

TWO NEW SPECIES OF THE GENUS
SCHELORIBATES (ACARINA : ORIBATEI)
FROM BHUTAN

By

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INTRODUCTION

The soil oribatid fauna of Bhutan was unexplored till the work of Chakraborti and Wilson (1981). They reported 11 genera distributed over 14 species including 4 species of the genus *Scheloribates*. During a short trip to Bhutan the author collected few oribatid mites and the present paper is based on that collection. Incidentally all the specimens examined in the present study belong to the genus *Scheloribates* and include three species, of which, *S. rostopilosus* and *S. bhutanensis* are considered here as new to science and the other one *S. laticlava* Hammer, 1961, is recorded here for the first time from Bhutan. Thus the total number of oribatid species and genera so far known from Bhutan stands to 11 and 17 respectively. All measurements are in microns. Types of the new taxa have been deposited in the National Collection of Zoological Survey of India, Calcutta.

***Scheloribates rostopilosus* sp. n.**

(Figs. 1-2)

Colour light brown ; length of the body 390, width 288 ; integument smooth without any microsculpture ; prodorsum broad at the base, short ; rostrum rounded with hyaline lip, rostral hairs thick, strongly feathered, about five times as long as their mutual distance ; lamellae dark, broad, stout, extend beyond the middle portion of prodorsum ;

lamellar heads connected by thin translamellar line ; lamellar hairs finely barbed, stout, about one and half times as long as their mutual distance, extend beyond the tip of the rostrum ; interlamellar hairs slightly shorter than

