

**A NEW SOIL UROPODID MITE (ACARINA : MESOSTIGMATA)
FROM WEST BENGAL, INDIA**

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INTRODUCTION

The mites of the genus *Trichouropoda* Berlese, 1916 belonging to family Trematuridae are found to occur in different habitats throughout the world. A total number of 159 species of *Trichouropoda* are known from the world (Hirschmann, 1983).

Very little information is known about trichouropods from India due to very little exploration of mite fauna in different States of India. So far only two species viz., *Trichouropoda* (?) *parasitica* Choudhuri and Mukherjee, 1964 from domestic fowls and *Trichouropoda similijavaensis* Hiramatsu and Hirschmann, 1979 from soil are known from India. While studying the soil mites of Purulia, West Bengal a number of male specimens are encountered which are identified as a new species *Trichouropoda asoki*.

Type materials are deposited in the National Zoological Collection, Zoological Survey of India, Calcutta.

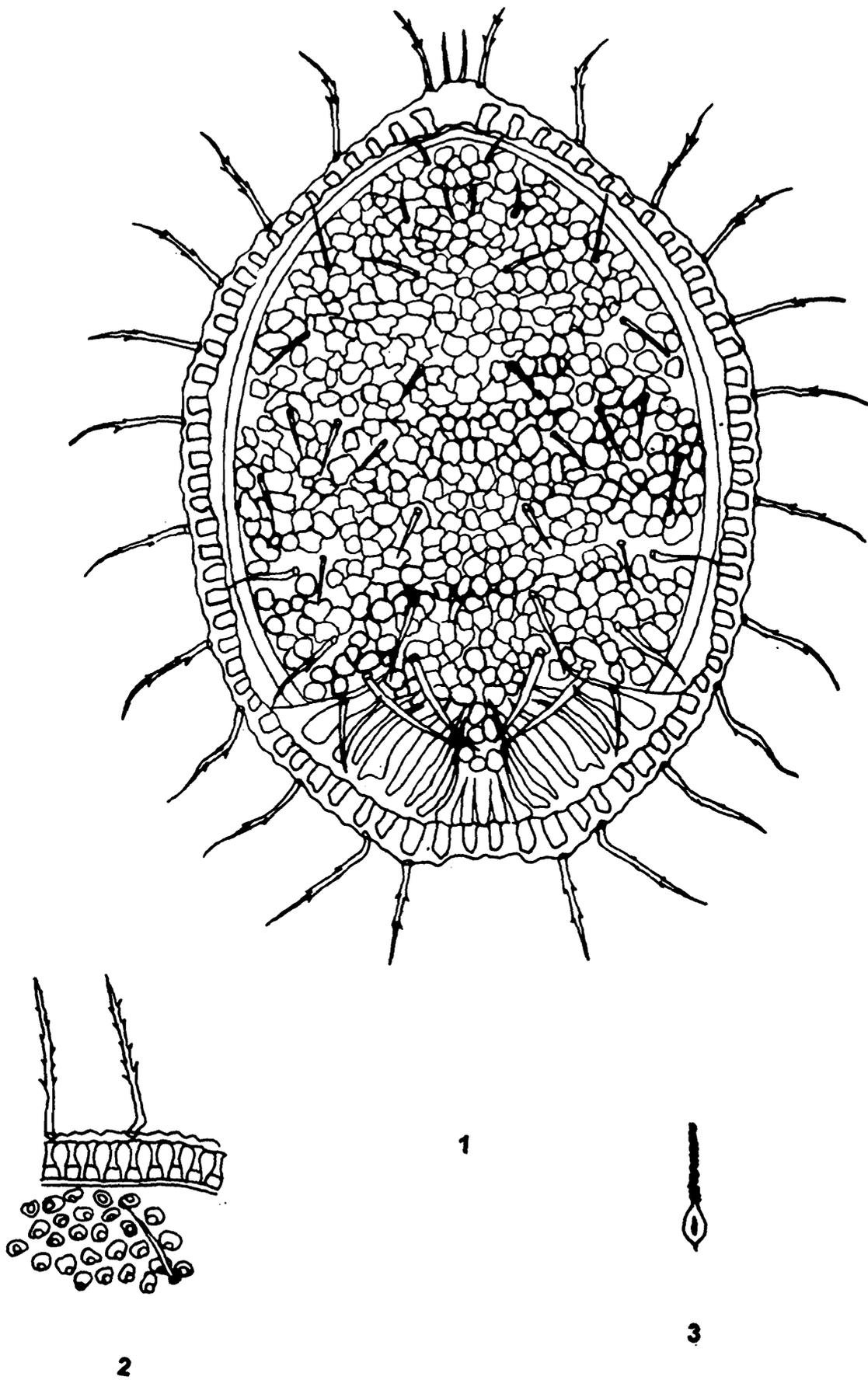
Trichouropoda asoki sp. nov.
(Figs. 1-6)

