Genus	Vol. 4(4): 269-294	Wrocław, 15 XII 1993

Five new species of the family *Syringobiidae* TROUESSART, 1896 from Sandpipers and Plovers (*Aves*: *Charadriiformes*) (*Astigmata*: *Pterolichoidea*)

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ABSTRACT: Five new species of the feather mite family *Syringobiidae* (*Astigmata, Pterolichoidea*) are described from the *Charadriiformes*: *Eurysyringobia mauri* from *Calidris mauri* (CABANIS) (*Scolopacidae*), *Longipedia indistincta* from *Charadrius melanops* (VIEILLOT) (*Charadriidae*), *Megasyringobia thyreana* from *Tringa solitaria* WILSON (*Scolopacidae*), *Phyllochaeta mirabilis* from *Charadrius vociferus* L. (*Charadriidae*) and *Sikyonemus lobatus* from *Calidris melanotos* (VIEILLOT) (*Scolopacidae*). *Sikyonemus crocethiae* DABERT, 1987 from *Calidris alba* (PALLAS) is placed in synonymy with *S. diplectron* (Trouessart, 1896) from *Calidris acuminata* (HORSFIELD).

Quill-inhabiting mites of the family *Syringobiidae* (*Astigmata*; *Pterolichoidea*) from North American *Charadriiformes,* are poorly known as only a few species have been described (ATYEO and PETERSON 1977, DABERT and EHRNSBERGER 1991). In the present paper we describe five new syringobiid species, four from American birds, and one from Australia. The previously reported hosts of the genera discussed herein have been from Eurasia. Additionally, three of these genera, *Eurysyringobia*, *Megasyringobia* and *Longipedia*, described by DABERT (1992), included only one species each. All the measurements are given in micrometers. Explanations of abbreviations used: NMNH - US National Museum of Natural History, Washington; NU - University of Nebraska, Lincoln; UAM - University of Poznań, Poland, UMMZ - University of Michigan, Museum of Zoology, Ann Arbor; UGA - University of Georgia, Athens.

Eurysyringobia mauri n. sp.

(figs. 1-3)

Description

Male (figs. 1, 2), holotype. Length of idiosoma 380 (paratype 420), width of idiosoma 160 (200), length:width ratio=2.4:1 (2.1:1). Hysterosoma narrowed terminally at level of legs IV. Terminal cleft small, not reaching the bases of setae *ps2*. Prodorsal shield smooth, divided transversely, anteromedial part trapeziform. Scapular shields narrow; humeral shields absent. Hysteronotal shield with some transverse furrows between setae *c2* and *d2*. Setae *e1* on or slightly posterad to level of opithonotal pores (*gl*). Shields of coxal fields I, II not fused; distal end of sternum with triangular shield. Medial sclerites between coxal fields III absent. Paragenital apodemes free, not extending anterior of bases of setae *g*. Adanal discs small (diameter <10), with smooth corollae. Tarsi I-II without apicoventral spines. Setae *cG* on genua I, II forked apically, thin (fig. 2.2b). Ventral surfaces of tibiae III-IV between setae *kT* and distal end of segment smooth. Legs IV hypertrophied; femur with large ventral apophysis; trochanter with small rounded apophysis dorsally; genu with basoventral spine; tarsus with apicoventral claw. Lengths of idiosomal setae: *vi* 40, *se* 130, *si* 20, *c1* 5, *c2* 30, *c3* 60, *cp* 180, *d1* 10, *d2* 150, *e1* 25, *e2* 25, *f2* 120, *h1* 20, *h2* 320, *h3* 210, *ps1* 15, *ps2* 25, *ps3* 25, *1a* 20, *3b* 20, *3a* 20, *4a* 10, *g* 20.

Female. (fig. 3), paratype. Length of idiosoma 540, width of idiosoma 170. Idiosoma elongated, length:width ratio=3.3:1), cylindrical with rounded terminus. Pronotal shield with posterior margin divided into three lobes by shallow incisions. Scapular sclerites narrow, humeral shields absent. Hysteronotal shield with poorly sclerotized area near setae *d1*. Lateral hysterosomal sclerites absent. Setae *c2*, *e2* half length of *d2*. Setae *e1* inserted anterior to level of *e2*. Setae *f2* short, lanceolate. Epigynium semicircular (width:height ratio=1.4). Coxal fields with small sclerotizations. Distal end of sternum without triangular shield. Setae *ps3* slightly longer than *ps2*. Setae *cG* I y-shaped with higly reduced one branch, *cG* II as in male (fig. 2.2). Lengths of idiosomal setae: *vi* 50, *se* 140, *si* 30, *c1* 10, *c2* 40, *c3* 60, *cp* 175, *d1* 10, *d2* 65, *e1* 10, *e2* 20, *f2* 50, *h1* 25, *h2* 440, *h3* >140, *ps1* 15, *ps2* 55, *ps3* 70, *ad3* 15, *1a* 30, *3b* 25, *3a* 15, *4a* 20, *g* 15.

Etymology. The specific epithet is derived from the name of the host species.

Type data. From quills of *Calidris mauri* (Cabanis) (*Charadriiformes, Scolopacidae*): holotype male, 1 male, 1 female paratypes, Gardner's Laguna, Salton River, California, 22 April 1894, E. A. Mearns (USNM 135500, NU 9122). Types deposited: NMNH. Additional material: from the same host 2 females, Kansas, Barton Co, Cheyenne Bottoms, 3 September 1976, J.G. Strauch Jr. (UMMZ 225460).

Differential diagnosis

Males differ from the type species, *E. spinigera* Vasyukova and Mironov 1986 in several features (only the more distinct differences are listed):

- apophyses on femora IV do not extend to posterior idiosomal margin; in *E. spinigera* apophyses extend beyond idiosomal terminus;

- trochanter IV without lateral apophysis; in *E. spinigera* large lateral apophysis present;

- paragenital apodemes do not extend anterior of the bases of setae *g*; in *E. spinigera* setae *g* inserted on the anterior ends of paragenital apodemes;

- setae *e1* positioned posterior to or at the level of pores *gl*; in *E. spinigera* setae *e1* anterior to the level of pores *gl*;

- terminal cleft very small, does not extend to the bases of setae *ps2*; in *E. spinigera* terminal cleft distinct, extending to the level of setae *ps2*;

- oval sclerites anterior to coxal fields III absent; in *E. spinigera* such sclerites are present.

Females are very similar to *E. spinigera*. The main differences are:

- y-shaped setae *cG* on genua I with one branch greatly reduced; in *E. spinigera* both branches of setae *cG* I well developed;

- setae *e2* twice shorter than *d2*; in *E. spinigera* setae *e2* as long as *d2*.

***Longipedia indistincta* n. sp.**

(figs. 4-7)

Description

Male (figs. 4, 5), holotype. Length of idiosoma 530, width of idiosoma 210, length:width ratio=2.5. Prodorsal shield strongly incised laterally at level of scapular setae; posterolateral corners formed as rounded "ears". Setae *se* positioned lateral to shield margin. Hysteronotal shield greatly reduced, basically U-shaped. Dorsal pygidial region with semicircular striae. Lateral sclerites well developed, sclerotized. Coxal fields I sclerotized; coxal fields II sclerotized marginally. Paragenital apodemes short, not extending posterior of genital organ. Adanal discs small (diameter 15) with some small teeth on the corollae. Tarsi I-II each with doubled apicoventral spines (claws). Setae *cG* on genua I parallel-sided, notched apically; on genua II awl-shaped. Legs III thin, extending slightly beyond terminus. Legs IV hypertrophied in diameter; femur with 2 large apophyses; tarsus with 1 apicoventral claw. Tibiae III, IV with ventral surfaces between setae kT, distal end of segment smooth. Lengths of idiosomal setae: *vi* 60, *se* 280, *si* 320, *c1* 170, *c2* 360, *c3* 370, *cp* 360, *d1* 140, *d2* 360, *e1* 120, *e2* 310, *f2* 350, *h1* 5, *h2* 660, *h3* 290, *ps1* 20, *ps2* 65, *ps3* 30, *1a* ?, *3b* 130, *3a* 70, *4a* 20, *g* 45.

Female (figs. 6, 7) paratype. Length of idiosoma 610, width of idiosoma 200. Idiosoma elongated, cylindrical, length:width ratio=3.1. Posterior margin of prodorsal shield sinuous. Hysterosomal terminus rounded with small cleft; lateral sclerites absent. Setae *c2* and *d2* shorter than *e2*; level of setae *e1* anterior to level of setae *e2*; setae *c2*, *e2* positioned external to hysteronotal shield; setae *f2* piliform, short. Coxal fields I sclerotized at the bases of legs; coxal fields II with small sclerotizations near leg bases. Epigynium small, arched, wider than tall, with medial process on concave margin. Anus flanked by 1 small, 1 large pair of setae. Setae *cG* on genua I, II as in male.

Length of idiosomal setae: *vi* 50, *se* 200, *si* 30, *c1* 30, *c2* 90, *c3* 110, *cp* 230, *d1* 25, *d2* 110, *e1* 30, *e2* 140, *f2* 30, *h1* 20, *h2* 420, *h3* 300, *ps1* 30, *ps2* 40, *ps3* 90, *ad3* 25, *1a* 40, *3b* 45, *3a* 15, *4a* 35, *g* 30.

Etymology. Indistincta (L.), derived from the greatly reduced hysteronotal shields of males.

