

Fig. 6.13.1. (cont.) **Female:** f hypostome, g tritosternum, h dorsal setae, i spermatheca (f – g WESTERBOER 1963; h VITZTHUM 1923; i ATHIAS-HENRIOT 1961)

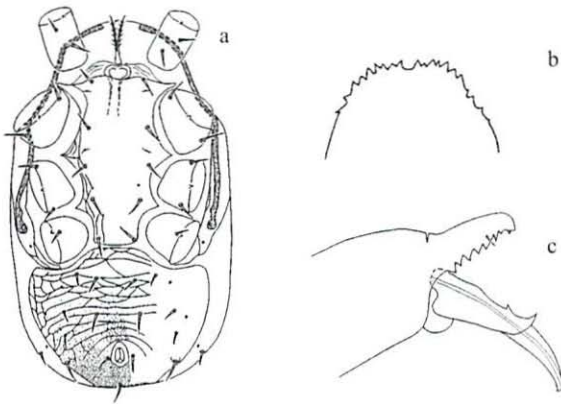


Fig. 6.13.2. **Male:** a ventral, b tectum, c chelicera (a – c GWIAZDOWICZ 2003)

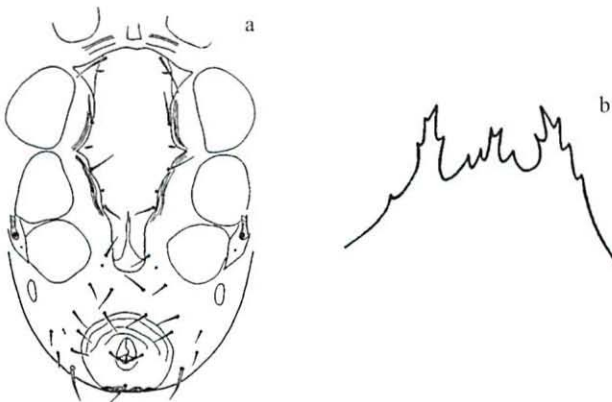


Fig. 6.13.3. **Deutonymph:** a ventral, b tectum (a, b WESTERBOER 1963)

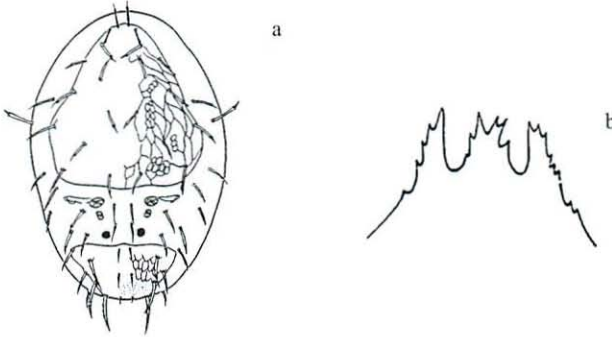


Fig. 6.13.4. **Protonymph**: a dorsal, b tectum (a, b WESTERBOER 1963)

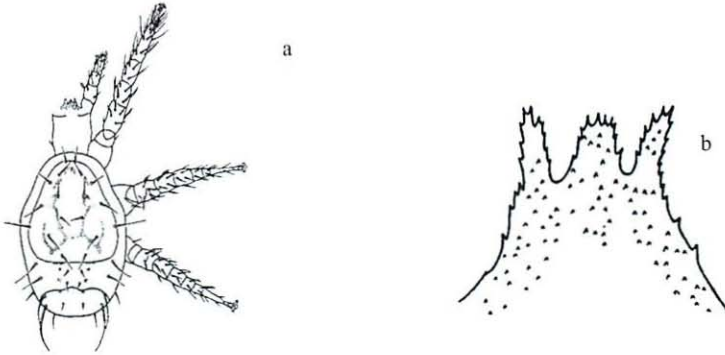


Fig. 6.13.5. **Larva**: a dorsal, b tectum (a, b WESTERBOER 1963)

*Lasioseius tuberculatus* Karg, 1980

(Fig. 6.14.)

KARG, W. (1980): Die Raubmilbengattung *Lasioseius* Berlese, 1916. – Zool. Jb. Syst. **107**: 344 – 367  
Types: Museum für Naturkunde Berlin (Germany)

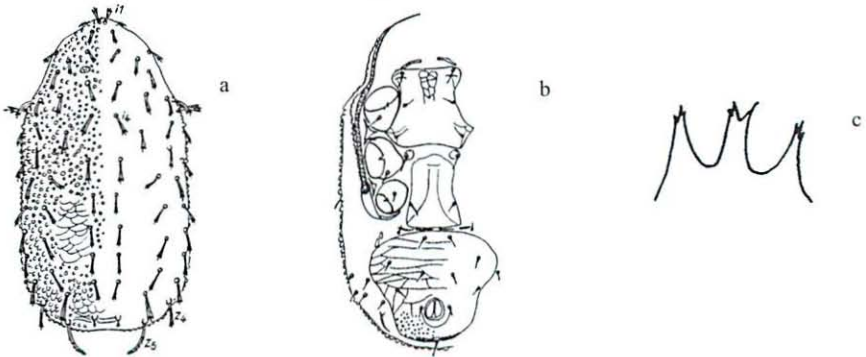


Fig. 6.14. **Female**: a dorsal, b ventral, c tectum (a – c KARG, 1980)

*Lasioseius manyarae* Hurlbutt, 1972

(Fig. 6.15.)

HURLBUTT, H. W. (1972): Ascinae and Podocinidae (Acarina, Mesostigmata) from Tanzania. – *Acarologica* 13 (2): 280 – 300

Holotype: United States National Museum, Washington D. C. (USA)

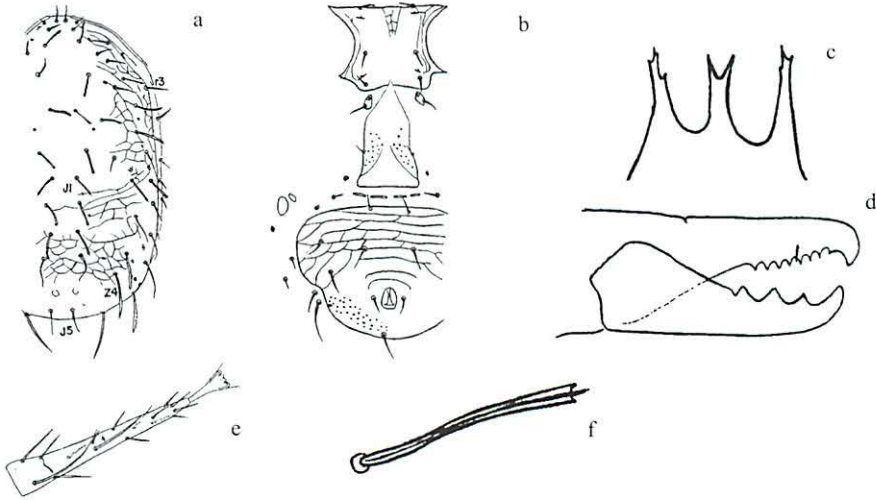


Fig. 6.15. **Female:** a dorsal, b ventral, c tectum, d chelicera, e tarsus IV, f dorsal seta (a – f HURLBUTT 1972)

*Lasioseius fimetorum* Karg, 1971

(Figs 6.16.1. – 6.16.2.)

KARG, W. (1971): Acari (Acarina, Milben; Unterordnung Anactinochaeta [Parasitiformes]): Die freilebenden Gamasina (Gamasides), Raubmilben. – In: DAHL, F., M. DAHL & F. PEUS (eds): Die Tierwelt Deutschlands und der angrenzenden Meeresteile. 59. Teil, Gustav Fischer Verlag, Jena: 1 – 475

Types: Museum für Naturkunde Berlin (Germany)

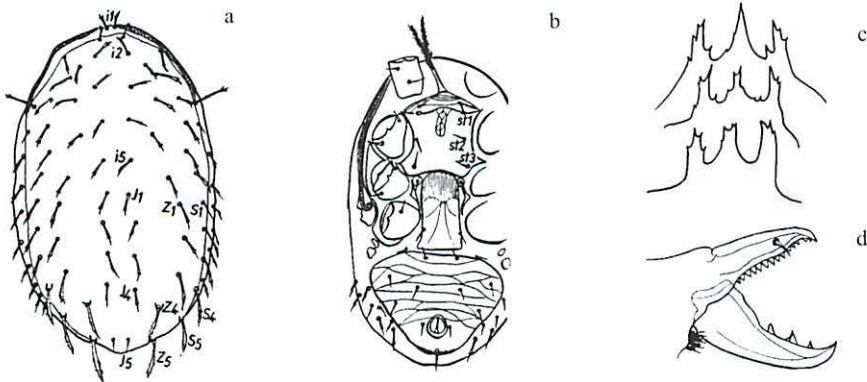


Fig. 6.16.1. **Female:** a dorsal, b ventral, c tectum, d chelicera (a – d KARG 1971)

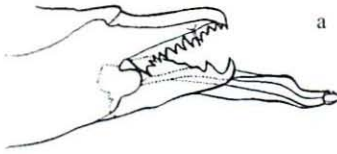


Fig. 6.16.2. **Male:** a chelicera (a KARG 1971)

*Lasioseius sugawarai* Ehara, 1964

(Figs 6.17.1. – 6.17.2.)

EHARA, S. (1964): Some mites of the families Phytoseiidae and Blattisocidae from Japan (Acarina, Mesostigmata). – J. Fac. Sci. Hokkaido Univ., Ser. 6, Zool. 15 (3): 378 – 394

Types: Zoological Institute, Faculty of Science, Hokkaido University (Japan)

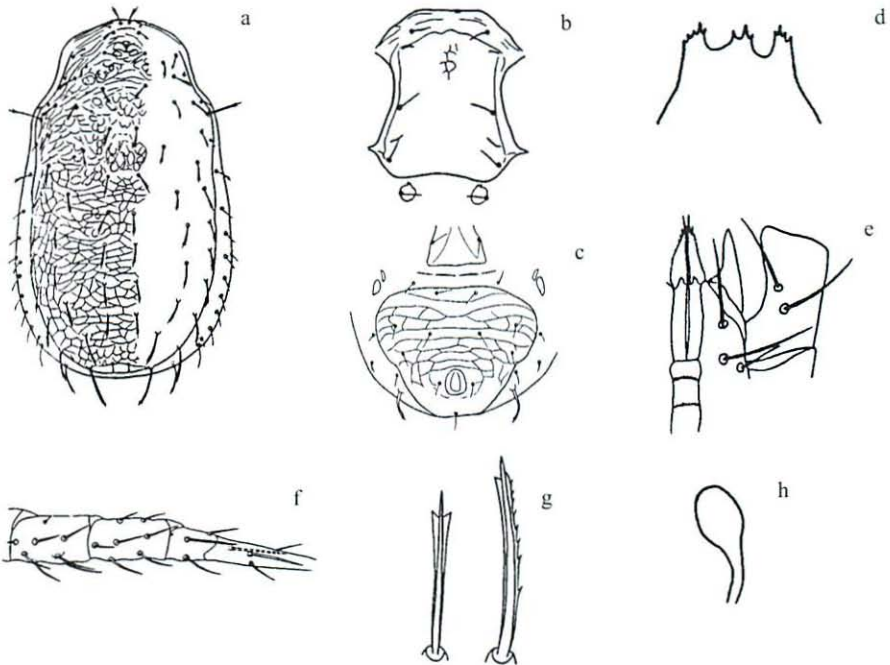


Fig. 6.17.1. **Female:** a dorsal, b sternal shield, c ventral, d tectum, e hypostome, f leg IV, g dorsal setae, h spermatheca (a – g EHARA 1964)

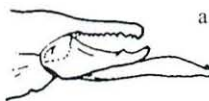


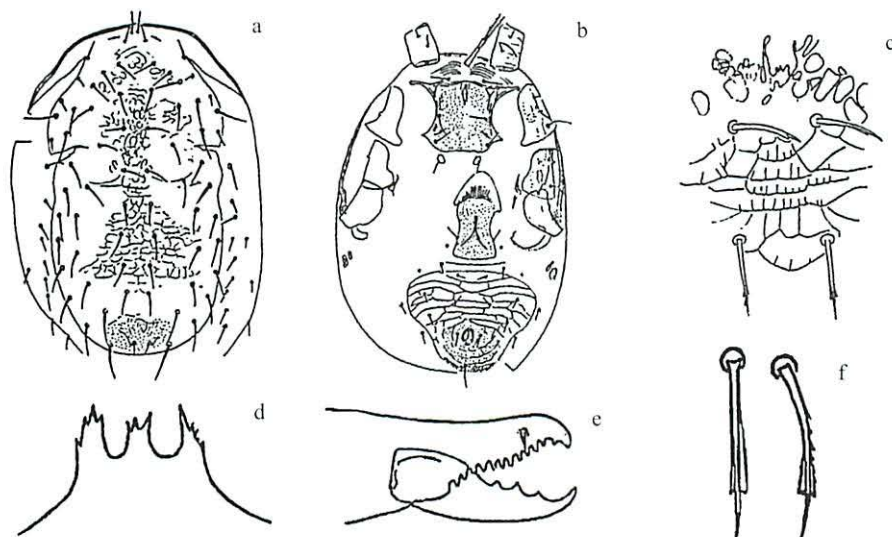
Fig. 6.17.2. **Male:** a chelicera (a LEE & LEE 1998)

*Lasioseius tridentatus* Baker, Delfinado & Abbatiello, 1976

(Fig. 6.18.)

BAKER, E. W., M. D. DELFINADO & M. J. ABBATELLO (1976): Terrestrial mites of New York II. Mites in Bird's nests (Acarina). – J. N. Y. Entomol. Soc. **84** (1): 48 – 66

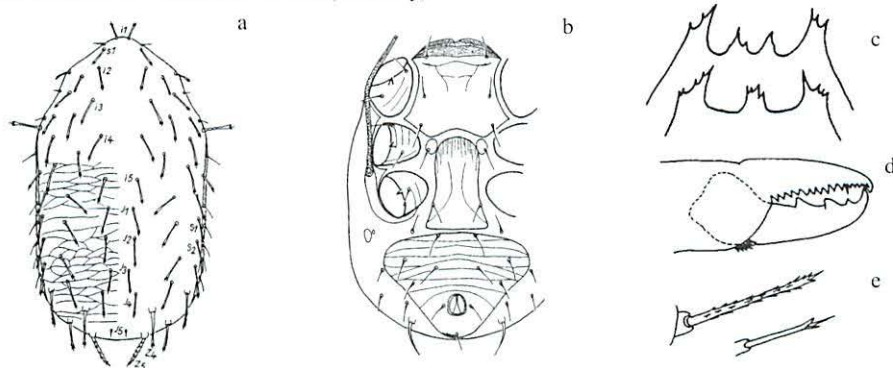
Holo- and paratypes: New York State Museum and Science Service, Albany, New York (USA), United States National Museum, Washington D. C. (USA)

Fig. 6.18. **Female:** a dorsal, b ventral, c detail of dorsal reticulation, d tectum, e chelicera, f dorsal setae (a – f BAKER, DELFINADO & ABBATELLO 1976)*Lasioseius rostratus* Karg, 1996

(Figs 6.19.1. – 6.19.2.)

KARG, W. (1996): Neue Arten aus Raubmilbengattungen der Gamasina Leach (Acarina, Parasitiformes) mit Indikatoren zum Entwicklungsalter. – Mitt. Zool. Mus. Berl. **72** (1): 149 – 195

Types: Museum für Naturkunde Berlin (Germany)

Fig. 6.19.1. **Female:** a dorsal, b ventral, c tectum, d chelicera, e dorsal setae (a – e KARG 1996)



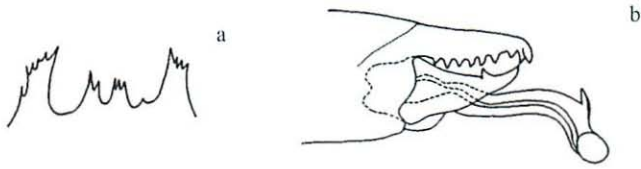


Fig. 6.19.2. **Male:** a tectum, b chelicera (a, b KARG 1996)

*Lasioseius plumatus* Karg, 1980

(Fig. 6.20.)

