A NEW SPECIES OF THE GENUS *TRICHTHONIUS* (ACARINA : ORIBATEI) FROM INDIA

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ORIENTAL REGION
INDIAN DISTRICT
ORIBATIDA

ABSTRACT : The paper reports the genus *Trichthonius* Hammer, 1961 for the first time from Indian subcontinent and a new species *T. heterotrichus*.

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RÉSUMÉ : Cet article rend compte du genre *Trichthonius* Hammer, 1961, pour la première fois dans le sous-continent Indien, et d'une espèce nouvelle, *T. heterotrichus*.

INTRODUCTION

Oribatid mites from gangetic delta of 24-Parganas, West Bengal have not been previously reported. In course of investigations of the oribatid mites of 24-Parganas, the authors came across an interesting species belonging to the genus *Trichthonius*. HAMMER (1958) described a new species *Cosmochthonius pulcherrimus* from Argentina and Bolivia. Subsequently in 1961 she selected *C. pulcherrimus* for her new genus *Trichthonius*. Up to now the genus *Trichthonius* was monotypic. The present material undoubtedly belongs to the genus *Trichthonius* but differs from HAMMER's species in a number of important characters for which it is described as new to science. The genus is reported for the first time from Indian territory. All measurements are in microns. Types of the new taxa have been deposited in the Zoological Survey of India, Calcutta.

Trichthonius heterotrichus spec. nov.
(Figs. 1-3)

MEASUREMENTS : Length, 225-318 ; Width, 105-182.

COLOUR : Pale white.

PRODORSUM : Slightly narrower than the hysterosoma across shoulder ; rostrum conical anteriorly, rostral setae broad, bilaterally feathered, directed forward and slightly curved, a little longer than their mutual distance (33-40) ; lamellar setae biramous, rami profusely branched on inner side, posterior rami shorter than anterior one, anterior rami directed upward, the posterior one downward, anterior rami longer than their mutual ditance (23-27) ; interlamellar setae situated near bothridium, about half the length of rostral setae, thin and strongly feathered on outer side ; anterior exostigmatal setae similar to interlamellar setae ; sensillus narrow at base, gradually become broadened at its distal end which is densely setose.

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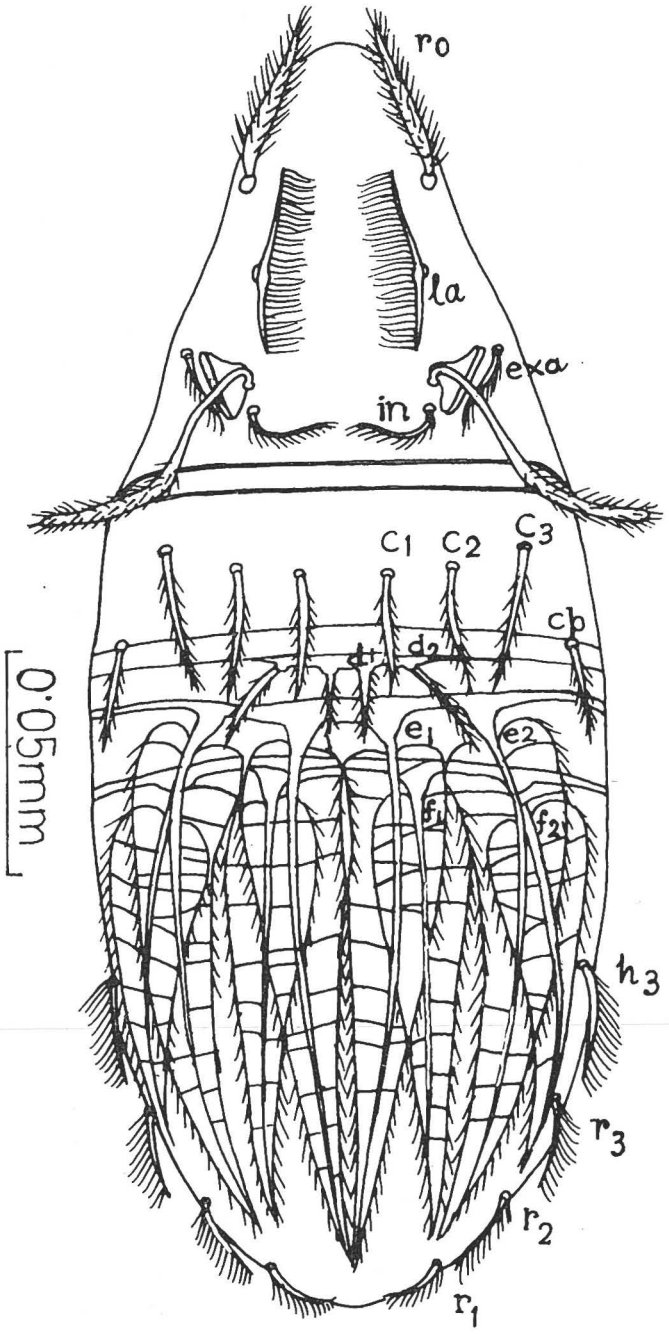