Type data. From quills of *Charadrius melanops* (VIEILLOT) (*Charadriiformes, Charadriidae*). holotype male, 1 female, 1 TN paratypes, Brooking Springs, Western Australia, Australia, 26 September 1976, F. S. LUKOSCHUS (UGA 9225). Types deposited: NMNH.

DIFFERENTIAL DIAGNOSIS

This new species is similar to type species, *L. tricalcarata* (TROUESSART and NEUMANN 1888).

MALE

- prodorsal shield incised laterally to the level of setae si; in *L. tricalcarata* shield without lateral incisions.
- prodorsal and hysteronotal shield smooth; in *L. tricalcarata* posterior part of prodorsal shield and anterior part of hysteronotal shield with reticulate pattern.
- hysteronotal shield almost completely reduced posteriorly; in *L. tricalcarata*, shield reduced only in medial part.
- legs III extend beyond terminus by 1/4 length of tarsus; in *L. tricalcarata* legs III extend beyond terminus by length of tarsus.
- setae *3a* at level of posterior pair of genital acetabula; in *L. tricalcarata*, setae *3a* at level of anterior pair of genital acetabula.

FEMALE

- coxal fields I sclerotized anteriorly; in *L. tricalcarata* coxal fields I totally sclerotized.
- opisthosomal terminus with small cleft; in *L. tricalcarata* opisthosoma without terminal cleft.
- lengths of setae *c2* and *d2* subequal; in *L. tricalcarata*, setae *d2* twice as long as c2.

Megasyringobia thyreana sp.n.

(figs. 8-11)

DESCRIPTION

MALE (figs. 8, 9), holotype. Length 630, width at level of setae *d2* 270, length/width ratio=2.3. Hysterosoma distinctly swollen in the middle of length, greatly narrowed to the terminus. Opisthosoma with small terminal cleft. Prodorsal shield with posterolateral margins rounded; terminal margin irregular, irregular striations paralleling posterior margin. Scapular shields well developed, humeral shields small. Hysteronotal shield with small unsclerotized area between setae *d2*, incised laterally at the bases of setae *d2*. Lateral hysterosomal sclerites very broad, more sclerotized than hysteronotal

shield. Setae *se*, *si* as macrosetae. Setae *d1* inserted midway between setae *c1*, *d2*. Distance *e1*:*e1* greater than *e1*:*e2*. Pores *gl* inserted interior to setae *e2*. Setae *h1* at bases of setae *f2*. Most lateral, terminal setae very long. Coxal fields I, II sclerotized except for narrow areas paralleling epimerites I, sclerotizations ending at terminations of epimerites I, II. Paragenital apodemes not fused with opisthoventral sclerites. Setae *1a* relatively long, extending beyond terminal margins of coxal shields. Setae *3a* inserted at level of anterior pair of genital acetabula. Adanal discs small (diameter 15) with 7-8 small teeth on corollae. Tarsi I-II with 2 small apicoventral apophyses. Setae *cG* on genua I, II thick, square, slightly forked apically. Setae *mG* on genua II as long as femora II + genua II. Tibiae I-IV with ventral surfaces between setae *kT*, segment apex weakly serrate (figs. 9.2). Tarsi III with setae *d* thicker, longer than on tarsi IV. Legs IV hypertrophied, tarsus with large apicoventral spine. Lengths of idiosomal setae: *vi* 70, *se* 220, *si* 250, *c1* 10, *c2* 430, *c3* 300, *cp* 650, *d1* 5, *d2* 310, *e1* 15, *e2* 320, *f2* 360, *h1* 25, *h2* 1300, *h3* 900, *ps1* 110, *ps2* 120, *ps3* 70, *1a* 80, *3b* 140, *3a* 120, *4a* 40, *g* 160.

FEMALE (figs. 10, 11), paratype. Length of idiosoma 670, width of idiosoma 280. Idiosoma elongated (length:width ratio=2.4:1), cylindrical with rounded terminus. Prodorsal shield fused with scapular shields, posterior margin divided into three lobes by shallow incisions, narrow lateral incisions to the bases of setae *se*. Setae *si* long, about half length of *se*. Lateral sclerites of hysterosoma well developed, fused terminally with hysteronotal shield. Hysteronotal shield not incised near pores *gl*. Setae *e1* inserted at level of setae *e2*. Setae *f2* long, macrosetae. Setae *h1* inserted anterior to *f2*. Epigynium horseshoe-shaped (width:height ratio=1), positioned anterior to epimeres III. Coxal fields I sclerotized; coxal shields II divided by conjunctiva. Setae *1a* inserted on margin of coxal shields I. Setae *ps2*, *ps3* long, subequal. Setae *cG* on genua I, II as in male. Lengths of idiosomal setae: *vi* 110, *se* 400, *si* 180, *c1* 5, *c2* 280, *c3* 160, *cp* 380, *d1* 10, *d2* 270, *e1* 10, *e2* 270, *f2* 230, *h1* 15, *h2* 600, *h3* 450, *ps1* 50, *ps2* 150, *ps3* 150, *ad3* 40, *1a* 40, *3b* 60, *3a* 40, *4a* 35, *g* 50.

Etymology. From thyreos (Gr., long, broad shield) to call attention to the very broad lateral hysterosomal shields of males.

Type data. From quills of *Tringa solitaria* WILSON (*Charadriiformes, Scolopacidae*): holotype male, 2 female paratypes, 10 miles SW Imperial, Nebraska, 6 September 1961, W. T. ATYEO (NU 4833). Holotypes deposited: NMNH; paratypes: NMNH, UAM.

DIFFERENTIAL DIAGNOSIS

The most distinct differences between new species and type species *M. calceata* (TROUESSART 1898) are listed below.

MALE

- idiosoma enlarged at mid length of hysterosoma by large lateral shields; in *M. calceata* idiosoma almost parallel-sided with lateral shields narrow.
- legs IV hypertrophied; in *M. calceata* legs IV not hypertrophied.

- ventral surface of all tibiae weakly serrate; in *M. calceata* ventral surfaces of tibiae I and II smooth, tibiae III and IV each with tongue-shaped apophysis.

- setae *si* subequal to *se*; in *M. calceata* setae *se* four times longer than *si*.

- setae *d* on tarsi III much longer than tarsi III; in *M. calceata* setae *d* on tarsi III much shorter than tarsi III.

- setae *h1* inserted anterior to setae *f2*; in *M. calceata* setae *h1* inserted internal to setae *f2*.

FEMALE

- setae *si* macrosetae, long; in *M. calceata* setae *si* short, piliform.

- lateral hysterosomal sclerites well developed; in *M. calceata* lateral sclerites rudimentary.

- setae *e1*, *e2* inserted at the same level; in *M. calceata* setae *e1* inserted posterior to level of setae *e2*.

- setae *h1* inserted anterior to setae *f2*; in *M. calceata* setae *h1* inserted internally to setae *f2*.

- hysteronotal shield without lateral incisions at level of opisthonotal gland openings; in *M. calceata* hysteronotal shield with lateral incisions near gland openings.

Phyllochaeta tenuiseta **sp.n.**

(figs. 12-14)

DESCRIPTION

The new species is the seventh species of the genus *Phyllochaeta* DUBININ 1956.

MALE (figs. 12, 13), holotype. Length 660 (paratype 690), width 300, length:width ratio=2.2. Hysterosoma slightly swollen at mid length. Opisthosomal lobes separated by triangular terminal cleft; postlobar membranes reduced, each with one small apical tooth. Pronotal shield divided posterior to scapular setae. Scapular shields weakly developed, humeral shields absent. Hysteronotal shield narrowed between setae *c1*, *d1*. Lateral hysterosomal sclerites well developed, fused posteriorly with hysteronotal shield. Setae *si* relatively long, about 1/3 *se* length. Setae *e2* thin, much shorter than other lateroterminal setae. Setae *ps1* as thick needles. Setae *d1* inserted nearer to *d2* than *c1*. Setae *e1* inserted anterior to *e2*. Pores *gl* inserted anterior to setae *e1*. Coxal fields I, II almost completely sclerotized. Pregenital region with 2 large sclerites united medially by weakly sclerotized tegument. Two small sclerites near bases of setae *3a*. Paragenital apodemes long, not fused with pregenital shields or adanal sclerites. Adanal sclerites not fused with opisthoventral sclerites. Small preanal shields anterior to setae *ps3*. Setae *1a* and *3b* longer than other ventral setae. Setae *g* inserted posterior to level of *3a*. Adanal discs large (diameter 30), with 19-20 small teeth on corollae. Legs I-IV subequal. Tibiae I-II with apicoventral, comb-shaped semicircular apophyses (figs. 13.2). Tarsi I-II each with 2 apicoventral apophyses. Setae *cG* on genua I, II thick, square, slightly forked apically. Genua, tibiae, tarsi III-IV with dorsoparaxial longitudinal sutures; tarsi III-IV each with single apicoventral apophysis. Lengths of idiosoma setae:

vi 90, *se* 400, *si* 140, *c1* 10, *c2* 200, *c3* 230, *cp* 630, *d1* 15, *d2* 230, *e1* 30, *e2* 85, *f2* 400, *h1* 30, *h2* ? (>670), *h3* 470, *ps1* 130, *ps2* 70, *ps3* 70, *1a* 100, *3b* 170, *3a* 80, *4a* 40, *g* 30.