KARG, W. (1980): Die Raubmilbengattung *Lasioseius* Berlese, 1916. – Zool. Jb. Syst. **107**: 344 – 367  
Types: Museum für Naturkunde Berlin (Germany)

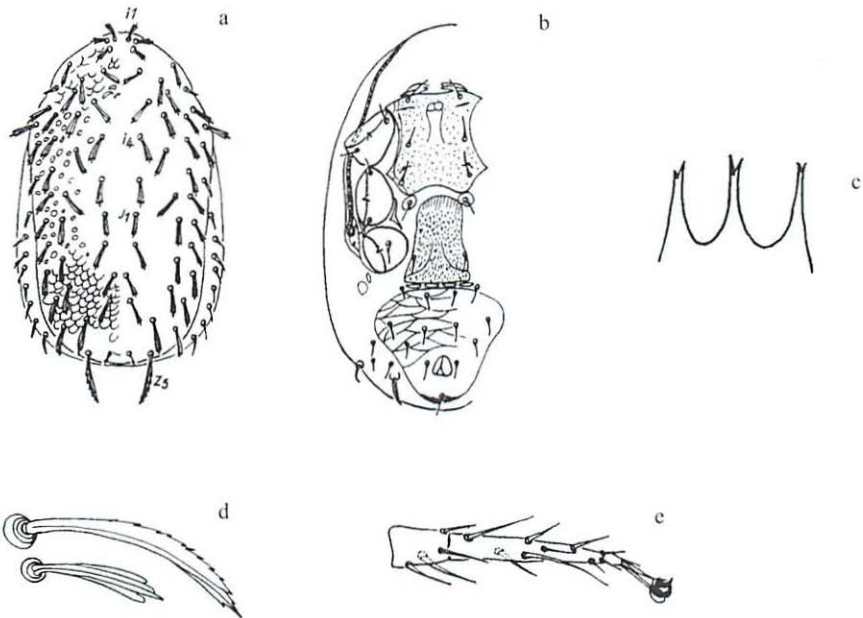


Fig. 6.20. **Female:** a dorsal, b ventral, c tectum, d dorsal setae I1, Z5, e tarsus IV (a – e KARG 1980)

*Lasioseius liuchungfui* Samsinak, 1964

(Figs 6.21.1. – 6.21.2.)

SAMSINAK, K. (1964): Termitophile Milben aus der VR China. I. Mesostigmata. – Entomol. Abh. (Dres.)  
**32**: 33 – 52

Holotype: Zoological Institute, Chinese Academy of Sciences, Peking-Haitien (China)

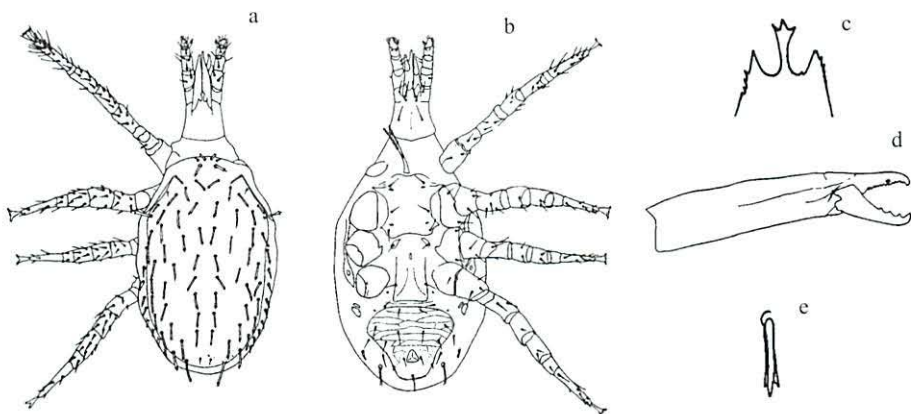


Fig. 6.21.1. **Female:** a dorsal, b ventral, c tectum, d chelicera, e dorsal seta (a – e SAMSINAK 1964)

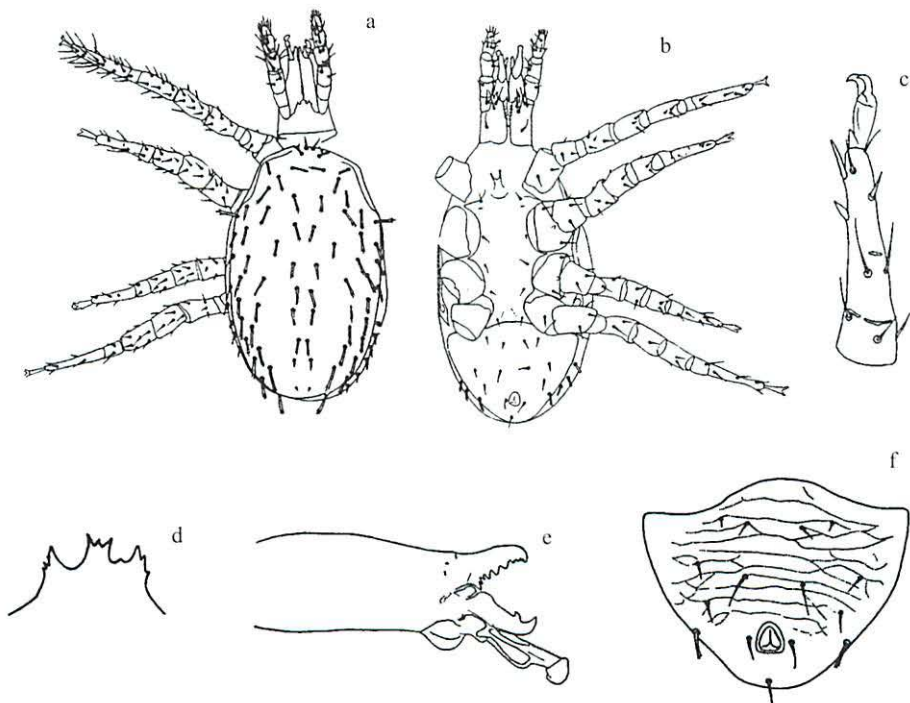


Fig. 6.21.2. **Male:** a dorsal, b ventral, c tarsus, d tectum, e chelicera, f ventrianal shield (a – f SAMSINAK 1964)

*Lasioseius elegans* Fain, Hyland & Aitken, 1977

(Figs 6.22.1. – 6.22.5.)

FAIN, A., K. E. HYLAND & T. H. G. AITKEN (1977): Nouveaux acariens Ascidae (Mesostigmata) phoretiques dans les fosses nasales de colibris. Note préliminaire. – Bull. Ann. Soc. R. Ent. Belg. 113: 184 – 186

Holotype: United States National Museum, Washington D. C. (USA)

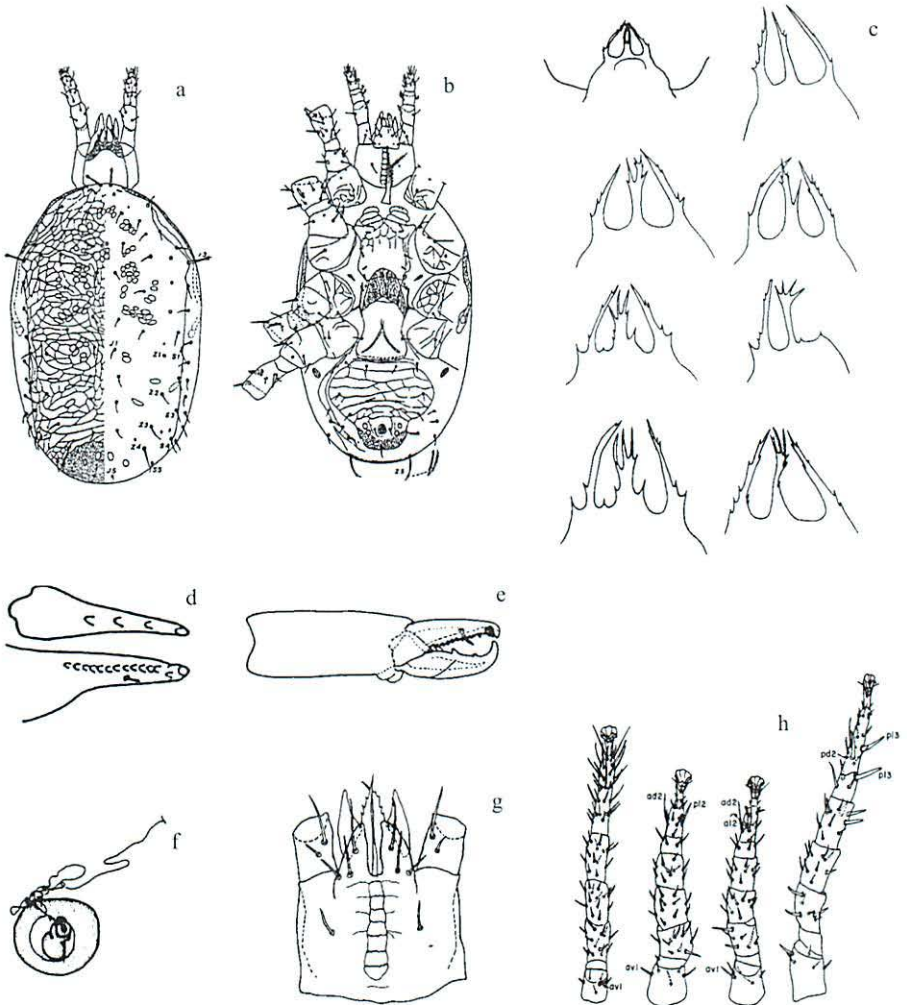


Fig. 6.22.1. **Female:** a dorsal, b ventral, c tectum, d, e chelicera, f spermatheca, g hypostome, h tarsus I – IV (a, b, d FAIN, HYLAND & AITKEN 1977; c, e – h NAEEM, DOBKIN & OCONNOR 1985)



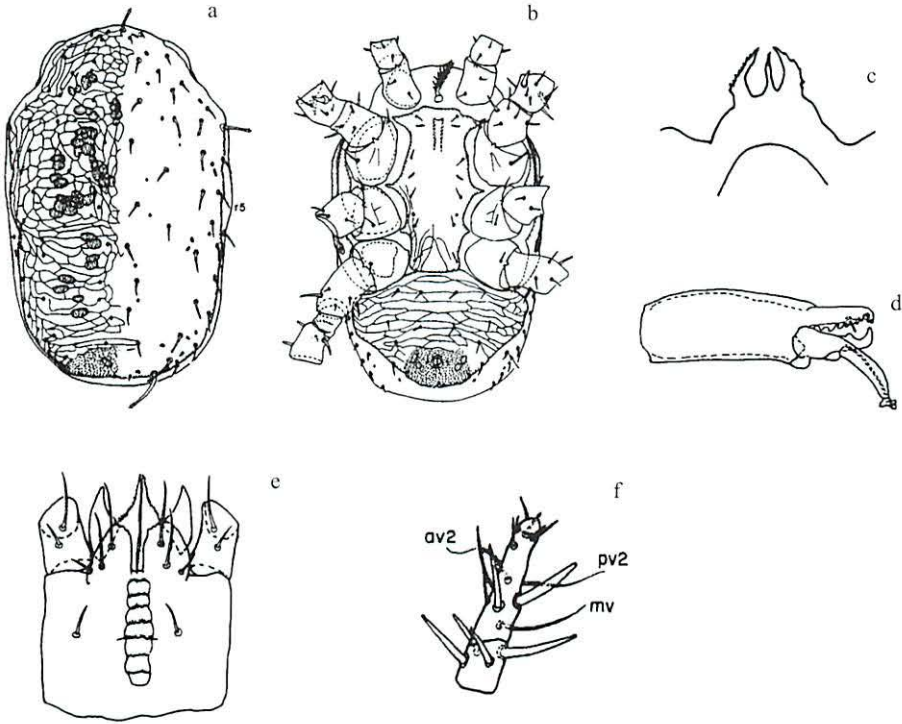


Fig. 6.22.2. **Male:** a dorsal, b ventral, c tectum, d chelicera, e hypostome, f tarsus IV (a – f NAEEM, DOBKIN & OCONNOR 1985)

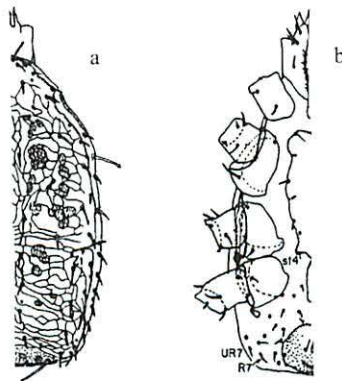


Fig. 6.22.3. **Deutonymph:** a dorsal, b ventral (a, b NAEEM, DOBKIN & OCONNOR 1985)

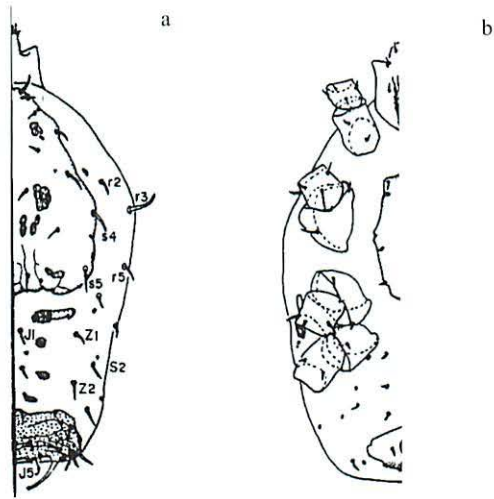


Fig. 6.22.4. Protonymph: a dorsal, b ventral (a, b NAEEM, DOBKIN & OCONNOR 1985)

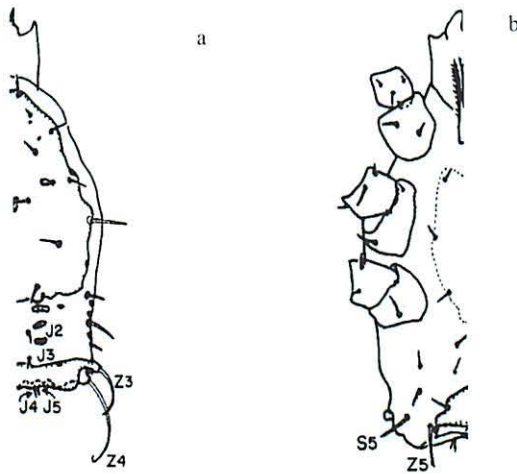


Fig. 6.22.5. Larva: a dorsal, b ventral (a, b NAEEM, DOBKIN & OCONNOR 1985)

*Lasioseius sewai* Nasr & Abou-Awad, 1987

(Fig. 6.23.)

NASR, A. K. & B. A. ABOU-AWAD (1987): Description of some ascid mites from Egypt (Acari, Ascidae).  
– *Acarologia* **28** (1): 27 – 35

Holotype: National Research Centre, Dokki-Cairo (Egypt)

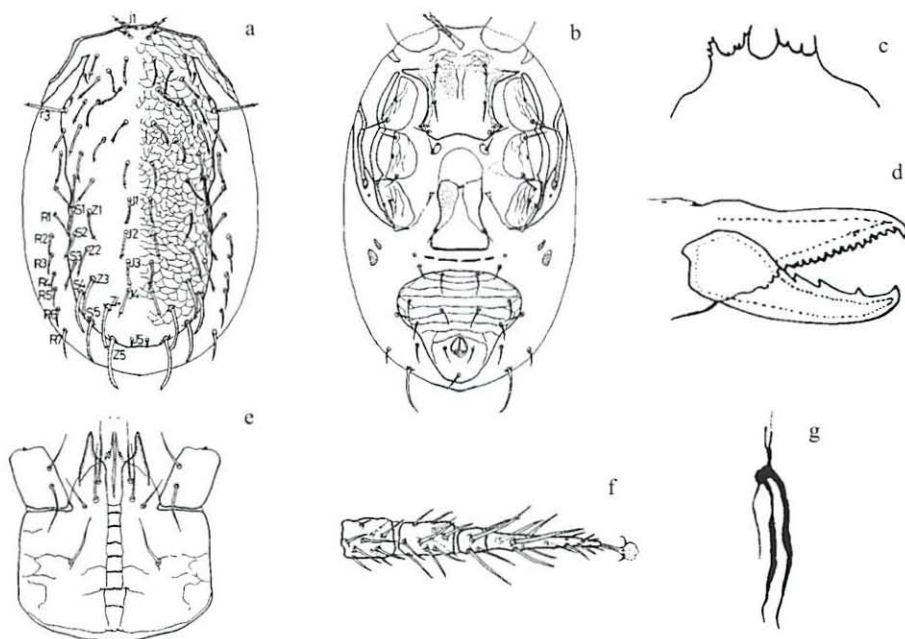


Fig. 6.23. **Female:** a dorsal, b ventral, c tectum, d chelicera, e hypostome, f leg IV, g spermatheca (a – g NASR & ABOU-AWAD 1987)

*Lasioseius kargi* Kandil, 1980

(Fig. 6.24.)

