

A NEW SPECIES OF THE GENUS *ARCTOSEIUS* THOR, 1930 (ACARINA : MESOSTIGMATA : ASCIDAE) FROM WEST BENGAL, INDIA

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INTRODUCTION

Thor (1930) established the genus *Arctoseius* and designated *Arctoseius laterincisus* as type-species. Thirty-five species of this genus are known to occur in North America, Australia and Europe belonging to three different zoo-geographical regions *i.e.*, Nearctic, Australian and Palaearctic region (Halliday *et al.*, 1998).

In the present paper *Arctoseius himalayensis* is described and illustrated as a new species. This is the first report of the genus from the Indian as well as Oriental region.

Chaetotactic pattern of Lindquist and Evans (1965) is followed in this description.

Type-material is deposited in the National Zoological Collection, Zoological Survey of India, Calcutta.

Arctoseius himalayensis sp. nov.

Female : Dorsal shield more than two times longer (360 μ) than wide (174 μ), distinctly reticulated, incompletely divided by a strong lateral incision, with 31 pairs of setae, 17 pairs situated on anterior region, rest on posterior region (Fig. 1); setae of J-series subequal in length (12 μ); all setae simple; setae j1, Z5 and S5 16 μ , 24 μ and 18 μ respectively. Lateral membrane lineated, with 6 pairs of marginal setae, equally distributed on each half; peritreme prominently visible dorsally.

Base of tritosternum wide, lacinae pilose, paired. Sternal shield distinctly reticulated, with three pairs of sternal setae of equal length (12 μ); sclerotization of anterior margin of sternal shield not properly discernible; posteromedian margin of sternal shield highly concave (Fig. 2). Pre-endopodal platelets elongate, well-developed. Metasternal setae placed on ventral membrane. Genital shield flask-shaped, convex posteriorly; genital setae present on ventral membrane beside genital shield at level of posterior to coxa IV. Anal shield longer (66 μ) than wide (62 μ), with lineation and reticulation; post-anal seta a little over two and half times longer than para-anal setae. Ventral membrane with

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seven pairs of setae around genital and anal shield, excluding metasternal and genital setae; area of lineation on ventral membrane demarcated as in fig. 2. Metapodal shield long, sclerotized, placed laterally along body margin. Endopodal shield present between coxae III and IV; remnants of exopodal shield fused with peritrematal shield at level of coxa II; peritrematal shield wide, fused with body margin; peritreme wide, extending well beyond coxa I; stigma large, situated at level of anterior half of coxa IV.

