STUDIES ON THE FAUNA OF SURINAME AND OTHER GUYANAS: No. 54.

PARASITIC MITES OF SURINAM

XXVII. GASTRONYSSIDAE, RHINONYSSIDAE AND EREYNETIDAE FROM THE NASAL CAVITIES OF BATS OR BIRDS

by

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The mites listed in the present paper have been collected by the junior author and Drs. N. J. J. KOK during a stay in Surinam from 6.VII–1.XI.1971 with financial aid of the Netherlands Foundation for the Advancement of Tropical Research (WOTRO). The collection enlarges our knowledge on parasites of nasal cavities of hosts from Surinam (FAIN & LUKOSCHUS, 1971).

Family GASTRONYSSIDAE Fain, 1956

Subfamily Rodhainyssinae Fain, 1964

Genus **Rodhainyssus** Fain, 1956

Rodhainyssus longipilis Fain, 1959

Rodhainyssus yunkeri ssp. *longipilis* Fain, 1959.
Rodhainyssus longipilis Fain, 1967 nov. tax.

This species has been described from the nasal cavities of *Cynomops planirostris* (= *Molossus abrasus*) in Surinam (FAIN, 1959). Up

to now, only female specimens were known. The description of a male specimen collected on *Molossus molossus* at Meerzorg follows.

Male (Fig. 61–62): Length including gnathosoma 330 μ; maximum width 135 μ. Cuticle dorsally with a rather poorly developed striation. Ventrally the striation is visible only in the posterior region of the body. Posterior margins of gnathosoma (ventrally) and epimera II bearing well-developed rounded lobes. Epimera II fused and V-shaped. Epimerites II prolonged internally into very thin punctate bands which are fused in the midline. Pregenital sclerite bearing the *g a* setae. The *a i* are in front of the *a e* setae and close together. Ventral hairs of genua and femora I and II 80 to 90 μ long. The dorsal hair of tarsi I to IV are 60 to 85 μ long.

Host and locality. – In the nasal cavities of several *Molossus molossus* from Meerzorg, Surinam, 25.VIII.1971: gravid female (bat no. 355) (11 ♀♀, 2 ♂♂, 5, nymphs, 2 larvae); 26.VIII.1971 (bat no. 358) (18 ♀♀, 4 ♂♂, 9 nymphs, 4 larvae), female bat at the nursing period (no. 359) (27 ♀♀, 5 ♂♂, 5 nymphs, 3 larvae).

Deposition. – Rijksmuseum van Natuurlijke Historie, Leiden; National Collection of Surinam, Paramaribo; Institut Pasteur, Cayenne; Rocky Mountain Laboratory, Hamilton; Institute of Parasitology, Prague; and the collections of authors in Antwerpen and Nijmegen.

Rodhainyssus surinamensis spec. nov.

This species is closely related to *R. longipilis* Fain. It differs from this species in the two sexes by the smaller size of the body, the presence of a very fine and regular striation on the dorsum, and the smaller length of the genual and femoral hairs (35 to 60 μ in the male) and of the tarsal hairs (maximum 60 μ). In the male by the different shape of the pregenital sclerite, the absence of fusion of the punctate bands extending from the epimerites II, the situation of the *a i* and *a e* setae on a slightly curved transverse line.

Male (holotype) (Fig. 63–64): Length (gnathosoma included) 279 μ; width 114 μ. Dorsal surface of hysterosoma finely and regularly striated. Pregenital sclerite short and regular, bearing laterally the *g a* setae. Anal spines on a transverse line and situated on a punctate area. Other characters as in *R. longipilis* except for the characters cited above.