FEMALE (fig. 14), paratypes. Length of idiosoma 630-660, width of idiosoma 250-270. Idiosoma slightly elongated (length:width ratio=2.5:1), terminus rounded. Pronotal shield with terminal margin divided into three indistinct lobes by shallow incisions. Scapular, humeral shields weakly developed. Hysteronotal shield relatively narrow, not fused with sclerotized lateral shields, transversely striated posteriorly. All lateral setae short. Setae *c2*, *d2* half length of *e2*. Setae *e1* inserted posterior to level of pores *gl*. Setae *f2* short, lanceolate. Setae *h1* inserted internally to *f2*. Epigynium arched (width:height ratio=2:1), with small aperture medially (fig. 14.3). Coxal fields I sclerotized near leg bases; coxal fields II as illustrated. One long pair (*ps3*), 1 short pair (*ad3*) setae flanking anal apex. Setae *cG* on genua I, II as in male. Lengths of idiosoma setae: *vi* 30, *se* 340, *si* 20, *c1* 10, *c2* 45, *c3* 70, *cp* 230, *d1* 5, *d2* 45, *e1* 10, *e2* 90, *f2* 50, *h1* 15, *h2* 390, *h3* 260, *ps1* 25, *ps2* 40, *ps3* 90, *ad3* 25, *1a* 40, *3b* 30, *3a* 20, *4a* 40, *g* 30.

Etymology. From tenuis (L., make thin, slenderize) + seta (L., hair) to refer to the atypical structure of setae *ps1* of males.

Type data. From quills of *Charadrius vociferus* (*Charadriiformes*, *Charadriidae*): holotype male, 1 male, 4 female paratypes, Haven, Florida, 20 July 1960, W. T. ATYEO, N. L. BRAASCH and K. R. ORWIG (NU 4594). Holotype deposited: NMNH; paratypes deposited: NMNH, UAM.

DIFFERENTIAL DIAGNOSIS

This new species is distinct among the species of *Phyllochaeta*. It differs from most of the other species as follows:

MALE

- divided prodorsal shield; in other species shield entire.
- terminal cleft triangular; in other species cleft apex rounded.
- setae *ps1* needle-shaped; in other species setae *ps1* leaflike or lanceolate.
- comb-like apophyses on tibiae of legs I-II; in other species when apophyses present, they are attenuated apically.

FEMALE

- setae *d2*, *e2* shorter than 1/2 idiosoma width; in other species these setae longer than 1/2 idiosoma width.
- epigynium with small aperture in the central part; in other species such apertures are absent.

The new species is most closely related to the *Phyllochaeta bouveti* (MÉGNIN and TROUESSART, 1884). Males of both species have legs III extending almost to the terminus and legs IV extending well beyond the terminus, have the diffuse margins of the hysteronotal shield and have the posterior region of the prodorsal shield striated.

Females of both species have setae *c2* shorter and hysteronotal shields narrower than in other species of the genus. The hosts for the two named species are the *Charadriidae*, while for the remaining species, the hosts are from the *Scolapacidae*.

Differentiation of the *P. tenuiseta* from *P. bouveti*: for males, *P. tenuiseta* has a triangular terminal cleft and the postlobar membranes each bear one small tooth; for *P. bouveti*, there is a long U-shaped terminal cleft and numerous teeth on each postlobar membrane. For females, *P. tenuiseta* has setae *d2* not extending to the openings of the opisthonotal glands and setae *e2* extends only to the terminus; for *P. bouveti*, setae *d2* extend to setae *e1* and setae *e2* extend beyond the terminus by at least one-third their length.

Sikyonemus lobatus n. sp.

(figs. 15-16)

DESCRIPTION

The new species is the fourth species of the genus *Sikyonemus* GAUD 1966. *Sikyonemus crocethiae* DABERT 1987 is a new synonym of *S. diplectron* (TROUESSART 1896).

MALE (fig. 15), holotype. Length 450 , width 170, length:width ratio 2.6:1. Hysterosoma with almost parallel-sided; opisthosomal lobes more or less triangular; terminal cleft semicircular; postlobar membranes narrow, each with one small tooth. Pronotal shield posterior to scapular setae transversely striated. Scapular shields narrow, humeral shields absent. Hysteronotum with reticulate pattern anteriorly. Lateral hysterosomal sclerites narrow, fused posteriorly with hysteronotal shield. Setae *c2* not longer than 2/3 length of *d2*. Setae *e2* much shorter than other lateral setae. Setae *e1* inserted posterior to pores *gl*. Setae *f2*, *h2* about 1/2 length of *h3*. Setae *ps1* short, lanceolate. Pores *gl* inserted external to hysteronotal shield. Coxal fields I with minimal sclerotization; coxal fields II completely sclerotized. Pair of parallel rod-shaped sclerites divided into small anterior, long posterior sections between coxal fields III. Paragenital apodemes long, fused with opisthoventral sclerites. Setae *3a* inserted posteriolateral to genital acetabula. Adanal discs medium sized (diameter 15), with 12 small teeth on corollae. Legs III displaying slight hypertrophy; with 3 apophyses: 1 ventral on femur, 1 apicoventral on tibia, 1 apicoventral on tarsus. Tarsi III, IV similar. Setae *cG* on genua I, II thick, cleft apically. Lengths of idiosoma setae: *vi* ?, *se* 200, *si* 20, *c1* 5, *c2* 60, *c3* 130, *cp* 210, *d1* 10, *d2* 100, *e1* 5, *e2* 25, *f2* 160, *h1* 20, *h2* 340, *h3* 150, *ps1* 30, *ps2* 30, *ps3* 30, *1a* 25, *3b* 30, *3a* 25, *4a* 20, *g* 25.

FEMALE (fig. 16), paratype. Length of idiosoma 480, width of idiosoma 170. Idiosoma elongated, length:width ratio=2.8:1), cylindrical with rounded terminus. Pronotal shield similar to male except lacking transverse striae. Scapular sclerites narrow, humeral shields absent. Hysteronotal shield with irregular unsclerotized areas near setae *d1*. Lateral hysterosomal sclerites absent. Setae *c2*, *d2* half length of *e2*. Setae

e1 inserted anterior to level of *e2*. Setae *f2* short, lanceolate. Epigynium horse-shoe shaped (width:height ratio=1), with distinct lateral projections. Coxal fields with small sclerotizations. Setae *ps3* much longer than *ps2*, *ad3*. Setae *cG* as in male. Lengths of idiosomal setae: *vi* 45, *se* 230, *si* 20, *c1* 5, *c2* 50, *c3* 100, *cp* 170, *d1* 10, *d2* 65, *e1* 5, *e2* 150, *f2* 45, *h1* 10, *h2* 370, *h3* 170, *ps1* 35, *ps2* 25, *ps3* 50, *ad3* 10, *1a* 30, *3b* 20, *3a* 15, *4a* 20, *g* 15.

Etymology. Lobatus (L., lobe) for the the presence of opisthosomal lobes in males; males of other species of *Sikyonemus* lack terminal lobes.

Type data. From quills of *Calidris melanotos* (VIEILLOT) (*Charadriiformes*, *Scolopacidae*): holotype male, 1 female paratype, 30 miles N Dallas, Texas, 1 January 1947 (NU 1098). Additional material: 1 female, California, 1887, no other data. Types deposited: NMNH.

DIFFERENTIAL DIAGNOSIS

Males of *Sikyonemus lobatus* differs from other species of the genus as follows:

- distinct opisthosomal lobes with narrow postlobar membranes present; in other species opisthosoma at most with small terminal cleft.
- coxal fields I without uniform sclerotization; in other species coxal fields I completely sclerotized.
- paragenital apodemes fused posteriorly with opisthoventral sclerites; in other species paragenital apodemes separate from opisthoventral sclerites.

ACKNOWLEDGEMENTS

The research was supported in part by the National Science Foundation, BSR-8908301.

