

# ZOOLOGISCHE MEDEDELINGEN

UITGEGEVEN DOOR HET

RIJKSMUSEUM VAN NATUURLIJKE HISTORIE TE LEIDEN  
(MINISTERIE VAN WELZIJN, VOLKSGEZONDHEID EN CULTUUR)

Deel 63 no. 14

19 januari 1990

ISSN 0024-0672

---

**PARASITIC MITES OF SURINAM, XXIV.  
THE SUBFAMILY ORNITHONYSSINAE, WITH DESCRIPTIONS OF A NEW  
GENUS AND THREE NEW SPECIES (ACARI: MESOSTIGMATA:  
MACRONYSSIDAE)**

by

**C.E. YUNKER, F.S. LUKOSCHUS † & K.M.T. GIESEN**

Yunker, C.E., F.S. Lukoschus & K.M.T. Giesen: Parasitic mites of Surinam XXIV. The subfamily Ornithonyssinae, with descriptions of a new genus and three new species (Acari: Mesostigmata: Macronyssidae).

Zool. Med. Leiden 63 (14), 19-i-1990, 169-186, figs 1-22, — ISSN 0024-0672.

Key words: Parasitic mites, Macronyssidae, Ornithonyssinae, Surinam.

Seven species of Ornithonyssinae are recorded from Surinam. Of these, three are described as new: *Chiroptonyssus brennani* spec. nov., from *Molossops (Cynomops) planirostris*; *Steatonyssus surinamensis* spec. nov., from *Eptesicus melanopterus*; *Mitonyssoides stercoralis* gen. et spec. nov., from *Molossus molossus*. *Chiroptonyssus haematophagus* (Fonseca, 1935) is listed for the first time from Surinam and also from Grenada, Windward Is., West Indies.

C.E. Yunker, UF/USAID/ZIM project, Veterinary research laboratory P.O. Box 8101, Causeway, Zimbabwe.

K.M.T. Giesen, Laboratory for Aquatic Ecology, Katholieke Universiteit, Toernooiveld, 6525 ED Nijmegen, The Netherlands.

## MATERIAL AND DEPOSITION OF TYPE-SERIES

This report lists ornithonyssine mites collected in Surinam, mostly by one of us (FSL) in 1969-1970 or by FSL and N.J.J. Kok in 1971. Also included is a single collection of *Chiroptonyssus haematophagus* (Fonseca, 1935) from the West Indies (Grenada). Eight species (of which 1 genus and 3 species are new) are represented in this significant collection. Macronyssine mites of Surinam are reported in a previous paper (Yunker & Radovsky, 1980). Setal nomenclature follows Radovsky (1967). All measurements are in micrometers. Unless otherwise mentioned, all localities are of Surinam.

Deposition of types.—*Chiroptonyssus brennani* spec. nov. and *Steatonysus surinamensis* spec. nov.: holotype female, allotype male and a series of paratypes in the Florida State Collection, Florida Department of Agriculture and Consumer Services, Gainesville, Florida, USA; an additional series of paratypes of either species in the Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands. *Macronyssoides stercoralis* gen. et spec. nov.: holotype female, allotype male and paratype female in the Rijksmuseum van Natuurlijke Historie, Leiden.

Subfamily ORNITHONYSSINAE Lange, 1958 (see Radovsky, 1969)

Genus *Chiroptonyssus* Augustson, 1945

*Chiroptonyssus haematophagus* (Fonseca, 1935)

Material.—Three specimens from *Molossops (Cynomops) planirostris* (Peters, 1865). Meerzorg: 1 protonymph, 29-VIII-1971; 1 protonymph, 27-VIII-1971. Paramaribo: 1 female, 18-XI-1971. One protonymph from *Eumops auripendulus* (Shaw, 1800), Wageningen, 22-IX-1971. Sixteen protonymphs from 3 *Glossophaga soricina* (Pallas, 1766), Uitvlucht, 19-II-1970. One protonymph from *Micronycteris brachyotis* Dobson, 1879, Gros gold mine, 23-VIII-1971. Eighty-five protonymphs from *Molossus ater* E. Geoffroy, 1805. Lelydorp: 39, 19, 6 and 3 from 4 hosts, 22-I-1971; 1, 15-VII-1971. Meerzorg: 1, 20-VIII-1971. Moerokreek: 15 from 6 hosts, all 16-XI-1971. Santo Boma: 1, 5-VIII-1971. One protonymph from *Molossus (?) ater*, Paramaribo, 15-VIII-1971. Eighty-nine specimens from *Molossus molossus* (Pallas, 1766). Lelydorp: 3 females, 17 protonymphs, 10-XII-1969; 1 female, 23 protonymphs, same date; 1 larva, 24-I-1970; 5 protonymphs in 3 collections, 9-XII-1971. Meerzorg: 1 protonymph, 14-VIII-1971; 1 female, 1 protonymph in 2 collections, 26-VIII-1971. Paramaribo: 2 males, 11 protonymphs in 7 collections, all 30-XI-1969; 2 males in 2 collections, 1-I-1970; 12 protonymphs in 2 collections, 11-II-1970; 3 protonymphs, 12-II-1970; 2 males, 1 protonymph, 16-II-1970; 1 protonymph, 4-VIII-1971. Wageningen: 1 male, 2 protonymphs in 2 collections, 22-IX-1971. Weg naar Zee: 4 protonymphs, 11-IX-1971. Fifteen protonymphs from *Molossus molossus*, Meerzorg, 15-VIII-1971. Seven protonymphs from *Noctilio labialis albiventris* Desmarest, 1818, Meerzorg, 15-VIII-1971.

One protonymph from *Rattus rattus* (Linnaeus, 1758) Brokobaka, 21-II-1971. (This is undoubtedly an accidental association).

Seven protonymphs of *C. haematophagus* from *Molossus molossus*, West Indies, Windward Is., Grenada, collected by J.L. Eger, 25-V-1977, were also seen. These were kindly made available for study by Dr. J.R. Tamsitt, Curator of Mammals, Royal Ontario Museum, Ontario, Canada.

Remarks.—*Chiroptonyssus haematophagus* is principally a parasite of *Molossus* spp. throughout their range (Radovsky, 1967), but occasional collections from other genera of Neotropical molossid bats have been recorded (Dusbabek, 1969). Records of *C. haematophagus* from the non-molossid bats listed above require confirmation.

