



*Rec. zool. Surv. India* : 105 (Part 1–2) : 157-159, 2005

## FIRST RECORD OF IXODID TICK (ACARINA : METASTIGMATA) FROM MAHESHKHALI ISLAND, CHITTANGONG, BANGLADESH

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### INTRODUCTION

In the month of December, 2003 the author went to Maheshkhali, an island off the coast of Cox's Bazar, Chittagong, Bangladesh, surrounded by low hills in the center of the island and along the coast lines and fringed by mangrove jungle. During the visit he collected eight specimens of ixodid ticks from cattle and goat. The present contribution records four species of tick for the first time from Maheshkhali Island.

#### 1. *Boophilus microplus* (Canestrini)

1887. *Haemaphysalis micropla* Canestrini, *Atti. Soc. veneto-Trent. Sci. nat.*, 11 : 104.

1890. *Rhipicephalus micropa* Canestrini, *Padova*, 4 : 493.

1943. *Boophilus microplus*, Fairchild, *Am. J. Trop. Med.*, 23(6) : 586.

*Diagnosis* : Male : Scutum quite hirsute; short caudal appendage and tapering; inner margin of basal palpal segment ventrally concave; dentition 4/4.

Female : Coxa I with deep, inverted 'V'-shaped cleft, inner margin of basal palpal segment ventrally short, deeply concave; dentition 4/4.

*Material examined* : Bangladesh : Chittagong, Maheshkhali island, beside Adinath temple, 2 ♀ ♀, from cow, 24.xii.2003, coll. A. K. Sanyal.

*Distribution* : Bangladesh : All districts.

*Elsewhere* : Africa, Australia, central America, Formosa, India, Indonesia, Japan, Myanmar, New Guinea, Philippines, South America, Sri Lanka.

*Remarks* : The species is a common cattle infesting tick.

## 2. *Haemaphysalis bispinosa* Neumann

1897. *Haemaphysalis bispinosa* Neumann, *Mem. Soc. Zool. Fr.*, **10** : 341.

*Diagnosis* : Male : Elongate-oval shaped scutum; cervical grooves with convergent depressions; long, well-marked lateral grooves ending behind spiracles; festoons twice as long as broad; slightly salient palps, segment 2 and 3 subequal, segment 3 bluntly conical and bears a prominent dorsal retrograde spur in the mid-dorsal line and a similar but larger ventral spur; dentition 4/4; a moderate sharp spur on coxa I; a very slight protubérance on coxae II and IV.

Female : Sub-cordiform scutum, punctations little larger than male; basis capituli broader; short cornua; oval porose areas; palpi similar to male.

*Material examined* : Bangladesh : Chittagong, Maheshkhali Island, beside Adinath temple, 2 ♀ ♀, from cow, 1 ♀ ♀, from goat, 24.xii.2003, coll. A. K. Sanyal.

*Hosts in Bangladesh* : Cow, Indian Bison, goat, dog, barking deer, vegetation.

*Distribution in Bangladesh* : Almost all over the country.

*Elsewhere* : All Asian countries, Australia and Newzealand.

*Remarks* : The species is responsible for transmitting the KFD viruses in mammals. The species was first recorded from Rangamati Hill district, Bangladesh from barking deer and dog (Sharif, 1928).

The species is recorded here for the first time from goat.

## 3. *Hyalomma anatolicum anatolicum* Koch

1844. *Hyalomma anatolicum anatolicum* Koch, *Arch. Naturgesch.*, **10**(1) : 220.

*Diagnosis* : Male : Lightly punctated scutum; lateral grooves short but distinct; posteromedian groove not reaching the parma; subanal shields small, situated directly posterior of adanals; basis capituli dorsally with slightly concave posterior margin, never angular; legs without ring.

Female : Scutum longer than wide with narrowly rounded posterior margin; punctuations large in scapular areas; operculum short, small.

*Material examined* : Bangladesh : Chittagong, Maheshkhali, near salt field, 1 ♀, from cow, 24.xii.2003, coll. A. K. Sanyal.

*Distribution* : Bangladesh : Allmost all districts.

*Elswwhere* : Afganistan, Border of Mediterranean sea, Canary Işlands, East Africa, India, Pakistan, Portugal, U.S.S.R., West Asia, Southeast Europe.

*Remarks* : This is a most common tick infesting cattle.

#### 4. *Rhipicephalus haemaphysaloides* Supino

1897. *Rhipicephalus haemaphysaloides* Supino, *Atti. Soc. veneto-Trent. Sci. Nat.*, 2s. 3(1) : 234.

*Diagnosis* : Male : Lateral grooves narrow, deep; cervical grooves short converging pits; few punctations of larger and smaller types; basis capituli twice as broad as long; palpi longer than broad; adanal shields sickle-shaped; spiracle comma-shaped; dentition 3/3.

Female : Cervical grooves deep; punctations few, large, finer one hardly visible; spiracle sub-triangular with a large mecula; cornua short; blunt palpi twice as long as broad.

*Material examined* : Bangladesh : Chittagong, Maheshkhali, near salt field, 2 ♀ ♀, from goat, 24.xii.2003, coll. A. K. Sanyal.

*Distribution* : Bangladesh : All over the country.

*Elswhere* : China, India, Indonesia, Myanmar, Sri Lanka, Taiwan, Thailand, Vietnam.

*Remarks* : It is suspected that the species plays some role in transmission of tick typhus fever.

#### SUMMARY

The paper records four species of ixodid ticks viz., *Boophilus microplus*, *Haemaphysalis bispinosa*, *Hyalomma anatolicum anatolicum* and *Rhipicephalus haemaphysaloides*; for the first time from Maheshkhali Island, Chittagong, Bangladesh. Brief descriptions of the species are also incorporated in the paper.

#### ACKNOWLEDGEMENTS

The author expresses sincere gratitude to the Director, Zoological Survey of India, Kolkata for providing facilities. Thanks are also due to Shri B.J. Sarkar, Sr. Zoological Assistant, ZSI. for assistance and Sucheta and Ayan Sanyal for assisting in collection of specimens.

#### REFERENCE

Sharif, M. 1928. A revision of the Indian Ixodidae, with special reference to the collection in the Indian Museum. *Rec. Indian Mus.*, 30(3) : 217-344.