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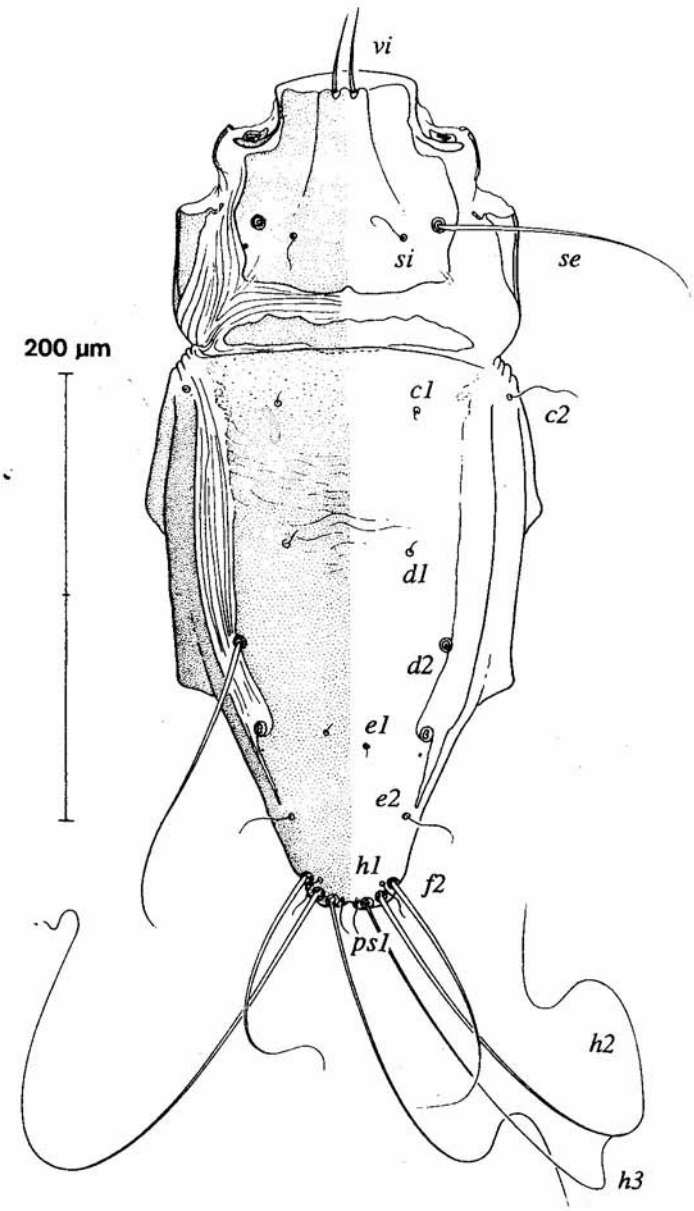
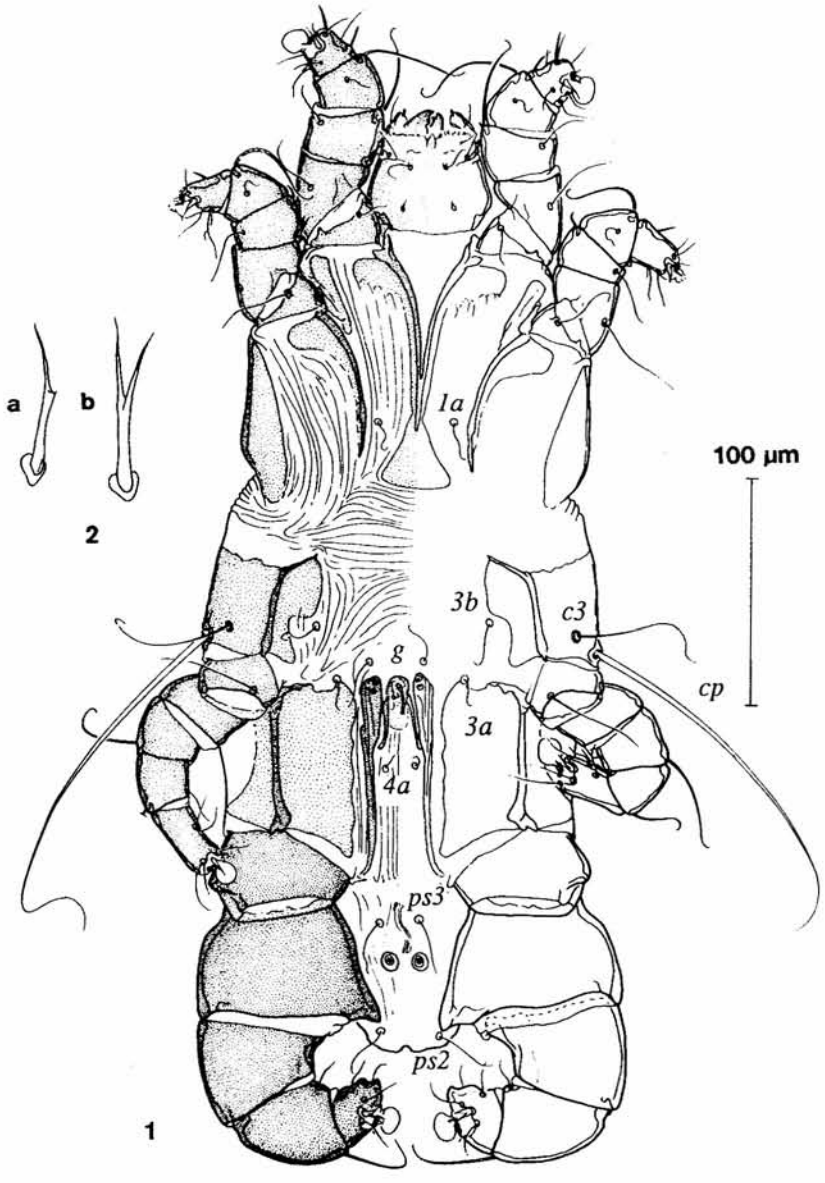
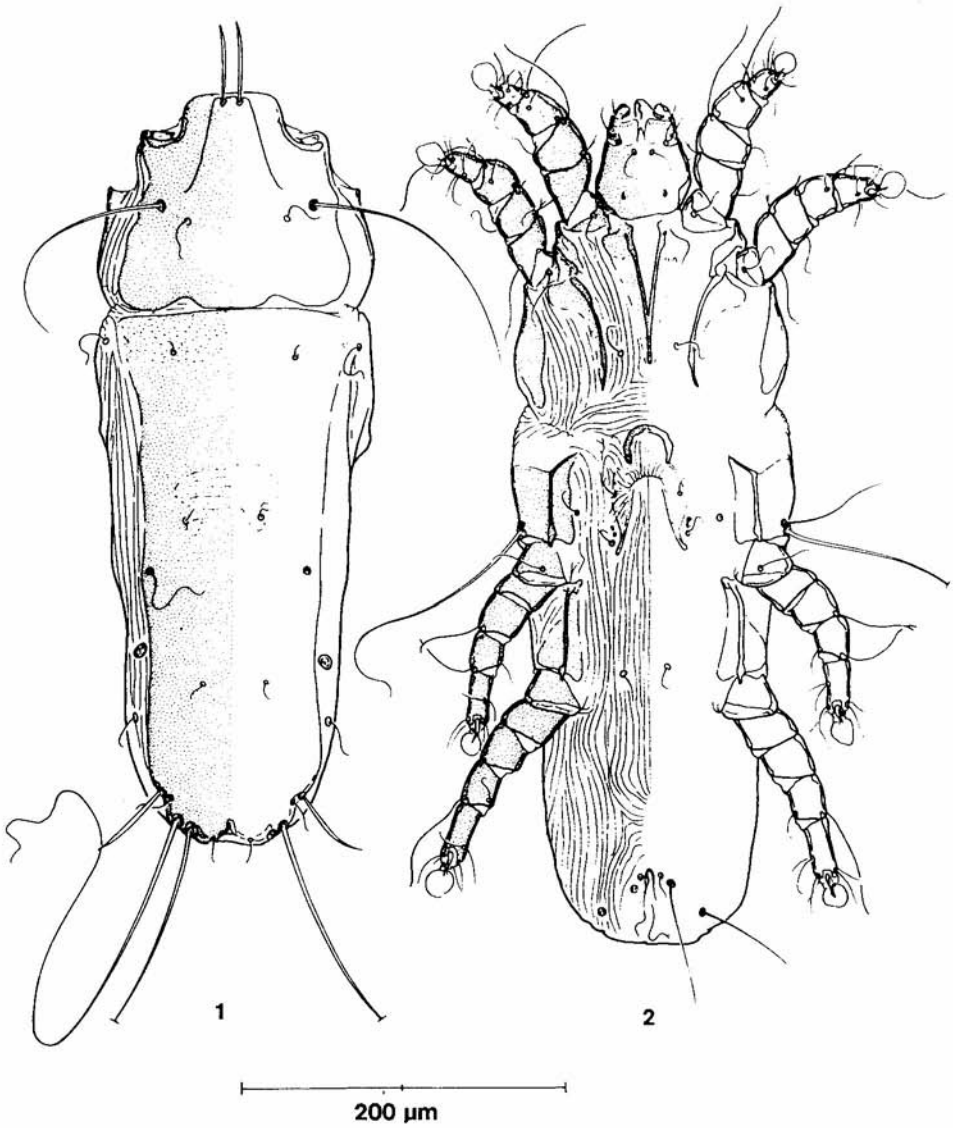


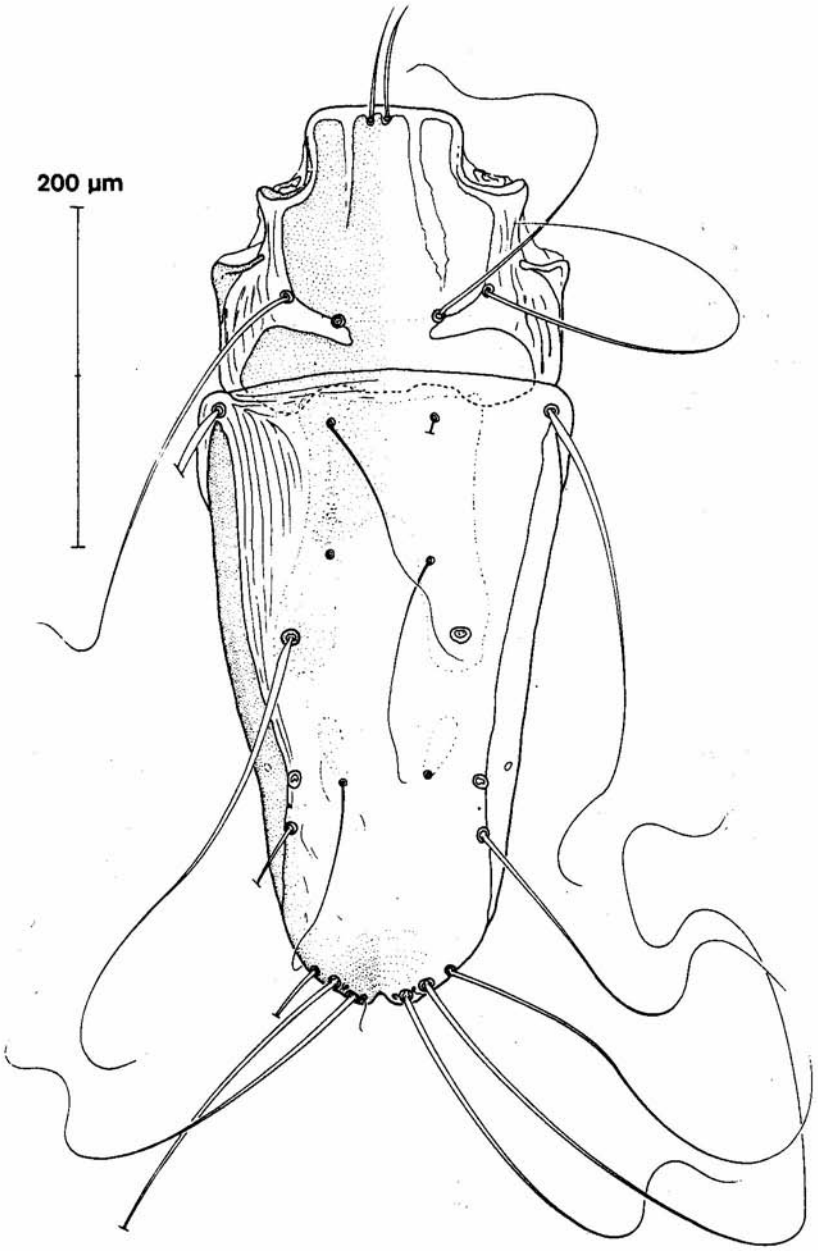
1. *Eurysyringobia mauri* n. sp. - male, dorsal view