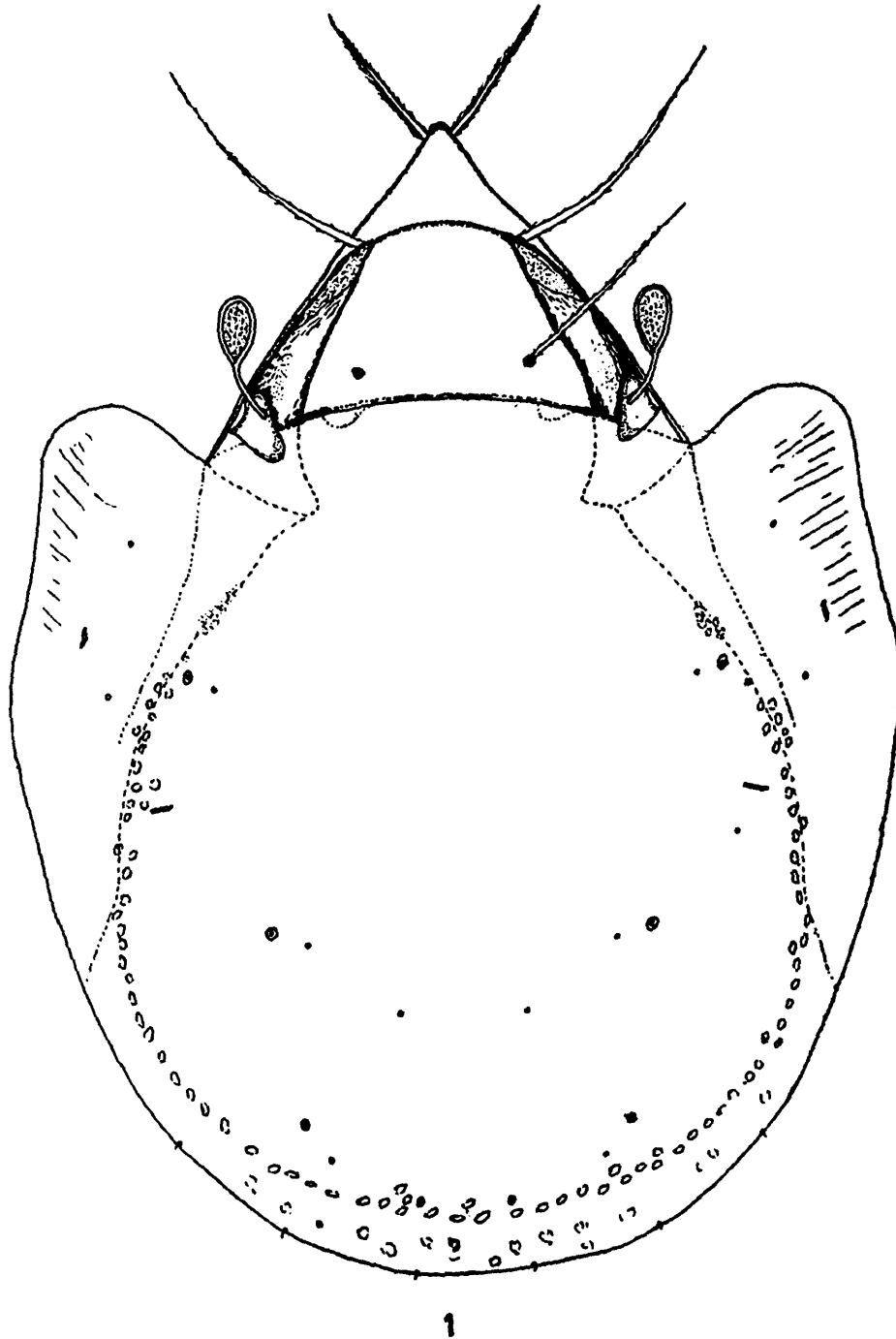
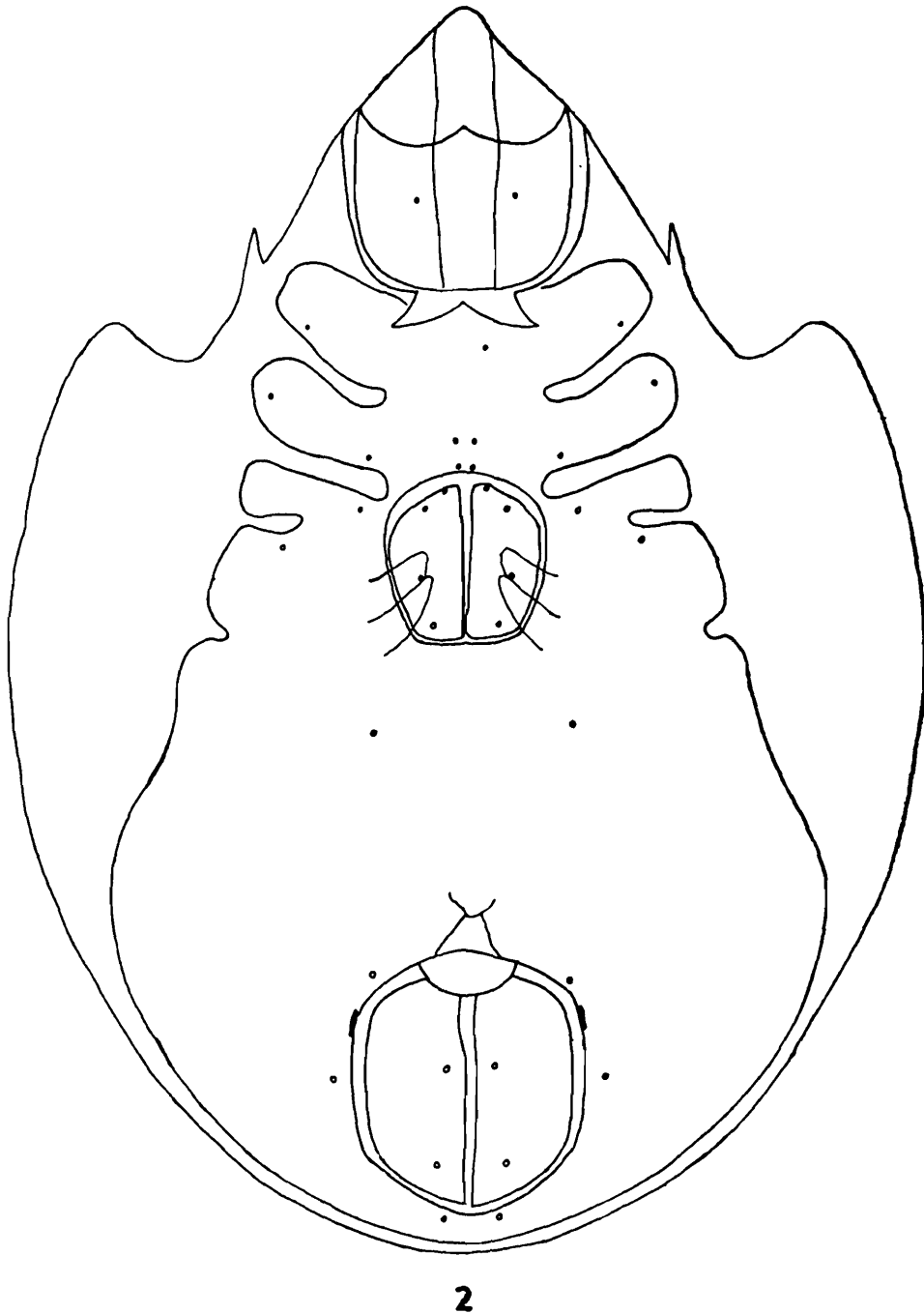


