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AUSTROTENERIFFIA KHORRAMABADIENSIS N. SP. (ACARI: TENERIFFIIDAE): A NEW SPECIES FROM SOUTHWESTERN IRAN, WITH A DESCRIPTION OF THE MALE

Mohammad KHANJANI¹, Mohammad Ahmad HOSEINI² and Bahman ASALI FAYAZ²

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¹ Department of Plant Protection, College of Agriculture, Bu-Ali Sina University, Hamedan, Iran. mkhanjani@gmail.com

² Ph. D student of Agricultural Entomology, Department of Plant Protection, College of Agriculture, Bu-Ali Sina University, Hamedan, Iran. basalifayaz@gmail.com, mahmadhoseini@yahoo.com

ABSTRACT — A new mite species belonging to the family Teneriffiidae, *Austroteneriffia khorramabadiensis* n. sp., from southwestern Iran (Khorramabad vicinity, Lorestan province) is described and illustrated based on females and males sampled from the soil and litter associated with oak trees. A key to adult females of the genus *Austroteneriffia* is also provided based on the original description and the literature.

KEYWORDS — Trombidiformes; Anystoidea; soil mite; predatory mite; oak; Iran

INTRODUCTION

The genus *Austroteneriffia* was described by Womersley (1935) with type species *A. hirsti* Womersley, from Australia. This genus is one of the eight genera belonging to the family Teneriffiidae. The members of *Austroteneriffia* are free living in soil, sand, under rocks, leaf litters under oak trees, and on ground pearls, *Porphyrophora tritici* (Bodenheimer) (Margarodidae) (Sayer *et al.* 1992; Judson 1995; Ueckermann and Khanjani 2002; Khanjani *et al.* 2011; 2013). Up to now nine species were recorded, namely: *A. hirsti* Womersley, 1935; *A. japonica* (Ehara 1965); *A. tadjikistanica* Wainstein 1969; *A. hojensis* (Shiba and Furukawa 1975) [suspected junior synonym of *A. japonica* (Ehara 1965) by Judson 1995]; *A. littorina* Shiba and Furukawa 1975; *A. leei* Judson, 1994; *A. kamalii* Ueckermann and Khanjani 2002; *A. zamani-ani* Khanjani *et al.* 2011; *A. shiraziensis* Khanjani *et al.* 2013. This paper presents the description of a new

species, *A. khorramabadiensis*, as tenth species of the genus.

MATERIAL AND METHODS

Mites were extracted from soil and litter under oak trees, from Khorramabad vicinity, Lorestan province using Tullgren funnels. The obtained mites were mounted directly on slides in Hoyer's medium. The slides were dried in an oven with 50 °C, covered with nail polish and examined under an Olympus BX51 phase contrast and a Differential Interference Contrast microscope. Drawings were made with a camera Lucida. The notation of the idiosomal setae follows that of Kethley (1990) and the notation of the cupules and female and male genitalia that of Judson (1995). All measurements are given in micrometers (µm) and the holotype measurements (female) are followed by the range of the

paratypes in parentheses and for the measurements of the male only the range is given. A key to adult females of the genus *Austroteneriffia* is also provided based on original descriptions and literature.

Family TENERIFFIIDAE Thor, 1911

Genus *Austroteneriffia* Womersley, 1935

Type species: *Austroteneriffia hirsti* Womersley, 1935.

Genus diagnosis — Color orange to red in life, body oval; aggenital chaetotaxy holotrichous; claws of legs I-II large, strongly pectinate; prodorsal shield with four pairs of setae (*vi*, *ve*, *sci*, *sce*), opisthosoma with seven pairs of setae (*c1*, *c2*, *d1*, *e1*, *f1*, *h1*, *h2*), of which seta *c2* is the longest; palp genu with or without oncophysis; gnathosoma with four pairs of setae: three pairs of adoral setae (*or1-3*), and one pair of subcapitular setae (*m*) [Based on Womersley (1935) and Judson (1995)].

Key to species of *Austroteneriffia* of the world (Females)

1. Palpal oncophysis present 4
—Palpal oncophysis absent 2
2. Prodorsal shield poorly defined; seta *c2* almost extending to base of seta *d*.....
.....*A. littorina* Shiba & Furukawa
—Prodorsal shield distinct; seta *c2* reaching to over the base of setae *e* or *f* 3
3. Basifemur I with five setae, tibia II nine setae.
A. zamaniani Khanjani, Asali Fayaz & Ueckermann
—Basifemur I with four setae, tibia II 10 setae.
.....*A. kamalii* Ueckermann & Khanjani
4. Genu IV with a solenidion 5
—Genu IV lacking a solenidion 6
5. Basifemur I with five setae; telofemur III with five setae; prodorsal shield without distinct pores.....
.....*A. hirsti* Womersley
—Basifemur I with four setae; telofemur III with four setae; prodorsal shield with distinct

pores.....
.....*A. leei* Judson

6. Basifemur III with four setae.....7
—Basifemur III with five setae.....
.....*A. tadjikistanica* (Wainstein)

7. Trochanter IV with 2 setae 8
—Trochanter IV with 3 setae.....
.....*A. shiraziensis* Khanjani, Yazdanpanah & Asali Fayaz

8. Telofemora III-IV with 5 setae, telotarsi III-IV with 7-6 (7) setae.....
.....*A. japonica* (Ehara) / *A. hojoensis* (Shiba & Furukawa)
—Telofemora III-IV with 4 setae, telotarsi III-IV with 8-8 setae
.....*A. khorramabadiensis* **n. sp.**

***Austroteneriffia khorramabadiensis* Khanjani **n. sp.**
(Figs. 1-3)**

Diagnosis — This species is close to *A. japonica* but differs by having 8 setae on the telotarsus III instead of 7 for *A. japonica* and by having 4 setae on the teleforma III-IV instead of five; palpal oncophysis present; trochanter IV with two setae; basifemura and telofemora III-IV each with four setae, telotarsi III-IV with 8-8 setae; genu IV without a solenidion; dorsal seta *c2* reaching over the base of seta *h1*.

Female (n= 3): Color orange in life. Idiosoma oval. Body length (base of palp tibial claw to terminal body) 868 (915 – 930), excluding gnathosoma 588 (610 – 633); width 485 (458 – 470) at level of seta *c2*.

