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A NEW GENUS OF CARABODIDAE (ACARI: ORIBATEI)
FOM DARJEELING, WEST BENGAL, INDIA

BY B. K. MONDAL¹ and B. G. KUNDU²

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SUMMARY: Indotocepheus himalayensis gen. nov. et sp. nov. (Acari: Oribatei: Carabodidae) is described from Darjeeling, West Bengal, India.

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RÉSUMÉ: Indotocepheus himalayensis, espèce nouvelle et genre nouveau de Darjeeling (Bengale Occidental) en Inde est décrite.

INTRODUCTION

As a result of investigations of the oribatid fauna from forests and tea estates of Darjeeling, West Bengal, India, a new genus and species of the family Carabodidae, Indotocepheus himalayensis, was collected and is described here. Twenty-nine genera have so far been described in this family. The presence of translamella and increased number of genital setae (6 pairs) in the new species is sufficient to create the new genus Indotocepheus. The types are deposited in the laboratory of the Department of Zoology, Ananda Chandra College, Jalpaiguri-735 101, India.

Indotocepheus gen. nov.


Type-species: Indotocepheus himalayensis sp. nov.

Remark. The new genus stands nearest to Odontocepheus Berlese, 1913 in the presence of anterior 3 pairs of notogastral setae directed anterior, strongly upcurved rostral and lamellar setae, large irregular foveolae on notogaster and 14 pairs of notogastral setae. However, Indotocepheus differs from Odontocepheus in the number of genital setae, the non-elongated notogaster and presence of translamella.

Indotocepheus himalayensis sp. nov. (Figs. 1–5)

All measurements are in micrometers (µm). Colour of body and legs brownish yellow. Average body length 620 (range 600–640), average width 335 (range: 330–340).

Prodorsum. Prodorsum nearly as long as broad, medially with small irregular foveolae; lateral lamel-
Figs 1–5: Indotocepheus himalayensis gen. et sp. nov.

1. — Dorsal view. 2. — Anterior distal part of prodorsum. 3. — Posterior part of prodorsum and anterior part of notogaster (right side).
4. — Surface structure of notogaster and notogastral seta it (left side). 5. — Ventral view.
liform expansion (spa.) very wide; lamellae (lam) well-developed, mostly parallel, well separated, with diverging anterior apex, 170–174 long, with a prominent translamella (tlam); rostrum wide; rostral setae (ro) strongly bent and incurved, finely roughened, 80–82 long, originated laterally; lamellar setae (le) incurved, finely roughened, 140–146 long, much longer than the distance between them, located laterally outside and a little below the apex of the lamellae; interlamellar setae (in) very long and finely roughened, pointed at tips, 250–254 long, nearly twice as long as the distance between them, situated on the base of the lamellae anterior to the bothridia; order in length of prodorsal setae: in > le > ro; bothridium (bo) longer than broad, 48–50 long, open laterad; sensillus (ss) 78–80 long, directed laterad, with a long narrow stalk and slightly dilated spinulose head; median prodorsal condyles (co.plm) absent, lateral prodorsal condyles (co.pl) more or less rounded, with a small medial lobe, 160–164 apart; pedotecta complex II–III (pd.2-3) well developed, trapezoid in shape.

Notogaster. Notogaster with large irregular foveolae on the middle and posterior parts, slightly longer then broad, anterior border straight, posterior border rounded; dorsosejugal region of notogaster wide; dorsosejugal suture straight; median notogastral condyles (co.nlm) absent, lateral notogastral condyles (co.nl) triangular, projecting forward anteriorly and laterally below co.pl, distance between them 59.5 R.L.N (Relative length to notogaster); marginal ridge (vm) prominent, extending anteriorly even below the dorsosejugal suture, notogastral setae 14 pairs including tax, tex, msx and rx, finely roughened curved, of different sizes, tips pointed or blunt, 80–220 long, R.L.N 23.8–65.4; setae tax longest (220), 4 pairs of posteromarginal setae (p1, p2, p3 and r1) shorter than the rest of notogastral setae, 80–88 long; notogastral fissures 3 pairs, ia at level of insertion of te laterally, ih just above r3 and ips between p3 and r3.

Anogenital region. Surface foveolate; anal aperture as long as wide, with lateral margins parallel; anal setae 2 pairs (an1 and an2), glabrous, nearly equal, with pointed tip, 16–20 long, inserted at the inner middle side of each plate; adanal setae 3 pairs, phylliform, finely roughened, with a pointed tip, 40–48 long; ad1, postero-marginal, ad2, postero-lateral and ad3, apo-anal to anal field; iad medio-lateral, transverse relative to anal field, 10 long; distance between anal and genital apertures 1.5 times as long as the latter; each genital plate twice as long as broad; genital setae 6 pairs, glabrous, with pointed tip, 19–21 long, situated in a row at inner margin of genital plate; aggenital setae one pair, finely roughened, with a pointed tip, 28 long, located postero-lateral to genital field, distance between aggenital setae and genital aperture 28.

Epimeral region. Epimera I and II separate, III and IV fused; epimeral setae simple, 20–48 long, setae 3b longest; epimeral setal formula 3-1-2-2.

Legs. All tarsi monodactylous; claws curved; all legs with ultimate setae of flagelliform type (L-L-L-L).


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