Fig. 1. *Schelorbates rostopilosus* sp. n. : Dorsum

lamellar hairs, minutely barbed, stout, base covered with thick chitinous scale ; sensillus with short stalk, head club shaped, broadest distally, flat, covered with minute scales, directed outwards and forwards, does not reach the lateral border of the broad pteromorph.

Notogaster longer than broad, posterior part rounded ; dorsosejugal suture arched ; pteromorph broad, shoulder rounded, faint striations ; notogastral hairs ten pairs, except



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Fig. 2. *Scheloribates rostopilosus* sp. n. Venter

short and fine P_1 - P_3 represented by their alveoli ; some scattered light spots of glandular tissue present along the lateral margin ; fissures *ia*, *im* and *ip* found on dorsal side.

Genital plates as long as broad, four pairs of genital hairs ; anal plate about one and half times longer than genital plates, equal in length and width, two pairs of anal hairs ; three pairs of adanal hairs and one pair of adanal fissures ; apodemata III nearly touching the anterolateral border of genital plates ; legs with one strong claw.

Holotype : Adult female, Bhutan : Phuntsholing ; 4 kms away from Jaigaon towards Gumpa, from forest soil and litter, 24.XI.1983, coll. *A. K. Sanyal*.

Remarks : The new species differs from all other species of *Scheloribates* by the presence of very characteristic rostral hairs.

