

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 Pacific 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 presents the main characters of the genus *Binuncus* RADFORD, however 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.1960 (N° 55752). (Coll. F. Radovsky).

\* Déposé le 4 mai 1975.

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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 (*vi* 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  $\mu$ , maximum width 235  $\mu$ . *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 curved claws and ventrally a scale-like striated hair. Tarsi II-IV with 2 long, slightly unequal claws. Gnathosoma much longer ventrally than dorsally.

*Chaetotaxy*: *vi* very thin and short. Most of the other dorsal hairs are inflated anteriorly and striated. The *d1 to d5* are thick and striate. The *l1* and *l2* are striate, the *l3* is lacking, the *l4* 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*:

On *Cynopterus brachyotis*, Mindanao Cotabato, Tupi, Kablon, Mt. Matutum, Philippine Is., 7.VI.1966. (N°1709) alt. 1250-1660 m). (Holotype and 11 paratypes, females; 4 nymphs paratypes) (Coll. N. Wilson).

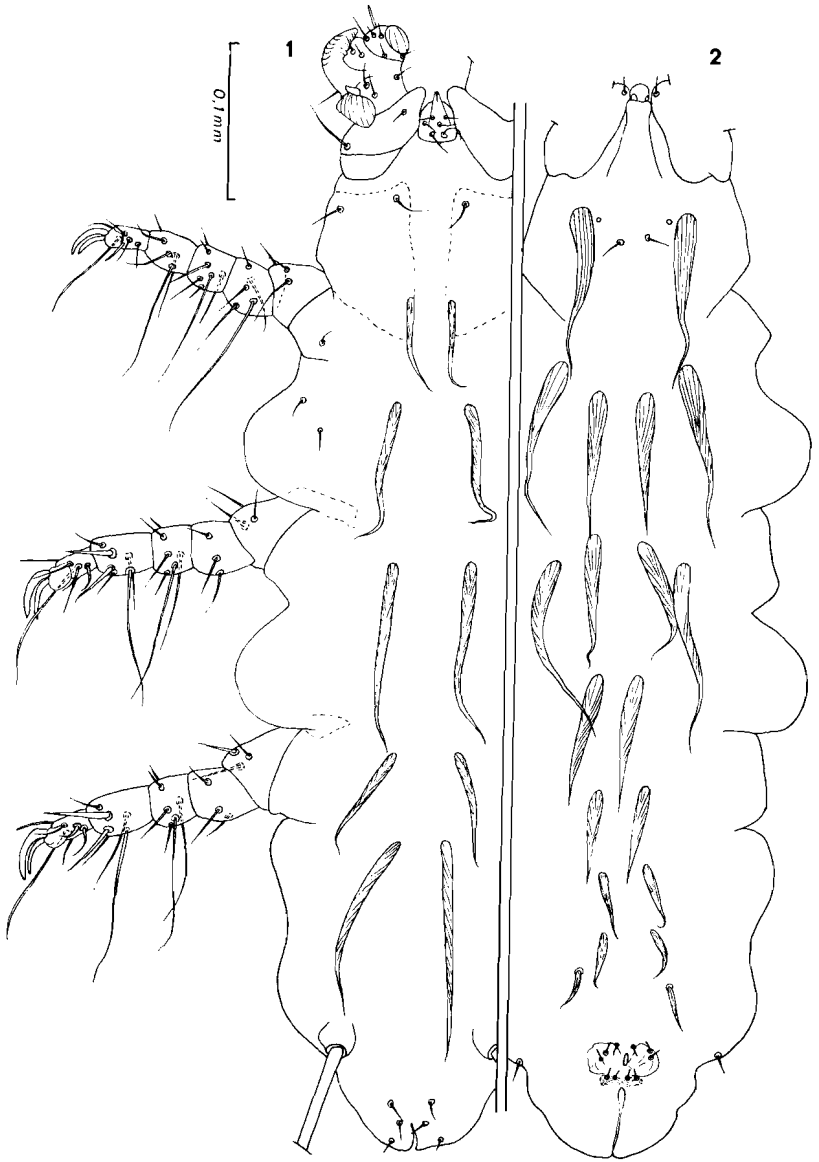


FIG. 1-2 — Female of *Binuncus (Probinuncus) cynopterus* sp. n.  
FIG. 1 : Ventral view ; FIG. 2 : Dorsal view

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.

