

PARASITIC MITES OF SURINAME  
 III. DIAGNOSIS OF NEW LISTROPHORIDS <sup>(1)</sup>

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In the present paper we give the preliminary diagnosis of 11 new species of fur mites collected on various mammals, mostly bats. These species belong to the families Labidocarpidae and Atopomelidae. A more complete description together with figures will appear later.

These mites have been collected by Dr. F. Lukoschus, University of Nijmegen, Nederland, during a stay in Suriname from 11 November 1969 until 14 March 1970.

The types of these new species are deposited in the Rijksmuseum van Natuurlijke Historie, Leiden, Nederland.

I wish to acknowledge my thanks to Dr. F. Lukoschus for the material described in this paper.

Family **LABIDOCARPIDAE** GUNTHER, 1942

Genus **LABIDOCARPUS** TROUËSSART, 1895

1. **Labidocarpus medius** sp. n.

This species presents a small postscapular shield in the shape of two narrow chitinous bands L-shaped and apparently fused in the midline; these bands bear the setae *sc i* and *sc e*. Posterior margin of prescapular shield with 4 rounded processes. Setae *b* very long (150  $\mu$  in the female); *sb* about 100  $\mu$  long. The apical hairs of tarsi III and IV are thick and not flagelliform apically.

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(1) Investigations conducted by Dr. F. Lukoschus. Dept. of Zoology, Catholic University of Nijmegen, Nederland, with the aid of the Grant W 83-1, by the Netherlands Foundation for the Advancement of Tropical Research (WOTRO).

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Length of holotype male (including gnathosoma) 360  $\mu$ , width 135  $\mu$ . Allotype female 495  $\mu \times$  150  $\mu$ .

*Host and locality*: On an *Eptesicus melanopterus*, of Lelydorp, Suriname. (Coll. Dr. F. Lukoschus, 26.II.1970).

## 2. *Labidocarpus lukoschi* sp. n.

This small species is well characterized by the very unequal length of some associate setae. In the female the *b* and *sb* are respectively 60  $\mu$  and 15  $\mu$  long, the *sc e* and *sc i* are respectively 60-70  $\mu$  and 30-35  $\mu$  long, the postero-dorsal and postero-ventral setae are respectively 60-75  $\mu$  and 15-20  $\mu$  long. Postscapular shield absent. In both sexes the apical cylindro-conical hair of tarsus III is slightly shorter than that of tarsus IV. These hairs are not flagelliform. Holotype male 210  $\mu$  long (including gnathosoma), 90  $\mu$  wide. Allotype female (larvigerous) 324  $\mu$  long and 110  $\mu$  wide.

This species is named after F. Lukoschus, Universiteit Nijmegen, Nederland.

*Host and locality*: *Micronycteris megalotis*, of Lelydorp, Suriname. (Coll. Dr. F. Lukoschus, 26.II.1970).

## Genus ALABIDOCARPUS EWING, 1929

### 1. *Alabidocarpus saccopteryx* sp. n.

This species is close to *A. minor* TROUESSART. It is distinguished from this species, in the male, by the greater length of the *sb* setae (about 15  $\mu$ , while this hair is vestigial in *A. minor*), the greater separation of the *sc e* and *sc i* and the more posterior situation of the latter, the greater length and width of the apical seta of tarsi IV. Holotype male 240  $\mu$  long and 94  $\mu$  wide.

*Host and locality*: *Saccopteryx bilineata*, of Lelydorp, Suriname. (Coll. Dr. F. Lukoschus, 26.II.1970).

### 2. *Alabidocarpus noctilio* sp. n.

This species is well separated from all the other species of the genus by the normal development of the *sc e*, *sc i* and *sb* setae.

The prescapular shield is normally formed (not shortened as in *Parakosa*). The tarsi III and IV bear the same number of setae as in the other species of *Alabidocarpus* (respectively 6 and 5) but one of the normal setae (not the big apical modified one) is thickened and more or less spinous. By these characters this new species appears to be a link between the genera *Alabidocarpus* and *Parakosa*. Holotype male 261  $\mu$  long, 105  $\mu$  wide. Allotype female (larvigerous) 384  $\mu$   $\times$  106  $\mu$ .

*Host and locality*: *Noctilio labialis*, of Meerzorg, Suriname. (Coll. Dr. F. Lukoschus, 2.III.1970).

#### Genus OLABIDOCARPUS LAWRENCE, 1948

##### 1. *Olabidocarpus eptesicus* sp. n.

This species resembles *O. cristatus* LAWRENCE by the complete absence of the *sb* setae and the presence of a dorsal crest. It is however well distinguished from that species by the punctate and more or less scaly aspect of the cuticle of the antero-lateral region of the body, behind the prescapular shield. This special structure extends to about 8-10 striations. Another character separating that species from *O. cristatus* is the flagellar aspect of the special setae of tarsi III and IV. Holotype male 261  $\mu$  long (including gnathosoma) and 105  $\mu$  wide. Allotype female 351  $\mu$   $\times$  93  $\mu$ .

*Host and locality*: *Eptesicus melanoptera*, of Lelydorp, Suriname. (Coll. Dr. F. Lukoschus, 24.II.1970).