Dorsum — (Figs. 1A-D). Prodorsal shield almost oval, 333 (320 – 330) long, 210 (210 – 217) wide at level of setae *sce*, with two pairs of eyes between setae *sce* and *c2*, anterior and posterior pairs 25 (20 – 21) and 31 (35 – 37) in diameter, respectively (Fig. 1A). Hysterosoma with three pairs of cupules (*ia*, *im* and *ip*) near setae *d1*, *f1* and *h1* (Fig. 1A). Prodorsal shield with four pairs of setae of which two pairs trichobothria (*sci* and *vi*); opisthosoma striated, bearing seven pairs of barbed setae (*c1*, *c2*, *d1*, *e1*, *f1*, *h1*, *h2*). Stigmatic opening anterior to setae *vi* and near to base of chelicera (Fig. 1A), with about 9 rows of

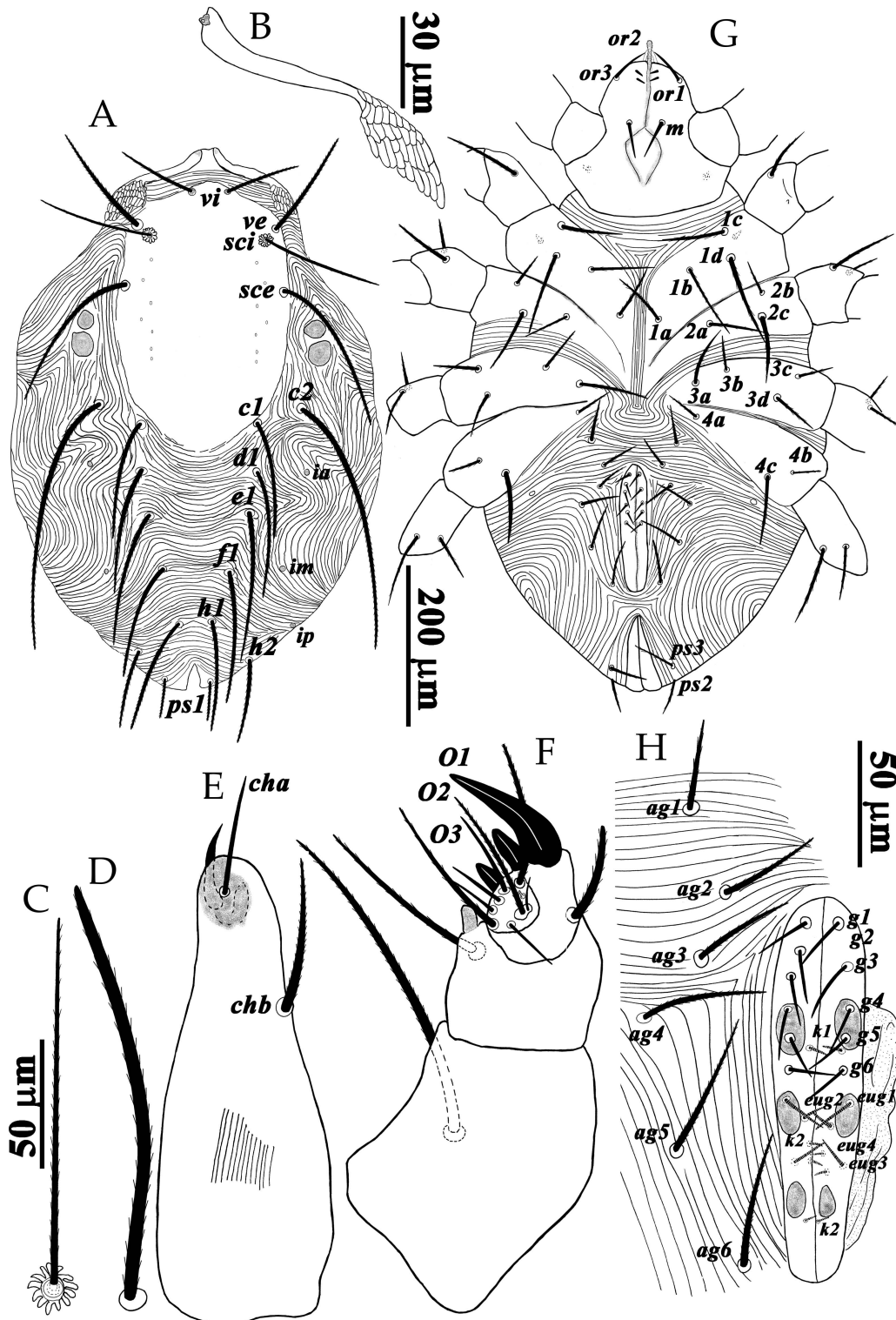


FIGURE 1: *Austroteneriffia khorrabadiensis* n. sp. (Female): A – Dorsum, B – Peritreme, C – Trichobothrium *sci*, D – Dorsal body seta *c1*, E – Chelicera, F – Palp, G – Venter, H – Genital region.