KANDIL, M. M. (1980): Three new *Lasioseius* species from Hungary (Acari, Mesostigmata, Podocinidae). – *Folia Entomol. Hung.* 61 (33): 75 – 86

Holotype: Hungarian Natural History Museum, Budapest (Hungary)

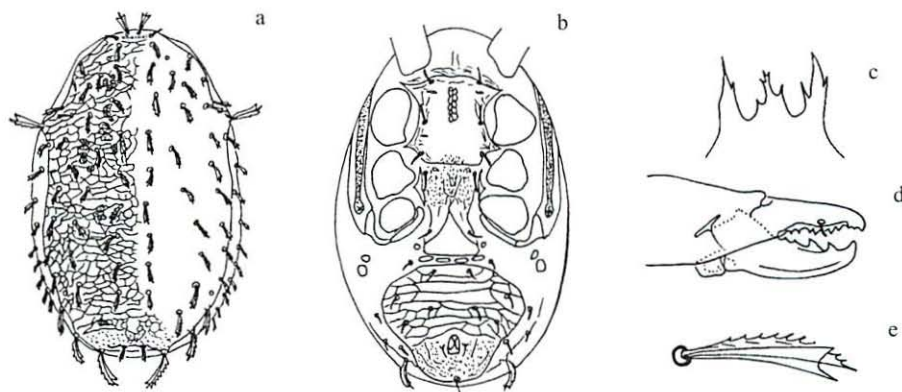


Fig. 6.24. **Female:** a dorsal, b ventral, c tectum, d chelicera, e dorsal seta (a – e modified after KANDIL 1980)

*Lasioseius neometes* McGraw & Farrier, 1969

(Fig. 6.25.)

MCGRAW, J. R. & M. H. FARRIER (1969): Mites of the superfamily Parasitoidea (Acarina, Mesostigmata) associated with *Dendroctonus* and *Ips* (Coleoptera, Scolytidae). – NC Agric. Exp. Stn. Tech. Bull. 192: 1 – 162

Holotype: United States National Museum, Washington D. C. (USA)

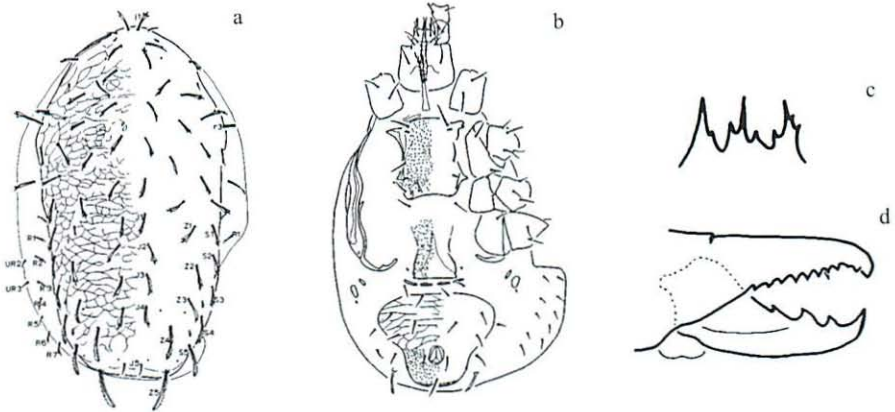


Fig. 6.25. Female: a dorsal, b ventral, c tectum, d chelicera (a – d MCGRAW & FARRIER 1969)

*Lasioseius nambirimae* Krantz, 1962

(Fig. 6.26.)

KRANTZ, G. W. (1962): Acari. Free-living Mesostigmata. II. – Family Aceosejidae. – Parc National De La Garamba, Mission H. De Saeger 34: 3 – 29

Holotype: Institute of the National Parks of Congo and Ruanda-Urundi, Bruxelles (Belgium)

Paratypes: United States National Museum, Washington D. C. (USA), British Museum (Natural History), London (United Kingdom)

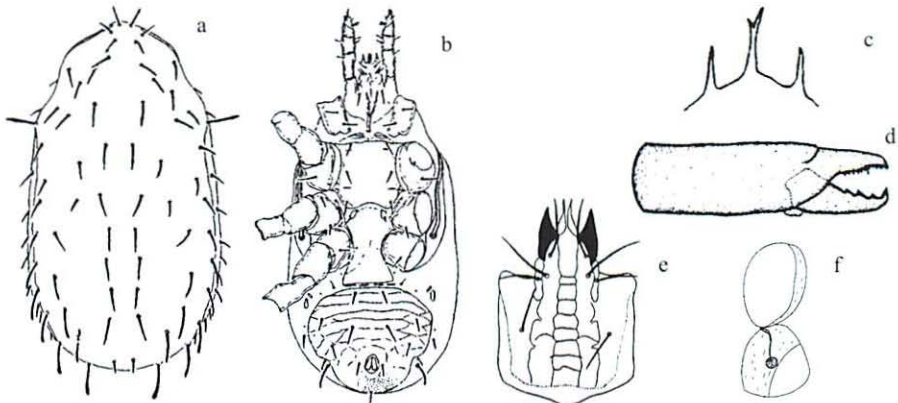


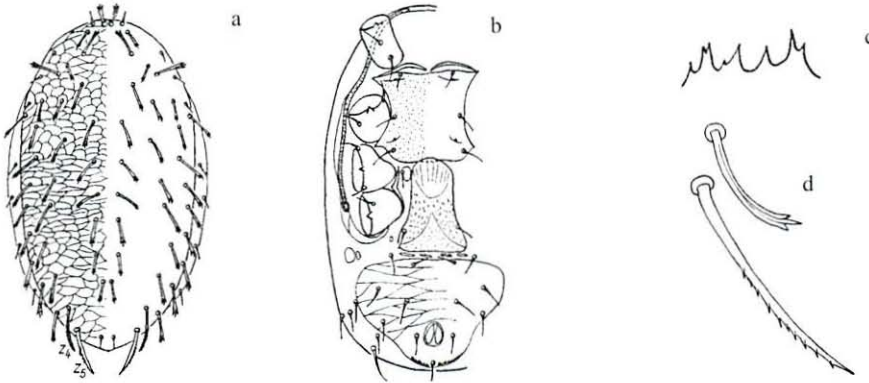
Fig. 6.26. Female: a dorsal, b ventral, c tectum, d chelicera, e hypostome, f spermatheca (a – c KRANTZ 1962; d – f ASWEGEN & LOOTS 1969)

*Lasioseius tetraspinosus* Karg, 1980

(Figs 6.27.1. – 6.27.2.)

KARG, W. (1980): Die Raubmilbengattung *Lasioseius* Berlese, 1916. – Zool. Jb. Syst. **107**: 344 – 367

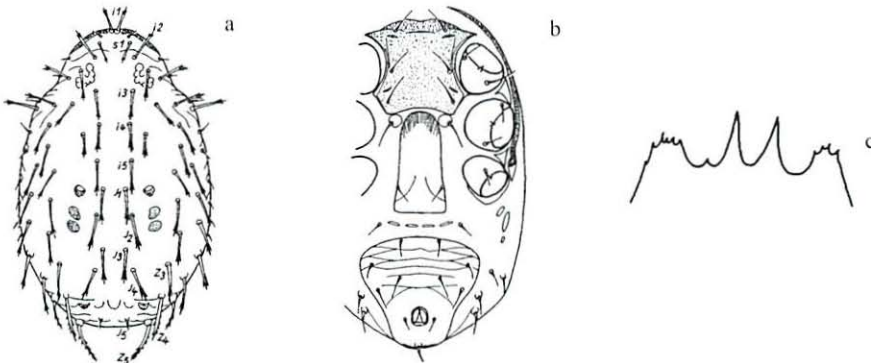
Types: Museum für Naturkunde Berlin (Germany)

Fig. 6.27.1. **Female:** a dorsal, b ventral, c tectum, d dorsal setae II, Z5 (a – d KARG 1980)Fig. 6.27.2. **Male:** a tectum, b chelicera (a, b KARG 1980)*Lasioseius euarmatus* Karg, 1994

(Fig. 6.28.)

KARG, W. (1994): Raubmilben der Cohors Gamasina Leach (Acarina, Parasitiformes) vom Galapagos-Archipel. – Mitt. Zool. Mus. Berl. **70** (2): 179 – 216

Types: Museum für Naturkunde Berlin (Germany)

Fig. 6.28. **Female:** a dorsal, b ventral, c tectum (a – c KARG 1994)



*Lasioseius inconspicuus* Westerboer, 1963

(Fig. 6.29.)

WESTERBOER, I. (1963): Die Familie Podocinidae Berlese, 1916. – In: STAMMER, H. J. (ed.), Beiträge zur Systematik und Ökologie mitteleuropäischer Acarina, Band II, Mesostigmata 1. Akad. Verlagsgesellschaft, Leipzig: 179 – 450

Types: deposition unknown to the authors

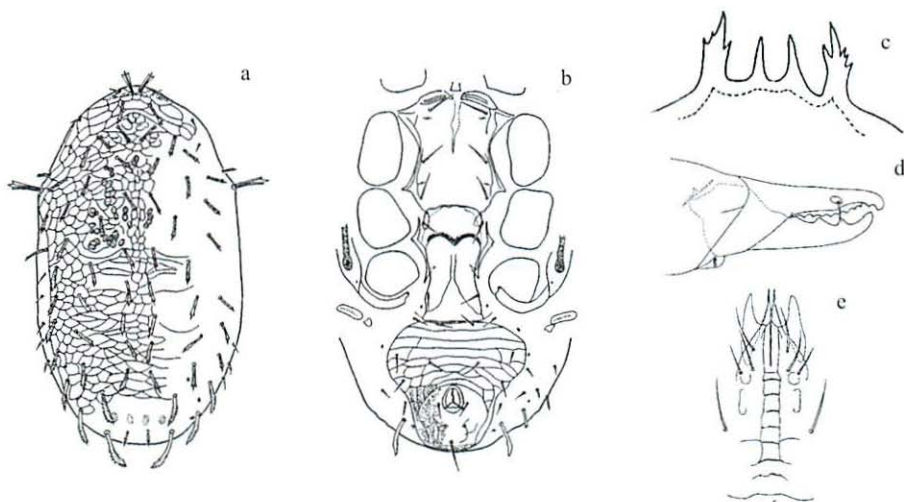


Fig. 6.29. **Female:** a dorsal, b ventral, c tectum, d chelicera, e hypostome (a – e WESTERBOER 1963)

*Lasioseius reticulatus* Bhattacharyya, 1968

(Figs 6.30.1. – 6.30.2.)

BHATTACHARYYA, S. K. (1968): Studies in Indian mites (Acarina, Mesostigmata). 6. Six records and descriptions of nine new species. – *Acarologia* **10** (4): 527 – 549

Holo- and paratypes: Zoological Survey of India, Calcutta, West Bengal (India)

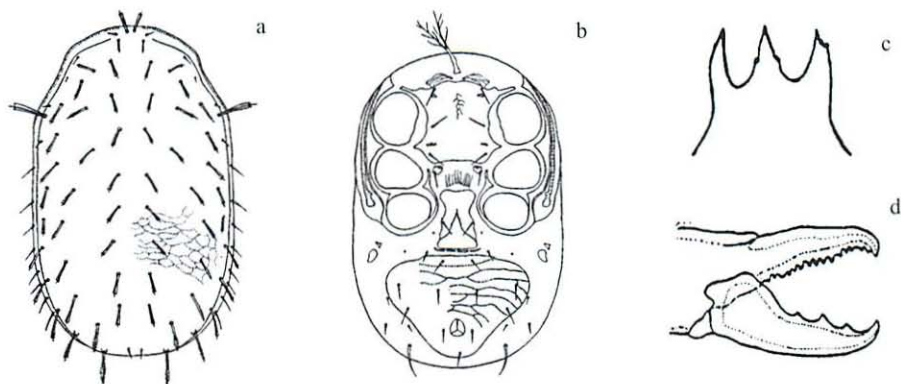


Fig. 6.30.1. **Female:** a dorsal, b ventral, c tectum, d chelicera (a – d BHATTACHARYYA 1968)

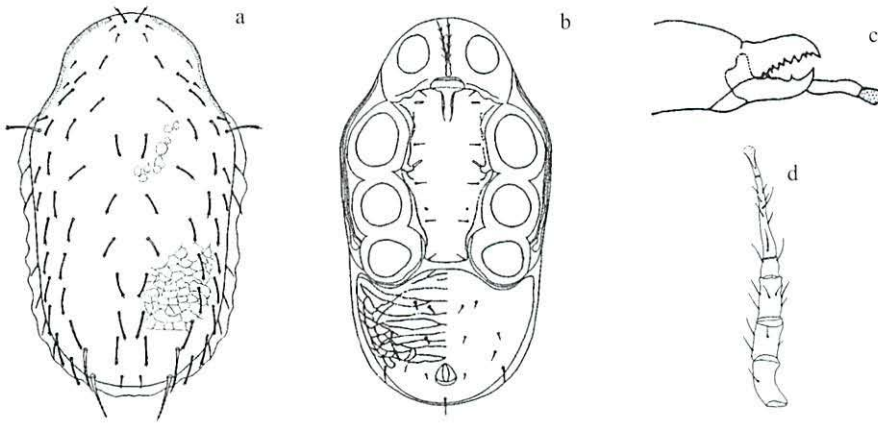


Fig. 6.30.2. **Male:** a dorsal, b ventral, c chelicera, d leg IV (a – d BHATTACHARYYA & SANYAL 2002)

*Lasioseius thermophilus* Willmann, 1942

(Fig. 6.31.)

WILLMANN, C. (1942): Milben aus deutschen Mineralquellen. – Zool. Anz. **139**: 237 – 247

Types: Zoologische Staatssammlungen München (Germany)

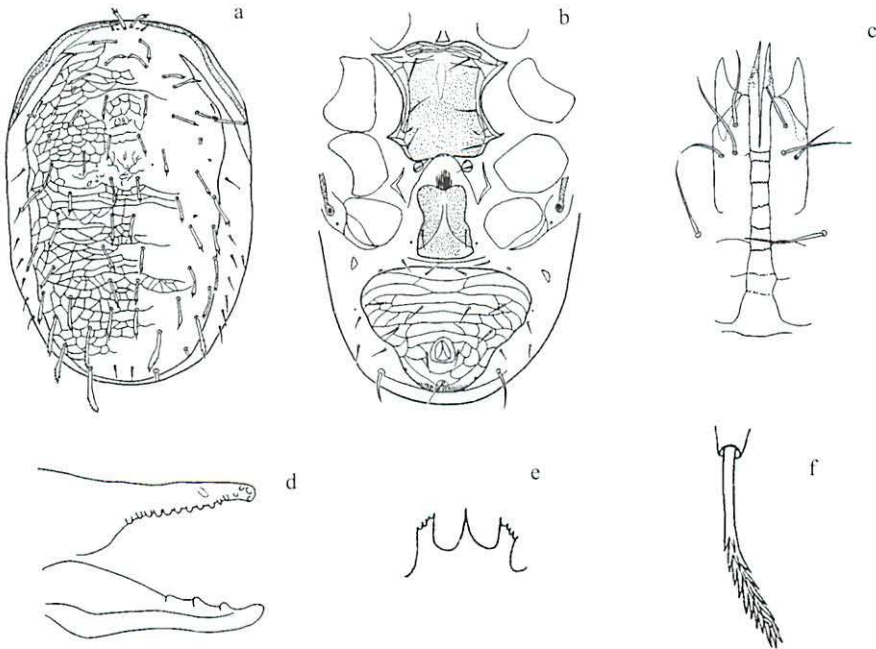


Fig. 6.31. **Female:** a dorsal, b ventral, c hypostome, d chelicera, e tectum, f dorsal seta (a – d WESTERBOER 1963; e, f WILLMANN 1942)

*Lasioseius serradentis* n. sp.

