SOME MYOBIIDS FROM EASTERN ASIA
AND THE PACIFIC AREA,
WITH DESCRIPTION OF A NEW SPECIES
(Acarina: Myobiidae)*

by A FAIN**

We study here a small collection of parasitic mites of the family
Myobiidae collected in several places of Eastern Asia and the Paci­
fic Area. All these mites belong to the Bishop Museum, Honolulu.

This collection contains a new species found on a frugivorous
bat, Cynopterus brachyotis, in the Philippines. This species pre­
sents the main characters of the genus Binuncus RADFORD, howe­
er it is distinguished from this genus by the great development
of the tibio-tarsus complex of leg I and the presence on the latter
of a pair of small claws. We propose therefore to separate it in
a new subgenus.

FAMILY MYOBIIDAE MEGNIN, 1877
Genus Binuncus RADFORD, 1954
Subgenus Binuncus RADFORD, 1954

Binuncus (Binuncus) magnus (RADFORD, 1954)

This species has been described from Pteropus medius, from
India.

In the collection of Bishop Museum we found a single female
specimen belonging to that species, from a bat probably Dobsonia
moluccensis (Pteropidae) Locality: Hollandia, Distr. Kota Radja,
West Irian (New Guinea), 16.VI.1966 (N° 55752). (Coll. F.
Radovsky).

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** Institut de Médecine Tropicale, Nationalestraat 153, B-2000 Antwerpen.
Subgenus *Probinuncus* subg. n.

This new subgenus which is based on the female and on nymphs, constitutes a link between the genera *Neomyobia* and *Binuncus*, however it is more close to the latter. The legs I present the same structure as in *Neomyobia*: the tarsus and tibia are fused into a broad complex bearing a pair or small recurved claws. By all the other characters (*v* piliform, dorsal hairs relatively narrow, same type of ventral hairs, leg chaetotaxy) this subgenus is more close to *Binuncus*. In the nymphs the legs I are unequal and the legs II-IV bear 2-1-1 claws respectively.

*Type species*: *Binuncus (Probinuncus) cynopterus* sp. n.
The subgenus *Probinuncus* is more primitive than *Binuncus* and it represents probably the ancestral form of the latter. We give at the end of this paper a list of all the known species of Myobiidae living on Pteropidae.

**Binuncus (Probinuncus) cynopterus** sp. n.

**Female** (fig. 1-3): Total length of the holotype (gnathosoma included, without the palps) 675 µ, maximum width 235 µ. 
*Dorsum*: genital lobes membranous, very thin and transparent and folded. *Venter*: coxae I well sclerotized. 
*Leg I*: trochanter I slightly produced forwards; the clasping process of the genu is rather short and has an anterior and internal direction; the complex tarsus-tibia is voluminous, and bears apically a pair of small recurved claws and ventrally a scale-like striated hair. Tarsi II-IV with 2 long, slightly unequal claws. Gnathosoma much longer ventrally than dorsally.

*Chaetotaxy*: *v* piliform very thin and short. Most of the other dorsal hairs are inflated anteriorly and striated. The *d*1 to *d*5 are thick and striate. The *l*1 and *l*2 are striate, the *l*3 is lacking, the *l*4 is very narrow. Coxal hairs (I-IV) 2-3-0-1. The coxal IV is striate. Intercoxals I-IV strong and striate. Legs (II-IV): Trochanters 3-3-3. Femora 5-3-3. Genua 7-6-6. Tibiae 6-6-6. Tarsi 7-6-6.

*Host and locality*:

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**Incus** subg. n.

...ed on the female and on nymphs, genera Neomyobia and Binuncus, later. The legs I present the same tarsus and tibia are fused into or small recurved claws. By all dorsal hairs relatively narrow, acetotaxy) this subgenus is more the legs I are unequal and the respectively.

**nuncus** cynopterus sp. n.

...more primitive than Binuncus ancestral form of the latter. We list of all the known species of

**nuncus** cynopterus sp. n.

...length of the holotype (gnathosoma 75 μ, maximum width 235 μ. transparent, very thin and transparent sclerotized. Leg I: trochanter I clasping process of the genu is and internal direction; the comb bears apically a pair of small-like striated hair. Tarsi II-IV claws. Gnathosoma much longer short. Most of the other dorsal striated. The d 1 to d 5 are thick striate, the I 3 is lacking, the I 4 2-3-0-1. The coxal IV is striate. minute. Legs (II-IV): Trochanters 5. Tibiae 6-6-6. Tarsi 7-6-6.