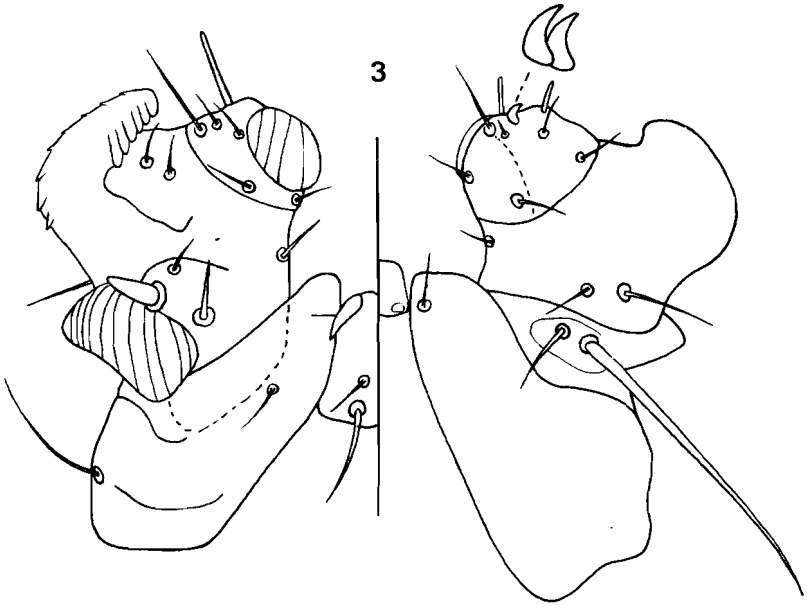


FIG. 3 — *Binuncus (Probinuncus) cynopterus* sp. n. Female gnathosoma and leg I ventrally (to the left) and dorsally (to the right)

Genus **Myobia** VON HEYDEN, 1826

1. **Myobia musculi** (SCHRANK, 1781)

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

List of the Myobiidae spp. living on Pteropidae

Parasitic mite	Host	Subfamily of the host	Locality
Genus <i>Binuncus</i> Radford, 1954			
Subgenus <i>Binuncus</i> Radford, 1954			
** <i>B. (B.) magnus</i> (Radford, 1954)	* <i>Pteropus medius</i> Temminck Bat (probably)	Pteropinae	India
	<i>Dobsonia moluccensis</i>	Pteropinae	West Irian
<i>B. (B.) jamesoni</i> (Hiregaudar et al. 1956)	* <i>Rousettus leschenaulti</i> Desm.	Pteropinae	India
<i>B. (B.) epomophori</i> Fain, 1972	* <i>Epomophorus labiatus minor</i> (Dobson)	Pteropinae	Rwanda
	<i>Epomophorus waa'bergi haldemani</i> (Halowell)	Pteropinae	Angola
<i>B. (B.) megaloglossus</i> Fain, 1973	* <i>Megaloglossus woermanni</i> Pagenstecher	Pteropinae	Zaire
<i>B. (B.) eidoloni</i> Fain, 1972	* <i>Eidolon helvum</i> Kerr	Pteropinae	Cameroun
<i>B. (B.) rousetti</i> Fain, 1972	* <i>Rousettus aegyptiacus leachi</i> (Smith)	Pteropinae	Zaire
Subgenus <i>Probinuncus</i> subg. n.			
** <i>B. (P.) cynopterus</i> sp. n.	* <i>Cynopterus brachyotis</i> (Muller)	Pteropinae	Philippines Is.
Genus <i>Pteropimyobia</i> Fain, 1973			
** <i>P. nyctimene</i> Fain, 1973	* <i>Nyctimene bougainvillei</i>	Nyctimeninae	Bougainville Is.
<i>P. pabangensis</i> Fain, 1973	* <i>Macroglossus minimus sobrinus</i>	Macroglossinae	Malaya

\* typical host.

\*\* type of the genus or subgenus

(?) Genus **Acanthophtirius** 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 *Acanthophtirius* owing to the nature of the hosts (Vespertilionidae).

### ACKNOWLEDGEMENTS

We are grateful to D' F. Radovsky and D' N. Wilson who sent us the material that is studied in this paper.

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