**Chiroptynyssus brennani spec. nov.**  
 (figs. 1, 2, 7, 10, 13, 16, 17)

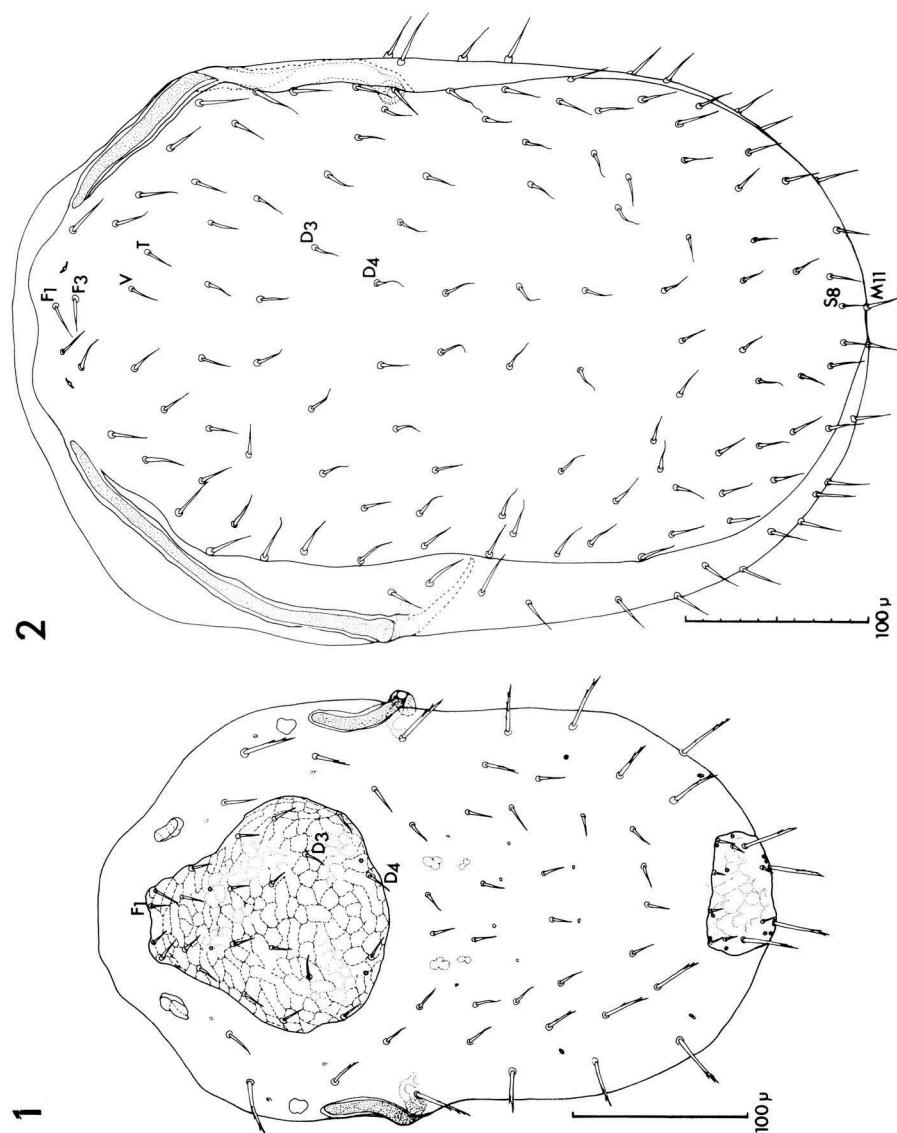
Material.—Sixty-four specimens from *Molossops (Cynomops) planirostris*. Blauwgrond: 4 males, 7 protonymphs in 5 collections, all 10-VII-1971. Meerzorg: 2 protonymphs from 2 hosts, 20-VIII-1971. Paramaribo: 3 males, 13 protonymphs, 11-XII-1969; 2 males, 10-VII-1971; 2 males, 4 protonymphs, 10-VIII-1971; 27 protonymphs from 5 hosts, all 11-VIII-1971.

Protonymph (figs. 1, 10, 16, 17). Idiosoma typically with 48.5 pairs of setae. Podosomal plate (fig. 1) pyriform, broadest at level of setae  $D_3$ , with 11 pairs of short, piliform setae; distance between  $F_1$  (17 microns) less than between  $F_3$  (32 microns). Pygidial plate (fig. 10) with 6 pairs of setae.  $D_8$ ,  $S_6$ ,  $S_7$  and  $S_8$ , short, bare, but one pair ( $M_{10}$ ,  $M_{11}$ ) flanking podosomal plate and 6 or 7 lateral pairs on opisthosoma longer, barbed. Claws of legs I small, of legs III slightly larger, of legs II massive. Coxa I (figs. 16, 17) with lateral spur. Unarmed venter with 6 setal pairs, all but caudal pair piliform and bare, caudals long, barbed. Anal plate without differentially sclerotized isthmus joining anal ring with anterior plate margin.

Measurements: Idiosoma 308 long exclusive of gnathosoma, by 216 wide (at stigmata), propodosomal plate 145 long by 137 wide (at  $D_3$ ), pygidial plate 70 wide, seta  $F_1$  11,  $F_3$  14,  $D_1$  13,  $D_4$  14,  $S_8$  7,  $M_{11}$  34, caudal 30 microns.

Male (figs. 2, 7, 13). Idiosoma with approximately 96.5 setal pairs. Dorsal plate (fig. 2) entire, extensive, posteriorly broadly rounded, as wide in opisthosomal region as in podosomal region, ornamented with pronounced reticulate sculpturing, with approximately 56 pairs of piliform setae,  $F_1$  subequal to  $F_3$ ,  $S_8$  well-developed and subequal to  $M_{11}$ . Unarmed dorsum with 9 or 10 pairs of piliform setae. Ventral shield (fig. 7) entire, with 14.5-15.5 pairs of moderately long, piliform setae, with lateral projections between coxae I-II and II-III, with faint reticulate sculpturing, except in region of ventrianal suture. Unarmed venter with 16-18 pairs of moderately long setae, all piliform except caudals multiply barbed. Peritreme terminating anteriorly at level of coxae I-II, its plate here connected to dorsal plate. Claws of leg I reduced but functional. Claws of leg II slightly larger than those of III and IV. Anterodorsal spur of coxa II long and sharp, other coxae and all remaining leg segments without spurs or distinctive ridges or setae. Gnathosomal base setae, as well as outer and distal hypostomals short and fine; inner hypostomals long and alternate. Palpal trochanter without ventral process. Chelicerae (fig. 13) as figured.

Measurements of allotype and one other paratype male from *Molossus (Cynomops) planirostris*, Paramaribo, Surinam. Indiosoma 450, 466; W. at stigmata 315, 315. Dorsal plate L. 435, 428; W. at level of setae  $D_2$ - $D_3$  258, 250.



Figs. 1-2, *Chiroptonyssus brennani* spec. nov. 1, protonymph, dorsum (holotype); 2, ♂, dorsum (allotype).

Holoventral plate L. 390, 370; W. at pores st<sub>2</sub> 99, 105, Setae F<sub>1</sub> 18, 20; F<sub>3</sub> 21, 23; D<sub>4</sub> 15, 15; S<sub>8</sub> 16, 14; M<sub>11</sub> 18, 17; St<sub>1</sub> 42, 42; genital 33, 33; adanal 24, 21; postanal 18, 16; caudal 36, 33.