Fig. 1-2 — Female of Binuncus (Probinuncus) cynopterus sp. n.

Fig. 1: Ventral view; Fig. 2: Dorsal view
Holotype and paratypes in the Bishop Museum. Paratypes in the collection of the author.

Genus Radfordia Ewing, 1938

1. Radfordia ensifera (Poppe, 1896)

One single female from Rattus mindanensis, Mt. Lobi Range, (160-200 m. alt.) Philippines Is., 5.VI.1964.

Genus Binuncus Radford, 1954

Subgenus Binuncus Radford, 1954

** B. (B.) magnus (Radford, 1954)

Binuneus Radford, 1954

Subgenus Binuneus Radford, 1954

B. (B.) jamesoni (Hiregaudar et al. 1956)

B. (B.) epomophori Fain, 1972

B. (B.) megaloglossus Fain, 1973

B. (B.) eionotoni Fain, 1972

B. (B.) rousetti Fain, 1972

Subgenus Probinuneus subg. n.

** B. (P.) cynopterus sp. n.

Genus Pteropimyobia Fain, 1973

** P. nyctimene Fain, 1973

P. pahangensis Fain, 1973

Nine female and one male specimens from Mus sp., Midway. 28.V.1969 (Coll. Ron Amerson).

Myobia von Heyden, 1826

1. Myobia musculi (Schräck, 1781)

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Nine female and one male specimens from Mus sp., Midway. 28.V.1969 (Coll. Ron Amerson).
List of the Myobiidae spp. living on Pteropidae

<table>
<thead>
<tr>
<th>Parasitic mite</th>
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<th>Subfamily of the host</th>
<th>Locality</th>
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<td>Genus Binuncus Radford, 1954</td>
<td>Pteropus medius (Temminck)</td>
<td>Pteropinae</td>
<td>India</td>
</tr>
<tr>
<td>Subgenus Binuncus Radford, 1954</td>
<td>Dobsonia moluccensis</td>
<td>Pteropinae</td>
<td>West Irian</td>
</tr>
<tr>
<td>** B. (B.) magnus (Radford, 1954)</td>
<td>* Pteropus medius (Temminck)</td>
<td>Pteropinae</td>
<td>India</td>
</tr>
<tr>
<td>B. (B.) jamesoni (Hiregaddar et al. 1956)</td>
<td>* Rousettus leschenaultii Desm.</td>
<td>Pteropinae</td>
<td>India</td>
</tr>
<tr>
<td>B. (B.) epomophori Fain, 1972</td>
<td>* Epomophorus labiatus minor (Dobson)</td>
<td>Pteropinae</td>
<td>Rwanda</td>
</tr>
<tr>
<td>B. (B.) megaloglossus Fain, 1973</td>
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<td>B. (B.) eidoscoli Fain, 1972</td>
<td>* Eidolon belvum Kerr</td>
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<td>Zaire</td>
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<td>B. (B.) rousetti Fain, 1972</td>
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<td>Pteropinae</td>
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<tr>
<td>Subgenus Probinuncus subg. n.</td>
<td>* Cynopterus brachyotis (Muller)</td>
<td>Pteropinae</td>
<td>Philippines Is.</td>
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<td>** B. (P.) cynopterus sp. n.</td>
<td>Nyctimene bougainvillei</td>
<td>Nyctimeneinae</td>
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</tr>
<tr>
<td>Genus Pteropimyobia Fain, 1973</td>
<td>* Macroglossus minimus sobrinus</td>
<td>Macroglossinae</td>
<td>Malaya</td>
</tr>
<tr>
<td>** P. nyctimene Fain, 1973</td>
<td></td>
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<tr>
<td>P. pahangensis Fain, 1973</td>
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</table>

* typical host.
** type of the genus or subgenus
Genus *Acanthophthirius* Perkins, 1925

We attribute to this genus several nymphs collected on two different hosts in New-Guinea.

1. *Kerivoula* sp. (N° BBM 95054 - B 80853), Wau Subdistrict, Edie Creek, (1900 m) (8 nymphs).

2. Bat (Vespertilionidae) (N° 28532), Karunka (Coll. H. Clissold) (3 nymphs).

The tritonymphs of this collection have the legs I symmetrical and the legs II-IV with 2-1-1 claws respectively. These characters are shared by other genera parasitic on bats. We think, however that they belong to *Acanthophthirius* owing to the nature of the hosts (Vespertilionidae).

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**REFERENCES**