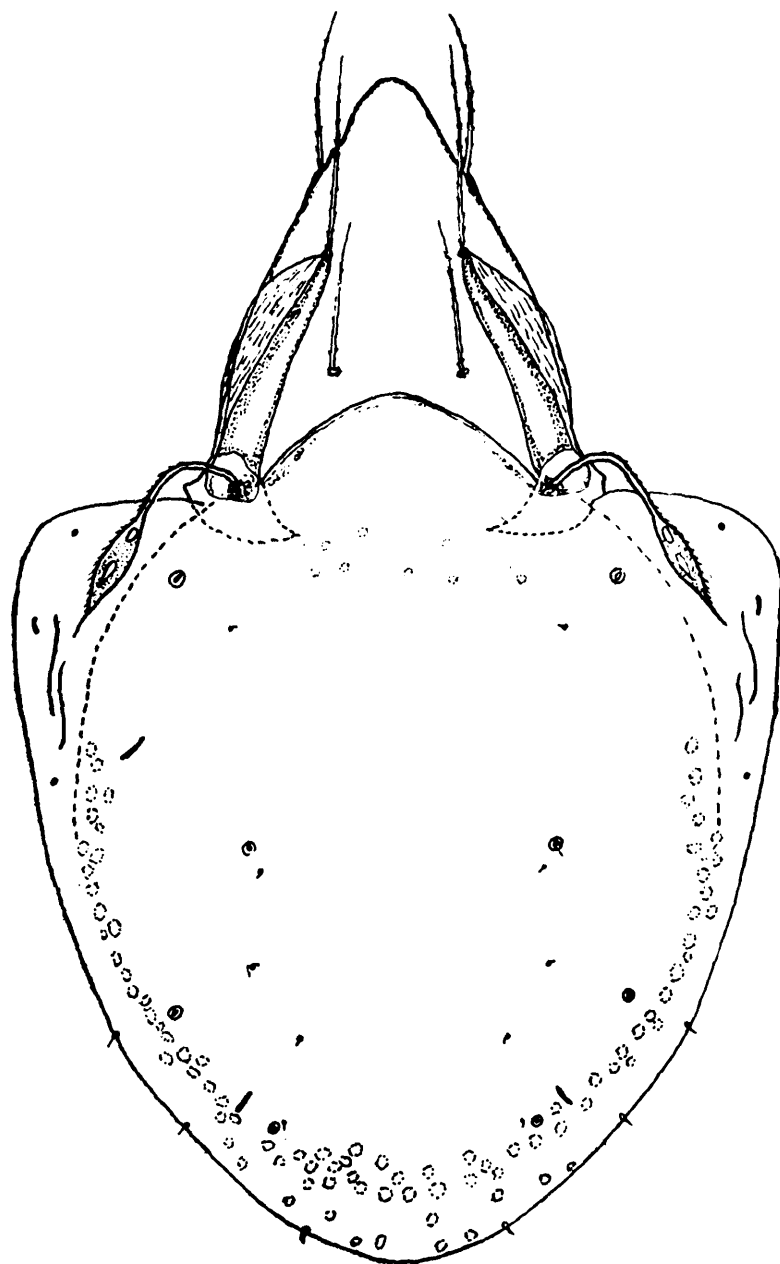
***Scheloribates bhutanensis* sp. n.**

(Figs. 3-4)

Colour light brown ; length of the body 309 ; width 200 ; microsculpture of the integument absent ; prodorsum broad at the base, long ; rostrum rounded, rostral hairs inserted laterally on distinct apophyses, long, thin, minutely barbed, as long as their mutual distance ; lamellae stout and extend upto middle portion of prodorsum ; lamellar hairs slightly longer than the mutual distance between their bases, finely barbed and extend beyond the tip of the rostrum ; inter-lamellar hairs as long as rostral hairs, finely barbed ; bothridium cup-shaped ; sensillus with long stalk, lanceolate head with two light spots and fine bristles, terminates in a thin thread, directed outwards and backwards, reaches beyond the lateral margin of pteromorph.

Notogaster longer than broad, posterior border rounded ; dorsosejugal suture deeply curved ; pteromorph rounded distally and laterally ; notogastral hairs ten pairs, minute ; light spots of glandular tissue present along the lateral border of notogaster , four pairs of small sacculi present on notogaster ; fissure *ia*, *im* and *ip* visible on dorsal view.