(Fig. 6.32.)

Holotype: ♀ Ecuador, prov. Pichinca, between Pifo and Papallacta, 4100 m a.s.l., plants creeping to 2 m height on a tree

Deposition of types: Staatliches Museum für Naturkunde Görlitz (Germany)

Characterised by distinctly tricarinate ds, including the caudal ds, and by an irregularly serrate te with longer lateral points.

Ids ♀ 400 – 420 x 240 – 260, dorsum slender and reticulate, most ds distinctly tricarinate, most ds relatively short, 22 – 26 long, caudal setae longer: I4 = 30, Z4 = 35, S5 = 40, Z5 = 50, sternal shield smooth, sternal setae 24 long, presternal region lineate and punctate, ventra length : width = 6 : 7, with 5 pairs of setae, 20 – 24 long, ventral seta pair V8 = 40 long, one of the metapodal plates tiny, the other plate 5 times as large, margin of te serrate in the middle, long lateral points 4x as long as the middle points, legs: I = 370, II = 270, III = 250, IV = 410, no macrochaetae present.

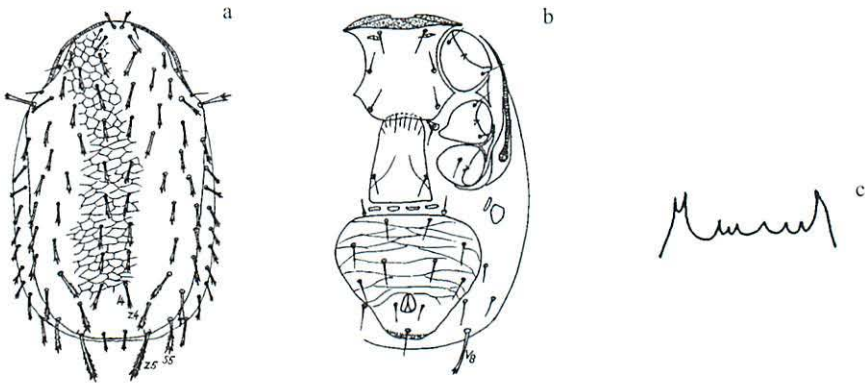


Fig. 6.32. Female: a dorsal, b ventral, c tectum (a – c original drawings by the authors)

**Key 7: The known species of the *Lasioseius-glomerulus*-complex (including a new species from Ecuador)**

- 1(2) Ventra extremely reduced, bearing only one pair of setae; most ds short (21 – 26) however Z4 = 30 – 37 and Z5 = 40 – 47, surface of sternal shield smooth, margin of te with sparse denticles, ids = 318 – 343 (Figs 7.1.1. – 7.1.2.):

*L. quandong* Walter & Lindquist, 1997

– Australia, Queensland, on leaves of tropical and subtropical rain forest trees.

- 2(1) Ventra not reduced, bearing 5 pairs of setae.

- 3(8) Leg IV remarkably long: =  $1\frac{1}{3}$  –  $1\frac{2}{3}$  times the length of the idiosoma.

- 4(5) Leg IV = 900 – 1000, most ds short and acicular, however i1, i2, z3, r3, s5 and Z5 thick, 60 – 90 long and tricarinate, ds Z4 thick (= 70) but smooth, sternal shield without ornamentation, ids = 624 (Figs 7.2.1. – 7.2.2.):

*L. peterfuldi* Ohmer, Fain & Schuchmann, 1991

– Colombia, La Planada, from angiosperm flowers (Zingiberaceae and Lorantaceae).

- 5(4) Leg IV = 500 – 700.
- 6(7) Surface of sternal shield densely punctate, leg I = 450, leg IV = 620, tarsus IV with long macrochaetae (110 – 160), te with a serrate margin, ids = 430 – 440 (Fig. 7.3.):  
*L. saltatus* Karg, 1980  
– Brazil.
- 7(6) The middle of the sternal shield with a circular structure, leg I = 400, leg IV = 510, macrochaetae on tarsus IV = 80 – 100, te with 3 groups of points, ids = 400 – 410 (Fig. 7.4.):  
*L. eupodis* Karg, 1994  
– Galapagos.
- 8(3) Leg IV not so remarkably long.
- 9(12) Ventra broad, length : width = 1 : 1.24 to 1 : 1.29.
- 10(11) Te with 3 terminally split branches, surface of sternal shield with many dots, ds Z5 = 60, leg I = 520, leg IV = 510, ids = 490 – 520 (Fig. 7.5.):  
*L. tridentis* Karg, 1979  
– Argentina.
- 11(10) Te with 4 branches, most ds 30 – 35 long, weakly tricarinate, however r3 = 50, Z5 = 50, ventrianal shield length : width 1 : 1.29, leg I = 450, leg IV = 500 with long macrochaetae (= 80 – 90 long), ids = 400 – 410 (Fig. 7.6.):  
*L. tenuidentis* n. sp.  
– Ecuador.
- 12(9) Ventra not so broad, length : width = 1 : 0.8 to 1 : 1.16.
- 13(14) Dorsum anteriorly with a net-like structure consisting of many little tubercles, sternal shield reticulate, ventrianal shield length : width = 1 : 1.16; digitus fixus of chelicera with 17 teeth, dorsal seta Z5 = 85, leg I = 770, leg IV = 741, ids = 620 (Fig. 7.7.):  
*L. americanellus* (De Leon, 1944)  
syn.: *Hyattella americanella* De Leon, 1944  
– North America.
- 14(13) Dorsal net-like structure consisting of fine lines, sternal shield without net-like structure.
- 15(16) Most dorsal setae conspicuously trispinate, digitus fixus of chelicera with 25 – 30 teeth, te with 4 branches: 2 in the middle smooth, 2 lateral branches with serrate margins, the middle of the sternal shield with a circular structure, ds Z5 = 40, ventrianal shield length : width = 1 : 1.10, leg I = 420, leg IV = 500, ids 360 – 370 (Fig. 7.8.):  
*L. glomerulus* Karg, 1979  
– Argentina.
- 16(15) Most of dorsal seta only slightly trispinate, digitus fixus of chelicera with 10 teeth, dorsal seta Z5 = 73 – 88, ventrianal shield length : width = 1 : 0.85; leg I = 400 – 425, ids = 385 – 410 (Figs 7.9.1. – 7.9.2.):  
*L. frankbakkeri* Faraji & Karg, 2005  
– France, weeds in the herbaceous layer of an apple orchard.



**Subgenus *Crinidens* Karg, 1980 n. comb.**

***Lasioseius-glomerulus-complex***

***Lasioseius quandong* Walter & Lindquist, 1997**

(Figs 7.1.1. – 7.1.2.)

WALTER, D. E. & E. E. LINDQUIST (1997): Australian species of *Lasioseius* (Acari, Mesostigmata, Ascidae): the *porulosus* group and other species from rainforest canopies. – Invertebr. Taxon. 11: 525 – 547

Holotype: Department of Entomology, University of Queensland, St. Lucia (Australia)

Paratypes: Australian National Collection, CSIRO Division of Entomology, Canberra (Australia); Canadian National Collection of Insects and Arachnida, Ottawa (Canada)

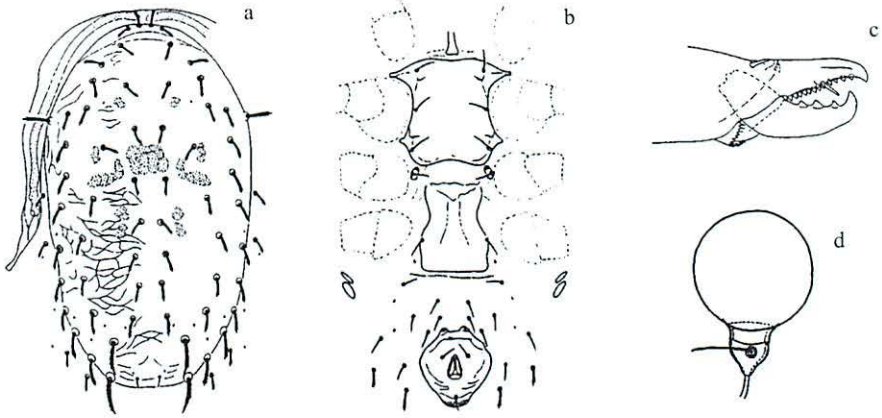


Fig. 7.1.1. Female: a dorsal, b ventral, c chelicera, d spermatheca (a – d WALTER & LINDQUIST 1997)

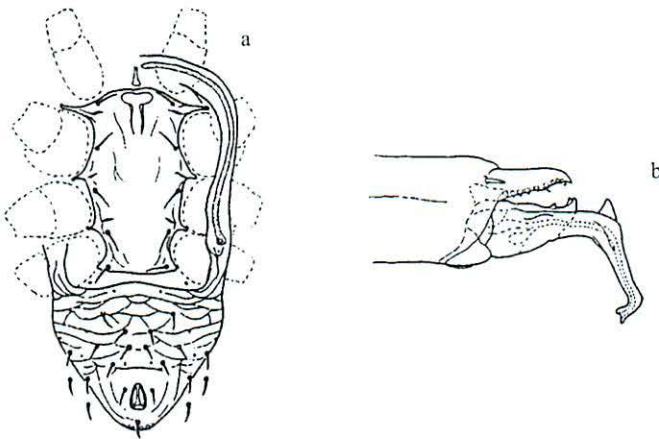


Fig. 7.1.2. Male: a ventral, b chelicera (a, b WALTER & LINDQUIST 1997)



*Lasioseius peterfuldi* Ohmer, Fain & Schuchmann, 1991

(Figs 7.2.1. – 7.2.2.)

OHMER, C., A. FAIN & K. L. SCHUCHMANN (1991): New ascid mites of the genera *Rhinoseius* Baker & Yunker, 1964 and *Lasioseius* Berlese, 1923 (Acari, Ascidae) associated with hummingbirds or hummingbird-pollinated flowers in Colombia. – *J. Nat. Hist.* 25 (2): 481 – 498

Holotype: Zoologisches Forschungsinstitut und Museum Alexander Koenig, Bonn (Germany)

Paratypes: L'Institut Royal des Sciences Naturelles, Bruxelles (Belgium)

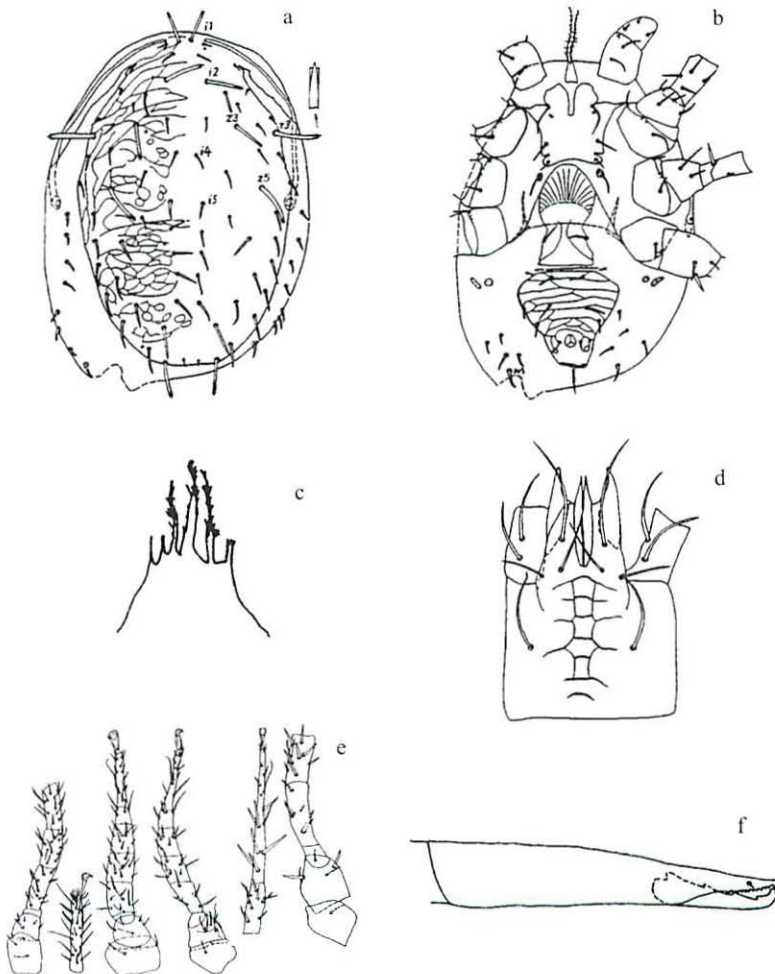


Fig. 7.2.1. **Female:** a dorsal, b ventral, c tectum, d hypostome, e leg I – IV, f chelicera (a – f OHMER, FAIN & SCHUCHMANN 1991)

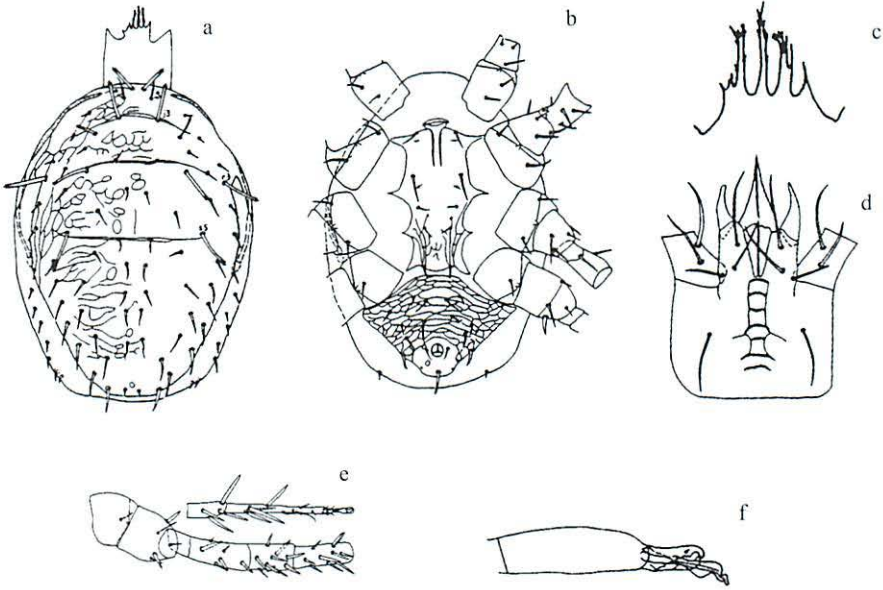


Fig. 7.2.2. **Male:** a dorsal, b ventral, c tectum, d hypostome, e leg IV, f chelicera (a – f OHMER, FAIN & SCHUCHMANN 1991)

*Lasioseius saltatus* Karg, 1980

(Fig. 7.3.)

KARG, W. (1980): Die Raubmilbengattung *Lasioseius* Berlese, 1916. – Zool. Jb. Syst. **107**: 344 – 367  
 Holotype: Hungarian Natural History Museum, Budapest (Hungary)  
 Paratypes: Museum für Naturkunde Berlin (Germany)

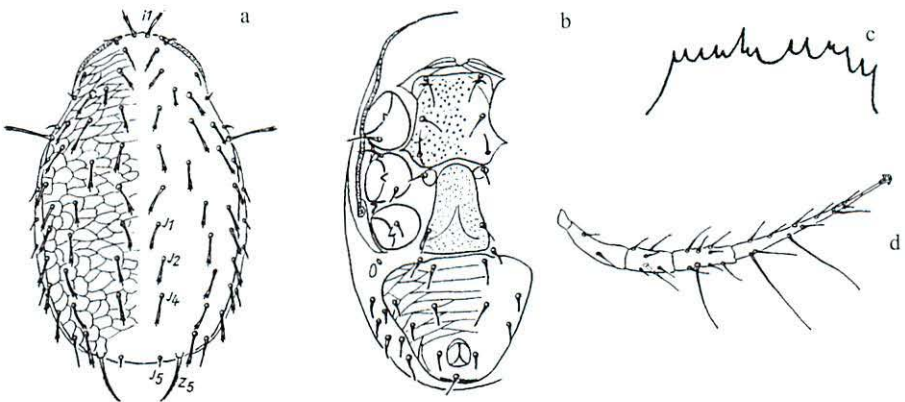


Fig. 7.3. **Female:** a dorsal, b ventral, c tectum, d leg IV (a – d KARG 1980)

*Lasioseius eupodis* Karg, 1994

(Fig. 7.4.)