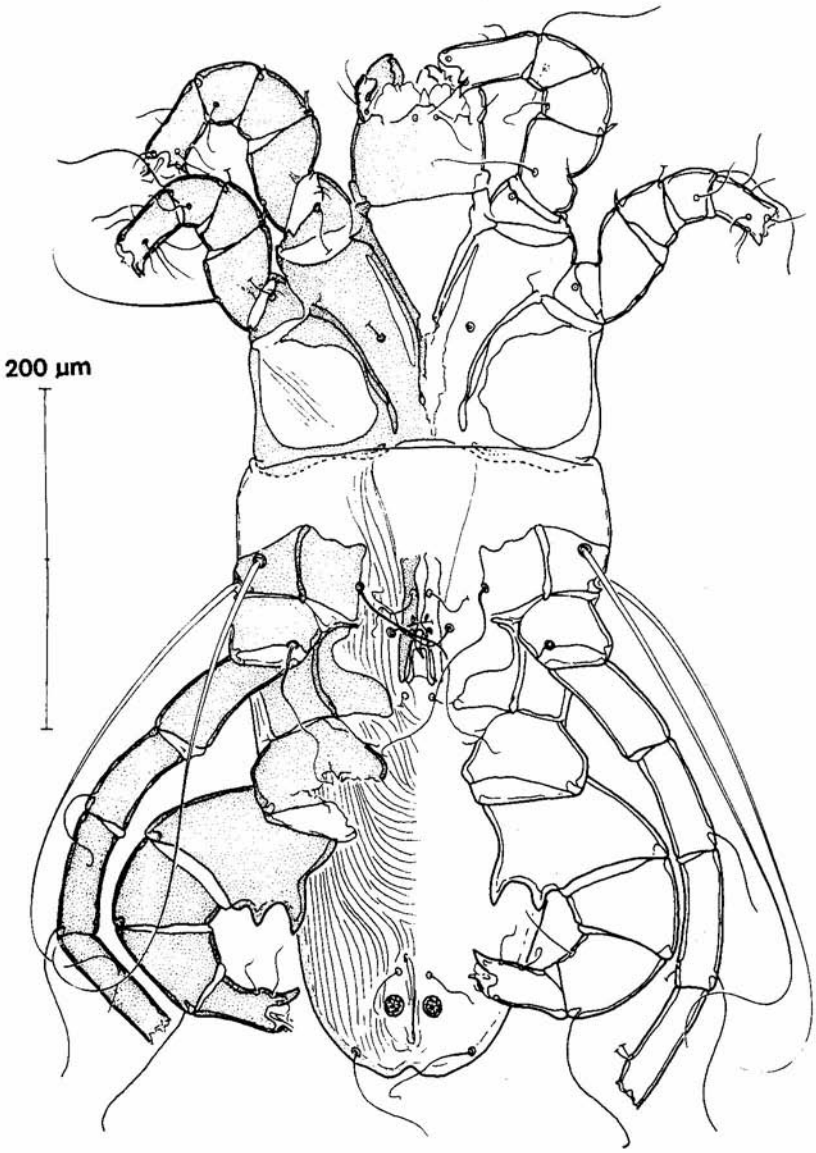
2. *Eurysyringobia mauri* n. sp.: 1 - male, ventral view,2 - setae cG of genua, a - cG I of female, b - cG II offemale and cG I and II of male



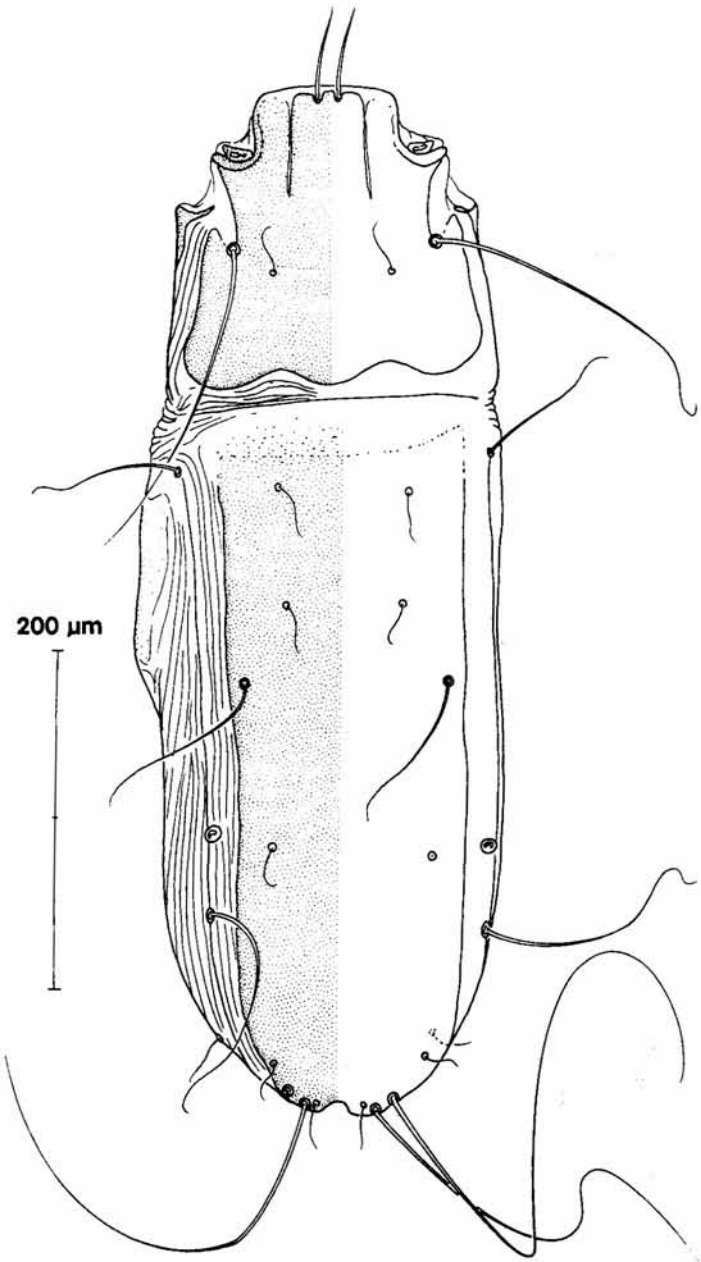
3. *Eurysyringobia mauri* n. sp.: 1 - female, dorsal view,2 - female, ventral view



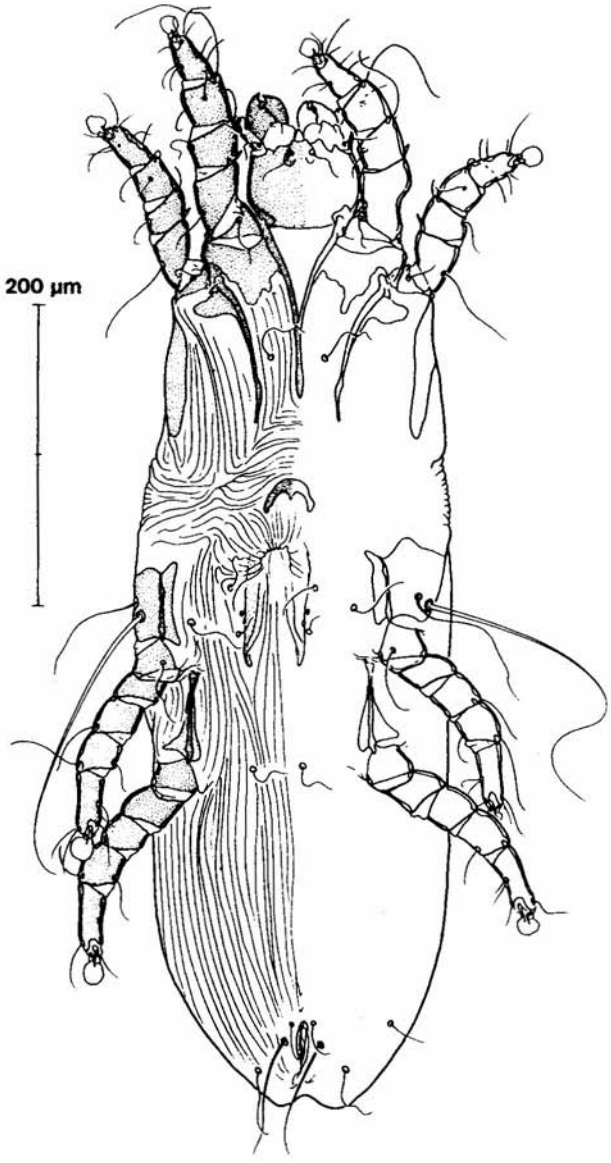
4 *Longipedia indistincta* n. sp. - male, dorsal view