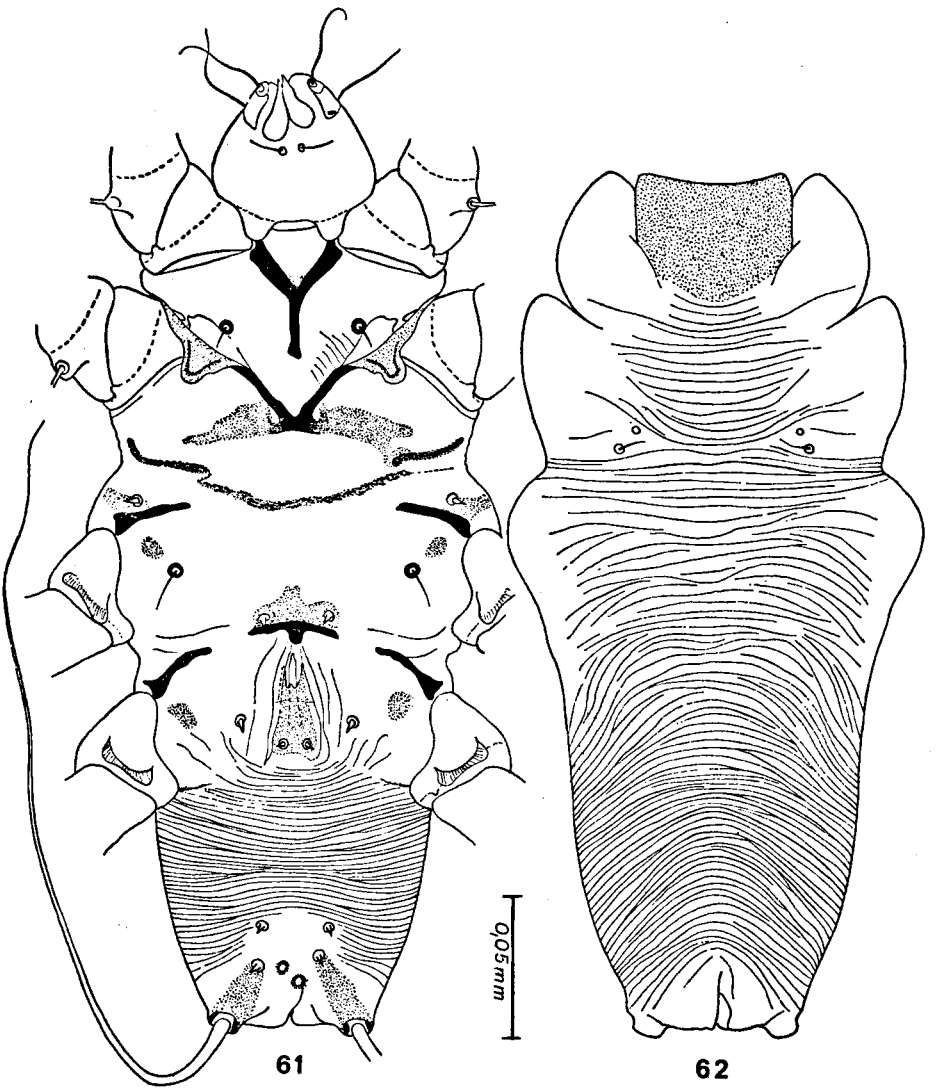


Fig. 61–62. *Rodhainyssus longipilis* Fain, from the nasal cavity of *Molossus molossus*. Male, ventrally (61) and dorsally (62).