Type-series. — Holotype and 2 paratypes protonymphs from *Molossus (Cynomops) planirostris*, Paramaribo, Surinam, 10-VIII-1971, Lukoschus & Kok; two additional paratypes, same data but 11-XII-1969, Lukoschus. Allotype and one paratype male from *M. (C.) planirostris*, Paramaribo, Surinam, 11-XII-1969, Lukoschus; and additional paratype male, same data but 10-VIII-1971, Lukoschus & Kok. Fifty-six additional paratype protonymphs and seven paratype males of *M. (C.) planirostris*, Paramaribo and Blauwgrond, Surinam, various dates, Lukoschus and Kok leg., were also seen.

Remarks. — Protonymphs of *Chiroptonyssus brennani* spec. nov. most resemble those of *C. haematophaqus* (Fonseca), especially in the setation of the pygidial plate. However, they are easily distinguished from the latter species by the presence of a lateral spur on coxa I, which is very similar to that of *C. venezolanus* (Vitzthum). Males of the new species differ from all known males of *Chiroptonyssus* in having undivided ventral armature. Because of this and the small claws of legs I they may easily be mistaken for males of *Mitonyssus molossinus* Yunker & Radovsky, 1980. However, the first pair of claws of *C. brennani*, although reduced are functional, whereas those of *M. molossinus* are minute and vestigial. In *C. brennani* setae F<sub>1</sub> are subequal to F<sub>3</sub>, whereas F<sub>1</sub> is much shorter than F<sub>3</sub> in *M. molossinus*. The unarmed idiosoma of the new species has about 25 pairs of setae, with the caudals being long (36 microns) and multiply barbed; that of *M. molossinus* has about 34 pairs of setae, with the caudals shorter (24 microns) and sparsely barbed.

The species was named for Dr. James M. Brennan, a friend and colleague, 20-II-1905—31-X-1985.

**Genus *Ornithonyssus* Sambon, 1928**  
***Ornithonyssus wernecki* (Fonseca, 1935)**

Material. — Eighty-two specimens from *Didelphis marsupialis* (Linnaeus, 1758). Brokobaka: 3 females, 1 deutonymph, 21-II-1970. Coronie: 1 male, 1 protonymph, 29-XI-1969; 17 females, 14 males, 6 protonymphs, 29-XII-1969; 2 females, 5 males, 3 protonymphs, 9 deutonymphs (including 2 female-deutonymphs and 2 male-deutonymphs), 24-I-1970. Lelydorp: 4 females, 2 males, 8 protonymphs, 3 deutonymphs (including 2 female-deutonymphs), 13-VII-1971; 1 female, 1 male, 1 protonymph off 2 hosts, 14-VII-1971.

Remarks. — *Ornithonyssus wernecki* is a parasite of New World marsupials and has been recorded from southern U.S.A., Panama, Venezuela, Surinam

and Brazil (Fonseca, 1948; Micherdzinski, 1980). Although a few records from rodents exist these are probably spurious.

Genus **Steatonyssus** Kolenati, 1858  
**Steatonyssus surinamensis** spec. nov.  
(figs. 3-6, 8, 11, 12, 14, 15, 18, 19)

Material examined. — Seventy-three specimens, all from *Eptesicus melanopterus* (Jentink, 1904). Brownsberg: 1 male, 18-X-1970. Burnside: 10 protonymphs, 26-IX-1971. Helena-Christina: 1 male, 9-IX-1971. Lelydorp: 1 female, 3 males, 1 protonymph in 2 collections, 24-II-1970. Meerzorg: 4 females, 5 protonymphs in 2 collections, 2-VIII-1971; 1 male, 3-VIII-1971; 2 males, 11-VIII-1971; 4 protonymphs in 3 collections, 7-IX-1971; 18 protonymphs, 9-IX-1971.

Female (figs. 3, 4, 12, 14). Podosomal plate (fig. 3) with eleven setal pairs, of which V close-set and shortest (less than one-half the length of  $D_1$ ). Opisthosomal plate (fig. 3) with seven setal pairs.  $S_8$  present, reduced. Sculpturing openly reticulate over both plates. Sternal plate (fig. 12) with strongly sclerotized band on posterior margin; with two pairs of pores and three pairs of setae, of which  $St_3$  longest. Metasternal setae arising from unarmed integument. Epigynial plate (fig. 4) linguiform, with bluntly pointed posterior tip and a narrow membranous protrusion on anterior margin; weakly sculptured. Anal plate (fig. 4) ovoid, anus close to anterior margin. Metapodal plates weak, subintegumental. Peritreme short, ending between coxae II and III; plate interrupted, with separate, leaf-like portion over coxae II and not joined to dorsal plate. All idiosomal setae piliform and unbarbed; those anteriomost slender, needle-like, those posteriomost stronger and more abruptly tapering near tips. Leg segments without characteristic spurs, spines or ridges; claws of legs I slightly smaller than other claws. Deutosternum with seven teeth in a row. A strong blade-like ventral process (fig. 4) on palpal trochanter. Chelicerae as figured (fig. 14).

Measurements (holotype): Idiosoma 690 long, exclusive of gnathosoma, by 420 wide (at stigmata); propodosomal plate 225 long by 213 wide (at  $St_3$ ); opisthosomal plate 216 long by 165 wide (at  $D_6$ ); sternal plate 40 long by 105 wide (at  $St_2$ ); anal plate 108 long by 66 wide (at adanals); moveable chela 30; setae  $F_1$  21,  $F_3$  30, V 15,  $D_1$  24,  $D_4$  27,  $D_5$  30,  $S_8$  10,  $M_{10}$  15,  $M_{11}$  12,  $St_3$  48, metasternals (fig. 10, MS) 42, caudals 48.

Protonymph (figs. 5, 11, 19). Idiosoma typically with 41.5 pairs of setae. Podosomal plate (fig. 5) pyriform, with flat posterior margin; broadest at level of setae  $D_3$ ; with 11 pairs of piliform setae, of which  $F_1$ , V and  $D_1$ - $D_4$  reduced (V markedly so, about 3/5 the length of  $D_1$  and less than 1/2 the size of  $F_3$ ).

Pygidial plate (fig. 11) subcircular in outline, with flat anterior margin and 4 pairs of setae, of which  $S_6$ ,  $M_{10}$  and  $M_{11}$  stout and long, and  $S_8$  minute;  $M_{10}$  and  $M_{11}$  with 2 or 3 short barbs. Unarmed dorsum (fig. 5) with 15 setal pairs, all stout, long, bare and attenuate. Sternal plate with 6 and anal plate with 3 setae. Unarmed venter with 6 setal pairs, similar to but smaller than those on unarmed dorsum. All coxal setae tapering evenly, uninflated (fig. 19).

Measurements: Idiosoma 375 long exclusive of gnathosoma, by 220 wide (at stigmata); propodosomal plate 138 long by 117 wide (at  $D_3$ ); pygidial plate 108 wide; setae  $F_1$  12,  $F_3$  18,  $V$  8,  $D_1$  12,  $D_4$  15,  $S_6$  18,  $S_8$  smaller than 3,  $M_{11}$  21.