KARG, W. (1994): Raubmilben der Cohors Gamasina Leach (Acarina, Parasitiformes) vom Galapagos-Archipel. – Mitt. Zool. Mus. Berl. **70** (2): 179 – 216

Types: Museum für Naturkunde Berlin (Germany)

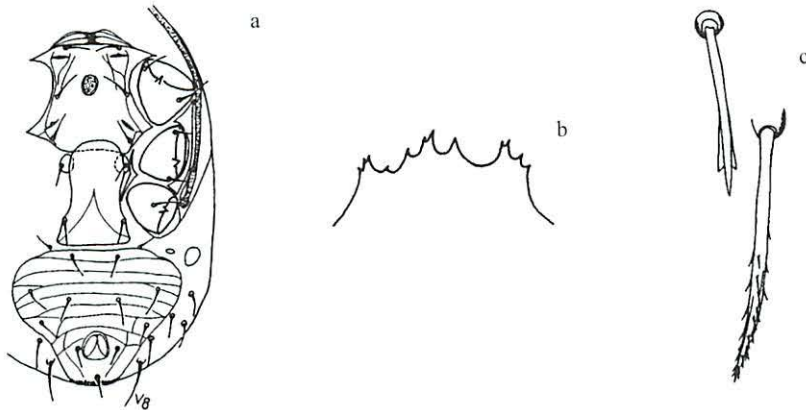


Fig. 7.4. **Female:** a ventral, b tectum, c dorsal setae I4, Z5 (a – c KARG 1994)

*Lasioseius tridentis* Karg, 1979

(Fig. 7.5.)

KARG, W. (1979): Zur Kenntnis der Milbengattungen *Lasioseius* Berlese, 1916, *Proprioseiopsis* Muma, 1961, *Podocinum* Berlese, 1882 und *Proctolaelaps* Berlese, 1923 (Acarina, Parasitiformes). – Deut. Entomol. Z., N. F. **26** (1 – 3): 1 – 8

Holotype: Hungarian Natural History Museum, Budapest (Hungary)

Paratypes: Museum für Naturkunde Berlin (Germany)

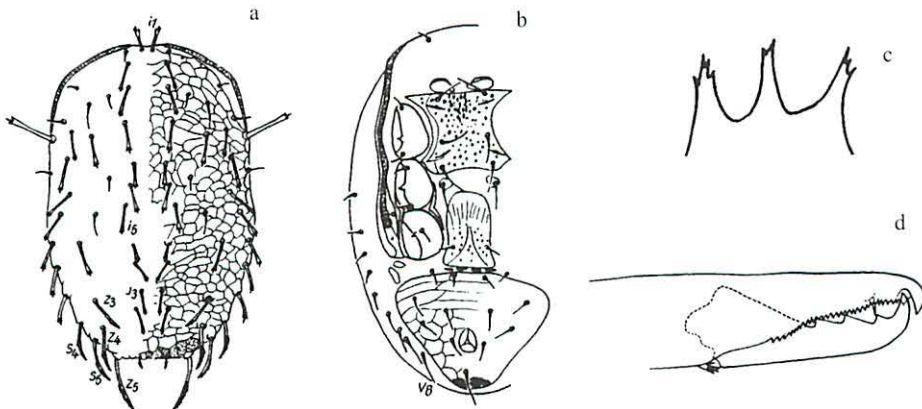


Fig. 7.5. **Female:** a dorsal, b ventral, c tectum, d chelicera (a – d KARG 1979)

*Lasioseius tenuidentis* n. sp.

(Fig. 7.6.)

Holotype: ♀ Ecuador 1989, prov. Pichinca, near Las Palmeras, 1850 m a.s.l., primary forest, large withered, mossy leaves

Paratype: 4 ♀, 1 ♂, 3 deutonymphs

Types: Staatliches Museum für Naturkunde Görlitz (Germany)

Characterised by slightly tricarinate ds, setae on the posterior half of dorsum reaching the bases of the next setae of the series, by a broad triangular ventra with 5 pairs of setae and a te with 4 branches.

Ids ♀ 400 – 470 x 220 – 300, dorsum weakly reticulate, most ds slightly tricarinate and 30 – 34 long:  $i1 = 30$ ,  $i4 = 35$ ,  $II = 34$ ,  $I2 = 33$ ,  $I3 = 32$ ,  $I4 = 34$ , the shoulder setae longer ( $r3 = 50$ ), also the caudal setae ( $S5 = 38$ ,  $Z4 = 45$ ), ds Z5 pectinate and 50 long, marginal setae (r- and R-setae) short ( $= 15$ ) and acicular, sternal shield anteriorly punctate and lineate along the lateral margins, presternal region lineate, sternal setae 27 – 32 long, ventra 115 long and 160 wide, with transverse lines and 5 pairs of setae 22 – 24 long, ps = 26 long, lateral branches of te serrate, the two medial branches cuspidate, between the branches short points visible, digitus fixus of the chelicera with 25 teeth, legs: I = 450, II = 360, III = 350, IV = 500, tarsus IV with 2 macrochaetae, 80 and 90 long.

Ids ♂ 300 x 180, ids deutonymph 290 x 170.

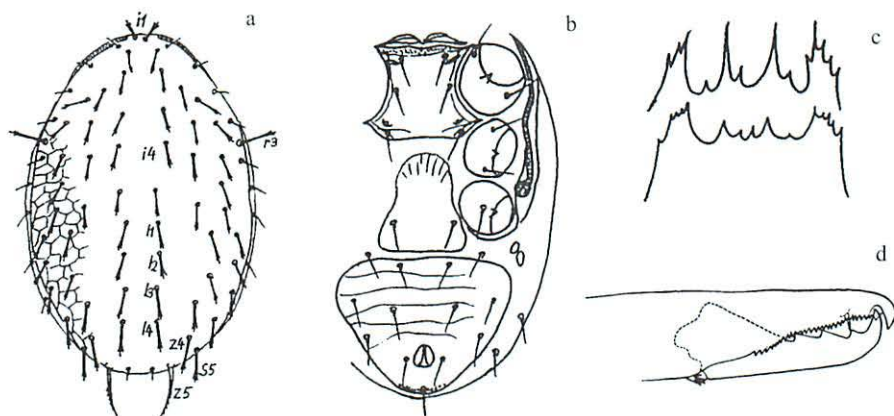


Fig. 7.6. Female: a dorsal, b ventral, c tectum, d dorsal seta (a – d original drawings by the authors)

*Lasioseius americanellus* (De Leon, 1944)

(Fig. 7.7.)

DE LEON, D. (1944): Four new *Sejus*, a new *Zerconopsis*, and a new *Hyattella* from the United States (Acarina, Blattisocidae). – Fla. Entomol. 47: 103 – 108

Types: deposition unknown to the authors

Synonym: *Hyattella americanella* De Leon, 1944

Four new *Sejus*, a new *Zerconopsis*, and a new *Hyattella* from the United States (Acarina, Blattisocidae). – Fla. Entomol. 47: 103 – 108



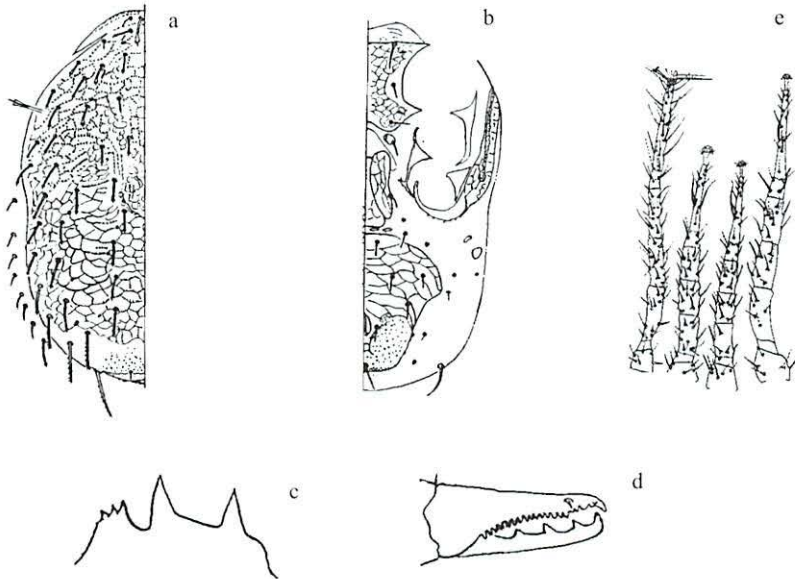


Fig. 7.7. **Female:** a dorsal, b ventral, c tectum, d chelicera, e tarsus I – IV (a – e DE LEON 1944)

*Lasioseius glomerulus* Karg, 1979

(Fig. 7.8.)

KARG, W. (1979): Zur Kenntnis der Milbengattungen *Lasioseius* Berlese, 1916, *Proprioiseiopsis* Muma, 1961, *Podocinum* Berlese, 1882 und *Proctolaelaps* Berlese, 1923 (Acarina, Parasitiformes). – Deut. Entomol. Z., N. F. 26 (1 – 3): 1 – 8

Holotype: Hungarian Natural History Museum, Budapest (Hungary)

Paratypes: Museum für Naturkunde Berlin (Germany)

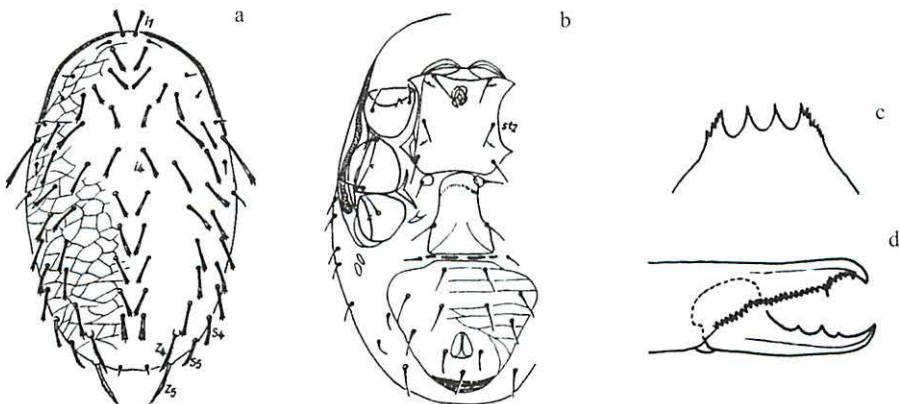


Fig. 7.8. **Female:** a dorsal, b ventral, c tectum, d chelicera (a – d KARG 1979)



*Lasioseius frankbakkeri* Faraji & Karg, 2005

(Figs 7.9.1. – 7.9.2.)

FARAJI, F. & W. KARG (2005): A new species of *Lasioseius* Berlese from France (Acari, Podocinidae). – *Int. J. Acarol.* **31** (2): 113 – 117

Holotype: Muséum National d'Historie Naturelle de Paris (France)

Paratypes: Muséum National d'Historie Naturelle de Paris (France), Natural History Museum, London (United Kingdom), National Museum of Natural History, Leiden (The Netherlands)

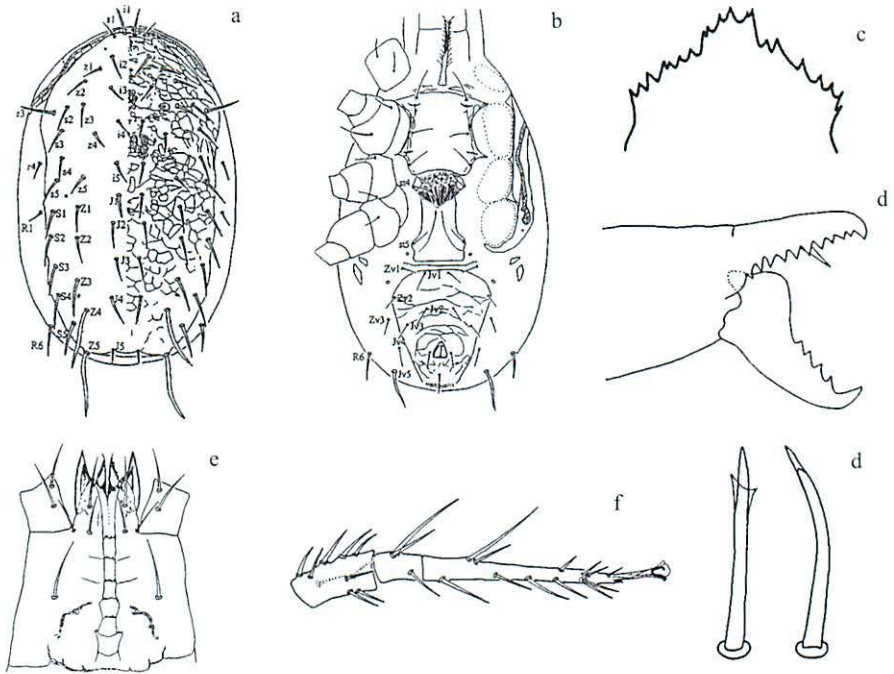


Fig. 7.9.1. **Female:** a dorsal, b ventral, c tectum, d chelicera, e hypostome, f leg IV, g dorsal setae (a – e FARAJI & KARG 2005)

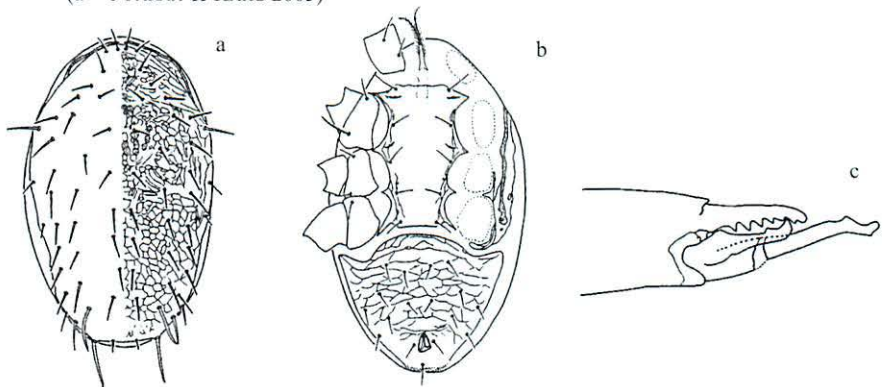


Fig. 7.9.2. **Male:** a dorsal, b ventral, c chelicera (a – c FARAJI & KARG 2005)

**Subgenus *Cuspiacus* n. subgen.**

Type species: *Lasioseius helveticus* Chant, 1958

The subgenus includes species having mostly acicular setae on the dorsum and a smaller or larger number of pectinate setae. The species of the subgenus are grouped in two species complexes with the following distinguishing features:

All of the setae on the dorsum acicular, not tricarinate:

*Lasioseius-helveticus*-complex: **Key 8**

A number of setae on the dorsum pectinate:

*Lasioseius-matthyssei*-complex: **Key 9**

**Key 8: The known species of the *Lasioseius-helveticus*-complex**

- 1(2) Ventra remarkably longer than wide, 140 long and 113 wide, most ds as long as the distances between their bases, ids = 442 (Fig. 8.1.):  
*L. helveticus* Chant, 1958  
– Switzerland.
- 2(1) Ventra wider than long or about as long as wide.
- 3(4) Ventra with 4 pairs of setae; all ds short and smooth, however r3 and i1 longer (= 2x the length of i4) and suggesting a tricarinate tip; te with 4 – 5 irregular tapering extensions, leg I and leg II longer than the dorsum, ids = 635 – 690 (Figs 8.2.1. – 8.2.2.):  
*L. chelaserratus* Naem, Dobkin & OConner, 1985  
– Trinidad.
- 4(3) Ventra with 5 – 7 pairs of setae.
- 5(16) Ventra with 5 pairs of setae.
- 6(7) No protruding shoulder setae r3, te with lateral serrated branches, ids = 550 (Fig. 8.3.):  
*L. multisetus* Chant, 1963  
– North America.
- 7(6) Shoulder setae r3 clearly protruding from idiosoma.
- 8(9) The first sternal seta pair st1 on separate plates, ds relatively long, i5, I1, I2 and I3 reaching the next seta of the series, ids = 520 (Fig. 8.4.):  
*L. dendroctoni* Chant, 1963  
– North America, Oregon.
- 9(8) Sternal seta pair st1 on the sternal shield.
- 10(13) Ds long, on the posterior half of dorsum ds longer than the distances between them within their series.
- 11(12) Lateral margins of ventra remarkably concave, ds r3 and Z5 longer than other ds, ids = 520 – 560 (Fig. 8.5.):  
*L. safroi* (Ewing, 1920)  
syn.: *Seius safroi* Ewing, 1920  
– North America, Oregon.