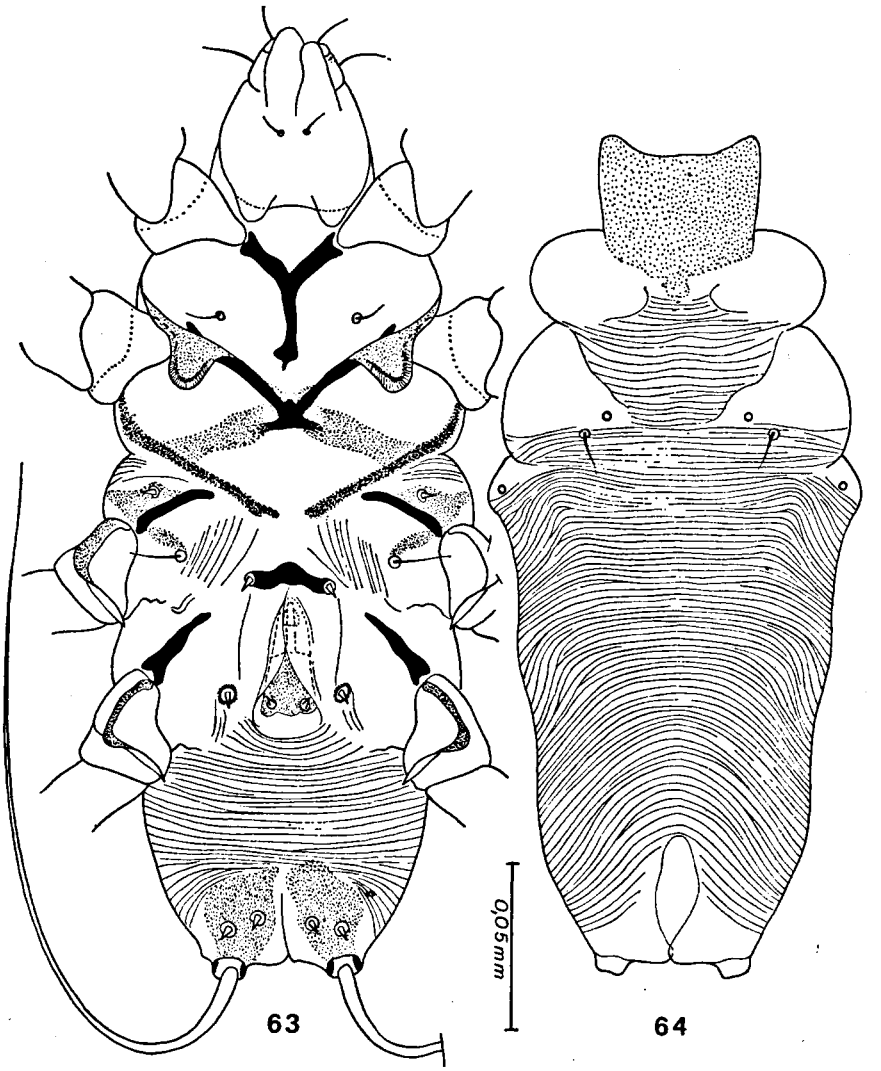


Fig. 63–64. *Rodhainyssus surinamensis* sp. n., from the nasal cavity of *Eptesicus melanopterus*. Male, holotype, ventrally (63) and dorsally (64).