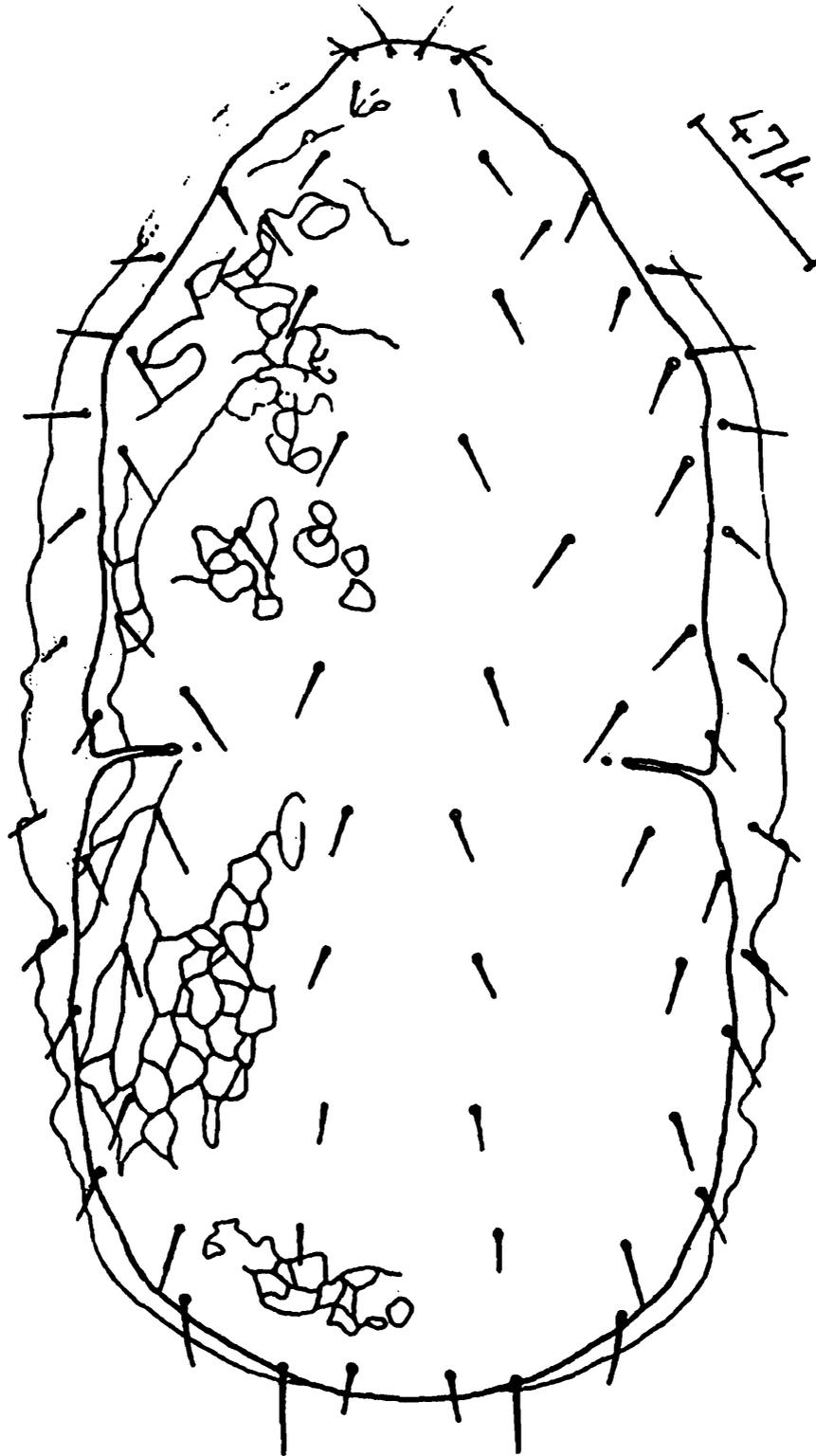


Fig. 1. *Arctoseius himalayensis* sp. nov., female Dorsal view.