Description : Female : Unknown.

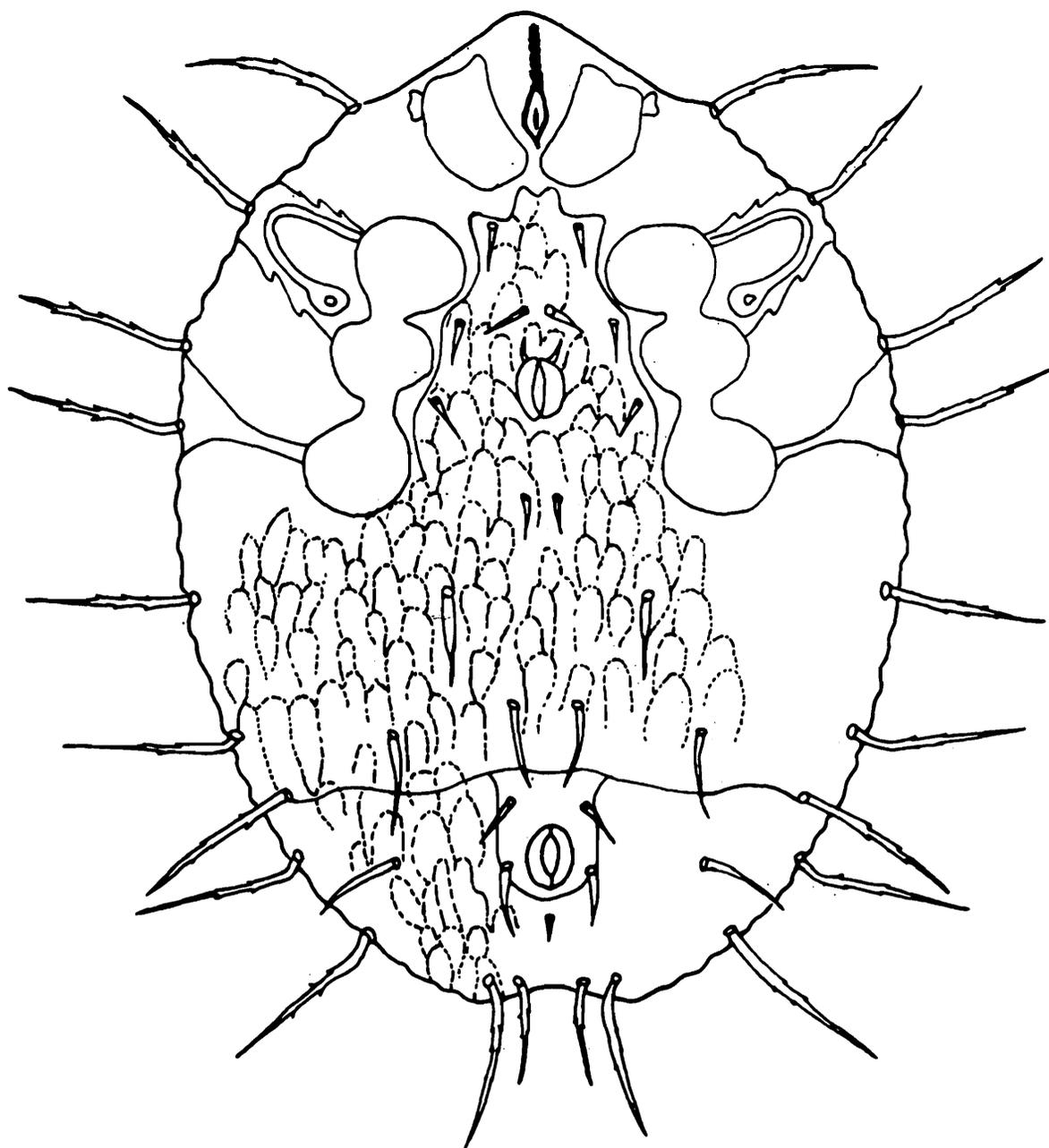
Male : Body oval with wavy margin. Dorsum 643.8 µm long, 503.2 µm wide, dark brown and highly ornamented; ornamentation of anterior region differs from ornamentation of posterior region (fig. 1); ornamentation of marginal region as in fig. 2; 19 pairs of dorsal setae simple, long; marginal setae exceptionally long, pilose except a pair of apical setae.

