Archemyobia (Nearchemyobia) latipilis sp.n.
(Acari: Prostigmata: Myobiidae) parasitic on marsupials in Panama and Brazil

by

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Abstract: Archemyobia (Nearchemyobia) latipilis sp. n. is described from specimens parasitizing marsupials in Panama and Brazil. It is distinguished from A. (N.) pectinata Méndez, 1972, mainly by the structure of the chaetotaxy.

In the present paper we describe a new species of Myobiidae belonging to the subgenus Nearchemyobia, genus Archemyobia. The known taxa of Nearchemyobia have been found only on marsupials of the family Didelphidae. However, it is possible that mites of this subgenus may parasitize members of the family Caenolestidae, the other American marsupial group.

Archemyobia (Nearchemyobia) latipilis sp.n.

This new species is very close to Archemyobia (Nearchemyobia) pectinata Méndez, 1972, described from Philander opossum fuscogriseus in Panama, but it differs from it by the following characters:

Female: 1. Different shape and disposition of genital and anal setae: the a i are thick, curved and situated very close to a e. In A. pectinata the a i are more anterior, more close to each other and far from a e
2. The distance d4-13 is 70 μm as opposed to 30 μm in A. pectinata.
3. Some ventral setae are much longer: ic 2 120 μm; ic 4 40-45 μm. In A. pectinata these setae are 36 μm and 25 μm, respectively.
3. The antero-ventral seta of trochanter III is thick but very finely attenuated apically. In A. pectinata this seta is a blunt spine.
5. The large foliate striate ventral setae are trapezoidal and wide (18 μm for coxals II and 12 μm for coxals III). In A. pectinata these setae are not expanded and narrower posteriorly (coxals II 12 μm, coxals III 10 μm). Moreover, the ic 3 and coxals III end in a very thin and short projection, which is absent in A. pectinata.

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Male: The size is larger, the setae d 2 are relatively much longer, the ic 2 are much longer, the coxals III and the ic 3 are shorter and broader, and the d 3 and l 3 are present.

Description:

Female (Fig. 1): Holotype 618 μm long (gnathosoma included) and 240 μm wide. In one paratype 585 μm x 243 μm. Dorsum: anterior setae foliate-striate and very wide (ν i=30μm; ν e=45μm; sc i=33μm) in their anterior half and very thin in their posterior half. Setae d 1 - d 4 and l 2 foliate-striate 9-12 μm wide in their anterior half. Setae l 3 much thinner and 39μm long. Anals and genitals g 5 - g 7 close together. Venter: setae ic 1 thin, 18 μm long; ic 2 thin, 120 μm long; ic 3 foliate-striate 27 μm long and 12μm wide; ic 4 thin, 45 μm. Coxals I and IV thin; coxals II and III foliate-striate and distinctly expanded posteriorly. Legs and gnathosoma as in A. pectinata. Coxae with 2-3-3-2 setae. Number of setae on legs II-IV: Trochanters 3-3-3. Femora 5-3-3. Genua 7-6-6. Tibiae 6-6-6. Tarsi 7-6-6.

Fig. 1. Archemyobia (Nearchemyobia) latipillis sp. nov. Ventral-dorsal view of female.
Male (Fig. 2): Length 453 µm, width 180 µm. Dorsum: Setae v i, v e, sc i, sc e, and l l as in female. There are 9 pairs of perigenital setae, one postero-external large (d 1), the other much smaller. Behind this area there are 4 pairs of unequal setae, being the most anterior long, foliate and striate (d 2), the others are thin and much shorter. Aedeagus 150 µm long. Venter as in the female, except that the ic 3 and the coxals III are narrower, especially the external pair, and that the ic 4 and coxals IV are shorter. Legs and gnathosoma as in the female.

Fig. 2. Same. Ventral-dorsal view of male.

Tritonymph: Length 570 µm, width 210 µm. Dorsum: Setae as in A. pectinata except that setae v e, sc e and l l end in a much longer posterior prolongation. Venter: as in A. pectinata but setae ic 2, ic 3, coxals II and III are relatively longer, more attenuated near their apex and bear a very thin apical prolongation.

Deutonymph: Length 460 µm, width 155 µm. It differs from the tritonymph mainly by the presence of only one pair of shell-shaped setae on coxae I, of only one pair of setae on coxae II and III, and the absence of setae on coxae IV.
Protonymph: Length 420 μm, width 150 μm. It differs from the deutonymph mainly by the absence of setae **ic 4** and of coxals II and III.

**Larva:** Length 380 μm, width 150 μm. It is characterized by the presence of only 3 pairs of legs and by the absence of coxal setae.

**Type material:** Holotype female ex *Cahuromys derbianus* (♂), from Aguacate, Capira, Province of Panama, Panama, 25. I. 1980, collected by H. Montenegro; 1 female paratype from the same animal. Allotype male and the following paratypes: 3 males, 15 females, 25 nymphs and 5 larvae, ex *C. derbianus* (Coll. No. 11535) deposited in the Senckenberg Museum Frankfurt, from Parana do Inkare, Brasil, 31. VII. 1925, collected by F.S.L.; 1 paratype female ex *C. philander* (Coll. No.76.4.26.1) housed in the British Museum, from Manaos, Brasil, collected by A. Fain.

Holotype, allotype, and a series of paratypes have been deposited in the Institut Royal des Sciences Naturelles de Belgique. Other paratypes have been distributed among the Department of Zoology, Catholic University of Nijmegen, The Netherlands, the Gorgas Memorial Laboratory, Panama City, Panama, and other institutions.

**Genus Archemyobia** Jameson, 1955

**Subgenus Nearchemyobia** Fain & Lukoschus, 1976

The subgenus *Nearchemyobia* was created for the species presenting a foliate-striped aspect of the **ic 3**, of the coxae II, and of III setae. The type species is *Archemyobia dimidiata* Fain, 1973.

**Key to the species of the subgenus *Nearchemyobia***

(Females only)


   Presence of 1 or 2 pairs of coxal setae IV. Other characters variable. 2


   Presence of 2 pairs of coxal setae .................................................. 3


   Setae **ic 4** only slightly longer (45 μm) than coxals IV (25-42 μm). Setae **1 3** narrower and not striate basally. Setae **ic 3** and coxals IV very wide and not progressively attenuated apically but with a rounded posterior margin ending or not in a very thin and short prolongation. 4

Setae *ic* 3 and coxals III inflated posteriorly and ending in very thin and short prolongation. Setae *ic* 2 120 μm long, *ic* 4 40-45 μm. Distance d 4 - 1 3 70μm. Setae a i thick, curved and situated very close to a a e. Coxals II trapezoidal, 18 μm wide. Trochanters III with anteroventral spine gradually attenuated apically. From Caluromys derbianus, Panama and Brazil, and C. philander, Brazil ................................. . .................................................. A. (N.) latipilis n. sp.

RESUMEN

Se describe e ilustra la especie Archemyobia *(Nearchemyobia) latipilis*, un ácaro que se encuentra en la piel de las zarigüeñas Caluromys derbianus (en Panamá y Brasil), así como en C. philander (en Brasil). Presentamos una clave para separar las especies del subgénero *Nearchemyobia* Fain & Lukoschus.

LITERATURE CITED


