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BAT MITES (ACARINA: SPINTURNICIDAE) MAINLY FROM SOUTH-EAST ASIA AND THE PACIFIC REGION

BY

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ABSTRACT.

Bat mites (Spinturnicidae) mainly from South-East Asia and the Pacific region are discussed and keys for known females and males are included. Many new collections and host records are given. Females of *Spinturnix chiengmai* n. sp. and males of *Meristaspis dusabeki* Baker & Delfinado, *Meristaspis hardyi* Prasad, and *Ancystropus rudnicki* Baker and Delfinado are described for the first time, and *Spinturnix kolenatii* Oudemans is recorded for the first time from the Oriental region. *Spinturnix verutus* Delfinado & Baker, and *Ancystropus palawanensis* Delfinado & Baker are considered synonyms of *Spinturnix psi* (Kolenati), and *Ancystropus zeleborii* Kolenati, respectively.

RUDNICK (1960) in his review of the family Spinturnicidae recognized 3 species from South-East Asia and the Pacific region. DELFINADO & BAKER (1963), and BAKER & DELFINADO (1964) reported 11 previously unknown and 6 known species and subspecies of these mites from the above regions. Later, PRASAD (1969) added 3 more new species and subspecies in the above lists. Most of the new species described by the above workers were based on the females, the males remaining unknown. Recently, I had an opportunity to examine the bat mite collection of the B. P. Bishop Museum, Honolulu, Hawaii, that contained females of *Spinturnix chiengmai* n. sp., and undescribed males of *Meristaspis dusabeki* Baker & Delfinado, *Meristaspis hardyi* Prasad, and *Ancystropus rudnicki* Baker & Delfinado. Specimens of *Spinturnix kolenatii* Oudemans in the collection provide the first record of this species outside of eastern Europe. In this paper, all of the species reported from South-East Asia and the Pacific region are discussed.

1. Contribution number 215 of Biology Department, Wayne State University, Detroit, Michigan.

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Key to genera of Spinturnicidae known from S.E. Asia and the Pacific region.

1. Peritremes completely dorsal ........................................... 2
   Peritremes bending ventrad between coxae II and III... Spinturnix von Heyden
2. Caruncles of leg I reduced ............................................. 3
   Caruncles of leg I well developed .................................. 4
3. Tarsus I with a large lateral hook ................................. Oncoscelus (Hireg. & Bal)
   Tarsus I without such lateral hook ............................... Ancystropus Kolenati
4. Tritosternum present .................................................... 5
   Tritosternum absent .................................................. Paraperiglischrodes Rudnick
5. Four pairs of dorsal propodosomal setae anterior to the peritremes .............................
   Five pairs of dorsal propodosomal setae anterior to the peritremes ........................
   Meristaspis Kolenati
   Eyndhovenia Rudnick

Key to the females of Spinturnix known from S.E. Asia and the Pacific region.

1. Dorsum with radiating line pattern around the dorsal shield, tarsi II to IV with broad lanceolate dorsal setae at the tips ................................................................. S. psi (Kolenati)
   Dorsum without radiating line pattern around the dorsal shield, tarsi II to IV without broad lanceolate dorsal setae at the tips ............................................. 2
2. Dorsal opisthosoma with more than 16 pairs of setae, tritosternum usually laterally emarginated ................................. S. chiengmai n. sp.
   Dorsal opisthosoma with less than 8 pairs of setae, tritosternum not laterally emarginated ................................................................. S. paracuminatus Bak. & Delf.

Key to the males of Spinturnix known from S.E. Asia and the Pacific region.

1. Sternal shield pointed posteriorly, sternal setae off the shield (Fig. 1) ................................. S. psi (Kolenati)
   Sternal shield rounded posteriorly, sternal setae on the shield ............................................. 2
2. Sternal shield hexagonal, sternal setae very thick (Fig. 4). S. kolenatii Oudemans
   Only one pair of dorsal setae at the posterior tip of the opisthosa, 3 pairs of ventral setae on integument between coxae IV and the anal shield ................................. S. paracuminatus Bak. & Delf.

1. Spinturnix psi (Kolenati).
   (Figs. 1-3, Male).

Spinturnix versutus Delfinado and Baker, 1963, Pacific Ins. 5 (4) : 906, new synonymy.