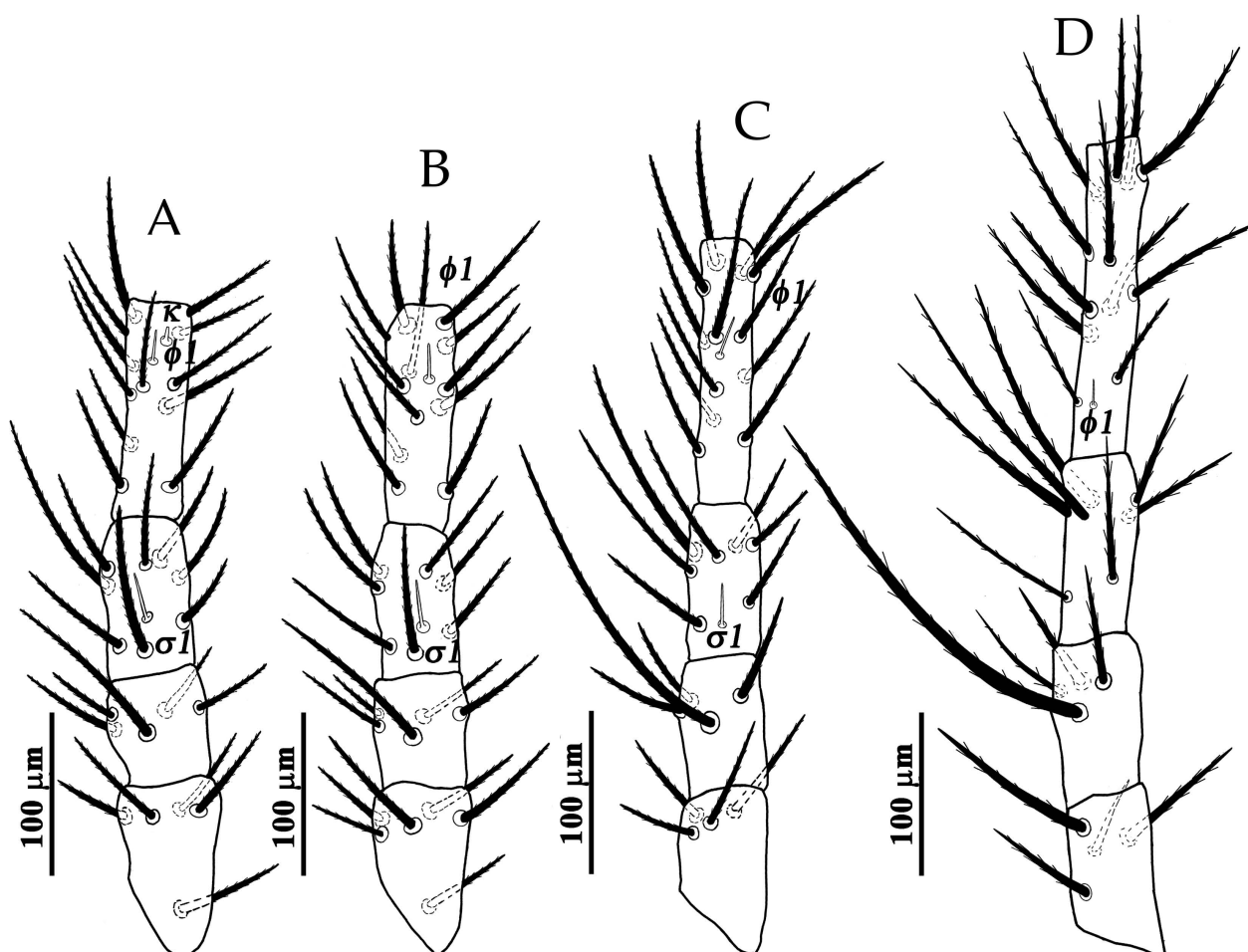


FIGURE 2: *Austroteneriffia khorrabadiensis* n. sp. (Female): A – Basifemur-tibia I, B – Basifemur-tibia II, C – Basifemur-tibia III, D – Basifemur-tibia IV.

elongate alveoli at opening of peritremes (Fig. 1B). Seta *c2* 295 (298 – 315); *h2* 100 (101 – 106). Dorsal setae serrate (Figs. 1A,C,D). Lengths of dorsal setae as follows: *vi* 102 (103 – 105), *ve* 143 (138 – 145), *sci* 153 (152 – 154), *sce* 203 (185 – 206), *c1* 153 (141 – 157), *c2* 296 (298 – 315), *d1* 167 (148 – 168), *e1* 182 (165 – 175), *f1* 190 (170 – 186), *h1* 146 (134 – 142), *h2* 100 (101 – 106). Distances between dorsal setae: *vi* – *vi* 45 (40 – 45), *ve* – *ve* 168 (164 – 167), *sci* – *sci* 148 (142 – 150), *sce* – *sce* 183 (195 – 197), *vi* – *ve* 71 (72 – 74), *sci* – *ve* 15 (14 – 17), *sce* – *sci* 70 (59 – 73), *sce* – *c1* 165 (164 – 165), *c1* – *c1* 140 (150 – 152), *c1* – *c2* 54 (49 – 58), *c2* – *c2* 250 (245 – 262), *c1* – *d1* 54 (61 – 65), *d1* – *d1* 143 (150 – 152), *d1* – *e1* 54 (63 – 69), *e1* – *e1* 125 (130 – 133), *e1* – *f1* 72 (84 – 86),

f1 – *f1* 78 (80 – 88), *f1* – *h1* 62 (62 – 85), *h1* – *h1* 40 (47), *h2* – *h2* 138 (143 – 150). Ratios between *vi*/*vi* – *vi* 2.27 (2.3 – 2.6); *ve*/*ve* – *ve* 0.85 (0.86 – 1.02), *sci*/*sci* – *sci* 1.03 (1.02 – 1.07), *c1*/*c1* – *c1* 1.09 (0.94 – 1.03); *c2*/*c2* – *c2* 1.18 (1.21 – 1.25); *d1*/*d1* – *d1* 1.16 (0.98 – 1.1); *e1*/*e1* – *e1* 1.45 (1.26 – 1.31); *f1*/*f1* – *f1* 2.43 (2.11 – 2.12); *h1*/*h1* – *h1* 3.65 (2.85 – 3.02); *h2*/*h2* – *h2* 0.72 (0.70).

Venter — (Figs. 1G-H). Ventral cuticle striated. Coxisternal shields smooth, bearing 14 pairs of setae (*la*, *1b*, *1c*, *1d*, *2a*, *2b*, *2c*, *3a*, *3b*, *3c*, *3d*, *4a*, *4b* and *4c*); coxisternal shield of legs I and II is fused, separated from legs III and IV (Fig. 1G). Aggential area with six pairs of setae (*ag1*–*6*), genital valves with six pairs of genital setae (*g1*–*6*) (one side of

