

PARASITES OF WESTERN AUSTRALIA

V

NASAL MITES FROM BATS (ACARI: GASTRONYSSIDAE
AND EREYNETIDAE) (1)

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and

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ABSTRACT

Two species of parasitic mites have been observed in nasal cavities of flying foxes: *Opsonyssus asiaticus* Fain, 1959 in *Pteropus alecto* and *P. scapulatus* (new host records) and *Neospeleognathopsis (Pteropignathus) pteropus* n. sp. from *P. scapulatus*, the latter representing a new subgenus of *Neospeleognathopsis*.

INTRODUCTION

In the nasal cavities of bats from Western Australia, the junior author collected two species of mites belonging to the family Gastronyssidae (Order Astigmata), and Ereynetidae (Order Prostigmata). One of these is a new species and is described here.

FAMILY GASTRONYSSIDAE Fain, 1956
SUBFAMILY RODHAINYSSINAE Fain, 1964
Genus *Opsonyssus* Fain, 1959
Opsonyssus asiaticus Fain, 1959

This species has been described from the nasal cavities of *Pteropus giganteus* (Brünn) and of *Pteropus melanopogon* Peters, both from unknown localities.

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In Western Australia we found a small series of specimens of that species in two new hosts:

- 1 *Pteropus alecto* Temminck, 1825, from Brooking Springs, 8.X.1976 (bat no. 2969) (one male and one female specimen).
- 2 *Pteropus scapulatus* Peters, 1862, from Geikie Gorge, 6.X.1976 (bat no. 2947) (five females and two males).

FAMILY EREYNETIDAE Oudemans, 1931
SUBFAMILY SPELEOGNATINAE Womersley, 1936
Genus *Neospeleognathopsis* Fain, 1958

Subgenus *Pteropignathus* subg. nov.

This new subgenus differs from the type subgenus (type species *N. chiropteri*) by the following characters: absence of propodosomal scutum, presence of a pair of intercoxal I setae (*i c 1*), anterior situation of the *v i* setae which are in front of the *v e* setae, sensillae slightly inflated basally. Other characters as in the type subgenus, except for minor differences (see Fain 1970 and Fain and Lukoschus 1971).

Type species: *Neospeleognathopsis (Pteropignathus) pteropus* sp. nov.

Neospeleognathopsis (Pteropignathus) pteropus sp. nov.

Female (Fig. 1): Idiosoma in the holotype 390 μ long and 255 μ maximum width. Dorsum: the *v i* setae are foliate and situated in front of the *v e* setae. Sensillae slightly inflated in their basal half, they are 30-35 μ long. Hysterosomal setae as in *N. chiropteri*. Venter: coxal setae (I to IV): 2-1-2(1)-1. The *i c 1* are present. There are 4 pairs of genital setae, and two pairs of anal setae. Gnathosoma: there is 1 pair of ventral setae. Palps: tarsus with 4 setae and 1 solenidion, tibia with one large dorsal seta. Chaetotaxy of the legs (I-IV): Trochanters 1-1-0-0. Femora 6-4-3-2. Genus 4-4-3-3. Tibiae 5-3-3-3. Tarsi 12-8-7-7.

Male: Allotype 395 μ long and 245 μ wide. General aspect as in the female but the genital slit is shorter, there are only 3 pairs of genital setae, some setae of tarsus and genu I are much longer and there is a broad bilobed testicule.

Larva: Idiosoma 375 μ long, 200 μ wide (specimen strongly flattened). Chaetotaxy of propodosoma as in the female. Coxal setae 2-1-1. Gnathosoma: there is one pair of ventral setae. Palps of two segments. All the legs with a pair of small normally formed and equal claws.

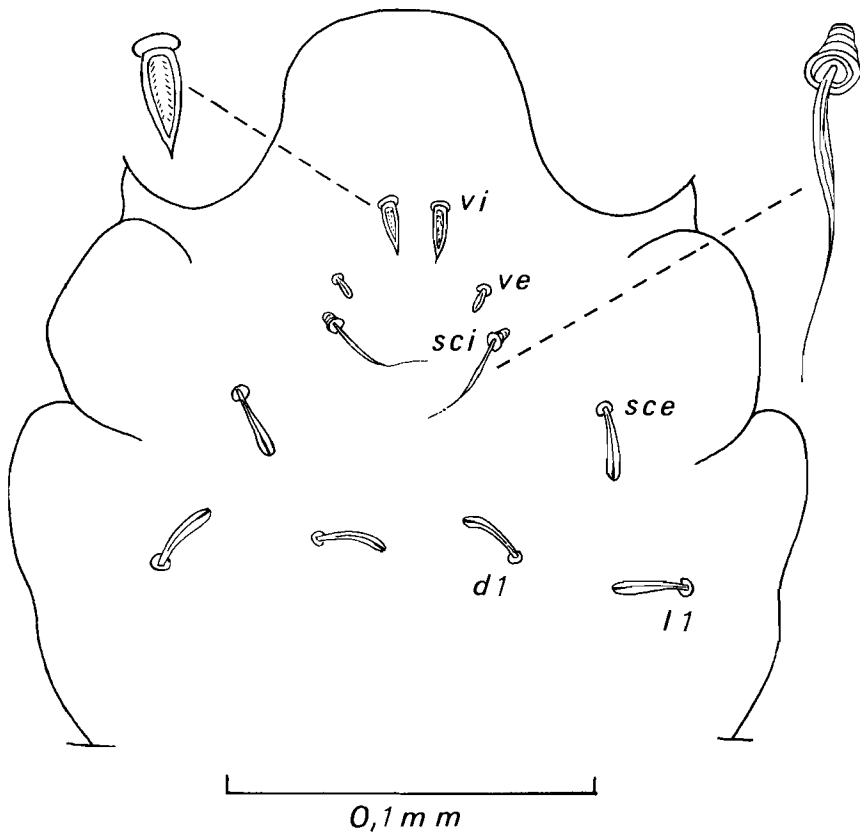


Fig. 1: *Neospeleognathopsis (Pteropignathus) pteropus* sp. nov. Female holotype: dorsal surface of propodosoma.

Host and locality

In the nasal cavities of *Pteropus scapulatus*, Brooking Springs, 7.X.1976 (bat no. 2952) (holotype and 5 paratypes female, allotype male, 7 larvae or larval skins). Types in the Western Australian Museum, Perth. Paratypes in collections of Field Museum of Natural History, Chicago; Institute of Tropical Medicine, Antwerp, Belgium; and Department of Zoology, Catholic University of Nijmegen, The Netherlands.

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