Male (figs. 6, 8, 15, 18). Idiosoma with about 68.5 setal pairs. Dorsal plate (fig. 6) entire, slightly broader anteriorly than posteriorly, lateral margins sinuous; with transversely aligned reticulate sculpturing anteriorly, longitudinally aligned reticulate posterolaterally and suggestions of longitudinal striations posteromedially; with about 23 pairs of piliform setae, of which  $F_1$ ,  $V$ , and 3 terminal pairs reduced. Unarmed dorsum (fig. 6) with about 17 pairs of robust piliform setae. Ventral armature (fig. 8) undivided, constricted medially, with 9.5 pairs of setae; sculpturing reticulate throughout, reticules transversely aligned in sternal area. Unarmed venter with about 19 pairs of setae similar to those on unarmed dorsum. Peritreme ending anteriorly at level of posterior margin of coxa II. Legs without unusual modifications, spurs of setae, the anterodorsal spur of coxa II well developed and anterior seta of coxa III (fig. 18) slightly more robust than other coxal setae. Chelicerae (fig. 15) as figured.

Measurements (Allotype): Idiosoma 450 long, exclusive of gnathosoma, by 285 wide (at stigmata); dorsal plate 417 long by 216 wide (at  $D_2$ ); holoventral plate 348 long by 90 wide (at  $St_2$ ), 34 wide (at medial constriction); setae  $F_1$  12,  $F_3$  26,  $V$  10,  $D_1$  18,  $S_6$  6,  $M_{10}$  11,  $M_{11}$  7, caudals 33.

Type-series.—Holotype and two paratype females from *Eptesicus melanopterus*, Paramaribo, Surinam, 2-VIII-1971, Lukoschus & Kok. Allotype male, same data but Brownsberg, 18-X-1971; two paratype males, same data but Lelydorp, 27-II-1970; two paratype males, same data but Meervzorg, 3-III-1970. One paratype protonymph, same data but Paramaribo, 2-VIII-1971; one paratype protonymph, same data but 7-IX-1971; five paratype protonymphs, same data but 9-IX-1971; two paratype protonymphs, same data but Meervzorg, 3-III-1970; one paratype protonymph, same data but 26-IX-1971. Sixty-three additional paratypes (50 protonymphs, 4 females, 9 males) off *Eptesicus melanopterus*, various dates and localities of Surinam, Lukoschus and Kok leg., were also seen.

Remarks.—In Radovsky's (1967) key to *Steatonyssus* females *S. surinamensis* spec. nov. will key to couplet 16, along with *S. emarginatus* Radovsky and Furman and *S. occidentalis* (Ewing). The new species may be distin-

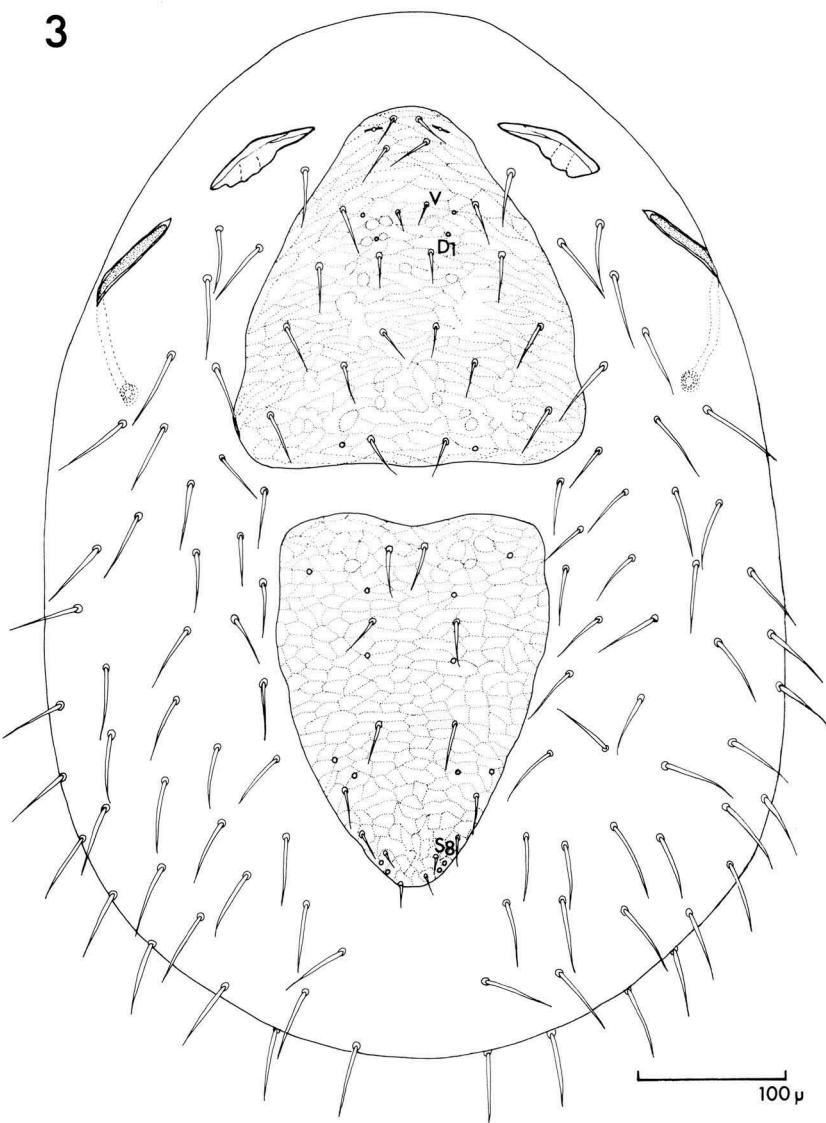


Fig. 3, *Steatonyssus surinamensis* spec. nov., ♀, dorsum (holotype).