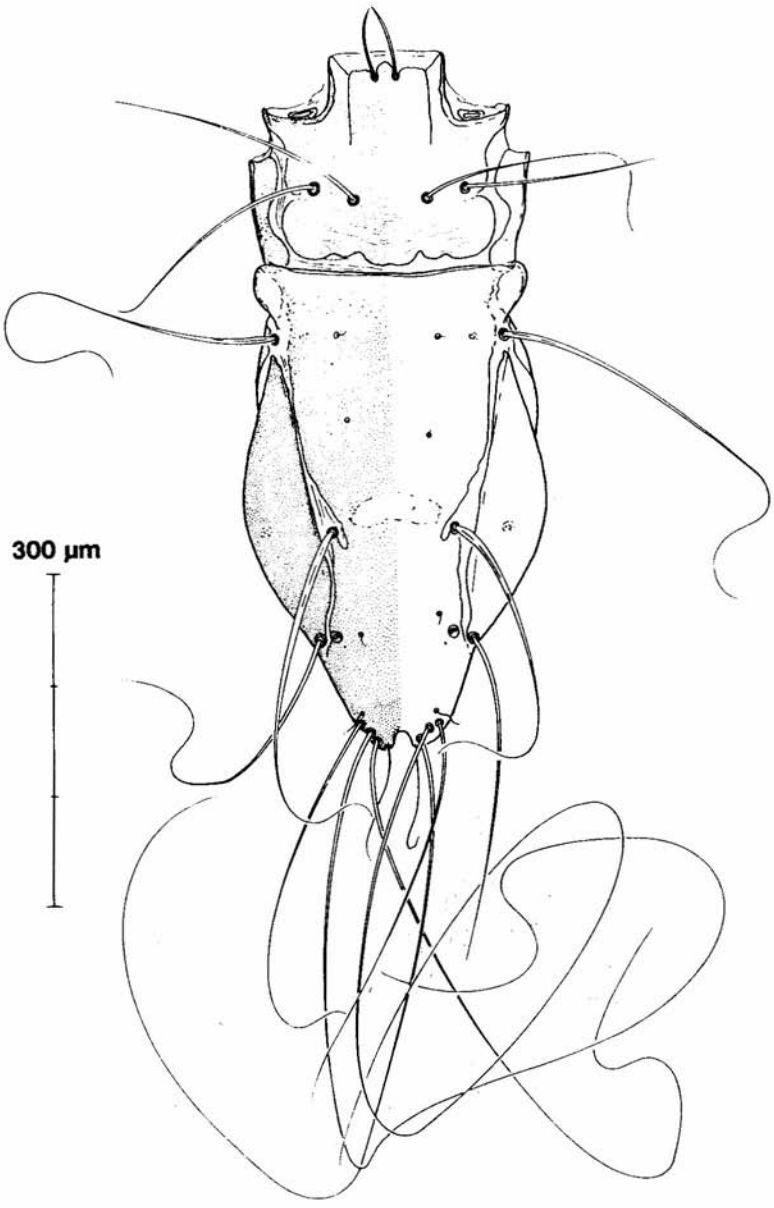
5. *Longipedia indistincta* n. sp. - male, ventral view



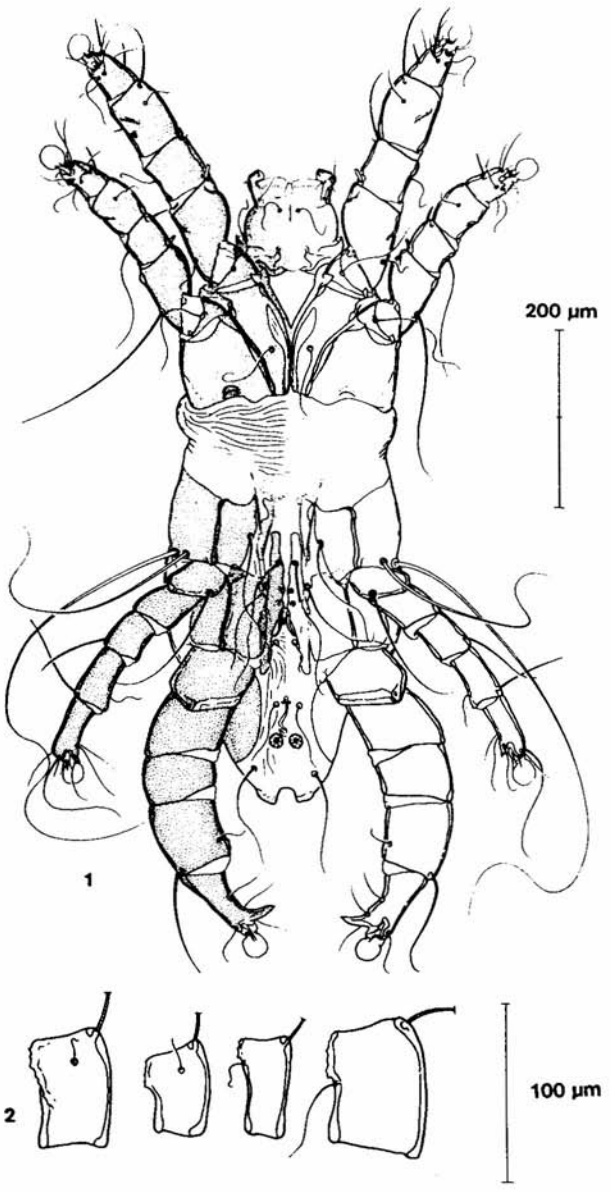
6. *Longipedia indistincta* n. sp. - female, dorsal view



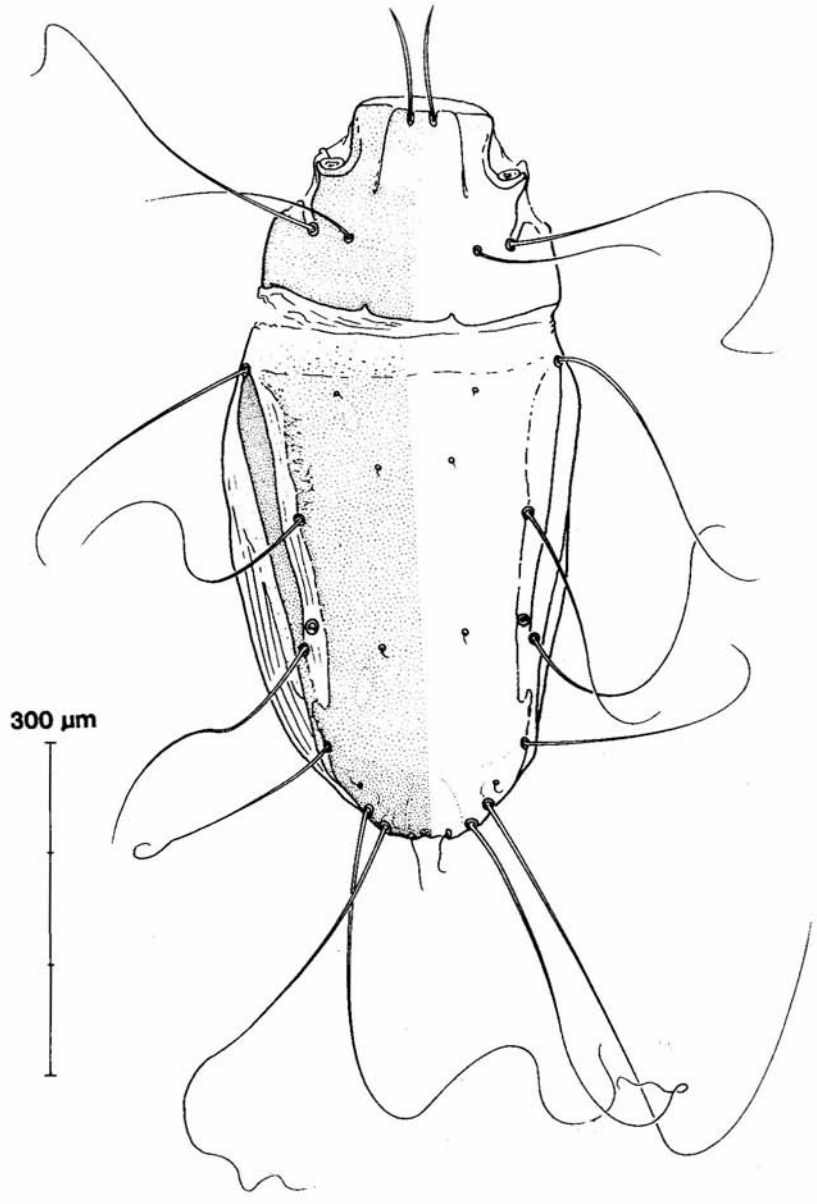
7. *Longipedia indistincta* n. sp. - female, ventral view