Tritosternum with single pilose lacina and tritosternal base bulb like with a median streak (fig. 3). Holoventral shield highly ornamented and its chaetotactic pattern shown in fig. 4. Sternal shield incomplete, 5 pairs of sternal setae present (fig. 4). Genital orifice present on sternal plate between coxae III and IV; 7 pairs of long ventral setae present on soft cuticle posterior to the region of coxa IV. Ventrianal shield broad, ornamented with 6 pairs of setae excluding a pair of par- and post-anal setae; large anal aperture situated on a flask-like depression. Stigma lies between coxae II and III; peritreme anteriorly curved and extending to coxa II; peritrematal shield

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Figs. 1-3. : *Trichouropoda asoki* sp. nov., male
 1. Dorsum; 2. Ornamentation of marginal region; 3. Tritosternum; 4. Venter; 5. Chelicera.



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Figs. 4-5. : *Trichouropoda asoki* sp. nov., male
4. Venter; 5. Chelicera.

distinct.

Gnathosoma with 4 pairs of hypostomatic setae. Movable digit of chelicera multidentate (fig. 5). Leg I with ambulacra and claws. Coxa I with ridges on antero-lateral margin. Femur I-IV with lamina.

Material examined : *Holotype* : ♂, India, West Bengal, Purulia district, Bansgarh, Balarampur; ex. soil under litter; 11.ix.1987; coll. A. K. Sanyal. *Paratypes* : 6 ♂♂, data same as for holotype.

Remarks : The new species *Trichouropoda asoki* shows close resemblances with *Trichouropoda atlantica* Sellnick, 1963, in the shape and ornamentation of dorsal and ventral shield, long marginal setae compared to body size and dentition of chelicera. However, the present species can easily be differentiated from *atlantica* by the difference in the number and shape of dorsal setae, shape of marginal setae and tritosternum. Position and relative length of ventral setae also differs.

This species is named after Mr. Asok Basu, late father of the first author.

SUMMARY

The paper embodies a description with illustrations of a new species of mite *Trichouropoda asoki* sp. nov. under the family Trematuridae from Purulia, West Bengal. The species shows resemblances to *Trichouropoda atlantica* Sellnick, 1963 but differs in the number and shape of dorsal setae, shape of marginal setae and position and size of ventral setae.

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REFERENCES

- Choudhuri, D. K. and Mukherjee, A. B. 1964. On the taxonomy of a new parasitic mite of the genus *Leiodynychus* Berlese, 1917 [Uropodidae : Mesostigmata]. *Proc. zool. Soc., Calcutta*, **17** : 27-34.
- Hiramatsu, N and Hirschmann, W. 1979. Teilgang einer neuen *Trichouropoda* Arten aus Indien. *Acarologie*, **25** (311) : 35-36.
- Hirschmann, W. 1983. Stadien von fraglichen *Urobovella* Arten aus Neuguinea und Bolivien (Dinychini, Uropodinae). *Acarologie*, **30** (448) : 173-184.
- Sellnick, M. 1963. Karibische Landmilben I. Uropodina. In : *Studies on the fauna of Curacao and other Caribbean Islands*, No. 71, **16** : 1-58.