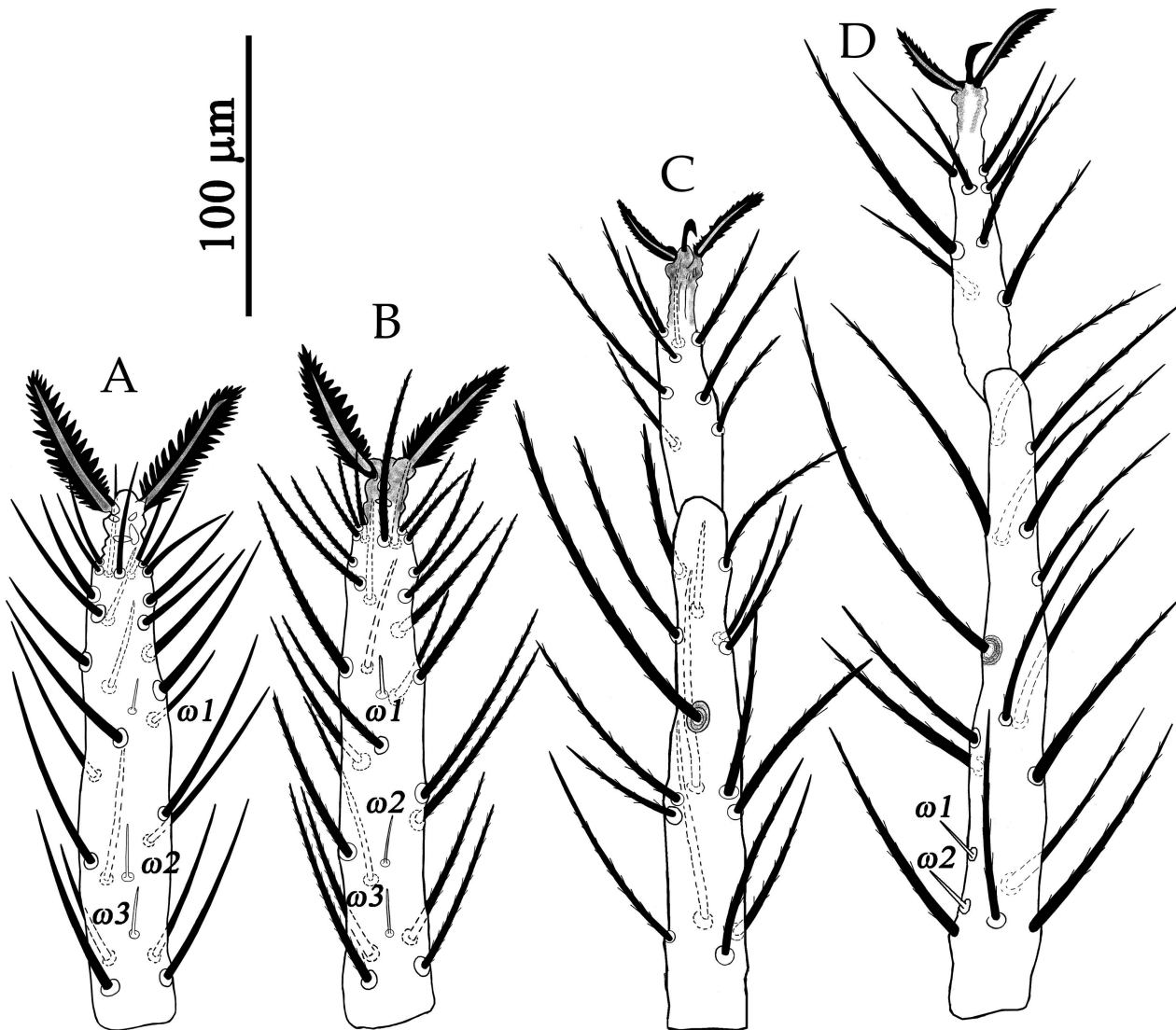


FIGURE 3: *Austroteneriffia khorramabadiensis* n. sp. (Female): A – Tarsus I, B – Tarsus II, C – Tarsus III, D – Tarsus IV.

genital valve in holotype specimen with five setae), four pairs of eugenital setae (*eug1-4*), three pairs of papillae-associated setae (*k1-3*), and three pairs of genital papillae (Fig. 1H); anal valves with three pairs of pseudanal setae (*ps1-3*). Measurements of setae: *g1* 26 (18 – 27), *g2* 24 (21 – 24), *g3* 20 (19 – 21), *g4* 19 (16 – 19), *g5* 20 (17 – 18), *g6* 21 (20 – 21); *ag1* 53 (45 – 51), *ag2* 42 (39 – 40), *ag3* 41 (39 – 40), *ag4* 50 (47 – 49), *ag5* 57 (52 – 56), *ag6* 54 (50 – 52), *k1* 7 (5 – 9), *k2* 5 (6 – 5), *k3* 5 (5), *eug1* 18 (22 – 23), *eug2* 12 (9) and *eug3* 15 (14 – 15), *eug4* 5 (4 – 5), *ps1* 40 (44 – 45), *ps2* 40 (422 – 46), *ps3* 48 (46 – 48). Distances

between setae: *g1-g1* 10 (7 – 11), *g2-g2* 17 (13 – 15), *g3-g3* 22 (20 – 21), *g4-g4* 23 (22 – 24), *g5-g5* 20 (20 – 22), *g6-g6* 20 (20 – 22); *g1-g2* 12 (10 – 12), *g2-g3* 12 (9 – 10), *g3-g4* 13 (10 – 12), *g4-g5* 12 (10 – 11), *g5-g6* 11 (8 – 12); *ag1-ag1* 105 (93 – 102), *ag2-ag2* 75 (73 – 74), *ag3-ag3* 90 (85 – 94), *ag4-ag4* 138 (148 – 150), *ag5-ag5* 130 (121 – 128), *ag6-ag6* 58 (50 – 61), *ag1-ag2* 29 (37 – 43), *ag2-ag3* 25 (23 – 25), *ag3-ag4* 33 (30 – 33), *ag4-ag5* 60 (57 – 59), *ag5-ag6* 51 (52 – 56), *ps1-ps1* 58 (76 – 80), *ps2-ps2* 78 (85 – 88), *ps3-ps3* 75 (80 – 83). Setae *ps1-3* fine and barbed.

Gnathosoma — (Figs. 1E-G). Palp five seg-

mented, palp tarsus reduced, with eight setae plus one solenidion 4 (5) long; palp tibia with one robust terminal spur (*o1*) 52 (51 – 52), two subterminal spurs (*o2-3*), 20 (18 – 20) and 17 (15) long, plus one serrated seta; palp femur and genu each with one seta, 118 (110 – 112) and 75 (74 – 76) long, respectively; oncofysis on distal end of genu 13 (11 – 12) long (Fig. 1F). Chelicerae 185 (190), movable digit 30 (34 – 37), with setae *cha* 46 (41 – 50) and *chb* 75 (71 – 72) (Fig. 1E); with one pair subcapitular setae (*m*) and three pairs of adoral setae: *m* 50 (55 – 60); *or1* 13 (15 – 16), *or2* 14 (12 – 13) and *or3* 55 (52 – 57); distances between setae: *m-m* 38 (35 – 37), *or1-or1* 26 (20 – 21), *or1-or2* 6 (5 – 7), *or2-or2* 30 (24 – 25), *or2-or3* 27 (24 – 31), *or3-or3* 85 (75 – 80), *m-or1* 56 (50) (Fig. 1G). Palp coxa with one supracoxal seta 4 (4 – 5) long (Fig. 1G).