- 12(11) Ventra only slightly concave laterally, ds r3 shorter than other ds, ds Z5 longer, ids = 437 – 460 (Figs 8.6.1. – 8.6.3.):  
*L. liaohaorongae* Ma, 1996  
 – China, Jilin Province.
- 13(10) Ds shorter than the distances between the neighbouring setae of a longitudinal series.
- 14(15) Ventra remarkably broad, triangular, 140 long, 175 wide, ids = 510 (Fig. 8.7.):  
*L. subterraneus* Chant, 1963,  
 syn.: *L. queenslandicus* Domrow, 1956 not *L. queenslandicus* Womersley, 1956  
 – North America.
- 15(14) Ventra about as long as wide, most ds short: ds i5 = ½ the distance between i5 and I1, however posterior region of dorsum with 4 pairs of long and spinose setae = 3x longer than I4, ids = 495 – 517 (Fig. 8.8.):  
*L. durumae* Krantz, 1962  
 – Africa, Garamba.
- 16(5) Ventra with 7 pairs of setae.
- 17(20) Number of ds reduced, without I2 and I3.
- 18(19) Ds i1 remarkably long: = 2½x the length of i5, shoulder setae (r3) longer than i2, ids = 452 (Fig. 8.9.):  
*L. spatulus* Gu & Wang, 1990  
 – China, Guizhou province, from *Rattus norvegicus*.
- 19(18) Ds i1 as long as i5, shoulder setae (r3) shorter than i2, ids = 400 (Figs 8.10.1. – 8.10.2.):  
*L. terrestris* Menon & Ghai, 1968  
 – India, near Delhi, on wheat.
- 20(17) Number of ds not reduced, ventra remarkably broad, sternal shield ornamented with rows of punctula, ids = 530 (Fig. 8.11.):  
*L. oblongus* (Ewing, 1909)  
 syn.: *Gamasus oblongus* Ewing, 1909  
 – North America, Illinois.

Supplement:

To the species complex belongs further *Lasioseius angustus* Evans & Sheals, 1959 – Indonesia from millipedes; however it is only known from the male, characterised by tiny setae of the dorsum and stout vertical setae i1 (Fig. 8.12.).

Subgenus *Cuspiacus* n. subgen.*Lasioseius-helvetius*-complex*Lasioseius helvetius* Chant, 1958

(Fig. 8.1.)

CHANT, D. A. (1958): Descriptions of six new species of *Garmania* Nesbitt and *Lasioseius* Berlese (Acarina, Acarosejidae). – *Can. J. Zool.* **36**: 383 – 390

Holotype: Canadian National Collection of Insects and Arachnida, Ottawa (Canada)

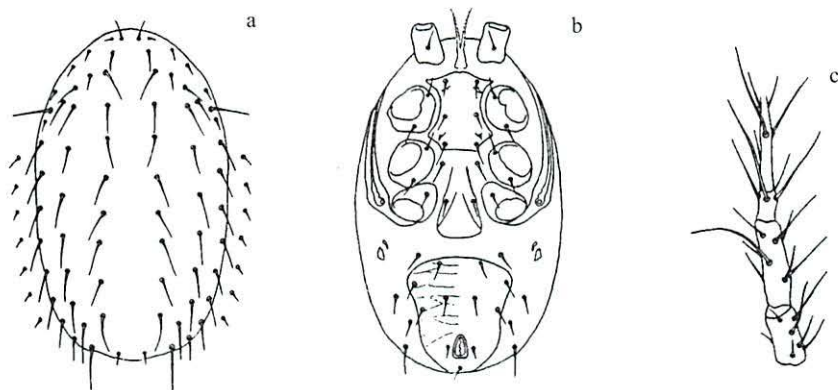


Fig. 8.1. **Female:** a dorsal, b ventral, c tarsus IV (a – c CHANT 1958)

*Lasioseius chelaserratus* Naeem, Dobkin & OConnor, 1985

(Figs 8.2.1. – 8.2.2.)

NAEEM, S., D. S. DOBKIN & B. M. OCONNOR (1985): *Lasioseius* mites (Acari, Gamasida, Ascidae) associated with hummingbird-pollinated flowers in Trinidad, West Indies. – *Int. J. Entomol.* **27** (4): 338 – 353

Holotype: United States National Museum, Washington D. C. (USA)

Paratypes: Canadian National Collection of Insects and Arachnida, Ottawa (Canada), Museum of Zoology, University of Michigan, Ann Arbor (USA)

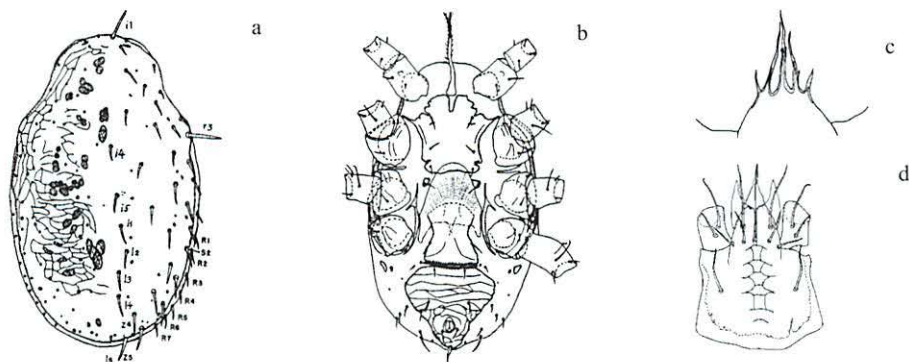


Fig. 8.2.1. **Female:** a dorsal, b ventral, c tectum, d hypostome (a – d NAEEM, DOBKIN & OCONNOR 1985)



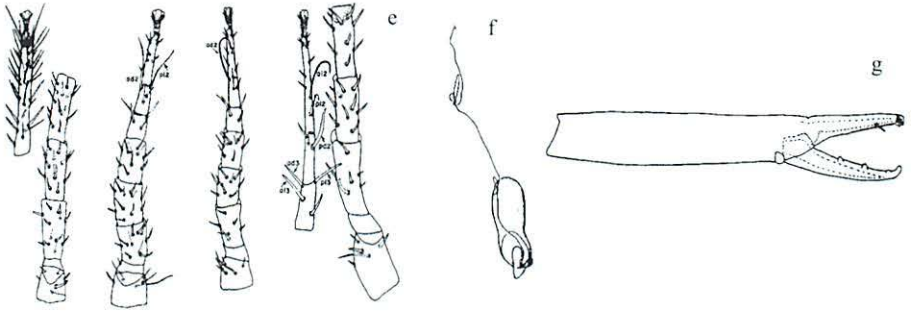


Fig. 8.2.1. (cont.) **Female:** e leg I–IV, f spermatheca, g chelicera (e–g NAEEM, DOBKIN & OCONNOR 1985)

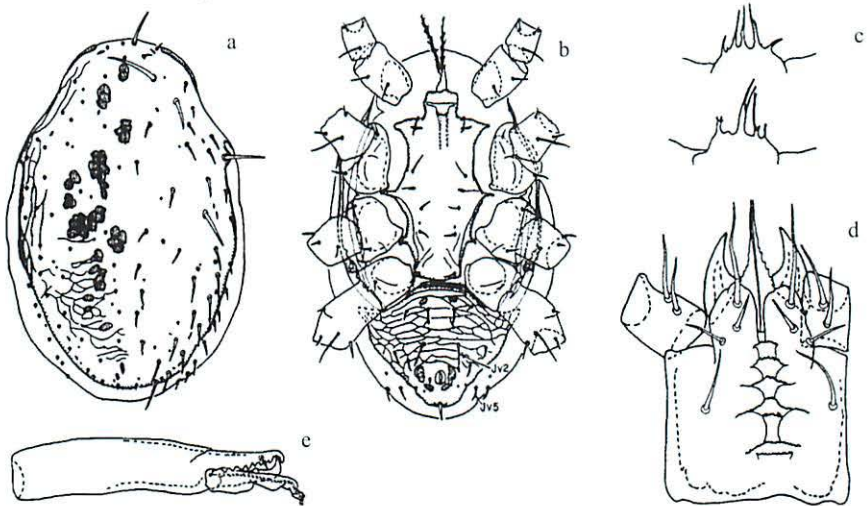


Fig. 8.2.2. **Male:** a dorsal, b ventral, c tectum, d hypostome, e chelicera (a – e NAEEM, DOBKIN & OCONNOR 1985)

*Lasioseius multisetus* Chant, 1963

(Fig. 8.3.)

CHANT, D. A. (1963): The subfamily Blattisocinae Garman (= Aceosejinae Evans) (Acarina, Blattisocidae Garman) (= Aceosejidae Baker & Wharton) in North America, with descriptions of new species. – *Can. J. Zool.* **41**: 243 – 305

Holotype: United States National Museum, Washington D. C. (USA)



Fig. 8.3. **Female:** a tectum (a CHANT 1963)



*Lasioseius dendroctoni* Chant, 1963

(Fig. 8.4.)

CHANT, D. A. (1963): The subfamily Blattisocinae Garman (= Aceosejinae Evans) (Acarina, Blattisocidae Garman) (= Aceosejidae Baker & Wharton) in North America, with descriptions of new species. – Can. J. Zool. 41: 243 – 305

Holotype: Canadian National Collection of Insects and Arachnida, Ottawa (Canada)

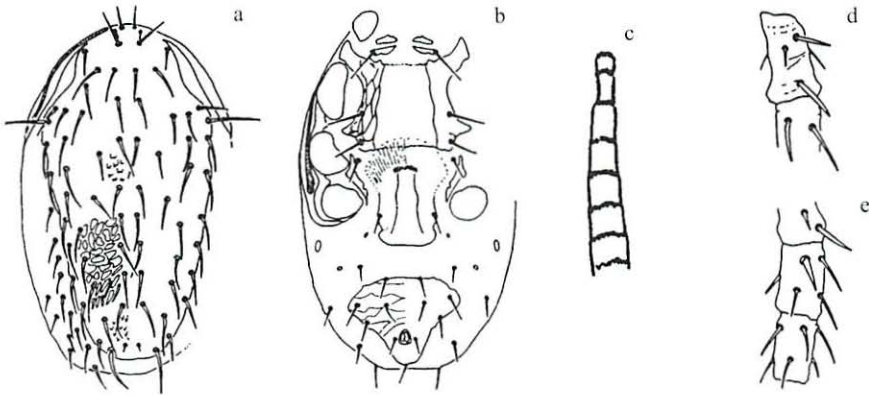


Fig. 8.4. Female: a dorsal, b ventral, c hypostome, d leg III, e leg IV (a – e CHANT 1963)

*Lasioseius safroi* (Ewing, 1920)

(Fig. 8.5.)

EWING, H. E. (1920): New predaceous and parasitic mites of the superfamily Gamasoidea, Acarina. – Entomol. News Philad. 31 (10): 286 – 293

Lectotype: United States National Museum, Washington D. C. (USA)

Synonym: *Seius safroi* Ewing, 1920

New predaceous and parasitic mites of the superfamily Gamasoidea, Acarina. – Entomol. News Philad. 31 (10): 286 – 293

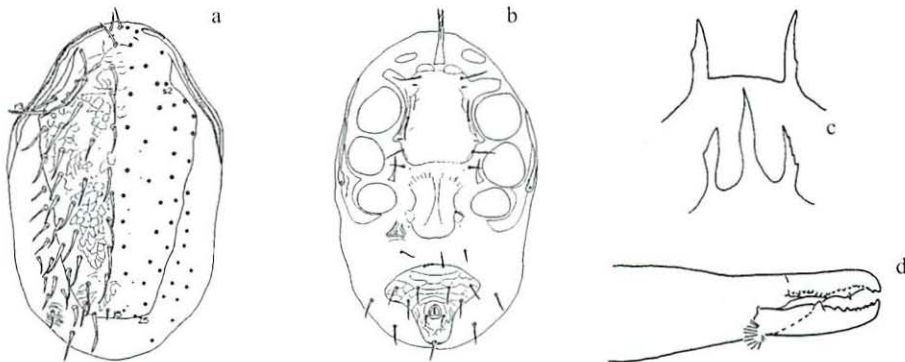


Fig. 8.5. Female: a dorsal, b ventral, c tectum, d chelicera (a – d HENNESSEY & FARRIER 1988)

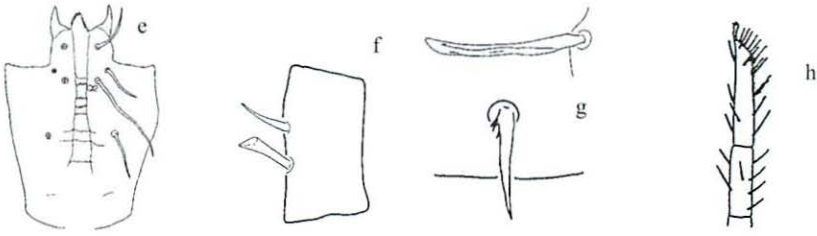


Fig. 8.5. (cont.) **Female:** e hypostome, f palpgenu, g dorsal setae r3, I4, h tarsus (e – g HENNESSEY & FARRIER 1988; h EWING 1920)

*Lasioseius liaohaorongae* Ma, 1996

(Figs 8.6.1. – 8.6.3.)

MA, L. M. (1996): A new species of *Lasioseius* and a new species of *Asca* (Acari, Aceosejidae, Rhodacaridae). [Orig. Chin.] – Acta Arachnol. Sin. 5 (1): 42 – 45

Types: National Base of Plague and Brucellosis Control, Baicheng City, Jilin Province (China)

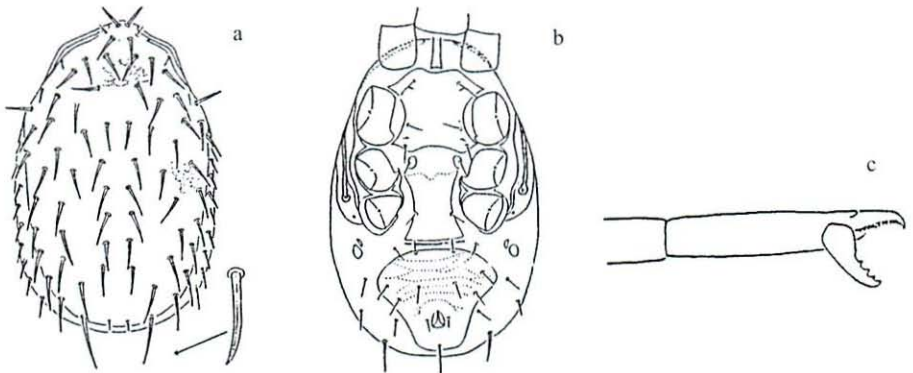


Fig. 8.6.1. **Female:** a dorsal, b ventral, c chelicera (a – c MA 1996)

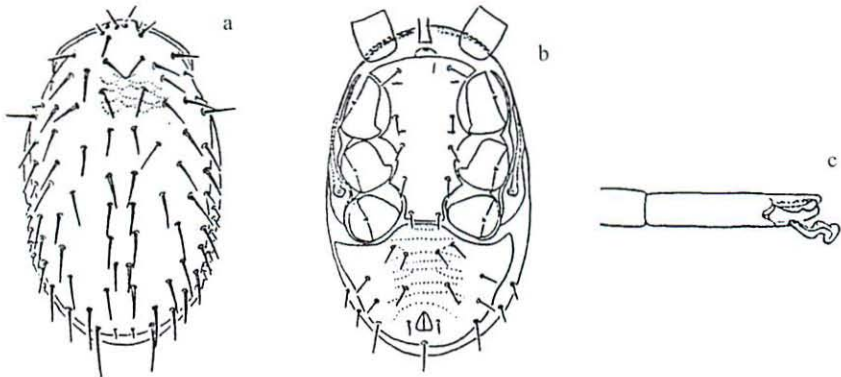


Fig. 8.6.2. **Male:** a dorsal, b ventral, c chelicera (a – c MA 1996)

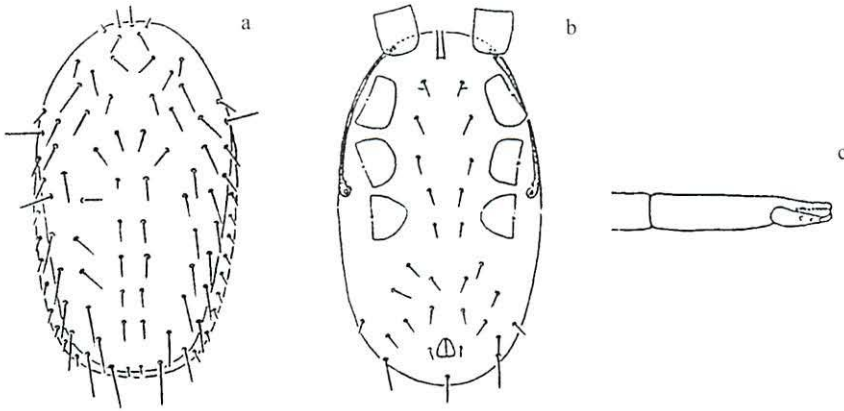


Fig. 8.6.3. **Deutonymph:** a dorsal, b ventral, c chelicera (a – c MA 1996)

*Lasioseius subterraneus* Chant, 1963

(Fig. 8.7.)