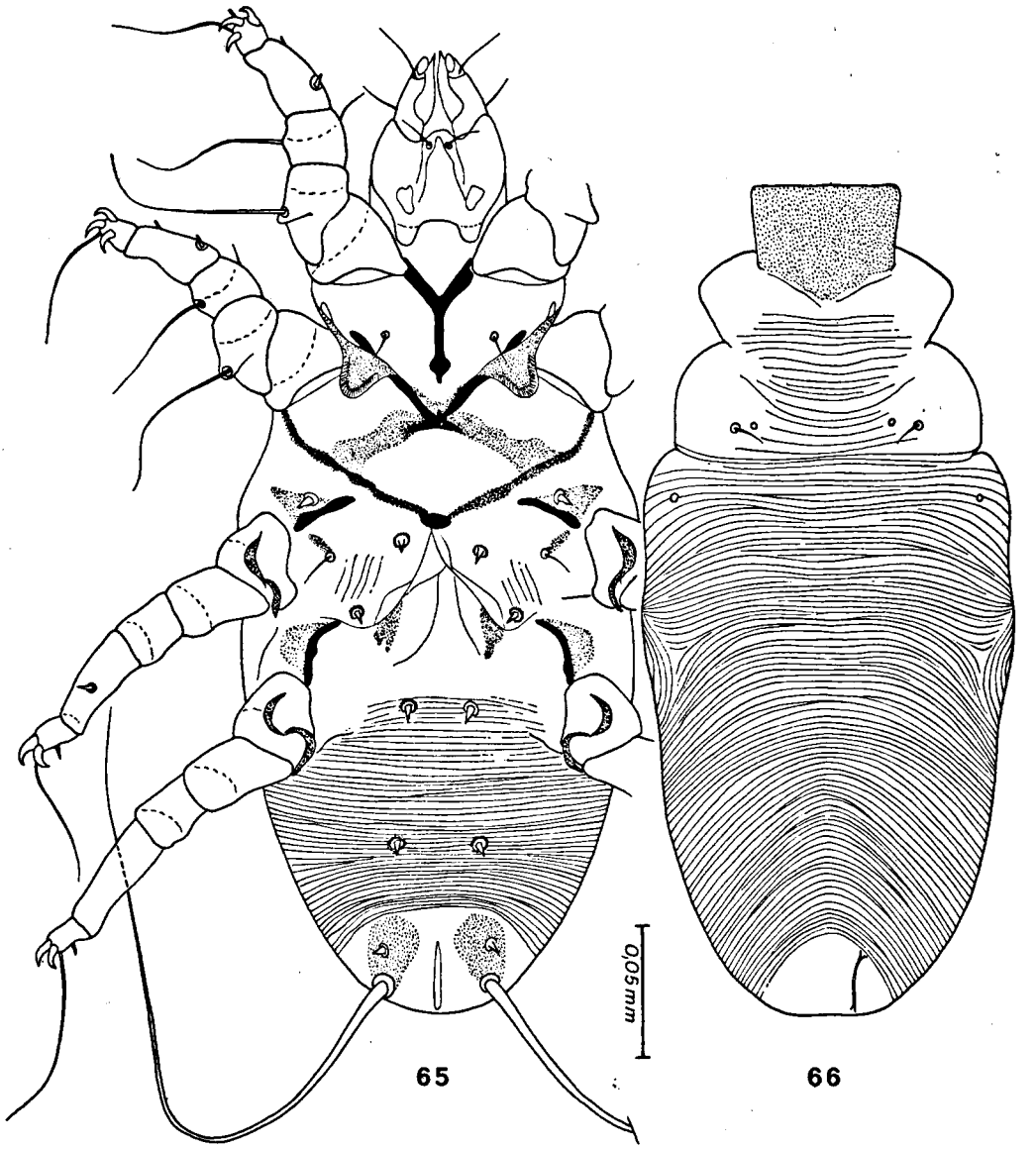


Fig. 65–66. *Rodhainyssus surinamensis* sp. n., from the nasal cavity of *Eptesicus melanopterus*. Female, allotype, ventrally (65) and dorsally (66).

Female (allotype) (Fig. 65–66): Length (gnathosoma included) 360 μ, width 135 μ. Dorsal surface as in the male. The bursa copulatrix is 21 μ long and opens dorsally. Gnathosoma and epimera I and II as in the male. The epimerites II are fused with the small epigynium. The *a i* setae are situated at 40 μ in front of the *a e* setae. The genital and the anal setae are in the shape of small triangular spines.

Host and locality. – On several *Eptesicus melanopterus* from two localities: Welgedacht, 1.VIII.1971 (bat no. 126) (holotype and 1 paratype ♂♂; allotype and 3 paratypes ♀♀; 1 nymph). Tawajariweg, 5.IX.1971 (bat ♂ no. 406) (13 ♀♀; 2 ♂♂; 2 nymphs, all paratypes).

Deposition. – Holotype and allotype: Rijksmuseum van Natuurlijke Historie, Leiden. Paratypes: National Collection of Surinam, Paramaribo; Institut Pasteur, Cayenne; Rocky Mountain Laboratory, Hamilton; Institute of Parasitology, Prague; and in the collection of authors at Antwerpen and Nijmegen.