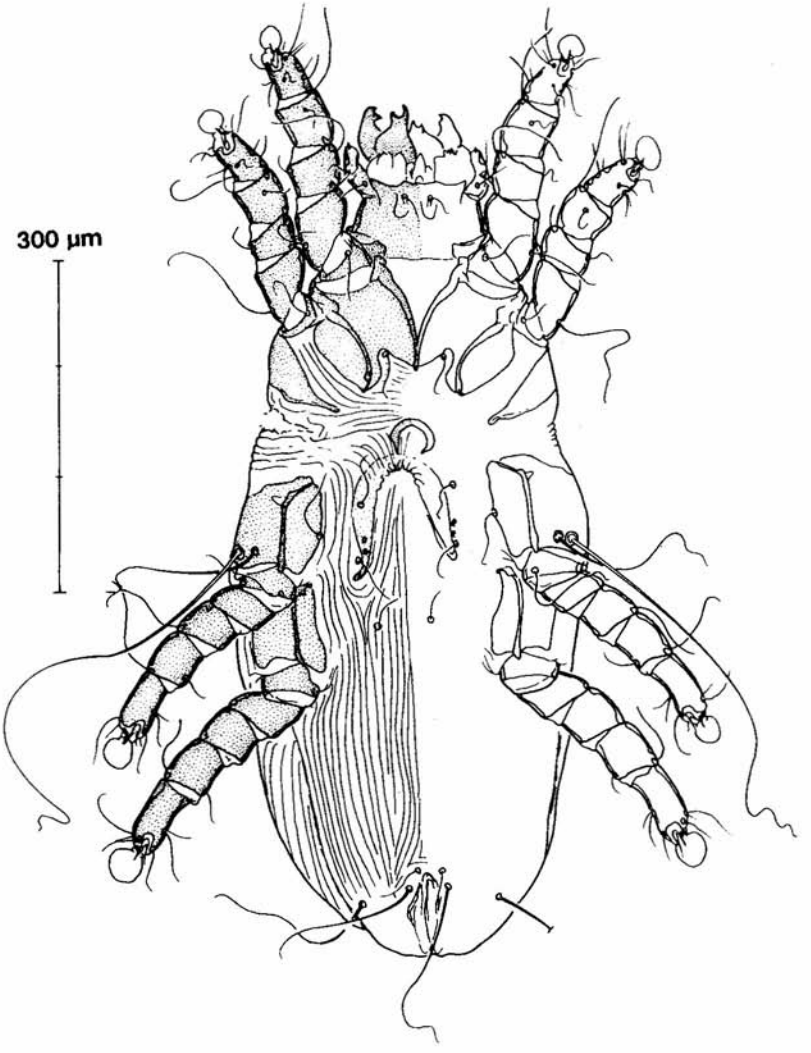
8. *Megasyringobia thyreana* n. sp. - male, dorsal view



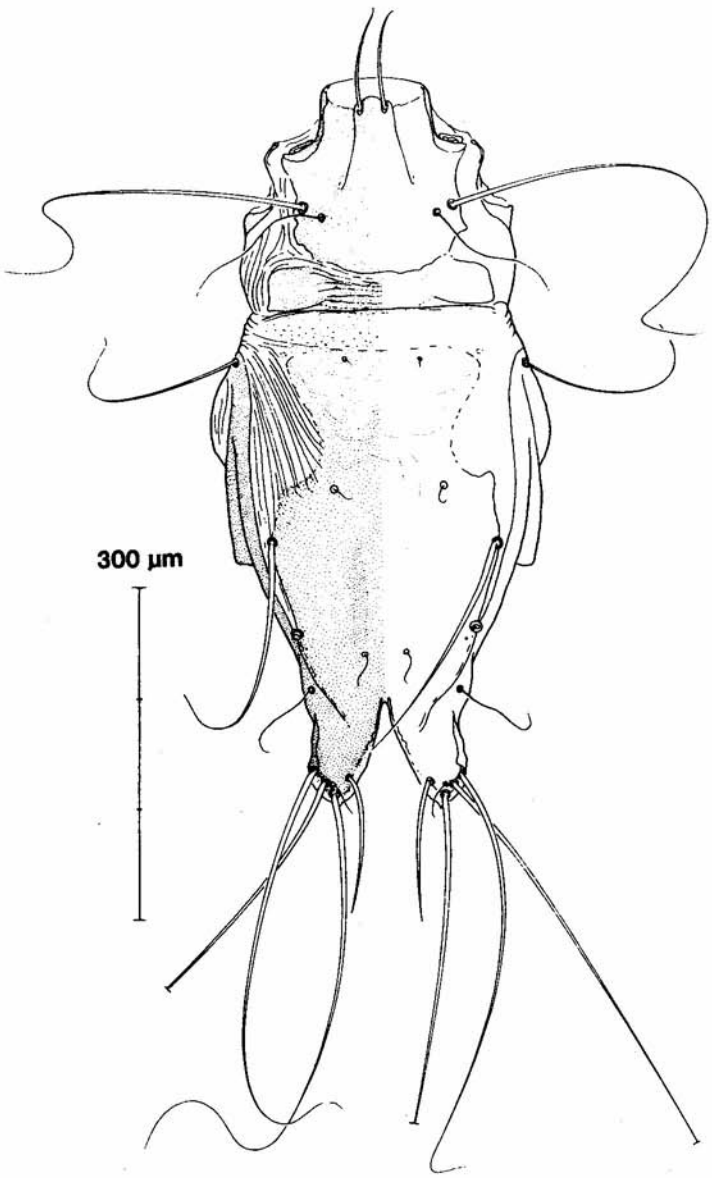
9. *Megasyringobia thyreana* n. sp.: 1 - male, ventralview, 2 - tibiae I-IV of male (from left to right)



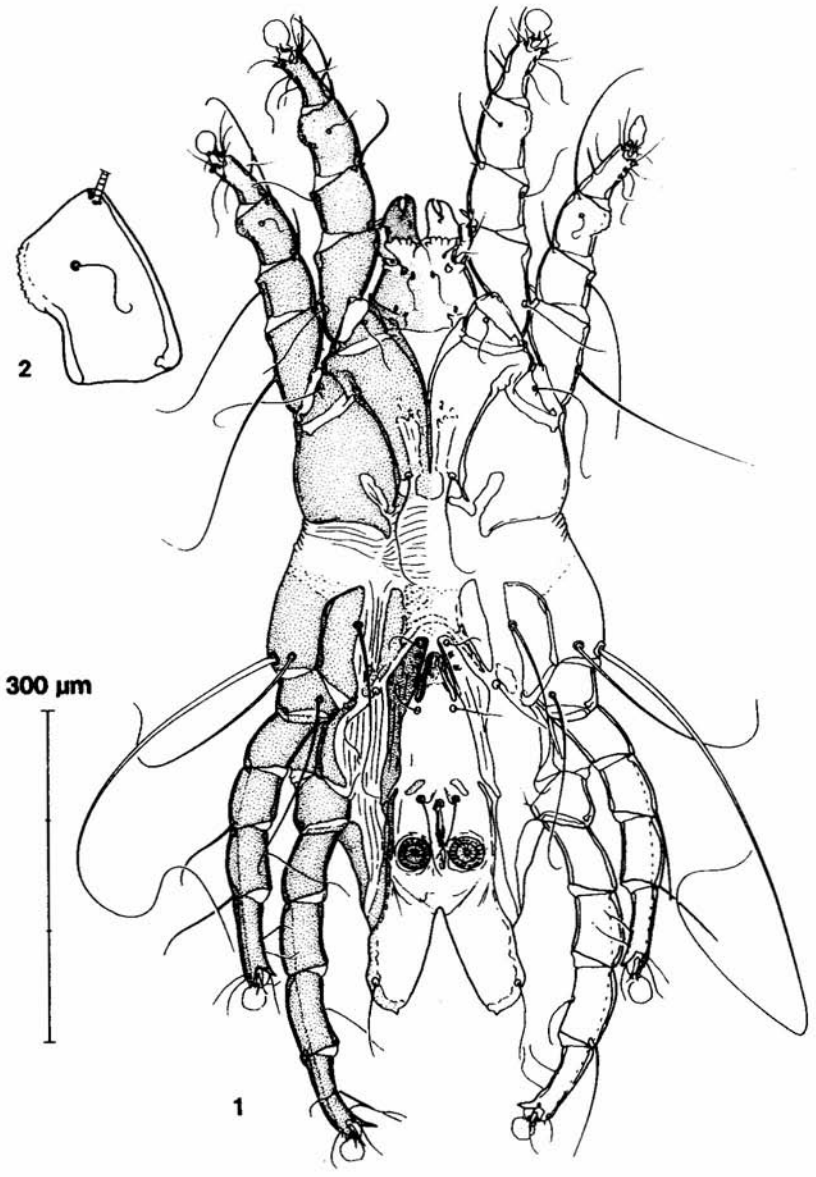
10. *Megasyringobia thyreana* n. sp. - female, dorsal view



