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

by

A. FAIN
(Prins Leopold Instituut voor Tropische Geneeskunde, Antwerpen)

and

F. S. LUKOSCHUS
(Zoologisch Laboratorium, Katholieke Universiteit, Nijmegen)

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 sp. longipilis Fain, 1959.
Rodhainyssus longipilis Fain, 1967 nov. tax.

This species has been described from the nasal cavities of Cynomops planirostris (= Molossus abrusus) in Surinam (FAIN, 1959). Up to now, only female specimens were collected, but in May 1971, a male specimen collected on Molossus abrusus (KOK).

Male (Fig. 61–62): Length including maximum width 135 μ. Cuticle dorsally vertically striated. Ventrally the striation is present in the region of the body. Posterior margins of epimerites II bearing well-developed regularly punctate bands which are fused in the region of the g a setae. The a i and a e setae are in a well-defined incisure. The dorsal hair of tarsi I to IV are slender and pointed.

Host and locality. – In the nasal cavities of: Meerzorg, Surinam, 25.VIII.1971: gravid female bat at the nursing period (no. 359) (2 gravid females); 26.VIII.1971 (bat no. 359) (2 nymphs, 2 larvae); 27.VIII.1971 (bat no. 359) (2' larvae); 28.VIII.1971 (bat no. 359) (2 nymphs, 2 larvae).

Deposition. – Rijksmuseum van Natuurlijke Historie, Leiden; Biological Collections of Surinam, Paramaribo; Institute of Parasitology, Hamilton; Institute of Tropenmuseum, Antwerp; Institute of Tropical Medicine, Antwerp and Nijmegen.

Rodhainyssus surinamensis Fain, 1959

This species is closely related to R. longipilis. In this species in the two sexes by the presence of a very fine and regular striation, the smaller length of the genual and femoral hairs (male) and of the tarsal hairs (maximum difference shape of the pregenital sclerite and punctate bands extending from the g a setae. The a i and a e setae on a slightly curved incisure.

Male (holotype) (Fig. 63–64): Length 279 μ; width 114 μ. Dorsal surface oligostriated. Pregenital sclerite shorter than the g a setae. Anal spines on a transversely punctate area. Other characters as in the species cited above.
NA OF SURINAME AND OTHER
ANAS: No. 54.

MITES OF SURINAM
RHINONYSSIDAE AND ERENYETIDAE
CAVITIES OF BATS OR BIRDS
by
A. FAIN
(Tropische Geneeskunde, Antwerpen)
and
LUKOSCHUS
(Katholieke Universiteit, Nijmegen)

Sent paper have been collected by the
J. Kok during a stay in Surinam from
al aid of the Netherlands Foundation
ical Research (WOTRO). The collect-
on parasites of nasal cavities of hosts
(SCHUS, 1971).

ONYSSIDAE Fain, 1956
ainyssinae Fain, 1964
ainyssus Fain, 1956
. longipilis Fain, 1959

Fain, 1959.
3v. tax.

ibed from the nasal cavities of Cyno-
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
nymphs, 2 larvae); 26.VIII.1971 (bat no. 358) (18 ♀, 4 ♂, 9 nymphs, 4 larvae).

Deposition.—Rijksmuseum van Natuurlijke Historie, Leiden; National Col-
lection of Surinam, Paramaribo; Institut Pasteur, Cayenne; Rocky Mountain La-
aboratory, 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 regu-
larly 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., *melanopterus*. Male, holotype, ventrals
Fig. 63-64. *Rodhainyssus surinamensis* sp. *n.*, from the nasal cavity of *Eptesicus melanopterus*. Male, holotype, ventrally (63) and dorsally (64).
Female (allotype) (Fig. 65-66). Female (allotype) width 360 μ, width 135 μ. Dorsal surfacelatrix is 21 μ long and opens dor: and II as in the male. The epimerepignium. The a s setae are situatThe genital and the anal setae are setae arspines.

Host and locality. - On several E Ewelgedacht, 1.VII.1971 (bat no. 126) (h and 3 paratypes; 1 nymph). Tawajariweg, 1 nymph, all paratypes).

Deposition. - Holotype and allotype Leiden. Paratypes: National Collection of Cayenne; Rocky Mountain Laboratory, Hs and in the collection of authors at Antwe

Genus Phyllostom

Phyllostomonyssus co

This species has been described: *literatus* and *Artibeus jamaicensis*

The new specimens found in St: different hosts, among which twc longing to the same subfamily Sts

Host and locality. - *Artibeus literat* 131) (1 5). *Uroderma bilobatum*, at Welge.

Deposition. - Rijksmuseum van N Tropical Medicine, Antwerpen.

Family RHINONYSSI

Genus Astridi

Astridiella scotornis

Host and locality. - In the nasal Baboehol, Surinam, 27.VII.1971 (1 5. 6 Deposition. - Leiden, Hamilton, An

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, I.VIII.1971 (bat no. 126) (holotype and 1 paratype ♂♂; allotype and 3 paratypes ♀♀; 1 nymph). Tawariweg, S.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.


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 Baboonhol, 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 *Alticora melanoleuca*. Weg naar Zee, Surinam, 10.IX.1971 (1 ♀, 2 nymphs).

*Deposion.* - Leiden, Antwerpen.

Family EREYNETIDAE Oudemans, 1931

Subfamily Speleognathinae Womersley, 1936

Genus *Boydaia* Womersley, 1953

Subgenus *Boydaia* Womersley, 1953

**Boydaia (Boydaia) agelali** 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).


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.) poiffei* 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.) poiffei* 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.

Soléndia: The palpotarsal soléndion is well formed, but partly internal (sunk into the tegument). Leg tarsus I with 1 short but completely external soléndion; leg tarsus II with a soléndion completely sunk into the tegument. Êreynetatal 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
Speleochar (Speleochar) carollia Fain & Lukoschus, 1971.
Fig. 68. Trispeleognathus (Neospeleognathus) of Amazona amazonica. Fem.
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.