Legs — (Figs. 2-3). Leg IV much longer than total length of body; each side of claws on tarsi I-II with 16 – 19 pectinations and tarsi III-IV with one median empodium. Measurements of leg segments as follows: Ta I 167 (173 – 179), Ti I 140 (138 – 140), Ge I 100 (94 – 95), TF I 69 (73 – 80), BF I 104 (96 – 100), Tr I 95 (70 – 85), Cx I 243 (253 – 262), leg I 918 (897 – 941); Ta II 173 (178 – 185), Ti II 145 (143 – 145), Ge II 100 (94), TF II 73 (71 – 85), BF II 100 (93 – 101), Tr II 89 (75 – 87), Cx II 239 (252 – 255), leg II 919 (906 – 952); Ta III 247 (246 – 254), Ti III 164 (168 – 170), Ge III 97 (93 – 98), TF III 79 (85 – 90), BF III 84 (76 – 87), Tr III 96 (95 – 97), Cx III 212 (203 – 205), leg III 979 (1001 – 1066); Ta IV 297 (300 – 303), Ti IV 197 (206 – 210), Ge IV 116 (110 – 117), TF IV 106 (102 – 105), BF IV 99 (97 – 116), Tr IV 125 (115 – 123), Cx IV 219 (207 – 210), leg IV 1159 (1142 – 1211), IP 3975 (3946 – 4170). Setal formulae of leg (I-IV) segments as follows (solenidia in parenthesis): coxae 4-3-4-3; trochanters 1-2-2-2; basifemora 5-6-4-4; telofemora 5-5-4-4, genua 8(1 σ)-7(1 σ)-7(1 σ)-7; tibiae 12(1 φ)(1 κ)-12(1 φ)-12(1 φ)-12(3 φ); tarsi 27(3 ω)-27(3 ω)-23 +1tric-23(2 ω)+1tric (Figs. 2-3). ω 1 I 12 (10), ω 2 I 20 (15 – 17), ω 3 I 17 (15 – 16), ω 1 II 12 (10 – 12), ω 2 II 17 (15), ω 3 II 15 (16), ω 1 IV 15 (15 – 20), ω 2 IV 16 (17 – 18), κ Ti I 8 (8), ϕ I 20 (19 – 22), ϕ II 18 (13 – 16), ϕ III 22 (19 – 25), ϕ IV 20 (15 – 16); σ I 30 (27 – 30), σ II: 35 (22 – 30), σ III 25 (27 – 29). Tarsi III-IV with one long trichobothrium each, 130 (120 – 125) and 140 (135 –

150) long, respectively (Figs. 3C-D). Coxa I with one supra coxal seta, 4 (4) (Fig. 1G).

MALE (n= 5): Color in life orange, Idiosoma oval. Length of total body (base of palp tibial claw to terminal body) 540 – 628, excluding gnathosoma 465 – 530; width 340 – 430 at level of seta *c2*.

Dorsum — (Figs. 4A-D). Prodorsal shield oval, 295 – 305 long, 190 – 200 wide, two longitudinal rows (5-6) of small oval pores between setae *sce-c1* on prodorsal shield and two pairs of eyes between level of setae *sce* and *c2*, anterior and posterior pairs 18 – 20 and 23 – 26 in diameter, respectively (Fig. 4A). Hysterosoma with three pairs of cupules (*ia*, *im* and *ip*) near setae *d1* and *f1* (Fig. 4A). Prodorsal shield with four pairs of setae (*vi*, *ve*, *sci* and *sce*), two pairs of ordinary setae, *sce*, *ve*, and two pairs of trichobotria, *sci* and *vi*; opisthosoma striated, bearing seven pairs of setae (*c1*, *c2*, *d1*, *e1*, *f1*, *h1*, *h2*). Stigmatic opening anterior to setae *vi* and base of chelicera, with about 11 rows of elongate alveoli at opening of peritremes (Fig. 4B). Dorsal setae serrated (Figs. 4A,C,D). Setae *c2* longest, 330 – 383 long; versus *h2* shortest, 80 – 105 long. Lengths of dorsal setae as follows: *vi* 92 – 101, *ve* 123 – 130, *sci* 142 – 150, *sce* 178 – 193, *c1* 130 – 138, *c2* 259 – 300, *d1* 125 – 139, *e1* 137 – 153, *f1* 148 – 151, *h1* 116 – 125, *h2* 78 – 89; distances between dorsal setae: *vi-vi* 30 – 45, *ve-ve* 148 – 155, *sci-sci* 125 – 135, *sce-sce* 171 – 180, *vi-ve* 63 – 68, *sci-ve* 13 – 15, *sce-sci* 61 – 66, *sce-c1* 150 – 163, *c1-c1* 123 – 136, *c1-c2* 45 – 53, *c2-c2* 215 – 235, *c1-d1* 56 – 63, *d1-d1* 130 – 143, *d1-e1* 42 – 55, *e1-e1* 108 – 110, *e1-f1* 69 – 83, *f1-f1* 70 – 80, *f1-h1* 58 – 65, *h1-h1* 33 – 38, *h1-h2* 50 – 63, *h2-h2* 125 – 143, *vi/vi-vi* 2.24 – 3.06; *ve/ve-ve* 0.83 – 0.84, *sci/sci-sci* 1.1 – 1.13, *c1/c1-c1* 1.01 – 1.05; *c2/c2-c2* 1.2 – 1.27; *d1/d1-d1* 0.96 – 0.97; *e1/e1-e1* 1.26 – 1.39; *f1/f1-f1* 1.8 – 2.1; *h1/h1-h1* 3.3 – 3.5; *vi-vi: ve-ve: sci-sci: sce-sce:c1-c1:c2-c2: d1-d1: e1-e1:f1-f1:h1-h1:h2-h2* : (0.42 – 0.56): (1.93 – 2.1): (1.68 – 1.78): (2.25 – 2.4): (1.7 – 1.75): (1.78 – 1.85): (2.20 – 2.60): (1.54 – 1.37): (1.0 – 1.0): (0.47 – 0.48): (1.78 – 1.79).

Venter — (Fig. 4G). Ventral cuticle striated. Coxisternal shields smooth, longitudinally striated between coxa I-IV; coxisternal shields II-III separated by transverse striations; coxisternal shields bear 14 pairs of coxal setae: *1a* 59 – 63, *1b* 73 – 75, *1c* 82 – 88,