This species is reported from Borneo, Corsica, East Indies, Formosa, France, India, Japan, Korea, Madagascar, Netherlands, New Guinea, Philippines, Serbia, Taiwan, and Yugoslavia. The bat hosts include Miniopterus capaccinii, M. majori,
Plate I: Spinturnix psi, male (1-3): 1, sternal shield; 2, scalelike pattern; 3, tritosternum; Spinturnix kolentii, male (4, 5): 4, sternal shield; 5, tritosternum; Spinturnix paracuminatus, male (6, 7): 6, sternal shield; 7, tritosternum.
M. schreibersi, M. schreibersi fuliginosus, M. schreibersi schreibersi, and Myotis sp. The new distribution records are from Hongkong and Thailand. The new host records are for Pipistrellus sp., and Hipposideros sp.

I have examined the holotype and paratypes of S. verutus Delfinado and Baker. The holotype female, although very much cleared, shows all the characteristics of S. psi clearly: the female has the radiating line pattern on the dorsal integument, and the broad lanceolate setae on dorsal tip of tarsi II-IV mentioned for this species are also present in S. psi. I have several specimens on hand collected from same locality and same host that have narrow to widened opisthosoma and show all the characteristics of S. psi. The paratype males of S. verutus are also similar to the males of S. psi.

Additional collection records: HONGKONG – Lan Tao Mui Wo, in old mine, August 18, 1964, from bat (BBM-HK 65034), W. J. Voss and N. Wilson; Lan Tao, old silver mine, August 18, 1964, from bat (BBM-HK 65040–45), Voss and Wilson. NEW GUINEA — Otibandar Creek, date, from Miniopterus sp. (BBM-NG 28955), Shanahan; Morobe district, April 7, 1959, from Pipistrellus sp. (BBM-NG 15027), Shanahan; Bulolo river, date, from Miniopterus sp. (BBM-NG 28984), Shanahan. TAIWAN — Puli, Nantounsien, January 1, 1964, from Miniopterus sp. (No. 610617), coll. ?; Tiping tsuen Piaan, Taitung Hsien, in tunnel, February 24, 1964, from Miniopterus sp. (No. ?), J. S. Kso; Taoyuan Hsien, Kueishan, October 2, 1964, from Miniopterus sp. (BBM-FA 6-10), Wilson. THAILAND — Ban Tha Phae, September 20, 1962, from bat (1553-1576) (1602-03), A. C. Nakornsritanraja; Ban Tham, A. Chiengdao Chiengmai, November 14, 1962, from Hipposideros sp. (1906), coll. ?

2. Spinturnix kolenatii Oudemans.
(Figs. 4-5, Male).

Spinturnix kolenatii Oudemans, 1910, Ent. Ber., Amsterdam, 3 (53) : 68.

This is reported from England, Germany, and Netherlands from Eptesicus serotinus. I have two males from Taipei, Taiwan, collected from Eptesicus horikawai that agree with male description of S. kolenatii. For full description of the male, the readers are referred to Rudnick (1960).

(Figs. 6-7, Male).

*Spin turnix paracuminatus* Baker and Delfinado, 1964, Pacific Ins. 6 (4) : 574.

This is known from New Guinea from *Miniopterus* and *Pipistrellus* bats. This species is distinctive from *S. acuminatus* (Koch), a very close species, in that the type females have no continuous row of setae between stigmata and posterior margin of opisthosoma.

4. *Spin turnix chiengmai* n. sp.  
(Figs. 8-12, Female).

This species is close to *Spin turnix acuminatus* (Koch) and *Spin turnix scotophili* Zumpt and Till but differs from both in having the sternal shield of different shape and in having 19-21 pairs of dorsal opisthosomal setae. According to Rudnick (1960) *S. acuminatus* has about 12 pairs of dorsal opisthosomal setae. I have examined the holotype of *S. scotophili* which has at least 30 pairs of dorsal opisthosomal setae.

**Female :** Idiosoma ovoid, averaging 1173 µ long and 987 µ wide (5 specimens), with 5 pairs of propodosomal and 19-21 pairs of opisthosomal setae; 1 pair of opisthosomal setae median to the stigmata. Dorsal shield with 10 pairs of pores, 8 pairs of which contain minute setae. Tritosternum variable in shape, usually laterally emarginate. Sternal shield triangular, pointed anteriorly, reticulate, and longer than wide, with 2 pairs of pores of which 1 pair large. Three pairs of short sternal setae on the integument. Epigynial shield narrow posteriorly, genital setae very small. Remnants of metasternal setae lateral to the epigynial shield. Nine to 10 pairs of short setae between epigynial and anal shield. Anal shield rounded anteriorly, with short adanal and postanal setae. Legs with long setae, dorsum of leg I as in Fig. 12.