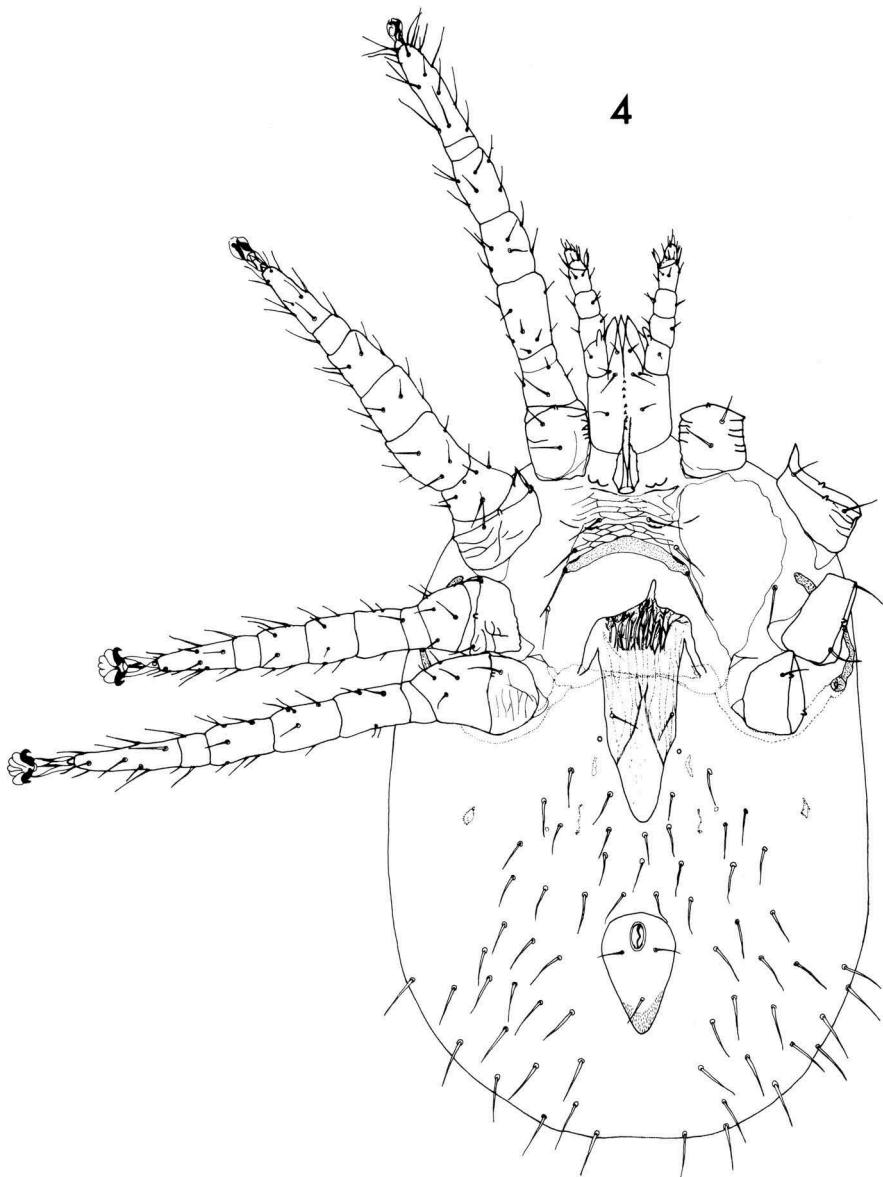
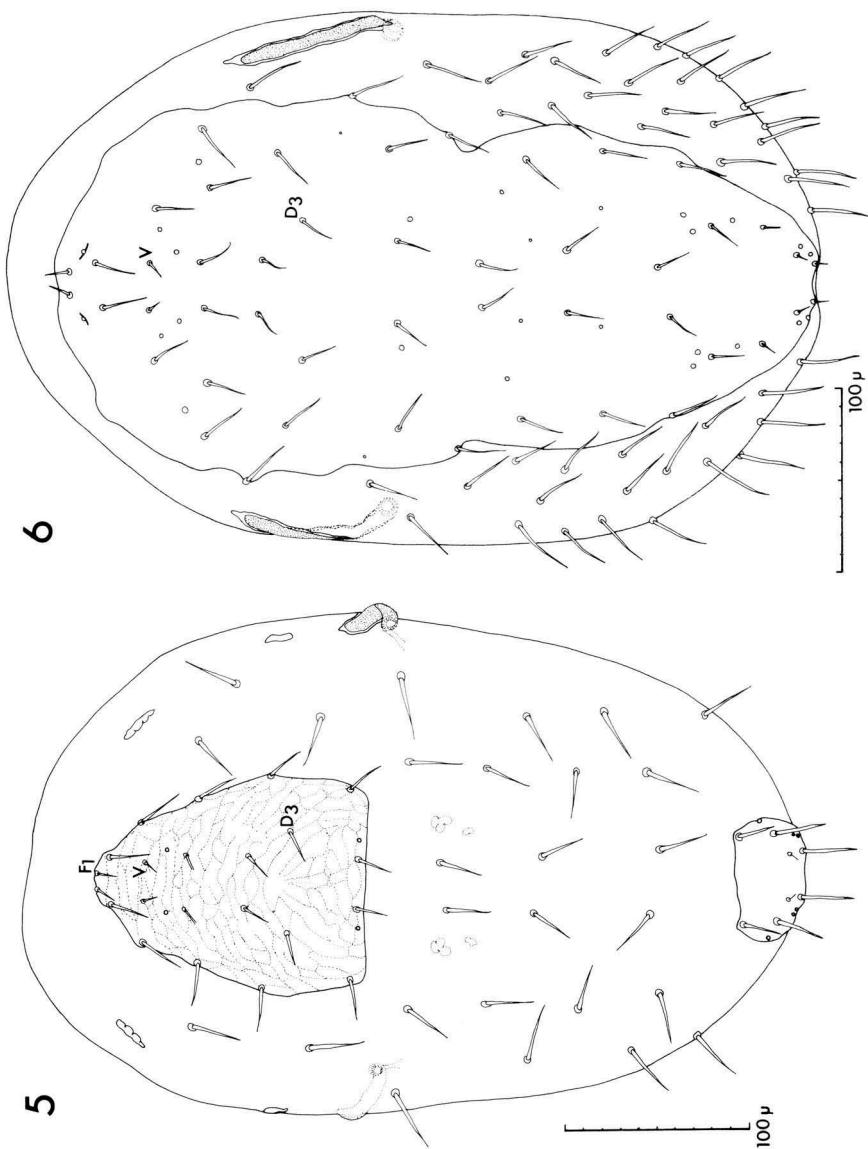


Fig. 4, *Steatonyssus surinamensis* spec. nov. ♀, venter (holotype).



Figs. 5-6, *Steatonyssus surinamensis* spec. nov. 5, protonymph, dorsum (paratype); 6, ♂, dorsum (allotype).