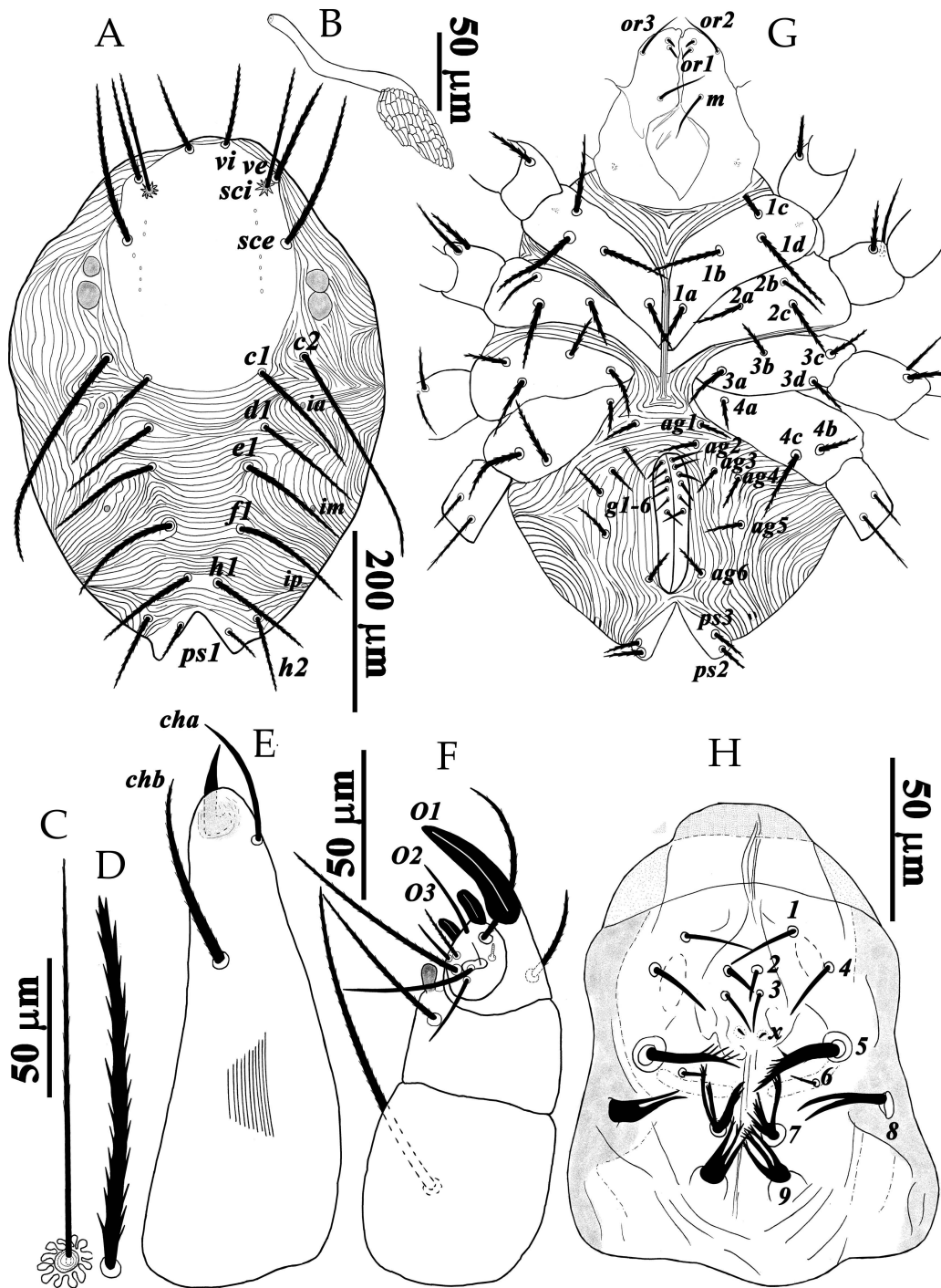


FIGURE 4: *Austroteneriffia khorrabadiensis* n. sp. (Male): A – Dorsum, B – Peritreme, C – Trichobothrium *sci*, D – Dorsal body setae (seta *c1*), E – Chelicera, F – Palp, G – Venter, H – Genitalia.

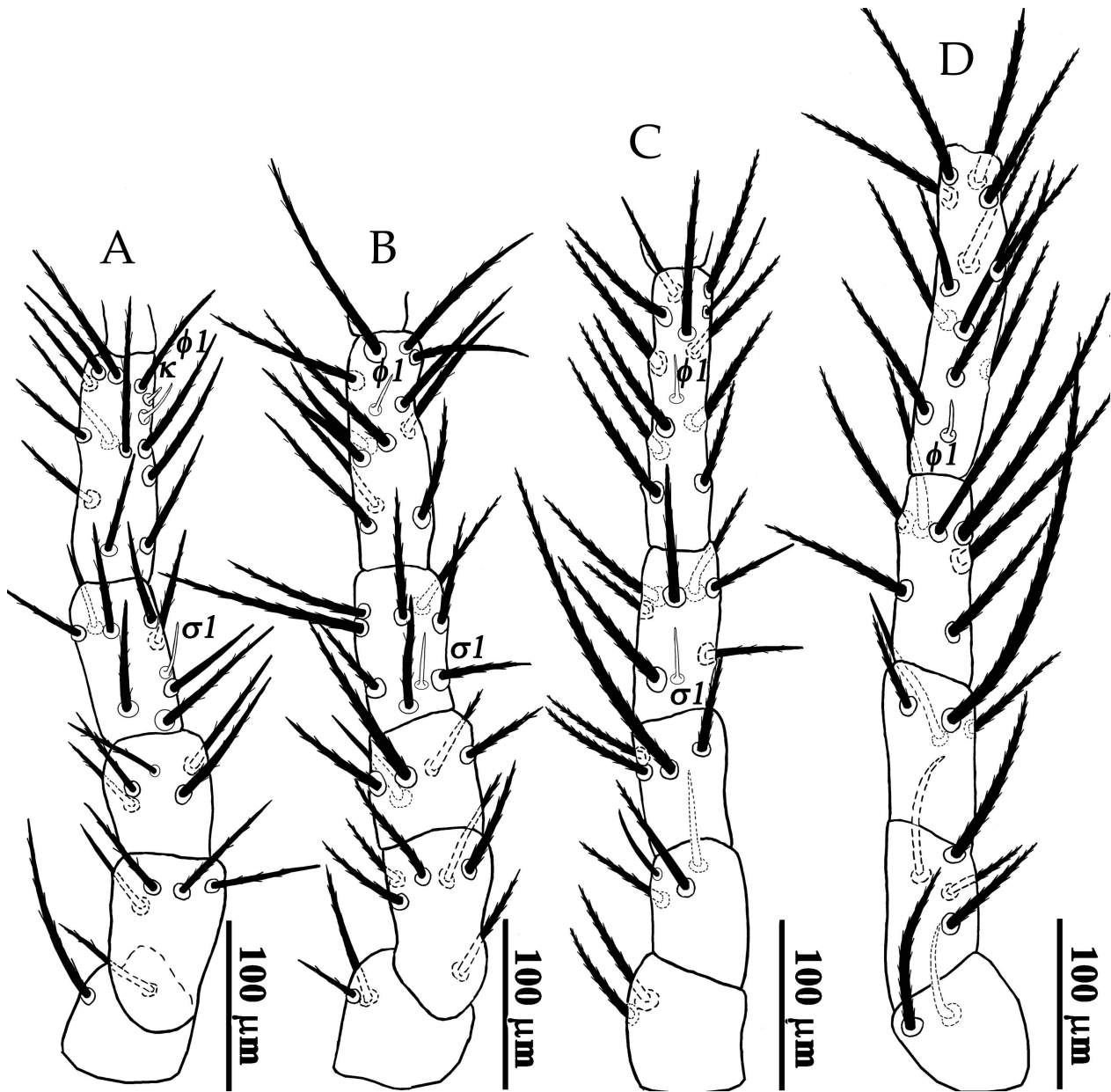


FIGURE 5: *Austroteneriffia khorrabadiensis* n. sp. (Male): A – Basifemur-tibia I, B – Basifemur-tibia II, C – Basifemur-tibia III, D – Basifemur-tibia IV.