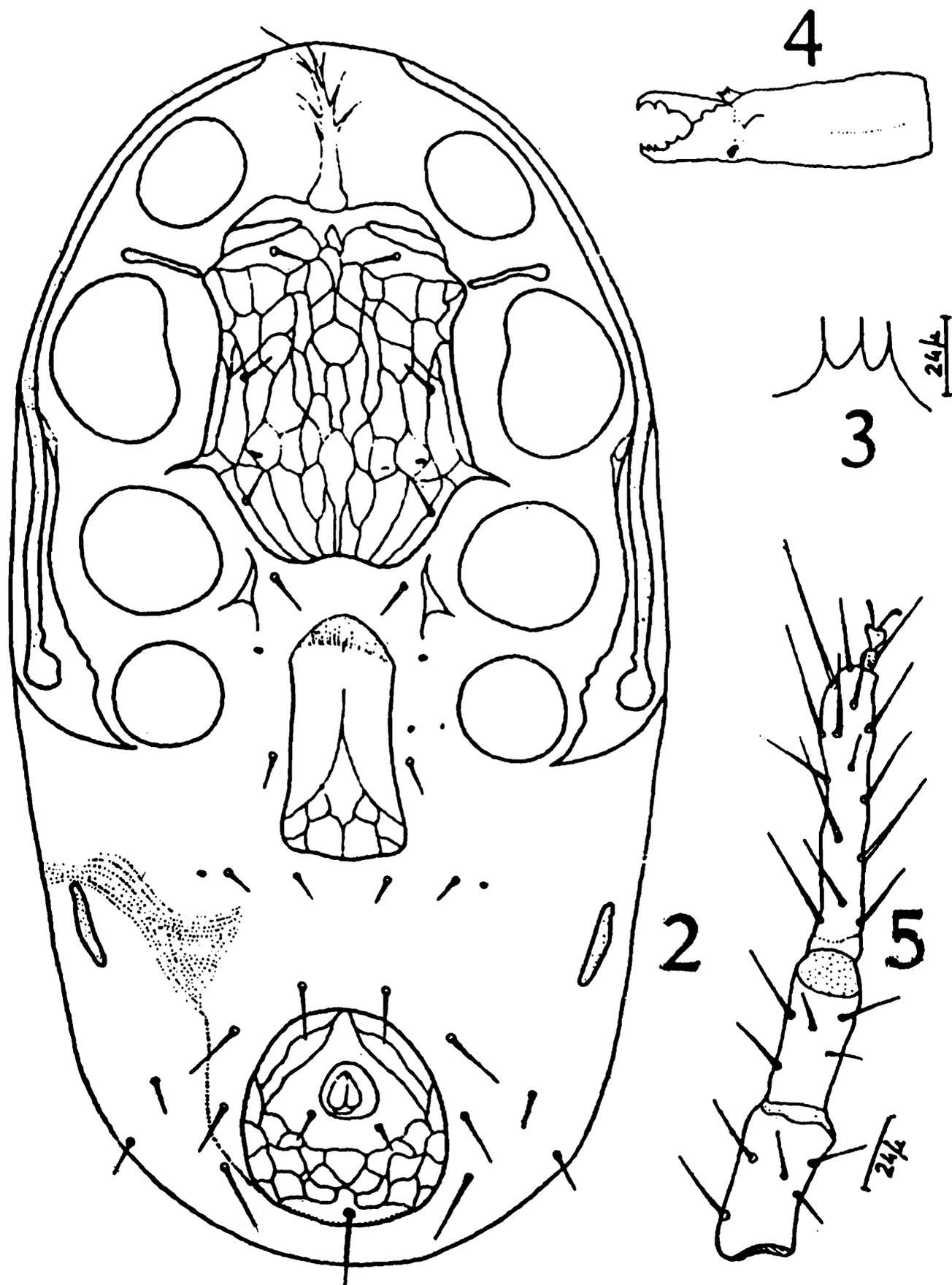


Fig. 2-5. *Arctoseius himalayensis* sp. nov., female.
Fig. 2. Ventral view.
Fig. 3. Tectum.
Fig. 4. Chelicera.
Fig. 5. Genu, tibia and tarsus of leg 1.

Tectum trispinate, spines of equal length (Fig. 3). Pedipalp 5-segmented; palp apotele two-tined.

Ventrally gnathosoma with four pairs of hypostomatic setae. Corniculi short but stout, not extending beyond tips of internal malae. Seven rows of hypognathal deutosternal denticles present, 12–16 denticles present in each row, most anterior pair widest with maximum number of teeth. Chelicerae chelate-dentate type; movable digit bidentate, fixed digit with a set of four small teeth (Fig. 4).

All legs with ambulacra and claws; tarsus I without any rod-like or clubbed setae; enlarged sensory setae present terminally on tarsus I (Fig. 5); legs I-II-III-IV 314.5 μ , 185 μ , 159.1 μ and 222 μ long respectively; chaetotaxy of genua and tibiae of legs I-II-III-IV observed as 12-10-7-7 and 12-9-7-6.

Male : Unknown.

Material Examined : Holotype female : Namchi, Sandak-Fu Range, West Bengal; ex. soil under grass; 8.i.1997; S. Khaling coll.

Differential Diagnosis : The new species, *Arctoseius himalayensis* superficially resembles to its congeneric member *Arctoseius pristinus* Karg, 1962 in number, nature and length of dorsal setae, shape of peritrematal shield and presence of endopodal shield, but the new species largely differs from *pristinus* in regard to reticulation of sternal shield, presence of exopodal shield, shape of tritosternum, tectum, chelicerae and anal shield and also in the total number of ventral setae.

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