X			Mediterranea west
Licneremaeidae Grandjean, 1931										
<i>Licneremaeus</i> Paoli, 1908										
77. <i>Licneremaeus licnophorus</i> (Michael, 1882)*										
Scutoverticidae Grandjean, 1954										
<i>Scutovertex</i> Michael, 1879										
78. <i>Scutovertex glaber</i> Mihelčič, 1957*										
79. <i>Scutovertex granulatus</i> Mihelčič, 1957*										
Passalozetidae Grandjean, 1954										
<i>Bipassalozetes</i> Mihelčič, 1957										
80. <i>Bipassalozetes reticulatus</i> (Mihelčič, 1957)*										
Passalozetidae Grandjean, 1932										
81. <i>Passalozetes agricola</i> Mínguez and Subías, 1983										
82. <i>Passalozetes inlenticulatus</i> Mihelčič, 1959										
Phenopelopidae Petrunkevitch, 1955										
<i>Eupelops</i> Ewing, 1917										
83. <i>Eupelops acromios</i> (Hermann, 1804)										
84. <i>Eupelops halophilus</i> Pérez-Íñigo, 1969*										
85. <i>Eupelops plicatus</i> (Koch, 1835)*										
86. <i>Eupelops somalicus</i> (Berlese, 1916)										
87. <i>Eupelops torulosus meridionalis</i> Pérez-Íñigo, 1969*										
Peloptulus Berlese, 1908										
88. <i>Peloptulus ibericus</i> Subías, 2012*										
89. <i>Peloptulus phaeonotus</i> (Koch, 1844)										
Oribatellidae Jacot, 1925										
<i>Oribatella</i> Banks, 1895										
90. <i>Oribatella berlesei</i> (Michael, 1898)*										
91. <i>Oribatella tridactyla</i> Ruiz, Subías and Kahwash, 1991										
Ceratozetidae Jacot, 1925										
<i>Ceratozetes</i> Berlese, 1908										
92. <i>Ceratozetes conjunctus</i> Mihelčič, 1956										
93. <i>Ceratozetes simulator</i> Pérez-Íñigo, 1970*										
94. <i>Ceratozetes</i> sp.										
Trichoribates (Latilamellobates) Shaldybina, 1971										
95. <i>Trichoribates (Latilamellobates) incisel-lus</i> (Kramer, 1897)*										
96. <i>Trichoribates (Latilamellobates) latila-mellatus</i> Mihelčič, 1956										
Chamobatidae Thor, 1937										
<i>Chamobates</i> Hull, 1916										
97. <i>Chamobates schuetzi</i> (Oudemans, 1902)										
<i>Iugoribates</i> Sellnick, 1944*										
98. <i>Iugoribates</i> sp.										
Puncitoribatidae Thor, 1937										
<i>Minunthozetes</i> Hull, 1916										

99. <i>Minunthozetes tarmani</i> Feider, Vasiliu and Călugăăr, 1971*	X								X				Palearctica south
<i>Puncitoribates</i> Berlese, 1908													
100. <i>Puncitoribates punctum</i> (Koch, 1839)						X				X			Semicosmopolitan
<i>Mochlozetidae</i> Grandjean, 1960													
<i>Podoribates</i> Berlese, 1908													
101. <i>Podoribates longipes</i> (Berlese, 1887)						X							Holarctica
<i>Oribatulidae</i> Thor, 1929													
<i>Lucoppia</i> Berlese, 1908													
102. <i>Lucoppia burrowsi</i> (Michael, 1890)				X			X			X			Holarctica
<i>Oribatula</i> (O.) Berlese, 1896													
103. <i>Oribatula (O.) parisi</i> Travé, 1961*										X			Mediterranea
104. <i>Oribatula (O.) tibialis</i> (Nicolet, 1855)										X			Holarctica
105. <i>Oribatula (O.) torrijosi</i> Subías, Ruiz and Kahwash, 1990								X					Iberia
106. <i>Oribatula (O.) polytuberculata</i> sp. n.*						X	X						Iberia
<i>Oribatula (Zygoribatula)</i> Berlese, 1916													
107. <i>Oribatula (Zygoribatula) exarata</i> Berlese, 1916									X				Palearctica south
108. <i>Oribatula (Zygoribatula) frisiae</i> (Oudemans, 1900)									X	X			Holarctica
<i>Phauloppiidae</i> Berlese, 1908													
109. <i>Phauloppiidae</i> sp.								X					Iberia
<i>Hemileiidae</i> J. and P. Balogh, 1984													
<i>Hemileius</i> Berlese, 1916													
110. <i>Hemileius eperezinigoae</i> Subías, 2010									X				Mediterranea
<i>Liebstadiidae</i> J. and P. Balogh, 1984													
<i>Liebstadia</i> (L.) Oudemans, 1906													
111. <i>Liebstadia (L.) saifulmalukensis</i> (Hammer, 1977)*									X				Palearctica south
<i>Liebstadia (Lagenobates)</i> Weigmann and Miko, 2002													
112. <i>Liebstadia (Lagenobates) lagenula</i> (Berlese, 1904)*					X								Palearctica
<i>Scheloribatidae</i> Jacot, 1935													
<i>Scheloribates</i> Berlese, 1908													
113. <i>Scheloribates barbatulus</i> Mihelčić, 1956*	X								X	X		X	Palearctica south
114. <i>Scheloribates fimbriatus</i> Thor, 1930									X				Iberia
115. <i>Scheloribates minifimbriatus</i> Minguez, Subías and Ruiz, 1986*		X								X			Semicosmopolitan
<i>Haplozetidae</i> Grandjean, 1936													
<i>Lauritzenia</i> (Incabates) Hammer, 1961													
116. <i>Lauritzenia (Incabates) similis</i> Subías and Gil-Martín, 1995		X				X							Iberia
117. <i>Lauritzenia (Incabates) sinuata</i> (Pérez-Íñigo jr., 1990)*										X			Iberia
<i>Pilobates</i> Balogh, 1960													
118. <i>Pilobates carpetanus</i> Pérez-Íñigo, 1969*									X				Mediterranea
<i>Galumnidae</i> Jacot, 1925													
<i>Allogalumna</i> Grandjean, 1936													
119. <i>Allogalumna parva</i> (Berlese, 1916)									X				Mediterranea

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<i>Galumna</i> Heyden, 1826												
120. <i>Galumna gibbula</i> Grandjean, 1956*											Mediterranea	
<i>Pilogalumna</i> Grandjean, 1956												
121. <i>Pilogalumna crassiclava</i> (Berlese, 1914)*	X		X						X		X	Palearctica south

* species are registered for the first time for Portugal