Genus **Phyllostomonyssus** Fain, 1970

Phyllostomonyssus conradyunkeri Fain, 1970

This species has been described from the nasal cavities of *Artibeus literatus* and *Artibeus jamaicensis* from Venezuela.

The new specimens found in Surinam were recovered from three different hosts, among which two are new for that species, all belonging to the same subfamily Stenodermatinae.

Host and locality. – *Artibeus literatus*, at Welgedacht, 2.VIII.1971 (bat. ♀ no. 131) (1 ♂). *Uroderma bilobatum*, at Welgedacht, 1.VIII.1971 (bat ♀ no. 127) (4 ♂♂, 1 ♀). *Vampyrops helleri*, at Tamanredjo, 30.XI.1971 (bat. ♀ no. 589) (1 ♀, 1 ♂).

Deposition. – Rijksmuseum van Natuurlijke Historie, Leiden; Institute of Tropical Medicine, Antwerpen.

Family RHINONYSSIDAE Trouessart, 1895

Genus **Astridiella** Fain, 1957

Astridiella scotornis (Fain, 1956) Fain, 1957

Host and locality. – In the nasal cavities of *Caprimulgus nigrescens* from Baboenhol, Surinam, 27.VII.1971 (1 ♂, 6 ♀♀). This is a new host for this species.

Deposition. – Leiden, Hamilton, Antwerpen, Nijmegen.

Genus **Ptilonyssus** Berlese & Trouessart, 1889

Ptilonyssus echinatus Berlese & Trouessart, 1889

Host and locality. – From *Atticora melanoleuca*. Weg naar Zee, Surinam, 10.IX.1971 (1 ♀, 2 nymphs).
Deposition. – Leiden, Antwerpen.

Family EREYNETIDAE Oudemans, 1931

Subfamily Speleognathinae Womersley, 1936

Genus **Boydaia** Womersley, 1953

Subgenus *Boydaia* Womersley, 1953

Boydaia (Boydaia) agelaii Fain & Aitken, 1968

Host and locality. – In the nasal cavities of *Agelaius icterocephalus*, which is the typical host at Welgedacht, Surinam, 31.VIII.1971 (9 ♀♀, 3 larvae).
Deposition. – Leiden, Paramaribo, Hamilton, Antwerpen, Nijmegen.

Genus **Trispeleognathus** Fain, 1958

Subgenus *Neospeleognathus* Fain, 1958

Trispeleognathus (Neospeleognathus) amazona spec. nov.

This new species differs from the two other species known in the subgenus *T.* (*N.*) *schoutedeni* (Fain, 1955) and *T.* (*N.*) *poffei* Fain, 1955 by the vestigial development of the pulvillus, the presence of a seta on the subapical palpal segment and the chaetotaxy.

Moreover, it is distinguished from *T.* (*N.*) *poffei* by the presence at the base of the sensillae of a small linear pattern and by the absence of B setae (see FAIN, 1963).

It is also separated from *T.* (*N.*) *schoutedeni* by the different coxal chaetotaxy (2-1-1-1 instead of 2-1-1-0) and the anterior situation of the *v i* setae (in front of the sensillae, while in *schoutedeni* the *v i* are behind the sensillae).

Female (holotype) (Fig. 67–68): Idiosoma 459 μ long (total length including gnathosoma 534 μ), maximum width 369 μ. Cuticle striate-punctate and reinforced by numerous short and narrow ridges. Dorsal shield absent, but there is a small linear pattern at the base of the sensillae. The latter are hairlike. The eyes contain a spherical lens and are prominent. Legs and base of gnathosoma with a well-developed network pattern. Legs with large claws, but with vestigial pulvilli.