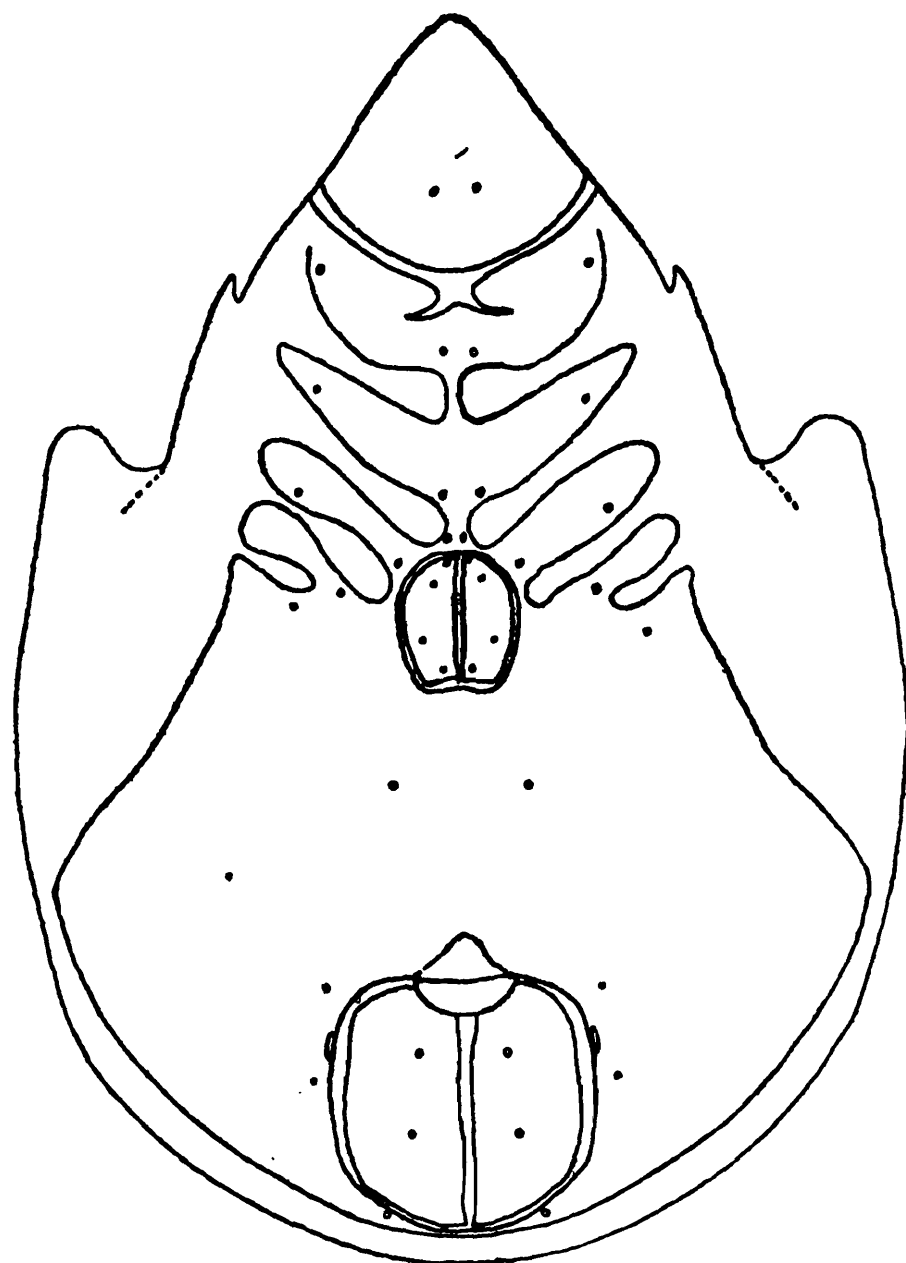
Genital plates more or less equal in length and breadth ;
two anteriorad and two posteriorad pairs of genital hairs ;



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Fig. 3. *Scheloribates bhutanensis* sp. n. Dorsum

anal plates longer than the genital plates, two pairs of hairs placed medially ; three pairs of adanal hairs ; one pair of adanal fissures placed antero-laterally of each anal plate ; apodemata II and III nearly meeting in front of the genital field ; all tarsi have two claws.



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Fig. 4. *Schelorbates bhutanensis* sp. n. Venter

Holotype : Adult female, Bhutan : Phuntsholing : 4 kms away from Jaigaon towards Gumpha, from forest soil and litter, 24.XI.1983, coll. A. K. Sanyal.

Remarks : The new species resembles *Schelorbates bidactylus* Hammer, 1961 in general body shape, in having long, barbed rostral, lamellar and interlamellar hairs and in bidactylous tarsi but can easily be separated from the peruvian species in having smaller body size, in length of *la*, long

sensills having thin thread at the tip of the head which extends beyond the lateral outline of pteromorpha, no incurvation in the middle of the lateral border of pteromorpha.

Scheloribates laticlava Hammer, 1961

Material examined : 6 adult females, phuntsholing, 4 kms away from Jaigaon towards Gumpha, from forest soil and litter, 24.XI.1983.

SUMMARY

Three species belonging to the genus *Scheloribates* are reported from Bhutan which include two new species and one new record for the country.

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