**Male :** Unknown.

**Collection record :** Huai, Mae Sanam, Hod, Chiengmai, date ?, from bat (SMRL-1682, 1683, 1685, 1687), coll. ? (7 females and 1 nymph).

**Holotype :** Female, collection data as above, SMRL- 1687, in B. P. Bishop Museum collection, Honolulu. A paratype will be deposited in U. S. National Museum, Washington, D. C.

Key to the females of *Meristaspis* known from S. E. Asia and the Pacific region.

1. Hypostomal processes harpoon shaped........................................ 2
   Hypostomal processes with recurved teeth.................................. 5
PLATE 2: *Spinturnix chienguai* n. sp., female (8-10): 8, dorsal view of body; 9, sternal shield; 10, tritosternum.
PLATE 3: Spinturnix chiengnai n. sp., female (11, 12): 11, ventral view of body; 12, leg 1.
2. Tritosternum wider than long, distal setae of tarsus I flattened.............. 3
   Tritosternum longer than wide, distal setae of tarsus I with slender drawnout tips. 4
3. Idiosoma with a transverse line, a pair of long setae immediately behind the dorsal shield......................... M. lateralis (Kolenati)
   Idiosoma without a transverse line, a pair of comparatively short setae immediately behind the dorsal shield......................... M. calcaratus (Hirst)
4. Sternal shield rounded posteriorly, pair of metasternal setae long and thick, lobes on posterior end of coxae IV well pronounced. M. jordani philippensis Prasad
   Sternal shield straight posteriorly, pair of metasternal setae very small and slender, lobes on posterior end of coxae IV not so pronounced. M. jordani jordani (Radford)
5. Sternal shield with very small and slender setae........ M. dusbabeki Bak. & Delf.
   Sternal shield with long and thick setae............................................. 6
6. Setae on ventral integument between coxae IV and anal shield very small........ M. mindanaensis Delf. & Bak.
   Setae on ventral integument between coxae IV and anal shield very long and thick...
   M. hardyi Prasad

Key to the males of Meristaspis known from S.E. Asia and the Pacific region.

1. Dorsal shield with many transverse lines, sternal shield straight posteriorly........ M. jordani jordani (Radford)
   Dorsal shield without any transverse lines, sternal shield rounded or pointed posteriorly .................................................. 2
2. Distal seta of tarsus I thick, spinose (Fig. 29).............. M. lateralis (Kolenati)
   Distal seta of tarsus I slender, setose (Fig. 22)......................... 3
3. Sternal shield elongate................................................................. 4
   Sternal shield otherwise............................................................... 5
4. Two pairs of dorsal setae on the posterior tip of opisthosoma, 4 pairs of setae between coxae IV and the anal shield........... M. calcaratus (Hirst)
   Only one pair of dorsal setae on the posterior tip of opisthosoma, 3 pairs of setae between coxae IV and anal shield.......... M. hardyi Prasad
5. Setae on sternal shield very small.................... M. dusbabeki Bak. & Delf.
   Setae on sternal shield more than one and half times longer than above........ M. mindanaensis Delf. & Bak.

1. Meristaspis calcaratus (Hirst).
   (Figs. 13-14, Male).

  Meristaspis calcaratus (Hirst), Oudemans, 1928, Ent. Ber., Amsterdam, 7 (164): 376.

  This species is known from Guam, Madagascar, Manus Island, New Hebrides, Peleliu, Philippines, Palau, Rock Island, and Saipan. The hosts include Flying fox, Pteropus hypomelenus, P. geddiei, P. marinus marinus, P. rufus, P. speciosus, P. tablensis, and P. vampyrus. The new distribution record includes Solomon Islands, and the host record includes Nyctimene major.
Plate 4: Meristaspis calcaratus, male (13, 14): 13, sternal shield; 14, tritosternum; Meristaspis jordani jordani, male (15-17): 15, dorsal shield; 16, tritosternum; 17, sternal shield.
Additional collection records: **PHILIPPINES** — Negros Oriental, Siaton, 10 km N., July 27, 1964 and August 1, 1964, from *Pteropus* sp. (BBM-PI 6145, 6383), Wilson. **SOLOMON ISLANDS** — Guadalcanal, Nini Cr., Roroni, May 8, 1964, from *Nyctimene major* (BBM-SI 23815), Temple; locality and collector as previous, with different dates, from *Pteropus* sp. (BBM-SI 23821-23); Guadalcanal, Tabalia, with different dates, host and coll. as previous (BBM-SI 23931, 23952, 23954-56, 23965, 23971).