FIG. 1 : *Trichthonius heterotrichus* n. sp., dorsal view.

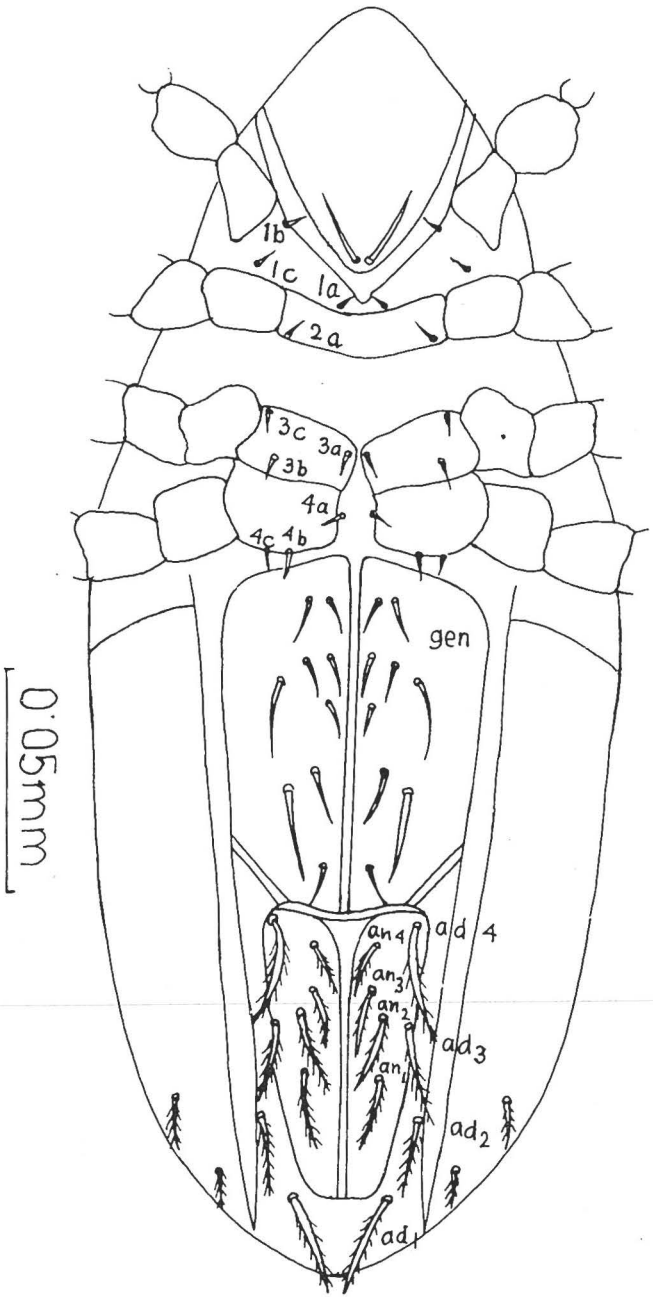

FIG. 2 : *Trichthonius heterotrichus* n. sp., ventral view.