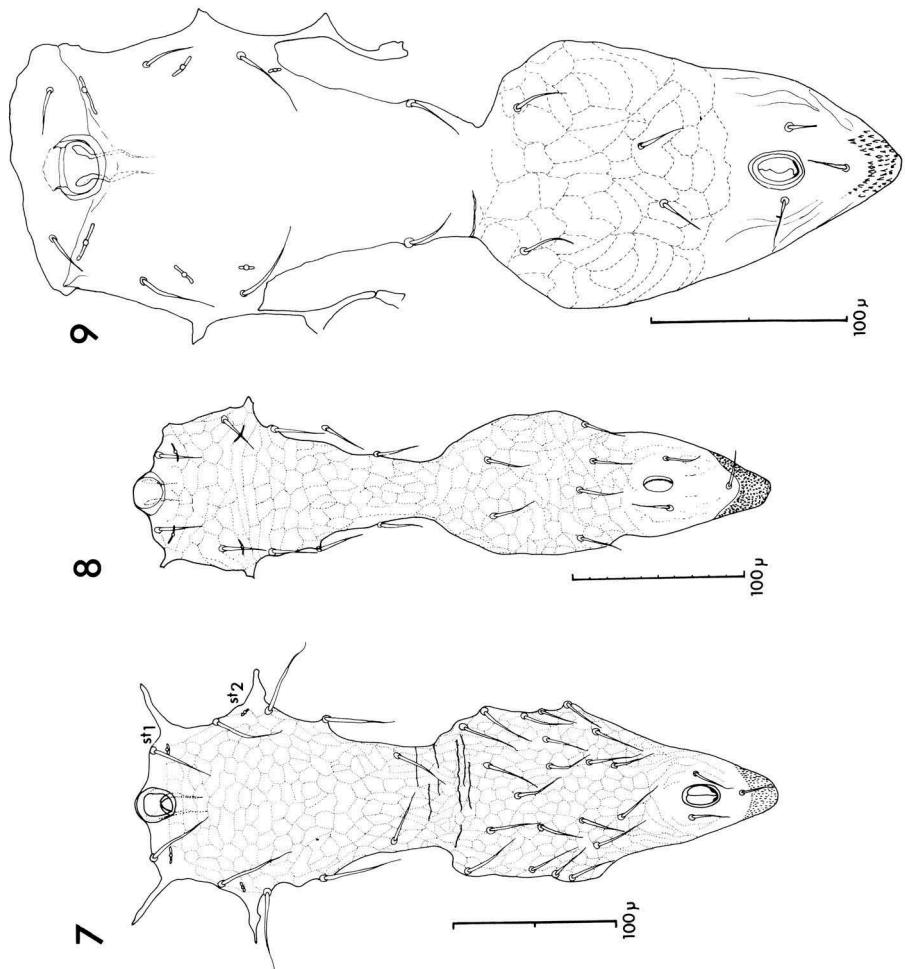


Fig. 7, *Chiroptonyssus brennani*, spec. nov., ♂, holoventral plate (allotype). Fig. 8, *Steatonyssus surinamensis* spec. nov., ♂, holoventral plate (allotype). Fig. 9, *Mitonyssoides stercoralis* spec. nov., ♂, holoventral plate (allotype).

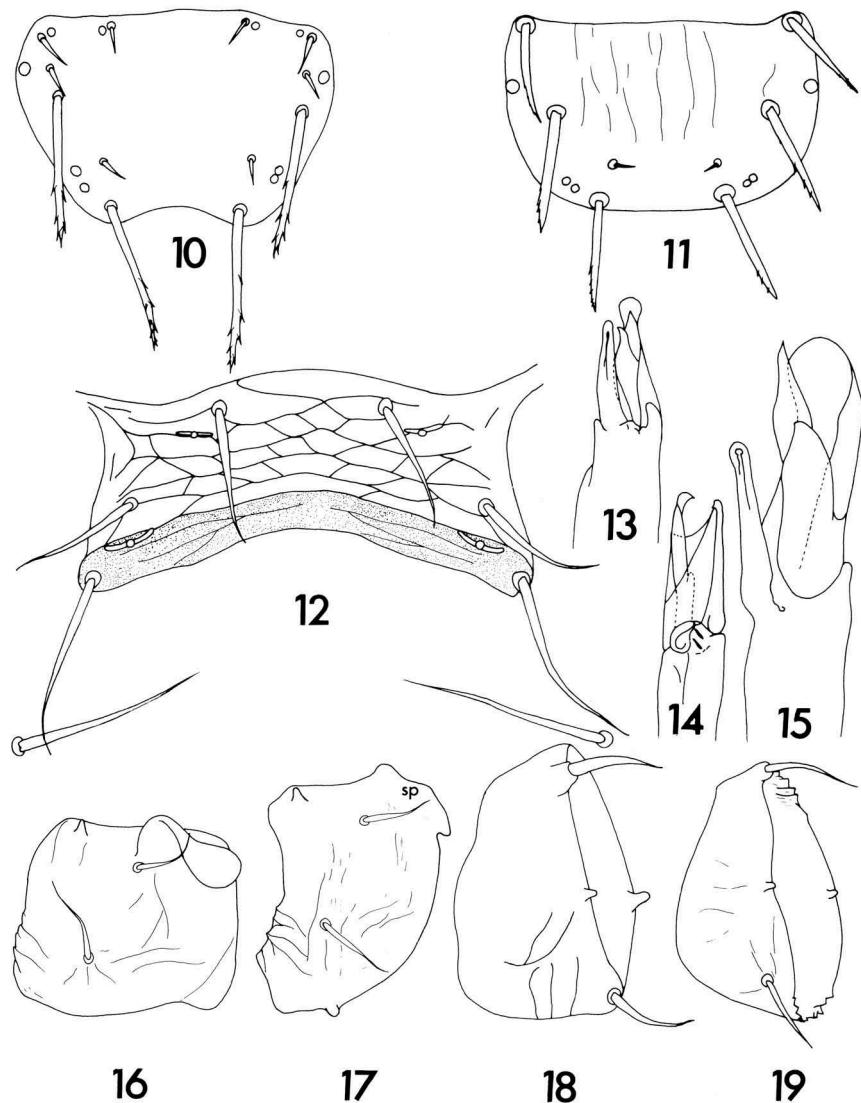


Fig. 10, *Chiroptonyssus brennani* spec. nov., protonymph, pygidial plate (holotype). Figs. 11-12, *Steatonyssus surinamensis* spec. nov. 11, protonymph, pygidial plate (paratype); 12, ♀, sternal plate (holotype). Fig. 13 *Chiroptonyssus brennani* spec. nov., ♂, chelicerae (allotype). Figs. 14-15, *Steatonyssus surinamensis* spec. nov., 14, ♀, chelicerae (holotype); 15, ♂, chelicerae (allo-type). Figs. 16-17, *Chiroptonyssus brennani* spec. nov. 16, protonymph, lateral view of coxa leg I (holotype); 17, protonymph, ventral view of coxa leg I (holotype). Figs 18-19, *Steatonyssus surinamensis* spec. nov. 18, ♂, coxa leg III (allotype); 19, protonymph, coxa leg III (paratype).

guished from *S. emarginatus* in the possession of 11 rather than 12 pairs of propodosomal plate setae; it differs from the last named in the marked reduction of V, which in *S. occidentalis* is subequal to D<sub>1</sub>. In addition, both sexes and protonymphs of *S. surinamensis* are distinguishable from those of *S. emarginatus* and *S. occidentalis* in the relative lengths of S<sub>8</sub> and M<sub>11</sub>; in the new species, S<sub>8</sub> is small but subequal to M<sub>11</sub>; in the last two S<sub>8</sub> is minute.

**Genus Mitonyssus** Yunker & Radovsky, 1980  
**Mitonyssus noctilio** Yunker & Radovsky, 1980

Remarks.—Described from Bolivia and also recorded from Venezuela and Surinam, collection records indicate that *M. noctilio* is a specific parasite of the type-host *Noctilio labialis* (Yunker & Radovsky, 1980).