   (Figs. 15-17, Male).


This species is reported from Celebes, New Guinea, and Solomon Islands. The bat hosts include *Dobsonia* sp., and *Pteropus* sp. The other host record includes *Dobsonia inermis*.

Additional collection records: **NEW GUINEA** — Korgur, date ?, from *Dobsonia* sp. (BBM-NG 28221, 28222, 28224), coll. ?.  
**SOLOMON ISLANDS** — Guadalcanal, Nini Cr., date ?, from *Pteropus* sp. (BBM-SI 23822), Temple; Guadalcanal, Tabalia, with different dates, from *Dobsonia inermis* (BBM-SI 23865, 23882, 23914), Temple.

   (Figs. 18-22, Male).


This species is reported from New Guinea from *Syconycteris* sp. The new collection record is for the Solomon Islands.

In their description of *M. dusbabeki*, Baker and Delfinado (1964) mentioned the absence of a dorsal transverse suture in the female. Males were unknown at the time of description. I have examined the holotype and paratype female slides that show the dorsal transverse suture clearly. Other specimens collected in the Solomon Islands also show this suture. Males have been discovered and are described here for the first time.

**Male:** Dorsum similar to female in most characters. Idiosoma rounded anteriorly, averaging 498 µ long and 447 µ wide (2 specimens). Dorsal shield long, reaching posteriorly, close to the tip of opisthosoma, with 10 pairs of large pores and 3 pairs of small pores. Propodosomal integument with 4 pairs of barbed setae anterior to the peritremes. A pair of metapodosomal setae posterior to stigmata. Single pair of opisthosomal setae behind the dorsal shield.

Hyposomal processes slender, pointed distally; spermatodactyl long, slender.
Plate 5: *Meristaspis dusbabeki*, male (18-22): 18, ventral view of body; 19, sternal shield; 20, tritosternum; 21, leg I; 22, distal seta of tarsus I.
Tritosternum more than twice as wide as long, slanting laterally, slightly concave posteriorly. Sternal shield longer than wide, rounded posteriorly, with 3 pairs of small setae and 2 pairs of pores; 2 pairs of additional setae close to posterior end of the shield. Three pairs of setae on integument between coxae IV and the anal shield. Anal shield with a pair of adanal setae. Dorsum of leg I as in Fig. 21.


4. Meristaspis hardyi Prasad.
(Figs. 23-26, Male).


This species is known from Nyctimene major and Pteropus bats collected in Solomon Islands. The new distribution record is from New Guinea.

*M. hardyi* is close to *M. mindanaoensis* Delf. & Bak. but is clearly distinguished from the latter in that the ventral setae between coxae IV and anal shield in females are more than twice as long as the ventral setae in *M. mindanaoensis*.

**Male:** Idiosoma averaging 551 µ long and 530 µ wide (3 specimens); dorsal shield covering most of idiosoma, reaching posteriorly near the tip of opisthosoma, with 10 pairs of pores. Four pairs of barbed dorsal propodosomal setae on the integument. A pair of setae posterior to stigmata. One pair of setae on posterior lateral margin of opisthosoma. Chelicera with small teeth. Spermatodactyl slender.

Tritosternum more than twice as long as wide, slanting laterally. Sternal shield elongate, with 4 pairs of setae, fifth pair of setae on integument close to the shield. Two pairs of small pores on sternal shield. Three pairs of setae between coxae IV and anal shield. Anal shield rounded anteriorly, with a pair of adanal setae. Dorsum of leg I as in Fig. 25.

Additional collection records: New Guinea — Wau Cr., date ?, from Nyctimene sp. (BBM-NG 20401, 20446, 20458, 20468), H. Clissold and P. Shanahan; Finschafen, date ?, from Nyctimene sp. (BBM-NG 27680), Clissold; Sakata Ridge, date ?, from bat (BBM-NG 28502), Shanahan; Bulldog Road, date ?, from Nyctimene sp. (BBM-NG 28959), Shanahan.

