

(Noona Dan Papers No. 87).

**Ticks (Metastigmata: Ixodidae) collected by the
Noona Dan Expedition to the Philippine
and Bismarck Archipelagos.**

By

Nixon Wilson

Department of Biology, University of Northern Iowa,
Cedar Falls, Iowa 50613 USA

The Danish natural history expedition to the southern Philippines and Bismarck and Solomon Islands in 1961—1962 (Petersen, 1966), collected 52 ticks representing 4 genera and 7 species. This material, though small in quantity, is important from the standpoint of extending the known distribution of several species to little collected island groups.

A few specimens deposited in the collection of the Bernice P. Bishop Museum, Honolulu are indicated by the letters BBM; all others are in the Zoological Museum, Copenhagen. Acknowledgement is extended to Dr. B. Petersen for allowing me to study the material and to Dr. H. Hoogstraal for comments relative to some of the *Haemaphysalis* and for reviewing the manuscript.

***Amblyomma cyprium cyprium* Neumann, 1899**

Philippines, TAWI TAWI: Lapid Lapid, 3 ♂, 2 ♀, 21 Nov. 1961 (1 ♂, 1 ♀, BBM).

Bismarck Is., NEW IRELAND: Lemkamin, 900 m, 1 ♀, 15 April 1962.

The material from Tawi Tawi was compared with specimens of *A. cyprium aeratipes* Schulze from Mindanao and with specimens of *A. c. cyprium* from Micronesia and New Guinea. It clearly belongs to the latter subspecies. This is the first record of the nominate subspecies from any of the Philippine Islands.

The closest recorded occurrence of *A. cyprium aeratipes* to *A. c. cyprium* of Tawi Tawi is the specimen listed by Schulze (1933)

from Point Banga (between Kawit Kawit and Anungan), Zamboanga del Norte Province, Mindanao. These two localities are about 370 kilometers apart. It would be desirable to have additional specimens of *Amblyomma cyprium* from the southern Zamboanga Peninsula of Mindanao and the Sulu Archipelago, to determine the exact limits of the two subspecies in this area. The species has not been recorded from nearby Borneo, Java, Sumatra and Malaya, or the numerous small islands surrounding them. The only records for southeast Asia are from China (Chang, 1958) and Thailand (Audy et al. 1960).

***Amblyomma helvolum* Koch, 1844**

Philippines, TAWI TAWI: Tarawakan; 4 ♂, 3 ♀, 6 and 13 Nov. 1961 (1 ♂, 1 ♀, BBM).

This species is widely distributed throughout southeast Asia and the south Pacific from Thailand to Australia with reptiles the preferred hosts. These are the first records from the Sulu Archipelago.

***Aponomma fimbriatum* (Koch, 1844)**

Bismarck Is., MUSSAU: Talumalaus, 20 ♂, 6 ♀, 6 N, ex *Varanus* sp., 6 Feb. 1962 (4 ♂, 2 ♀, 2 N, BBM).

This widespread species in the south Pacific occurs almost exclusively on reptiles.

I have called the above specimens *A. fimbriatum* on the basis of scutal measurements and presence of a ventral terminal spur on tarsus I of the males, as defined by Roberts (1964). The extreme scutal measurements for 20 males are 2.45×2.41 mm — 1.84×1.94 mm with an average of 2.17×2.19 mm. All have a small ventral terminal spur. There is considerable variation in the number of punctations and degree of scutal ornamentation, and several specimens would be identified as *A. trimaculatum* (Lucas) on the basis of this character alone.

***Dermacentor auratus* group**

Philippines, TAWI TAWI: Lapid Lapid, 2 ♂, 21 Nov. 1961.

This species complex is widespread throughout southeast Asia, Borneo, Indonesia, New Guinea and Palawan Province of the Philippines. This is the first record from the Sulu Archipelago.

Haemaphysalis (Rhipistoma) centropi Kohls, 1949

Philippines, PALAWAN: Makagwa, 2 ♂, 1 ♀, ex *Centropus bengalensis*, 27 Sept. 1961.

This species is recorded from this host on Palawan (Kohls, 1949). Hoogstraal et al. (1965) list it as occurring also in Borneo, Burma, Malaya, Taiwan and Thailand.

Haemaphysalis (Kaiseriana) nadchatrami Hoogstraal,
Trapido and Kohls, 1965

Philippines, PALAWAN: Pinigisan, 600 m, 1 ♂, 21 Sept. 1961.

Hoogstraal et al. (1965) recorded *nadchatrami* as a subspecies, from central and southern Thailand, Malaya, Singapore, Sumatra, Java, Nanukan and Borneo. They now consider it a valid species. The above record from Palawan is not surprising, inasmuch as this island shares close faunal affinities with Borneo.

Haemaphysalis sp.

Philippines, TAWI TAWI: Lapid Lapid, 1 ♀, 16 Nov. 1961.

According to Hoogstraal, this specimen appears to represent an undescribed species in the *formosensis* group. More material of this species is especially desirable.

Summary

Seven species of ticks are recorded: 4 from Tawi Tawi, 2 from Palawan and 2 from the Bismarck Islands. All collections, except one, are new records for the islands on which they were collected.

Literature Cited

- A u d y, J. R., M. N a d c h a t r a m and L i m B o o - L i a t, 1960: Host distribution of Malayan ticks (Ixodoidea). — Stud. Inst. Med. Res., Malaya, No. 29, pp. 225—246.
- C h a n g, P. H., 1958: A study on the *Amblyomma cyprium* Neumann, 1899, collected from human body. — Acta Ent. Sin. 8: 290—292.
- H o o g s t r a a l, H., G. M. K o h l s and H. T r a p i d o, 1965: *Haemaphysalis (Rhipistoma) eupleres* sp. n. from a Madagascar carnivore and definition of the subgenus *Rhipistoma* Koch (resurrected) (Ixodoidea, Ixodidae). — J. Parasit. 51: 997—1000.
- H o o g s t r a a l, H., H. T r a p i d o and G. M. K o h l s, 1965: Southeast Asian *Haemaphysalis* ticks (Ixodoidea, Ixodidae). *H. (Kaiseriana) papuana nadchatrami* ssp. n. and redescription of *H. (K.) semermis* Neumann. — J. Parasit. 51: 433—451.

- Kohls, G. M., 1949: *Haemaphysalis centropi*, a new species of tick from birds in the far east. — J. Parasit. 35: 388—390.
- Petersen, B., 1966: The Noona Dan Expedition, 1961—62. Insects and other land arthropods. — Ent. Meddr. 34: 283—304.
- Roberts, F. H. S., 1964: Further observations on the Australian species of *Aponomma* and *Amblyomma* with descriptions of the nymphs of *Amblyomma moreliae* (L. Koch) and *Amb. loculosum* Neumann (Acarina: Ixodidae). — Aust. J. Zool. 12: 288—313.
- Schulze, P., 1933: Neue Ixodiden aus den Gattungen *Amblyomma* und *Aponomma*. — Zool. Anz. 104: 317—323.
-