■ NOTOGASTER : Long, narrow, divided into three segments by two transverse furrows ; segment I longer than segment II, segment III longest ; segment I with 12 thin, barbed setae arranged in two rows ; segment II with 4 large broad leaf-shaped setae with broad chitinous bases, distinct mid ribs and minutely barbed lateral margins ; segment III with 4 similar broad leaf-shaped setae placed at middle as in segment II and 8 small posterolateral setae strongly feathered unilaterally on outerside.

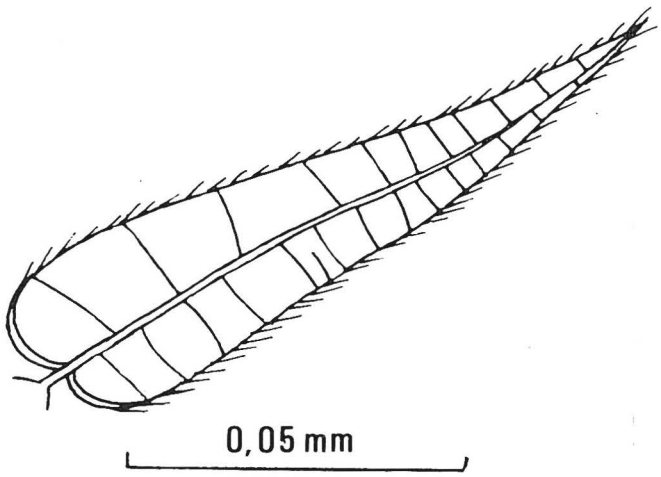

FIG. 3 : *Trichthonius heterotrichus* n. sp., notogastral seta.

■ ANO-GENITAL REGION : Genital plate large, roughly rectangular in outline, posterior portion slightly narrower than anterior portion, anterior margin projecting forward medially, posterior portion extend back over preanal plate, 9 pairs of smooth genital setae with an average length of 18 ; anterior margin of preanal plate more or less straight, posterior margin convex ; 4 pairs of anal setae with an average length of 14, thickly feathered bilaterally ; 4 pairs of bilaterally feathered adanal setae.

■ EPIMERAL REGION : All epimeres separate ; epimeral setae smooth, pointed ; epimeral setal formula 3 — 1 — 3 — 3.

■ LEGS : All tarsi are monodactyle.

■ MATERIAL STUDIED : HOLOTYPE : Adult female, India : West Bengal : Namkhana, 27.III. 1977, from litter and soil (0-5 cm), A. K. SANYAL coll. PARATYPES : 3 adult females, Namkhana, 26.I.1977-26.II.1978 from litter and soil (0-5 cm), A. K. SANYAL coll.

DISCUSSION

The new species resembles *Trichthonius pulcherrimus* (Hammer, 1958) in having broad leaf-shaped notogastral setae e_1, e_2, f_1, and f_2 and 9 pairs of genital setae, but can easily be separated from the latter species by the presence of broad foliate *ro* which is strongly feathered bilaterally, biramous and unilaterally feathered *la*, narrowly clavate pseudostigmatic organ which is strongly setose on distal half, simple minutely barbed notogastral setae c_1, c_2, c_3, d_1, d_2, *cp* and four pairs of strongly feathered anal and adanal setae.

ACKNOWLEDGEMENTS

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— INFORMATIONS —

INTERNATIONAL COMMISSION
ON ZOOLOGICAL NOMENCLATURE

The following Opinion has been published by the International Commission on Zoological Nomenclature in the *Bulletin of Zoological Nomenclature*, volume 39, part 3, on 30 September, 1982 :

OPINION N° 1218 (page 166). — *Trombidium akamushi* Brumpt, 1910 (Acarina) : designation of type species.