1d 103 – 105 + one supracoxal spur 4 – 5; 2a 53 – 58, 2b 40 – 45, 2c 72 – 75, 3a 62 – 72, 3b 43 – 47, 3c 46 – 49, 3d 60 – 65, 4a 35 – 39, 4b 37 – 46, 4c 72 – 82. One pair of cupules (Fig. 4G). Aggential area with six pairs of setae (ag1-6), genital valves with 6 pairs of setae, anal valves with three pairs of pseudanal setae (ps1-3). Measurements of setae: g1 24 – 27, g2 26 – 28, g3 26 – 29, g4 22 – 28, g5 23 – 27, g6 22 – 27, ag1 36 –

40, ag2 30 – 33; ag3 30 – 38, ag4 35 – 40, ag5 35 – 44, ag6 35 – 38, ps1 38 – 45, ps2 35 – 43, ps3 38 – 43, all setae serrated. Distances between setae: g1-g1 10 – 13, g1-g2 9 – 13, g2-g2 18 – 21, g2-g3 7 – 9, g3-g3 25 – 33, g3-g4 10 – 13, g4-g4 23 – 30, g4-g5 10 – 13, g5-g5 23 – 30, g5-g6 10 – 13, ag1-ag1 73 – 75, ag2-ag2 68 – 84, ag3-ag3 89 – 109, ag4-ag4 155 – 177, ag5-ag5 150 – 175, ag6-ag6 57 – 80, ag1-ag2 23 – 30, ag2-ag3 23 – 37,

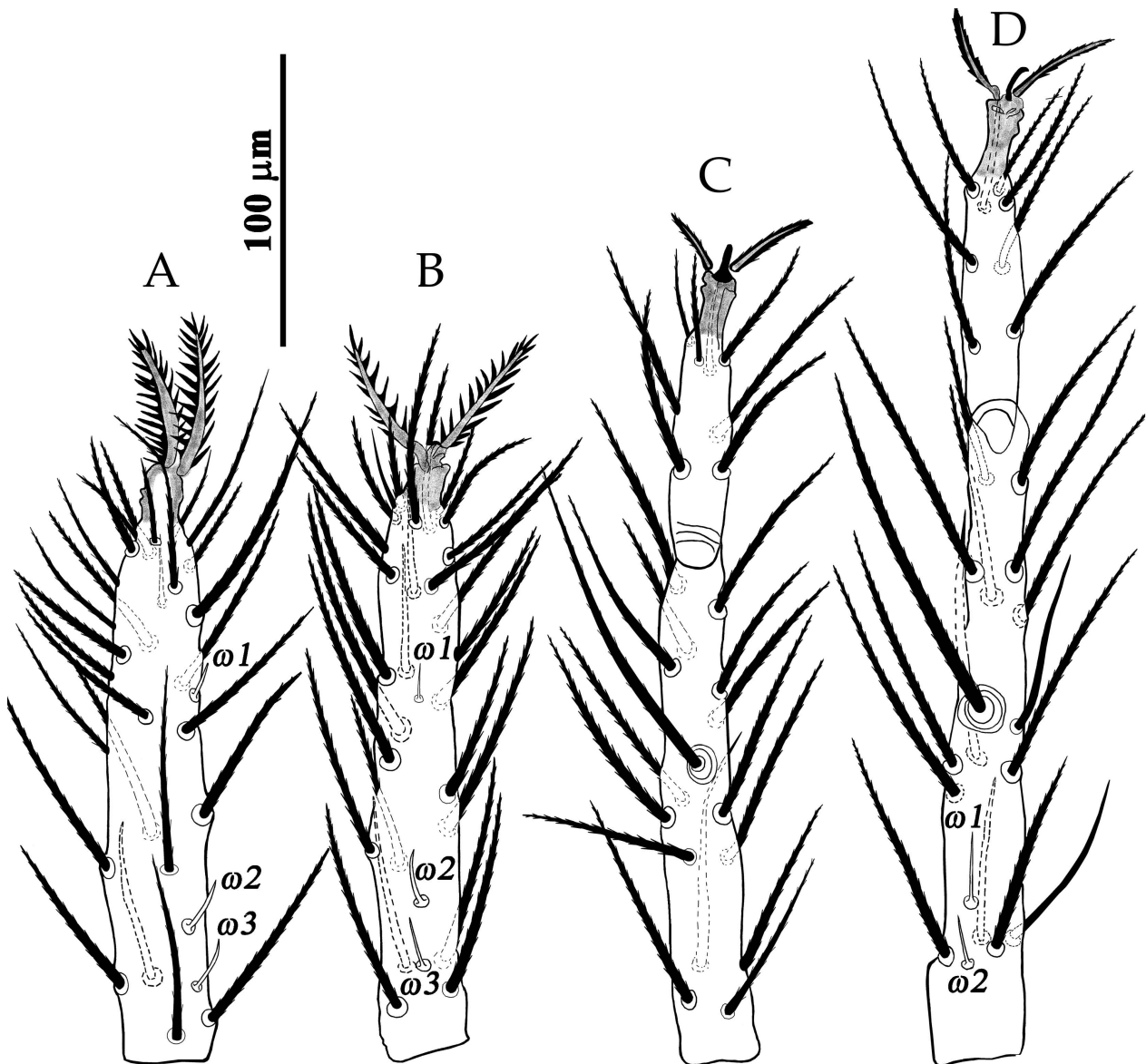


FIGURE 6: *Austroteneriffia khorrabadiensis* n. sp. (Male): A – Tarsus I, B – Tarsus II, C – Tarsus III, D – Tarsus IV.

ag3-ag4 45 – 50, *ag4-ag5* 53 – 59, *ag5-ag6* 65 – 69, *ps1-ps1* 71 – 75, *ps2-ps2* 70 – 80, *ps3-ps3* 63 – 78, *ps1-ps2* 20 – 28, *ps2-ps3* 13 – 18.

Male genitalia — (Fig. 4H). With eight pairs of eugenital setae [1 28, 2 15, 3 18, 4 25, 5 35, 6 10, 7 25, 8 30, 9 21 and one spine like seta \times 5] (Fig. 4H).