5. Meristaspis lateralis (Kolenati).
(Figs. 27-29, Male).

Pteroptus lateralis Kolenati, 1856, Die Parasiten der Chiroptern, p. 29.
Meristaspis lateralis (Kolenati), Kolenati, 1857, Wien. Ent. Monatschr. x (2) : 60.
PLATE 6: Meristaspis hardyi, male (23-26): 23, ventral view of body; 24, tritosternum; 25, leg I; 26, sternal shield.
This species is recorded from Ceylon, Cyprus, Egypt, India, New Guinea, North Borneo, Palestine, Philippines, and Yemen. The hosts include: *Cynopterus brachyotis*, *Eidolon sebaeum*, *Eonycteris robusta*, *Rhinopoma microphyllum*, *Rousettus aegyptiacus*, *R. amplexicaudatus*, *R. lesschenaulti*, *R. seminudus*, and *Tupaia* sp.

The new distribution records are from Laos and Thailand, and the new host records are for *Cynopterus brachyotis luzoniensis*, and *Eonycteris spelaea glandifera*.

**Additional collection records:**

- **LAOS** — Phontiou, June 8, 1965, from *Cynopterus* sp. (BBM-LA 40017-22), N. Wilson.
- **NEW GUINEA** — Enarotali, date ?, from bat (BBM-NG 21476), Wilson; Nakata Ridge, date ?, from bat (BBM-NG 28044), Clissold.
- **PHILIPPINES** — Negros Oriental, Kandugay, Siaton, date ?, from bat (B 2640), coll. ?; Negros Oriental, Camp Lookout, Valencia, with different dates, from *R. amplexicaudatus* (M 5123, 5235, 5352, 5382, 5446, 5503), D. S. Rabor; locality and coll. as previous, August 19, 1964, from *Cynopterus brachyotis luzoniensis* (M 5292); locality and coll. as previous, with different dates, from *Eonycteris spelaea glandifera* (M 5343, 5478, 5608); Negros Oriental, Malindog, San Antonio, Sibulan, with different dates, from *R. amplexicaudatus* (M 5766, 5919), Rabor; locality and coll. as previous, September 16, 1964, from *Eonycteris spelaea glandifera* (M 6120); Negros Oriental, Siaton, 10 km. N. 1000 f., July 27, 1964, from bat (BBM-PI 6146), Wilson; Negros Oriental, Agan-An Sibulan, with different dates, from *R. amplexicaudatus* (M 6457, 6598); Negros Oriental, Kandugay, Siaton, October 31, 1964, from *Cynopterus brachyotis luzoniensis* (M 7252), Rabor; Negros Oriental, Siaton, January 31, 1962, from *R. amplexicaudatus* (Smrl-359), coll. ?


(Figs. 30-31, Male).


The above species is reported from New Guinea and Philippines. The bat hosts include *Cynopterus brachyotis*, *Macroglossus* sp., *Nyctimene* sp., and *Rousettus* sp. The new hosts include *Cynopterus brachyotis luzoniensis*, and *Rousettus amplexicaudatus*.

**Additional collection records:**

- **NEW GUINEA** — Wau Cr., date ?, from *Nyctimene* sp. (BBM-NG 20401), Clissold.
7. *Meristaspis jordani philippinensis* Prasad


This species is described from *Harpylumycteris whiteheadi* collected in Philippines. This is distinctive from *Meristaspis jordani jordani* (Radford), a close species, in that the pair of metasternal setae are very long and thick, and the lobes on the posterior end of coxae IV are well extended in *M. jordani philippinensis*. Also the sternal shield in this species is rounded posteriorly and tibia and tarsus of leg I are with lateral hooks. Males are unknown.

Key to the females of *Ancystropus* known from S.E. Asia and the Pacific region.

1. Tritosternum longer than wide.............................................. *A. nakatae* Prasad
   Tritosternum wider than long............................................. 2
2. Most anterior pair of dorsal propodosomal setae about as long as other two pairs of propodosomal setae, tibia and tarsus of leg I each with a thick, rod-like ventral seta...
   *A. rudnicki* Bak. & Delf.
   Most anterior pair of dorsal propodosomal setae very small; tibia and tarsus of leg I without such rod-like ventral seta............................................. 3
3. Three pairs of dorsal setae between the stigmata and posterior margin of opisthosoma.............................................. *A. zeleborii* Kolenati
   Only two pairs of dorsal setae between the stigmata and posterior margin of opisthosoma .............................................. *A. eonycteris* Delf. & Bak.

1. *Ancystropus rudnicki* Bak. & Delf.
   (Figs. 32-35, Male).

*Ancystropus rudnicki* Baker and Delfinado, 1964, Pacific Ins. 6 (4) : 577.

This species is known from New Guinea from *Roussettus* sp. and is very similar to *Ancystropus taprobanius* (Turk) except that it possesses a pair of setae immediately behind the dorsal shield. This characteristic is very constant. The new distribution record includes Laos, and Philippines. The new host record is for *Cynopterus brachyotis*, and *R. amplexicaudatus*.