**Mitonyssus molossinus** Yunker & Radovsky, 1980

Remarks.—*M. molossinus* was described from Venezuelan molossids and was also recorded from *Molossus ater* in Surinam. Like *Mitonyssus noctilio*, *M. molossinus* exhibits a marked host-preference, which in this case is for bats of the genus *Molossus*.

**Mitonyssoides** gen. nov.  
(figs. 9, 20-22)

Diagnosis.—Ornithonyssinae. All setae short, piliform and bare. Dorsal plate (figs. 21, 22) entire, narrow, reticulate only in anterolateral areas, ornamented with small porosities overall; a paired lens-like structure near anterolateral margin; with 39 pairs of setae. Sternal plate (fig. 20) short, wide; with a single pair of setae (St<sub>2</sub>) and two pairs of pores; St<sub>1</sub>, St<sub>3</sub> and metasternals on unarmed integument. Epigynal plate (fig. 20) narrow, linguiform; with a single pair of setae. Anal plate (fig. 20) triangular. Peritreme reaching to coxae I; plate not connected to dorsal shield. Holoventral shield of male (fig. 9) with 7 pairs of piliform setae, and medio-ventral seta posterior of ventrianal suture. Lateral, posteriorly directed, projections between coxae II-III. Faint reticulate sculpturing in part posterior of median constriction of ventral shield, except in region of ventrianal suture; reticules relatively larger than in other two newly described species. All coxae devoid of spurs, spines or ridges. Tarsi I

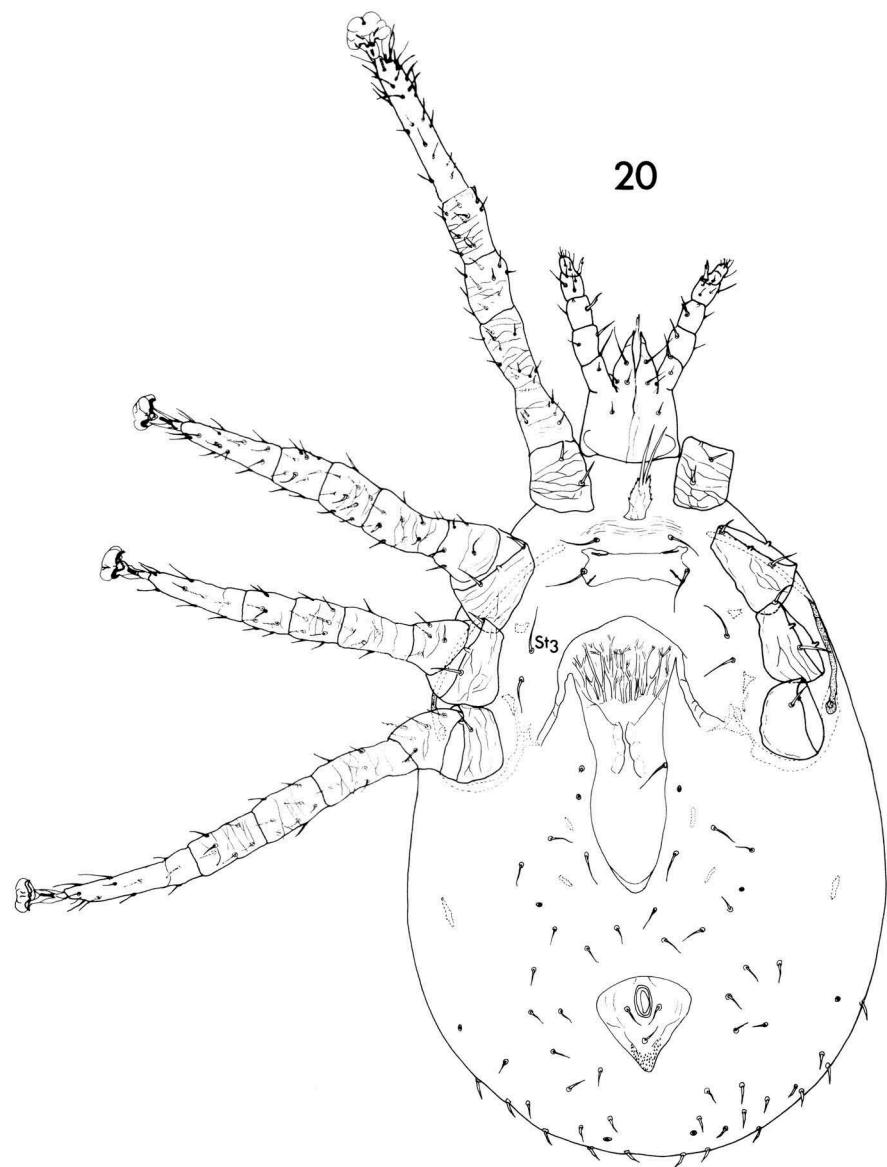
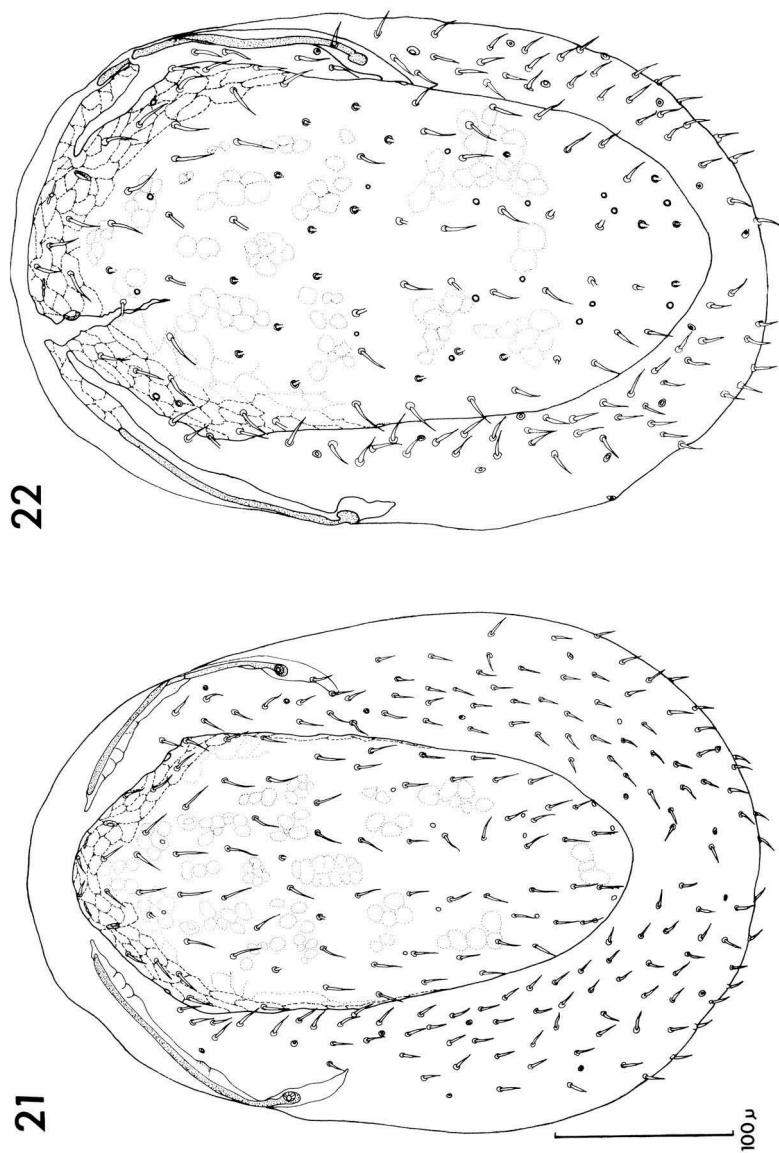


Fig. 20, *Mitonyssoides stercoralis* spec. nov., ♀, venter (holotype).