Chaetotaxy: Sensilla hair-like, 80 to 90 μ long. All the dorsal hairs and the ventral hairs except the coxals III are of the D type (see FAIN, 1963). The *v i* are in front of the sensillae. Coxae (I to IV): 2-1-1-1. The coxals III are simple (Na type), the other coxals are of the D type. Trochanters: 1-1-0-0. Femora: 4 (2 Na, 2 Db) – 3 (1 Na, 2 Db) – 2 (1 Na, 1 Db) – 3 (1 Na, 2 Db). Genua: 4 (1 Na, 3 Db) – 4 (1 Na, 3 Db) – 3 (1 Na, 2 Db) – 3 (1 Na, 2 Db). Tibiae: 5 Na – 3 Na – 3 Na – 3 Na. Tarsi: 12-8-7-7, most of these tarsal setae are short and inconspicuous. Palp tarsus with 3 setae (1 Na, 1 Nz, 1 Db), palp tibia with a dorso-apical Db seta. Base of gnathosoma 2-2.

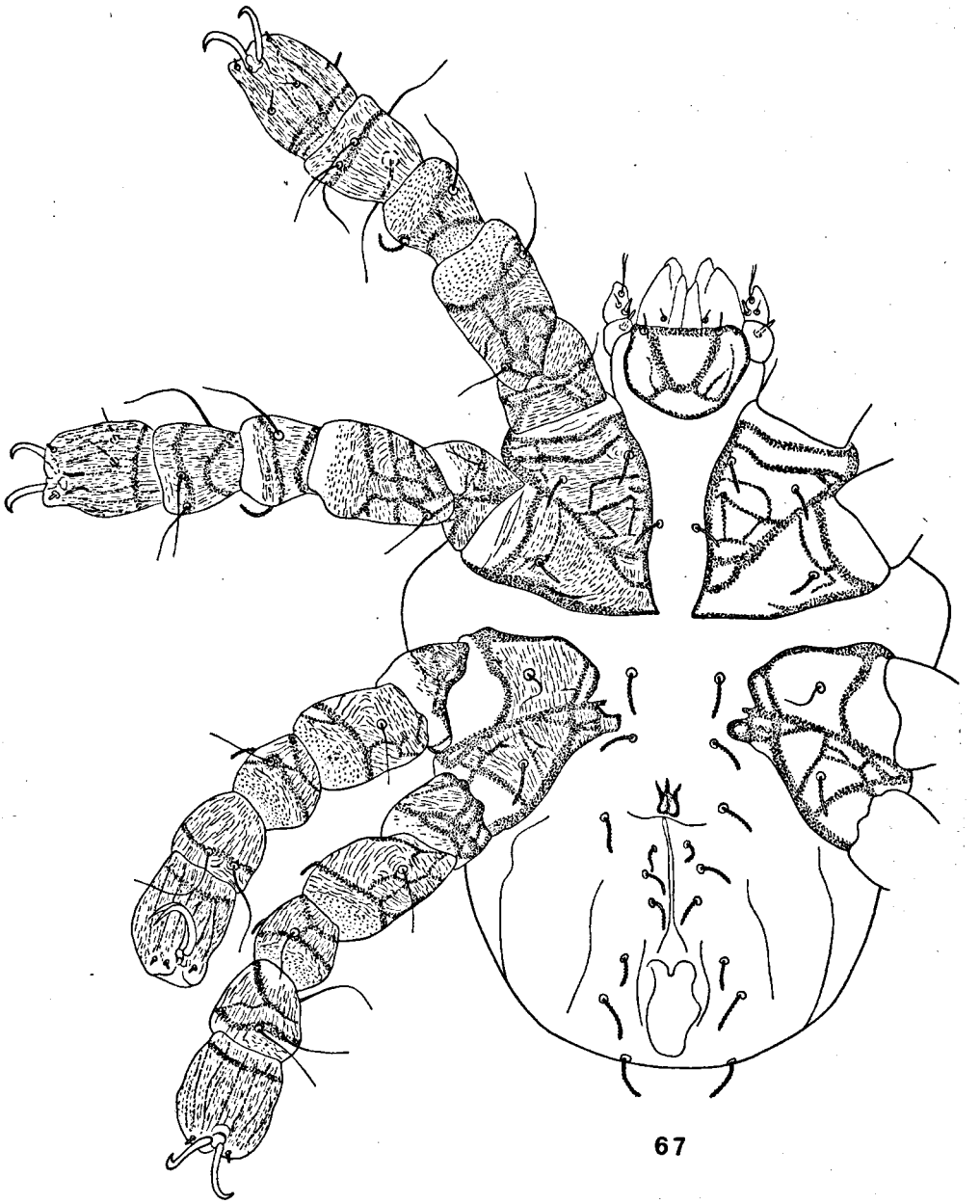
Solenidia: The palpotarsal solenidion is well formed, but partly internal (sunk into the tegument). Leg tarsus I with 1 short but completely external solenidion; leg tarsus II with a solenidion completely sunk into the tegument. Ereynetal organ with a long narrow canal.