*Male*: Idiosoma broad, rounded anteriorly, averaging 356 µ long and 324 µ wide (2 specimens). Dorsal shield covering most idiosoma, reaching posteriorly close to the tip of opisthosoma, with 7 pairs of large pores and 3 pairs of small pores. Three pairs of barbed dorsal propodosomal setae, all about equal in length, anterior to the peritremes; one pair of metapodosomal setae immediately posterior to stigmata; two pair of setae at the posterior margin of opisthosoma. Spermatodactyl slender, curved toward apex.

Tritostenum more than twice as wide as long, convex anteriorly and laterally,
PLATE 8: Ancystropus rudnicki, male (32-35): 32, ventral view of body; 33, tritosternum; 34, leg I; 35, sternal shield.

and concave posteriorly. Sternal shield widened near second pair of sternal setae, pointed posteriorly, with 3 pairs of marginal setae; other 2 pairs of sternal setae on integument close to the shield. Three pairs of setae between coxae IV. Anal shield elongate, with a pair of adanal setae. Dorsum of leg I as in Fig. 34.

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2. Ancystropus zeleborii Kolenati.
(Figs. 36–37, Male).


Plate 9: Ancystropus zeleborii, male (36–37) : 36, sternal shield; 37, tritosternum; Paraaperiglischrus strandtmanni, male (38) : 38, sternal shield.
A. zeleborii is reported from Cyprus, Egypt, India, Philippines, Thailand, Uganda, and Vietnam. The bat hosts include Cynopterus brachyotis, Lavia frons res, Rousettus aegyptiacus, R. amplexicaudatus, R. leschenaultii, and Rhinopoma microphyllum. The new distribution records are from Laos, and Solomon Islands, and host record is for Dobsonia sp.

I have examined the holotype and paratypes of Ancystropits palawanensis Delf. & Baker that agree with the description of A. zeleborii.


3. Ancystropits nakatae Prasad.


A. nakatae is described from a single specimen collected in the Philippines from Eonycteris spelaea glandifera. The female, in most major characters, is very close to Oncoscelis kanheri (Hireg. and Bal) except that it lacks the large lateral hooks on tarsus I and coxa I. The males are not known.

4. Ancystropus eonycteris Delf. & Bak.


This species is known from a single specimen collected in the Philippines from Eonycteris robusta. I have examined the holotype female which is very distinctive in having large ventral projection on femur and genu I. The males are unknown.

Key to the females of Paraperiglisculus known from S. E. Asia and the Pacific region.

1. Sternal shield present; sternal setae with basal pore only; epigynial shield narrow, pointed posteriorly: ......................... P. strandmanni Bak. & Delf.

Sternal shield absent; sternal setae with basal pore and setae in it; epigynial shield rounded posteriorly: ......................... P. hippocideros Bak. & Delf.
(Fig. 38, Male).

*Paraperiglischrus strandtmanni* Baker and Delfinado, 1964, Pacific Ins., 6 (4) : 587.

*P. strandtmanni* is reported from Korea on *Rhinolophus* sp. The new distribution records are from Borneo, Laos, and Taiwan.


2. *Paraperiglischrus hipposideros* Bak. & Delf.

*Paraperiglischrus hipposideros* Baker and Delfinado, 1964, Pacific Ins., 6 (4) : 589.

This species is known from New Guinea from *Hipposideros* sp., and *Phileter* sp. The new collection record is from Thailand.

Additional collection record: Thailand — Bon Tham, Chiangdao, date ?, from *Hipposideros* sp. (Smrl-1904, 1944, 1959), coll. ?

1. *Oncoscelus kanheri* (Hireg. & Bal).

*Oncoscelus kanheri* (Hiregaudar and Bal), Delfinado and Baker, 1963, Pacific Ins. 5 (4) : 913.

This species is known from India, Malaya, New Guinea, O-Sumba, Philippines, and Solomon Islands. The bat hosts include *Rousettus amplexicaudatus*, and *R. leschenaulti*. Males are not known.


1. *Eyndhovenia euryalis ahī* Bak. & Delf.

*Eyndhovenia* [sic] *euryalis ahī* Baker and Delfinado, 1964, Pacific Ins. 6 (4) : 585.

This species is reported from Korea on *Rhinolophus ferrum-equinum*. I have not seen the types but the subspecies seems very distinctive.
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