##### 2. *Olabidocarpus myoticola* sp. n.

This species is represented only by the holotype female. It resembles *O. eptesicus* in lacking the *sb* setae and having a dorsal crest, a scaly-punctate structure on the dorso-lateral areas of the body and flagellar apical hairs on posterior tarsi. It is distinguished from that species by the much larger size of the modified cuticular area, which extends from the prescapular shield to near the anal region, and by the different structure of the scaly-formations which are smaller and more numerous than in *O. eptesicus*. Holotype female 291  $\mu$  long (gnathosoma included) and 90  $\mu$  wide.

*Host and locality*: *Myotis albescens*, of Brokopondo, Suriname. (Coll. Dr. F. Lukoschus, 2.II.1970).

## Genus PARALABIDOCARPUS PINICHPONGSE, 1963

1. **Paralabidocarpus carolliae** sp. n.

This species present, in both sexes, a pedonculate sucker on tarsi III and IV as in *P. artibeii* (PINICHPONGSE, 1963). It is distinguished from that species by the great development of the solenidia of tibiae III and IV in the female, which measure 90  $\mu$  on tarsus III and 55  $\mu$  on tarsus IV. Other separating characters are the unequal size of *sb* and *b* and the flagellar aspect of the apical hairs of posterior tarsi. Holotype female 360  $\mu$  long (gnathosoma included) and 117  $\mu$  wide. Allotype male 246  $\mu$   $\times$  105  $\mu$ .

*Host and locality* : *Carollia perspicillata*, of Zandery, Suriname. (Coll. Dr. F. Lukoschus, 7.I.1970).

2. **Paralabidocarpus surinamensis** sp. n.

This species is distinguished from the two other species in the genus, in both sexes : by the larger size of the body, the situation of the *sc e* setae on a small punctate area connected with the prescapular shield, the absence of a punctate band connecting the *sc i* and *sc e* setae, and the greater length of the apical hairs of posterior tarsi. It il to be noted that the *b* and *sb* are distinctly unequal and that the solenidia of posterior tibiae are short. Holotype male 296  $\mu$  long (gnathosoma included) and 127  $\mu$  wide. Allotype female (larvigerous) 495  $\mu$   $\times$  145  $\mu$ .

*Host and locality* : *Sacopteryx canescens*, of Lelydorp, Suriname. (Coll. Dr. F. Lukoschus, 25.II.1970).

Family **ATOPOMELIDAE** GUNTHER, 1942Genus **CHIRODISCOIDES** HIRST, 19171. **Chirodiscoides interruptus** sp. n.

This species is well characterized in the male by the shape of the epimera IV which are widely separate in the midline by bare skin, and by the shape of the tarsi IV which are incurved inwards

at about  $135^\circ$ . In both sexes by the scaly aspect of the dorsal shields, the structure of the sternum, whose posterior half is divided into two narrow parallel and well-separate chitinous stripes, and the great development of the gnathosoma. In the female by the small number of ventral scales and the shape of the dorso-hysterosomal shield which is rather long and has a broadly rounded posterior border. Holotype male  $420 \mu$  long (gnathosoma included) and  $165 \mu$  wide. Allotype female (larvigerous)  $590 \mu \times 200 \mu$ .

*Host and locality*: *Proechimys guyannensis* (E. GEOFFROY, 1803) of Lelydorp, Suriname. (Coll. Dr. F. Lukoschus, 18.XII. 1969).

#### Genus ISOTHRICOLA FAIN, 1970

##### 1. *Isothricola coniformis* sp. n.

This species is well characterized, in the male by the shape of the opisthosoma which is conical and ending into a membranous and rounded apex. Gnathosoma very wide, approximately twice as wide as its maximum length. Posterior half of the sternum divided into two. Legs IV much stronger than legs III. Tarsi IV very slightly recurved inwards. Postscapular shield relatively short, with anterior margin deeply excavated. Holotype male  $310 \mu$  long (gnathosoma included) and  $130 \mu$  wide.

*Host and locality*: *Proechimys guyannensis* (E. GEOFFROY, 1803), of Lelydorp, Suriname. (Coll. Dr. F. Lukoschus, 18.XII. 1969).

##### 2. *Isothricola ovatus* sp. n.

This species is distinguished from *I. coniformis* in the male by the ovoid shape of the body, by the very small length of the opisthosoma which is devoid of any appendanges and membranes, by the shape of the gnathosoma longer and narrower, by the structure of the postscapular shield not incised anteriorly. Body of the female also ovoid, with a short hysterosomal shield (about  $75 \mu$  long). Holotype male  $267 \mu$  long (gnathosoma included) and  $138 \mu$  wide. Allotype female  $310 \mu \times 133 \mu$ .

*Host and locality*: *Proechimys guyannensis* (E. GEOFFROY, 1803), of Lelydorp, Suriname. (Coll. Dr. F. Lukoschus, 18.XII. 1969).

Genus *DIDELPHILICHUS* FAIN, 1970

1. *Didelphilichus serrifer* subsp. *philander* subsp. n.

This subspecies is distinguished from the typical form, in the male by the shape of the hysterosomal shield whose anterior border is straight or only slightly concave (deeply incised in the typical form), by the poor development of the epimerites IV, the smaller size of the body and of some hairs. Holotype male 336  $\mu$  long (gnathosoma included) and 156  $\mu$  wide.

*Host and locality*: *Philander opossum*, of Coronie, Suriname. (Coll. Dr. F. Lukoschus, 5.II.1970).

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