Figs. 21-22, *Mitonyssoides stercoralis* spec. nov. 21, ♀, dorsum (holotype); 22, ♂, dorsum (allotype).

strongly sclerotized, with pulvillus, but lacking umbilical claws. Palpal trochanter without ventral process. Chelicerae chelate, edentate.

Type-species: *Mitonyssoides stercoralis*, spec. nov.

### **Mitonyssoides stercoralis** spec. nov.

Material. — Type series: Holotype and 1 paratype female ex guano of *Molossus molossus*, 1 allotype male from *M. molossus*; all from Lelydorp, 9-VII-1971.

Description (figs. 9, 20-22). — With the characteristics of the genus.

### **UNASSIGNED FORMS**

A single protonymph that cannot be assigned to any ornithonyssine genus, but which most resembles nymphs of the genus *Steatonyssus*, was collected from *Sturnia lilyum* (E. Geoffroy, 1810), Brownsberg, 20-X-1971.

Two protonymphs, probably *Ornithonyssus* spec. were taken from a *Caluromys philander*, Lelydorp, 17-VII-1971.

### **HOST-PARASITE LIST\***

Host order family subfamily	species	mite species
Marsupalia Didelphidae	<i>Caluromys philander</i> (Linnaeus, 1758) <i>Didelphis marsupialis</i> (Linnaeus, 1758)	(?) <i>Ornithonyssus</i> spec. undet. <i>Ornithonyssus wernecki</i>
Chiroptera Noctilionidae	<i>Noctilio labialis albiventris</i> Desmarest, 1818	<i>Chiroptonyssus haematophagus</i> <i>Mitonyssus noctilio</i>
Phyllostomidae Phyllostominae	<i>Micronycteris brachyotis</i> Dobson, 1879	<i>Chiroptonyssus haematophagus</i>
Glossophaginae	<i>Glossophaga soricina</i> <i>soricina</i> (Pallas, 1766)	<i>Chiroptonyssus haematophagus</i>
Sturnirinae	<i>Sturnira lilyum lilyum</i> (E. Geoffroy, 1810)	Ornithonyssinae gen. et spec. undet.

<i>Stenodermatinae</i>	<i>Vampyrops helleri</i> Peters, 1866	<i>Mitonyssus noctilio</i>
<i>Vespertilionidae</i>	<i>Eptesicus melanopterus</i> (Jentink, 1904)	<i>Steatonyssus surinamensis</i>
<i>Molossidae</i>	<i>Molossops (Cynomops) planirostris planirostris</i> (Peters, 1865) <i>Eumops auripendulus</i> <i>auripendulus</i> (Shaw, 1800) <i>Molossus ater ater</i> E. Geoffroy, 1805 <i>Molossus (?) ater</i> <i>Molossus molossus</i> (Pallas, 1766)	<i>Chiroptonyssus haematophagus</i> <i>Chiroptonyssus brennani</i> <i>Mitonyssus molossinus</i> <i>Chiroptonyssus haematophagus</i> <i>Chiroptonyssus haematophagus</i> <i>Mitonyssus molossinus</i> <i>Mitonyssus molossinus</i> <i>Chiroptonyssus haematophagus</i> <i>Mitonyssus noctilio</i> <i>Mitonyssoides stercoralis</i>
*	<i>Classification according to Husson (1962)</i>	

#### ACKNOWLEDGEMENTS

Collection of most of the material reported here was facilitated by grants W83-1 and W83-14, respectively, from the Netherlands Foundation for Tropical Research (WOTRO). Other specimens were kindly provided by Dr. J.R. Tamsitt, Curator of Mammals, Royal Ontario Museum, Toronto, Canada, and Dr. L. van der Hammen, Rijksmuseum van Natuurlijke Historie, Leiden. Field identifications of hosts were confirmed or corrected by Dr. A.M. Husson, former Curator of Mammals of the Rijksmuseum van Natuurlijke Historie. Special thanks to G. Scheperboer, former student of Dr. Lukoschus, for preparation of the illustrations.

#### REFERENCES

- Augustson, G.F., 1945. A new genus, new species of dermanyssid mites (Acarina) from Texas. — Bull. So. Calif. Acad. Sci. 44: 46-47.
- Dusbabek, F., 1969. Macronyssidae (Acarina: Mesostigmata) of Cuban bats. — Folia Parasitol. 16: 321-328.
- Fonseca, F. da, 1935. Notas de acareologia. XXII. *Liponissus haematophagus* sp.n. (Acari: Liponissidae). — Mem. Inst. Butantan, 10: 43-46.
- Fonseca, F. da, 1948. A monograph of the genera and species of Macronyssidae Oudemans, 1936 (Synon: Liponyssidae Vitzthum, 1931) (Acari). — Proc. Zool. Soc. London, 118: 249-334.
- Husson, A.M., 1962. The bats of Suriname. — pp. 282, pls. 30, E.J. Brill, Leiden.
- Kolenati, F.A., 1858. Synopsis Prodroma der auf Chiroptera als Epizoen vorkommenden Laus-milben, Carida Kolenati. — Wiener Ent. Monatschr. 2: 4-7.
- Radovsky, F.J., 1967. The Macronyssidae and Laelapidae (Acarina: Mesostigmata) parasitic on bats. — Univ. Calif. (Berkeley) Publ. Ent. 46: 1-288.
- Radovsky, F.J., 1969. Adaptive radiation in the parasitic Mesostigmata. — Acarologia, 11: 450-483.
- Sambon, L.W., 1928. The parasitic acarians of animals and the part they play in the causation of the eruptive fevers and other diseases of man. Preliminary considerations based upon an ecological study of typhus fever. — Ann. Trop. Med. Parasitol. 22: 67-132.

Yunker, C.E. & F.J. Radovsky, 1980. Parasitic mites of Surinam. XXVI. A new genus and two new species of Neotropical Macropyssidae (Acari: Mesostigmata). — J. Med. Ent. 6: 545-554.