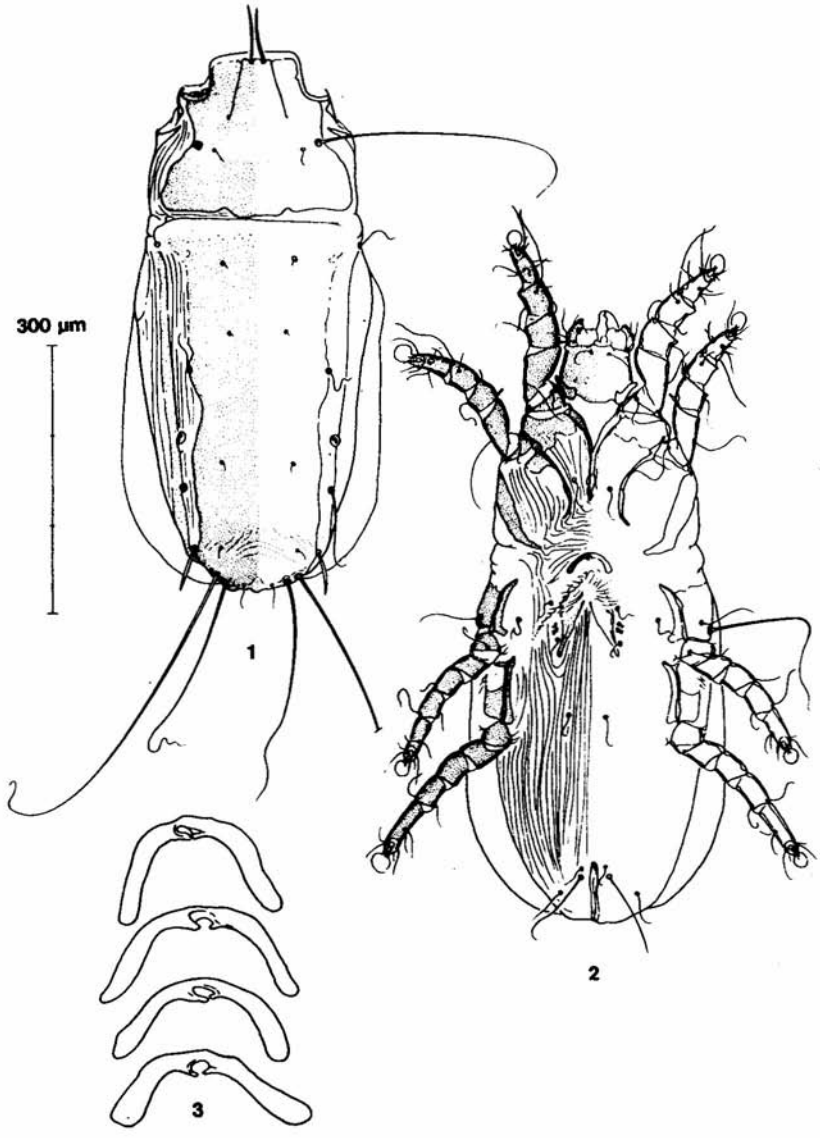
11. *Megasyringobia thyreana* n. sp. - female, ventralview



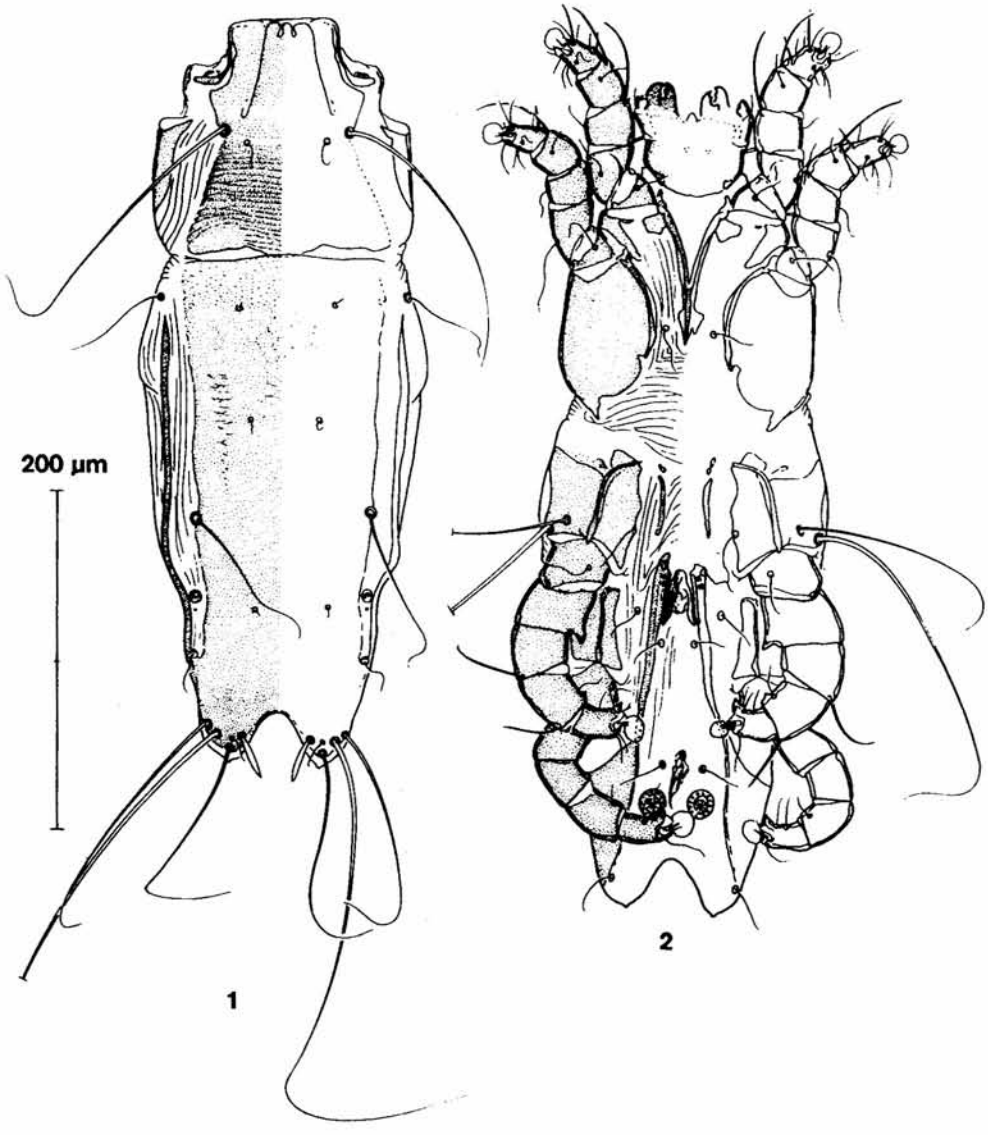
12. *Phyllochaeta tenuiseta* n. sp. - male, dorsal view



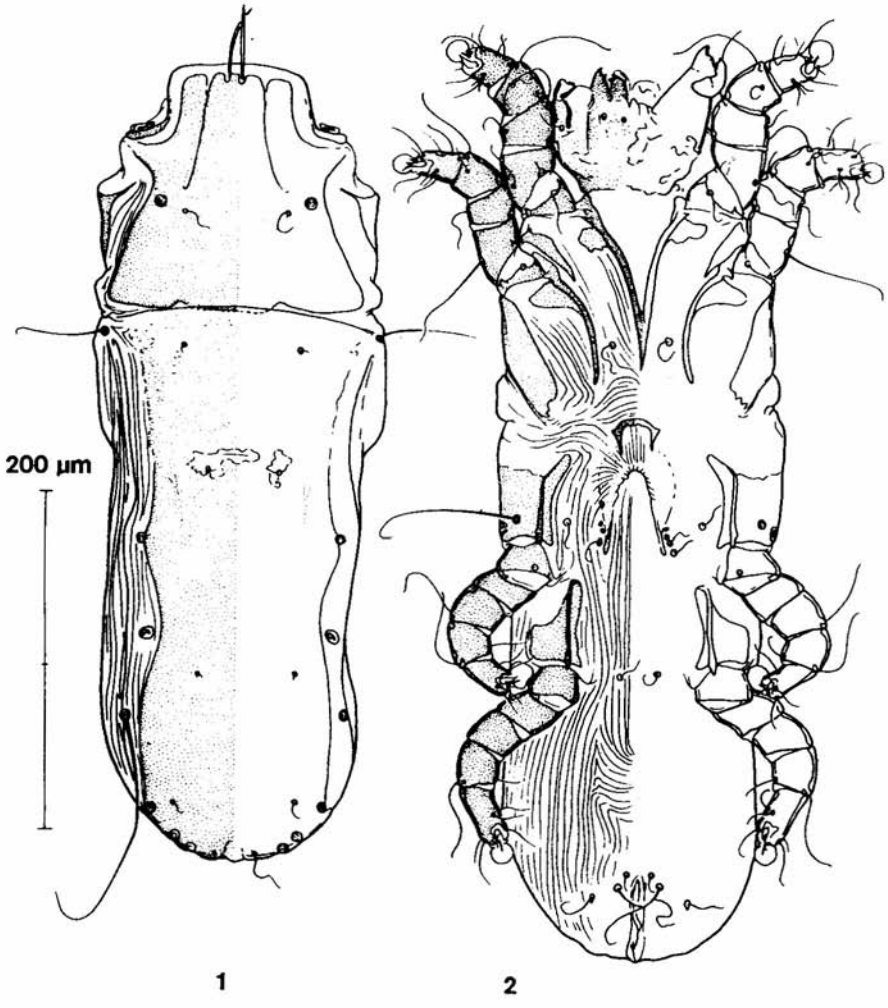
13. *Phyllochaeta tenuiseta* n. sp.: 1 - male, ventralview, 2 - tibia II of male



14. *Phyllochaeta tenuiseta* n. sp. - 1 -female, dorsalview, 2 - female, ventral view, 3 - variation in shape of epigynium



15. *Sikyonemus lobatus* n. sp.: 1 - male, dorsal view, 2- male, ventral view



16. *Sikyonemus lobatus* n. sp.: 1 - female, dorsal view,2 - female, ventral view