Host and locality. – In the nasal cavities of a parrot *Amazona amazonica*, Meerzorg, 14.VIII.1971 (no. 241) (holotype female and 12 female paratypes).

Deposition. – Type in Rijksmuseum van Natuurlijke Historie, Leiden. One paratype in the National Collection of Surinam; other paratypes in the collections of the authors at Antwerpen, and Nijmegen.

From the following species, already mentioned from Surinam (FAIN & LUKOSCHUS, 1971), additional specimens have been collected from typical hosts:

Neospeleognathopsis (*Speleomyotis*) *bastini bastini* (Fain, 1958)
Neospeleognathopsis (*Speleomyotis*) *molossus* Fain & Lukoschus, 1971
Hipposideroptes saccopteryx Fain & Lukoschus, 1971
Speleochir (*Speleochir*) *carollia* Fain & Lukoschus, 1971.



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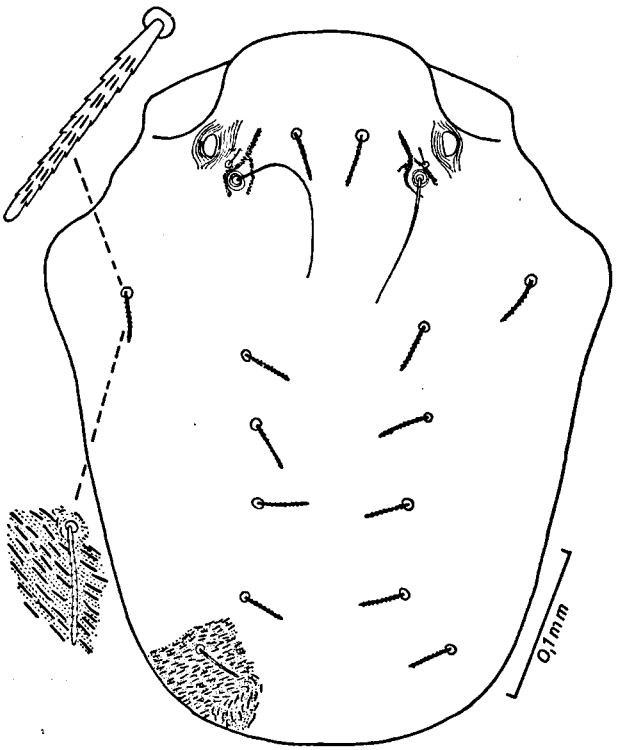

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Fig. 68. *Trispeleognathus* (*Neospeleognathus*) *amazona* sp. n., from the nasal cavity of *Amazona amazonica*. Female, holotype, dorsal view.

Fig. 67. *Trispeleognathus* (*Neospeleognathus*) *amazona* sp. n., from the nasal cavity of *Amazona amazonica*. Female, holotype, ventral view.

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