CHANT, D. A. (1963): The subfamily Blattisocinae Garman (= Accosejinae Evans) (Acarina, Blattisocidae Garman) (= Accosejidae Baker & Wharton) in North America, with descriptions of new species. – *Can. J. Zool.* **41**: 243 – 305

Holotype: United States National Museum, Washington D. C. (USA)

Synonym: *Lasioseius queenslandicus* Domrow, 1956 not *Lasioseius queenslandicus* Womersley, 1956  
Some Acarina Mesostigmata from the Great Barrier Reef. – *Proc. Linn. Soc. N. S. Wales* **81** (3): 197 – 216

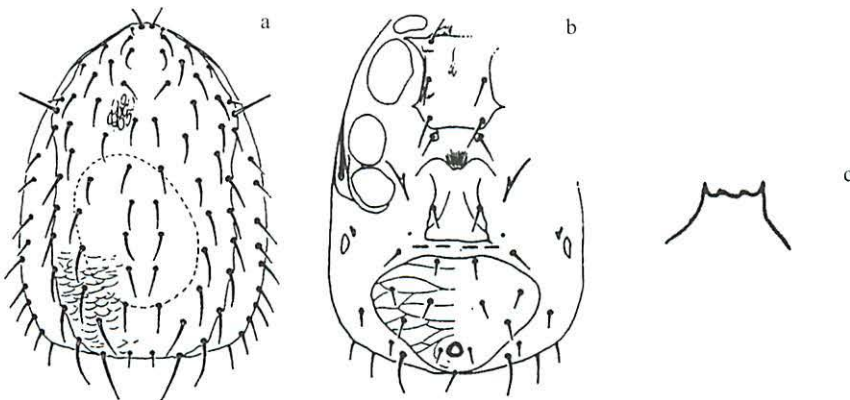


Fig. 8.7. **Female:** a dorsal, b ventral, c tectum (a – c CHANT 1963)

*Lasioseius durumae* Krantz, 1962

(Fig. 8.8.)

KRANTZ, G. W. (1962): Acari. Free-living Mesostigmata. II. Family Aceosejidae. – Parc National De La Garamba, Mission H. De Saeger 34: 3 – 29

Holotype: Institute of the National Parks of Congo and Ruanda-Urundi, Bruxelles (Belgium)

Paratypes: United States of National Museum, Washington D. C. (USA), British Museum (National History), London (United Kingdom)

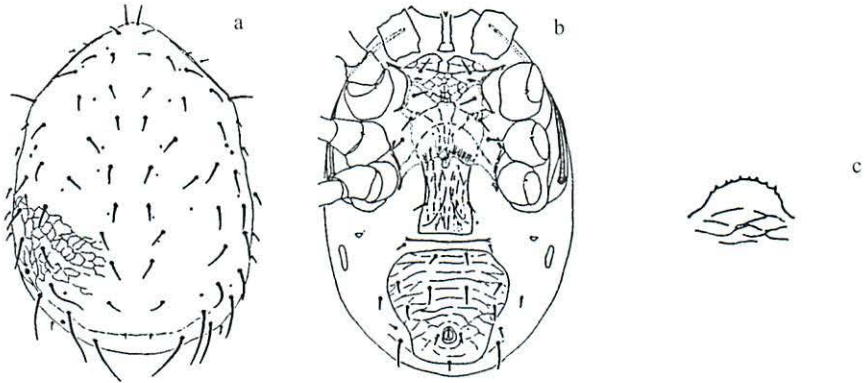


Fig. 8.8. Female: a dorsal, b ventral, c tectum (a – c KRANTZ 1962)

*Lasioseius spatulus* Gu & Wang, 1990

(Fig. 8.9.)

GU, Y. M., J. S. WANG & C. A. HUANG (1990): Six new species of the genus *Lasioseius* (Acari, Aceosejidae). [Orig. Chin.] – Acta Zootaxon. Sin. 15 (2): 174 – 184

Holotype: Department of Parasitology, Guiyang Medical College (China)

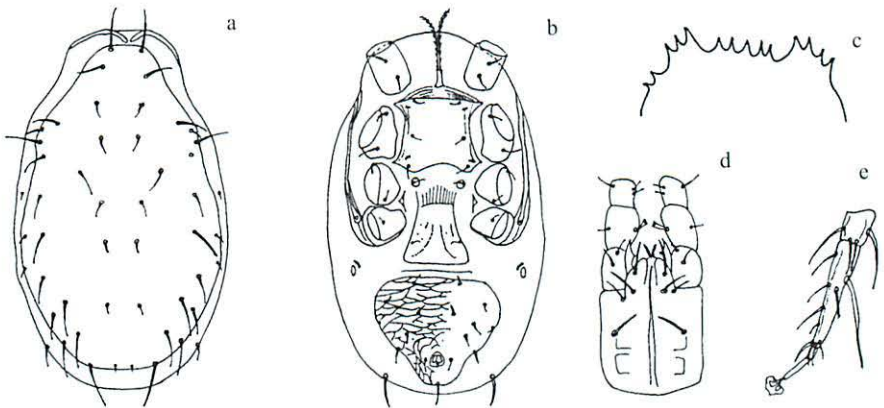


Fig. 8.9. Female: a dorsal, b ventral, c tectum, d hypostome, e tarsus IV (a – e modified after GU & WANG 1990)



*Lasioseius terrestris* Menon & Ghai, 1968

(Figs 8.10.1. – 8.10.2.)

MENON, M. G. R. & S. GHAI (1968): Further records of the distribution of *Petrobia latens* (Mueller) (Acarina, Tetranychidae) a pest of wheat in India together with the description of a new species of predatory mites on the same. – Indian J. Entomol. **30** (1): 77 – 79

Holo- and paratypes: National Pusa Collection, Indian Agriculture Research Institute, New Delhi (India)

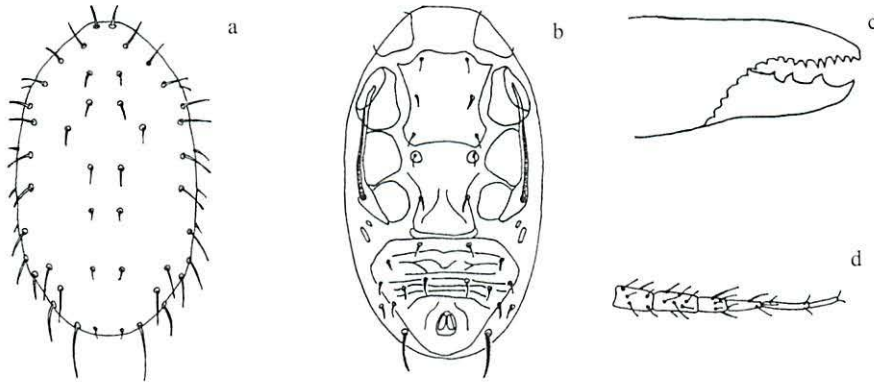


Fig. 8.10.1. **Female:** a dorsal, b ventral, c chelicera, d leg IV (a – d modified after MENON & GHAI 1968)

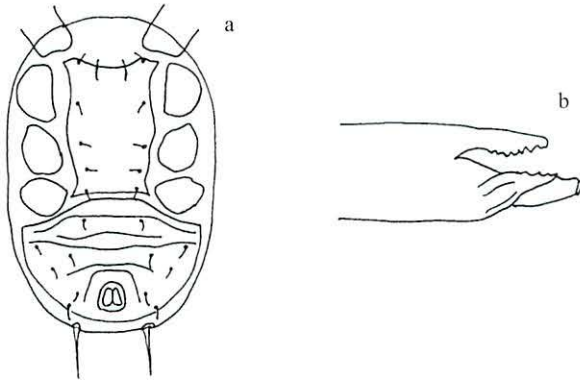


Fig. 8.10.2. **Male:** a ventral, b chelicera (a, b modified after MENON & GHAI 1968)

*Lasioseius oblongus* (Ewing, 1909)

(Fig. 8.11.)

EWING, H. E. (1909): New North American Acarina. – Trans. Ac. Sci. St. Louis **18**: 53 – 77

Lectotype: Illinois State Laboratory of Natural History (USA)

HENNESSEY, M. K. & M. H. FARRIER (1988): Systematic revision of thirty species of free-living, soil-inhabiting Gamasine mites (Acari, Mesostigmata) of North America. – NC Agric. Res. Serv. Tech. Bull. **285**: 1 – 123

Synonym: *Gamasus oblongus* Ewing, 1909

New North American Acarina. – Trans. Acad. Sci. St. Louis **18**: 53 – 77

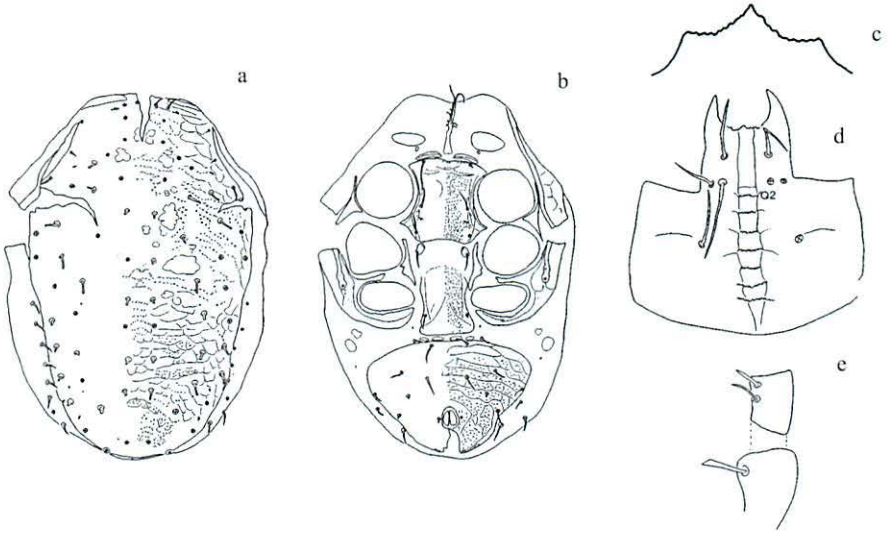


Fig. 8.11. **Female:** a dorsal, b ventral, c tectum, d hypostome, e palpfemur, palpgenu (a – e HENNESSEY & FARRIER 1988)

*Lasioseius angustus* Evans & Sheals, 1959

(Fig. 8.12.)

EVANS, G. O. & J. G. SHEALS (1959): Three new mesostigmatic mites associated with millipedes in Indonesia. – Entomol. Ber. (Amst.) **19**: 107 – 111

Holotype: British Museum (Natural History), London (United Kingdom)

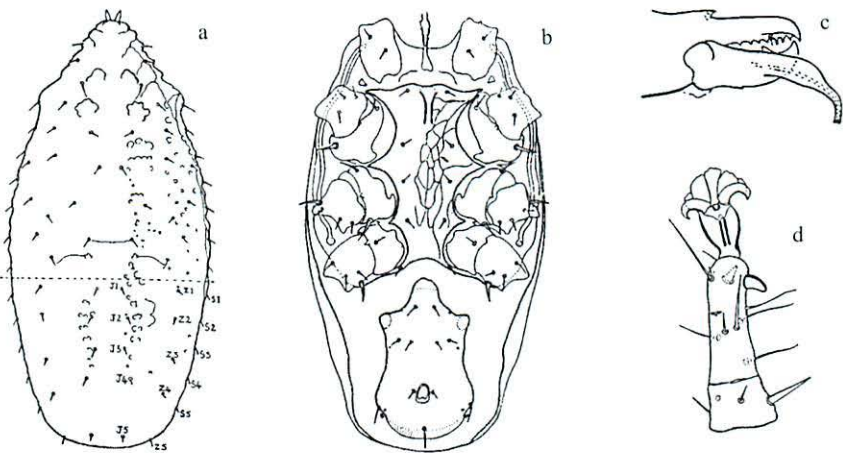


Fig. 8.12. **Male:** a dorsal, b ventral, c chelicera, d tarsus (a – d EVANS & SHEALS 1959)

**Key 9: The known species of the *Lasioseius-matthyssei*-complex (including two new species from Ecuador)**

- 1(18) Most ds pectinate, ds Z5 = 1½ – 3 times the length of i4.
- 2(7) Number of ds reduced, posterior half of dorsum without I3 or I1 and I3.
- 3(6) Dorsum without I1 and I3, ventra with 7 pairs of setae.
- 4(5) Ventra remarkably broader than long, width : length = 5 : 4 to 3 : 2, ds Z4 = 69 – 73, Z5 = 75, leg I = 400 – 420, leg IV = 475 – 530, ids = 425 – 470 (Fig. 9.1.):  
*L. youcefi* Athias-Henriot, 1959  
 syn.: *L. proteae* Ryke, 1964; *L. paucisetosus* Westerboer, 1963; *L. mcgregori* Chant, 1963;  
 n. syn.: *L. lasiodactyli* Ishikawa, 1969  
 – Eurasia, Africa, North America.
- 5(4) Ventra only slightly broader than long, width : length = 4 : 3½, ds Z4 = 54, Z5 = 63, leg I = 427, leg IV = 436, ids = 353 – 395 (Figs 9.2.1. – 9.2.2.):  
*L. lindquisti* Nasr & Abou-Awad, 1987  
 – Egypt.
- 6(3) Dorsum without I3, ventra with 5 pairs of setae, the two metapodal plates fused forming a tear-drop shaped shield, ids = 400 (Fig. 9.3.):  
*L. matthyssei* Chant, 1963  
 – Honduras, on guava.
- 7(2) Ds I1 – I5 developed on posterior half of dorsum.
- 8(13) Ventra very broad, bearing 7 pairs of setae.
- 9(12) Peritreme with poststigmatic projection, both metapodal plates linked or close to each other.
- 10(11) Ds i2 to i5 and I1 to I5 remarkably short and thin: i3 = ½ the distance i3 – i4, I1 = ⅔ the distance I1 – I2, digitus fixus of the chelicerae with 16 – 20 teeth, ids = 480 – 560 (Figs 9.4.1. – 9.4.2.):  
*L. confusus* Evans, 1958  
 syn.: *Platyseius nidus* Pinchuk, 1972  
 – Eurasia, North America.
- 11(10) Ds longer and stronger, i3 = the distance between i3 and i4, I1 = the distance I1 – I2, digitus fixus of chelicerae with 17 – 19 little teeth, ventra triangular, ids = 540 – 609 (Fig. 9.5.):  
*L. daanensis* Ma, 1996  
 – China, ex the nest of *Cricetulus barabensis*.
- 12(9) Peritreme without poststigmatic projection, digitus fixus of the chelicerae only with 5 big teeth, peritremata not lengthened, ventra broadly oval, leg I = 395, ids = 525 (Fig. 9.6.):  
*L. formosus* Westerboer, 1963  
 – Europe, manure.
- 13(8) Ventra bearing 5 – 6 pairs of setae.
- 14(17) Ds relatively short, length of ds i4 = the distance between the pair, Z5 = 2x the length of i4.