Gnathosoma — (Figs. 4E–G). Palp five segmented, palp tarsus reduced to circular plate, with eight setae (three long and serrated, two short and serrated, two short and smooth, one duplex seta

and one solenidion (ω) 6 – 8 long; palp tibia with one robust terminal spur (*o1*) 40 – 51 long, two sub-terminal spurs (*o2-3*) 16 – 20 and 15 – 17 long, plus one serrated seta; oncosphysis on genu distally, 10 – 14 long, palp genu and femur each with one seta, 67 – 76 and 107 – 118 long, respectively (Fig. 4F). Chelicerae 160 – 175, movable digit 23 – 26, with two setae *cha* 35 – 42 and *chb* 60 – 71 (Fig. 4E). Subcapitulum with one pair of setae *m*, 50 – 60, three pairs of adoral setae: *or1* 13 – 16, *or2* 11 – 13, *or3* 54 – 57;

distances between setae: *m-m* 35 – 45, *or1-or1* 17 – 20, *or2-or2* 23 – 26, *or2-or3* 25 – 28, *or3-or3* 46 – 50, *m-or1* 45 – 51 (Fig. 4G). Palp coxa with one supracoxal seta, 4 long (Fig. 4G).

Legs — (Figs. 5-6). Leg IV is much longer than total length of body. Each side of claws on tarsi I-II with 13-15 pectinations and tarsi III-IV with one median empodium. Measurements of leg segments as follows: Ta I 172 – 182, Ti I 138 – 150, Ge I 96 – 106, TF I 73 – 84, BF I 99 – 109, Tr I 80 – 84, Cx I 230 – 245, leg I 880 – 960; Ta II 181 – 193, Ti II 138 – 150, Ge II 89 – 102, TF II 82 – 90, BF II 90 – 101, Tr II 83 – 90, Cx II 225 – 240, leg II 880 – 966; Ta III 241 – 252, Ti III 160 – 178, Ge III 92 – 103, TF III 80 – 90, BF III 85 – 96, Tr III 83 – 91, Cx III 185 – 198, leg III 926 – 1000; Ta IV 295 – 313, Ti IV 194 – 213, Ge IV 109 – 115, TF IV 94 – 105, BF IV 94 – 103, Tr IV 106 – 113, Cx IV 195 – 208, leg IV 1087 – 1170, IP 3773 – 4096. Setal formulae of leg segments as follows (solenidia in parentheses): coxae 4-3-4-3; trochanters 1-2-2-2; basifemora 5-6-4-4; telofemora 5-5-4-4, genua 8(1 σ)-8(1 σ)-7(1 σ)-7; tibiae 12(1 φ)(1 κ)-12(1 φ)-12(1 φ)-12(1 φ); tarsi 27(3 ω)-27(2 ω)-23+1tric-23(2 ω)+1tric (Figs. 5-6). ω 1 I 11-13, ω 2 I 19-21, ω 3 I 16-18, ω 1 II 11-12, ω 2 II 15-18, ω 3 II 10-11, ω 1 IV 19-21, ω 2 IV 14-17, κ Ti I 8-10, ϕ I 25-30, ϕ II 23-26, ϕ III 21-24, ϕ IV 18-22; σ I 25-29, σ II 23-25, σ III 25-29. Tarsi III-IV with long trichobothrium each 113 – 124 and 145 – 161 long respectively and almost same in length of female (Figs. 6C-D).

Remarks — *Austroteneriffia khorramabadiensis* **n. sp.** closely resembles *A. japonica* (Ehara) in that basifemor III has 4 setae, trochanter 2 setae, genu IV is without solenidion and palpal oncophysis present. However, it differs that in: 1) Trochanter II with 2 setae instead of 3 setae; 2) Telofemora III-IV each with 4 setae in the former instead of 5 each in the latter; 3) Genua I-IV with 8(1 σ)-8(1 σ)-7(1 σ)-7 in new species opposed to 7-7-6-6 in *A. japonica*; 4) Telotarsi III-IV with 8-8 setae in *A. khorramabadiensis* **n. sp.** whereas 7-6 (7) in *A. japonica*; 5) tibiae formula I-III 12(1 φ +1 κ)-12(1 φ)-12(1 φ) versus 14 (1 φ +1 κ)-13 or 14 (1 φ)-13 or 14 (1 φ); 6) seta *c*2 long and reaching to setal base of *h*2 in the former whereas short and almost reaching *e*1 in *A. japonica*; 7) dorsal setae *c*1, *d*1, *e*1 and *f*1 long and reaching pass bases of setae *e*1, *f*1, *h*1 and *h*1 respectively in

the former but short and not reaching to the setae next behind in the latter; 8) length of dorsal setae *vi* 102 – 105, *ve* 138 – 145, *sci* 152 – 154, *sce* 185 – 206, *c*1 141 – 157, *c*2 296 – 315, *d*1 148 – 168, *e*1 165 – 182, *f*1 170 – 186, *h*1 134 – 146, *h*2 100 – 106 versus *vi* 57, *ve* 96, *sci* 102, *sce* 148, *c*1 61, *c*2 178, *d*1 77, *e*1 77, *f*1 90, *h*1 87, *h*2 72. Also *Austroteneriffia khorramabadiensis* **n. sp.** closely resembles *A. shiraziensis* Khanjani *et al.* 2013 from Iran in having the same femoral formula and palpal oncophysis present but differs by: 1) Trochanter IV with 2 setae in the new species opposed to 3 in *A. shiraziensis*; 2) Genua formula I-IV with 8(1 σ)-8(1 σ)-7(1 σ)-7 in the former opposed to 7(1 σ)-7(1 σ)-6(1 σ)-6 in the later; 3) Tibia IV with 12 (1 φ) in the former whereas 12 (3 φ) in the latter; 4) Basitarsus III with 15(1 ω)+1tric in *A. khorramabadiensis* whereas 15(2 ω)+1tric in *A. shiraziensis*; 5) Telotarsi III with 8 setae instead of 9; 6) Male genitalia setae 7 and 9 with three rami in the former opposed to two rami in the latter.

Etymology — This species is named in honor of the city of Khorramabad, capital of Lorestan province, where the new species was collected.


Type materials — The holotype female and two paratype females and five allotype males were collected from soil and litter under oak trees, *Quercus brantii* Lindl (Fagaceae), Kaka Reza region, Khorramabad vicinity, Lorestan province (33°56'N, 48°39'E, a.s.l. 1703 m), 19 xi 2011, by Mohammad Ahmad Hoseini. The holotype female and one paratype female, four allotype males are deposited in the Collection of the Acarology Laboratory, University of Bu-Ali Sina, Hamedan, Iran. One paratype female, one male slide is deposited in the mite Section of National Collection of Arachnida, Plant Protection Research Institute, Pretoria, South Africa.

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