- 15(16) Ds II to I4 not reaching the next setae of the series, Z4 not reaching Z5, te with 3 branches, ids = 483 – 506 (Figs 9.7.1. – 9.7.5.):  
*L. jilinensis* Ma, 1996  
 – China, Jilin Province, ex the nest of *Mus musculus*.
- 16(15) Ds longer (mostly = 35), ds II to I4 reaching the next setae of the series, Z4 reaching Z5, Z5 = 56, macrochaetae of tarsus IV = 88 – 92, ids = 394 (Fig. 9.8.):  
*L. scapulatus* Kennett, 1958  
 – North America, on *Paria* eggs on strawberry.
- 17(14) Ds longer, length of ds i4 = the distance between i4 and i5, however Z5 = only 1½x i4, most ds = 40 – 60, Z5 = 70, leg I = 520 and without macrochaetae, ids = 418 (Fig. 9.9.):  
*L. boomsmai* Womersley, 1956  
 – South Australia, from under bark among faeces of bark-boring beetles, ex rain forest litter.
- 18(1) Only S-setae respectively Z-setae of the posterior half of dorsum pectinate.
- 19(32) Ventra bearing 7 pairs of setae.
- 20(25) Number of ds reduced, posterior half of dorsum without ds I2 and I3.
- 21(22) Ds i4 and i5 as long as z3, Z4 = 48, Z5 = 80 long, ids = 394 – 423 (Fig. 9.10.):  
*L. punjabensis* Bhattacharyya & Sanyal, 2002  
 – India, Punjab.
- 22(21) Ds i4 and i5 conspicuously shorter than z3.
- 23(24) Ds i4 and i5 half as long as z3, Z5 remarkably strong, Z1 = 3x the length of I1, ids = 459 (Fig. 9.11.):  
*L. wangi* Ma, 1988  
 – China, Fuisong County, Jilin Province, in nest of *Apodemus agrarius* Pallas.
- 24(23) Ds i4 and i5 very short, z3 = 3x the length of these setae, Z5 = 5x the length of i4, ids = 525 (Fig. 9.12.):  
*L. phytoseioides* Chant, 1963  
 – North America, Louisiana, on clover.
- 25(20) Number of ds not reduced.
- 26(27) Peritreme with poststigmatic projection, te with 3 groups of points, setae of sternal shield and of ventra very short, ds Z4 = 57, Z5 = 65 – 67, ids = 520 (Fig. 9.13.):  
*L. mirabilis* Christian & Karg, 1992  
 – Europe, Germany, soil surface of planted slag heap.
- 27(26) Peritreme not lengthened behind stigma.
- 28(29) Ventra extremely broad, length : width = 4 : 7, te with 3 serrate branches, ids = 681 (Fig. 9.14.):  
*L. multispatus* Gu & Huang, 1990  
 – China, on *Apodemus sylvaticus*.
- 29(28) Ventra not so broad, length : width = 4 : 4 to 3 : 4, posterior S- and Z-setae as well as ds r3 lanceolate and partly pectinate.



- 30(31) Sternal shield densely dotted, ventra 220 long and 270 wide, te with 3 groups of points, ids = 600 (Fig. 9.15.):  
*L. lanciolatus* Chant, 1963  
 – North America, on a grape bud in a greenhouse.
- 31(30) Sternal shield reticulate, ventra 200 long and 255 wide, ids = 550 (Fig. 9.16.):  
*L. krantzi* Chant, 1963  
 – North America, on tulip bulbs and on *Oncidium* sp.
- 32(19) Ventra bearing 5 – 6 pairs of setae.
- 33(52) Ventra with 5 pairs of setae.
- 34(43) Ventra distinctly longer than wide.
- 35(38) Posterior half of dorsum without ds I2.
- 36(37) Posterior ds Z4 and Z5 strong and pectinate = 4x as long as ds I1, sternal setae st1 positioned on the sternal shield, ids = 402 (Figs 9.17.1. – 9.17.4.):  
*L. chenpengi* Ma & Yin, 1999  
 – China.
- 37(36) Only ds Z5 strong and pectinate = 4x as long as ds I1, furthermore i1 and r3 pectinate = 2 – 3x as long as I1, sternal setae st1 positioned anterior to the sternal shield, ids = 540 (Figs 9.18.1. – 9.18.2.):  
*L. cinnyris* Fain & Mariaux, 1991  
 – Africa, Ivory Coast, from *Nectarinia cuprea*.
- 38(35) Posterior half of dorsum with 5 pairs of I-setae: I1 to I5.
- 39(40) Ds r3 and Z5 very strong, club-shaped and serrate, length of Z5 = 4x I4, most other ds very short, ids = 325 (Fig. 9.19.):  
*L. traveni* Walter & Lindquist, 1997  
 – Australia, Queensland, from leaf of *Maesa* sp., tropical rain forest.
- 40(39) All ds acicular, thin, however caudal setae weakly pectinate, humeral setae may be tricarinate.
- 41(42) Caudal ds Z4 not longer than the distance Z4 – Z5, ds Z3 =  $\frac{2}{3}$  the distance Z3 – Z4, humeral setae acicular, ds Z4 = 59, Z5 = 68 =  $2\frac{1}{2}$ x I4, te denticulate, ids = 462 (Fig. 9.20.):  
*L. triangularis* Bhattacharyya & Sanyal, 2002  
 – India, Tamil Nadu.
- 42(41) Caudal ds Z4 longer than the distance Z4 – Z5, ds Z3 as long as Z3 – Z4, humeral setae tricarinate, Z4 = 63, Z5 = 69, leg I = 398, leg IV = 460, ids = 405 (Figs 9.21.1. – 9.21.2.):  
*L. porulosus* De Leon, 1963  
 – North America, on *Leucothoe* sp. and on nettle.
- 43(34) Ventra as long as wide or wider than long.
- 44(45) Ventra about as long as wide, most ds very short and peg-like, however ds Z5 extremely thickened and serrate = 10x as long as the short ds, te with smooth margin, ids = 408 (Fig. 9.22.):  
*L. fleschneri* Chant, 1963  
 – Honduras, on plants.

- 45(44) Ventra distinctly wider than long.
- 46(47) The first pair of sternal setae (st1) on weakly sclerotised praecendopodal plates, te trispinate, ids = 425 (Fig. 9.23.):  
*L. arboreus* Chant, 1963  
 – North America, Maryland, on black locust (*Robinia* sp.) and from soil.
- 47(46) The first pair of sternal setae on the sternal shield.
- 48(49) Ds relatively long, on the posterior half of the dorsum each setae reaching the next seta of the series, te with 4 branches, ventra triangular, Z4 longer than Z5, ids = 330 – 350 (Fig. 9.24.):  
*L. plenosestosus* n. sp.  
 – Ecuador.
- 49(48) Ds shorter, most ds not reaching the next setae of the series, te with 3 branches.
- 50(51) Sternal shield as wide as long, length : width of ventra = 4 : 6, ids = 550 – 567 (Fig. 9.25.):  
*L. medius* Gu & Guo, 1994  
 – China, on *Apodemus chevrieri* and on various species of *Rattus*.
- 51(50) Sternal shield longer than wide, length : width of ventra = 4 : 5, ids = 417 – 450 (Fig. 9.26.):  
*L. praevius* Gu & Guo, 1994  
 – China, on *Crocidura attenuata*, *Eothenomys miletus* and *Mus caroli*.
- 52(33) Ventra with 6 pairs of setae.
- 53(54) Ds short, no seta reaching the next seta of the series, Z5 = length of Z4, i3 = 2 – 4x the length of i4, ventra transverse oval length : width = 8 : 11, with small anus, ids = 376 (Fig. 9.27.):  
*L. garambae* Krantz, 1962  
 – Africa, Garamba.
- 54(53) Ds on the posterior half of dorsum reaching the next setae of the series, ds Z5 longer than Z4, ds i3 a little longer than i4, ventra triangular 180 long and 230 wide, ds Z4 = 45, Z5 = 82, leg I = 560, leg IV = 590, te with 3 terminally split branches, ids = 510 – 550 (Figs 9.28.1. – 9.28.2.):  
*L. pluvius* n. sp.  
 – Ecuador, Province Pichinca.

**Subgenus *Cuspiacus* n. subgen.*****Lasioseius-matthyssei*-complex*****Lasioseius youcefi* Athias-Henriot, 1959**

(Fig. 9.1.)

ATHIAS-HENRIOT, C. (1959): Phytoseiidae & Aceosejidae (Acarina, Gamasina) d'Algerie. III. Contribution au Aceosejinae. – Bull. Soc. Hist. Nat. Afr. N. **50** (5/6): 158 – 195

Syntypes: Laboratoire d'Acarologie de l'Ecole Pratique des Hautes Etudes, Paris (France)

Paratypes: Laboratoire de Zoologie Agricole de l'Ecole Nationale d'Agriculture d'Alger porte l'indication (Egypt)

Synonyms: *Lasioseius proteae* Ryke, 1964

Acarina associated with *Protea* flowers in Cape Province. – J. Ent. Soc. S. Afr. **26** (2): 337 – 354

*Lasioseius paucisetosus* Westerboer, 1963

Die Familie Podocinidae. Berlese, 1916. – In: STAMMER, H. J. (ed.), Beiträge zur Systematik und Ökologie mitteleuropäischer Acarina, Band II, Mesostigmata 1. Akad. Verlagsgesellschaft, Leipzig: 179 – 450

*Lasioseius mcgregori* Chant, 1963

The subfamily Blattisocinae Garman (= Aceosejinae Evans) (Acarina, Blattisocidae Garman) (= Aceosejidae Baker & Wharton) in North America, with descriptions of new species. – Can. J. Zool. **41**: 243 – 305

*Lasioseius lasiodactyli* Ishikawa, 1969 new synonym

Studies on the mesostigmatid mites in Japan. IV. Family Blattisocidae Garman. – Rep. Res. Matsuyama Shinonome Jr. Coll. **4** (1): 111 – 139

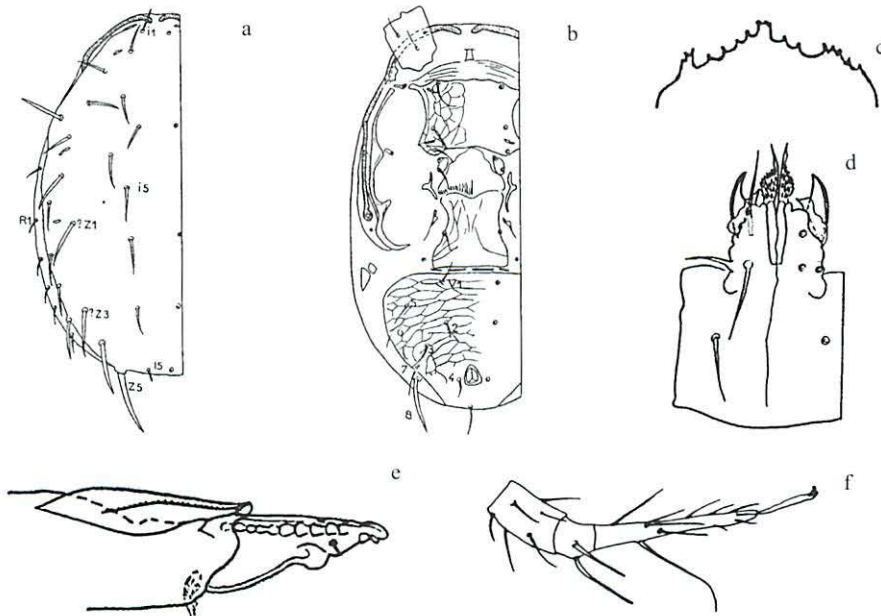


Fig. 9.1. **Female:** a dorsal, b ventral, c tectum, d hypostome, e chelicera, f tarsus IV (a – d ATHIAS-HENRIOT 1959; e, f LEE & LEE 1998)

*Lasioseius lindquisti* Nasr & Abou-Awad, 1987

(Figs 9.2.1. – 9.2.2.)

NASR, A. K. &amp; B. A. ABOU-AWAD (1987): Description of some ascid mites from Egypt (Acari, Ascidae).

– *Acarologia* **28** (1): 27 – 35

Holotype: National Research Centre, Dokki-Cairo (Egypt)

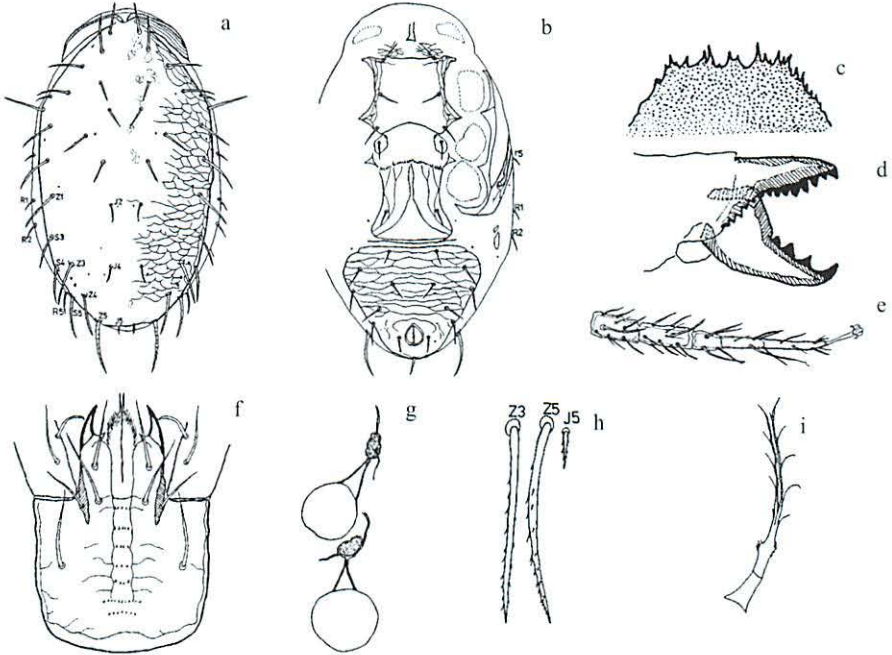


Fig. 9.2.1. **Female:** a dorsal, b ventral, c tectum, d chelicera, e leg IV, f hypostome, g spermatheca, h dorsal setae Z3, Z5, I5, i tritosternum (a – i NASR & ABOU-AWAD 1987)

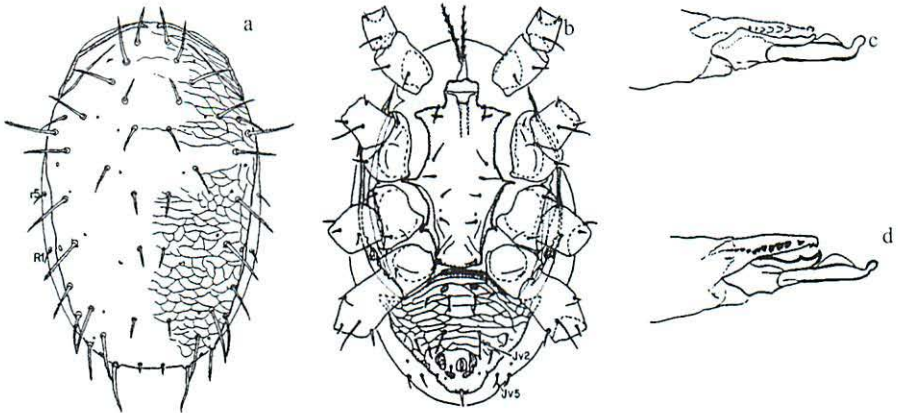


Fig. 9.2.2. **Male:** a dorsal, b ventral, c, d chelicera (a – d NASR & ABOU-AWAD 1987)