On two new species of Dermaptera from India

(Dermaptera)

BY

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LABIOIDEA

LABIIDAE

SPONGIPHORINAE

1. Spongovostox anamalaiensis n. sp. (figs. 1-4).

Holotype, &, Anamalai Hills, at 457 m, Chinchona, India (P. S. Nathan leg.) (Zoological Survey of India, Calcutta).

Male: Head, pronotum and abdomen black. Antennae yellow excepting four distal segments which are black. Pronotum with sides pale. Elytra black with a yellow longitudinal band close to costal margin, extending from shoulder to two third of its length. Wings yellow with a black band along the suture. Femora black but yellowish distally, tibiae blackish yellow and tarsi light yellow. Pygidium black but lighter towards apex. Forceps brownish yellow.

Head triangular, posterior margin gently emarginate in middle, frons tumid, sutures obliterated, eyes enormous, black, very slightly longer than cheeks and 1st antennal segments. Antennae (fig. 1) 14-segmented, hairy; 2nd segment small, about half as long as fourth; 3rd long and cylindrical; 4th subconical, shorter than 3rd; 5th subconical, equal to third and remaining segments long and cylindrical. Pronotum about as long as broad, widened posteriorly, anterior and lateral margins straight, hind margin feebly and caudal angles well rounded, median suture well marked; prozona tumid and well differentiated from depressed metazona. Elytra slightly less than double the length of pronotum, smooth, posterior margin gently concave in middle.

Wings ample, slightly shorter than pronotum. Femora thick; tibiae long and cylindrical, slightly longer than tarsi; tarsi with 1st segment slightly longer than 3rd segment and shorter than combined length of 2nd and 3rd; 2nd prominent. Abdomen punctuate, slightly dilated in middle, lateral tubercles on 4th tergite well developed. Ultimate tergite, smooth, strongly transverse, median sulcus faint, posterior margin truncate. Penultimate sternite (fig. 2) transverse with posterior margin gently emarginate in middle. Pygidium prominent, flat but convex anteriorly, almost filling the space between the forceps, broader at base than apex, apical margin concave with a minute tubercle on ventral side in middle and angles produced into minute tubercle. Forceps (fig. 3) with branches remote at base, trigonal in proximal third, long, cylindrical, tapering, almost straight but apices incurved, armed at base with a sharp tooth, bent downwards, placed ventrally at inner margin and a minute tooth in basal third. Genitalia (fig. 4).

Female: Unknown.
Measurements of male:

Length of head	0.96 mm.	
Width of head	1.19	"
Length of pronotum	1.02	"
Width of pronotum	1.09	"
Length of elytra	1.76	"
Width of elytra	0.68	"
Length of wing	0.74	"
Length of ultimate tergite	0.39	"
Width of ultimate tergite	1.14	"
Length of pygidium	0.57	"
Width of pygidium	0.39	"
Length of forceps	2.32	"
Length of body (without forceps)	5.33	"

Material.—Holotype, &, Anamalai Hills, Chinchona, 3500 ft., v. 1968, P. S. Nathan, genitalia mounted between two coverslips and penultimate sternite mounted on a card and both pinned with the specimen and deposited in the Zoological Survey of India, Calcutta.

Affinities.—This species comes very close to *Spongovostox semi-flavus* (Bormans, 1894) but differs by its long and cylindrical forceps with a sharp inner tooth at base and a minute tooth in basal third; prominent pygidium, concave at posterior margin with a minute tuber-

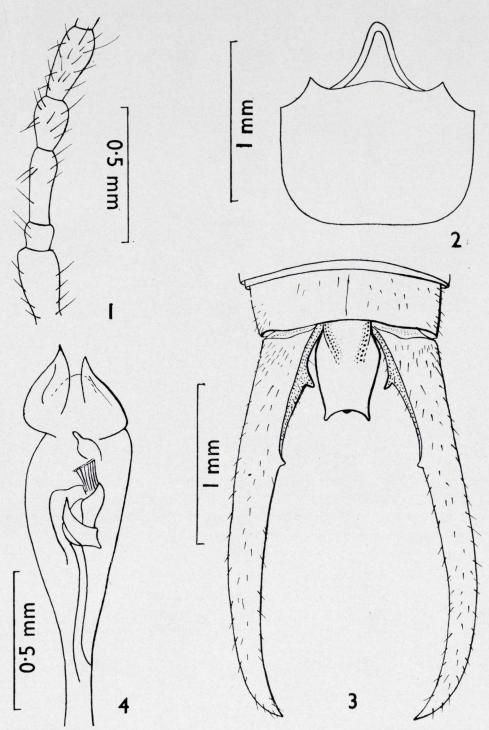


Fig. 1-4.—Spongovostox anamalaiensis n. sp.: 1) Ist five antennal segments; 2) Penultimate sternite and manubrium; 3) Ultimate tergite and forceps; 4) Genitalia.

cle in middle on ventral side and at caudal angles also and the details of structure of genitalia especially the parameres which are about as long as broad, flat, broad at base and narrowed apically with tip pointed.

FORFICULOIDEA

FORFICULIDAE

OPISTHOCOSMIINAE

2. Timmomenus nathani n. sp. (figs. 5-8).

Holotype, &, Anamalai Hills at 457 m, Chinchona, India (P. S. Nathan leg.) (Zoological Survey of India, Calcutta).

Male: Head, pronotum and abdomen shining black with greenish purple sheen. Pronotum dirty white on sides. Antennae and legs dark blackish brown. Elytra dark brown. Wings yellowish brown with a yellow spot at tip. Forceps black.

Head triangular, almost as broad as long, sutures deeply marked, frons tumid, cheeks slightly raised, faint tubercles on either side of median suture near hind margin which is straight. Eyes small, black. Antennae (fig. 5) 12 (?)-segmented, 1st segment club shaped, thick, shorter than combined length of 2nd, 3rd and 4th; 2nd small almost half as long as 3rd; the rest long and cylindrical; 4th slightly longer than 3rd. Pronotum as broad as long, anterior margin straight, sides feebly convex, posterior margin and angles well rounded, median suture distinct; prozona tumid and metazona weakly so. Legs stout, anterior femora short and thick, posterior pair slender; tibiae comparatively longer and cylindrical than femora, smooth above, with golden yellow pubescence on underside which is dense near distal end; tarsi pubescent beneath, 1st segment rather broad and shorter than 3rd which is much cylindrical, 2nd greatly dilated. Elytra slightly less than double the length of pronotum, smooth, without any costal keel, humeral angles not prominent. Wings well protruded beneath the elytra. Abdomen smooth excepting 9th tergite which is sparcely punctuate in anterior half, narrowed basally, broadest at 9th tergite, lateral tubercles on 3rd and 4th tergites well developed, sides of abdominal segments convex, sides of segments 7th with two (weakly developed), 8th with three and 9th with four tubercles. Ultimate tergite transverse, smooth, sloping and contracted posteriorly, lateral margins sinuate, posterior margin between the bases of forceps deeply emarginate and above the roots oblique and faintly emarginate, with an oblique ridge extending from caudal angles to the middle of tergite, weakly

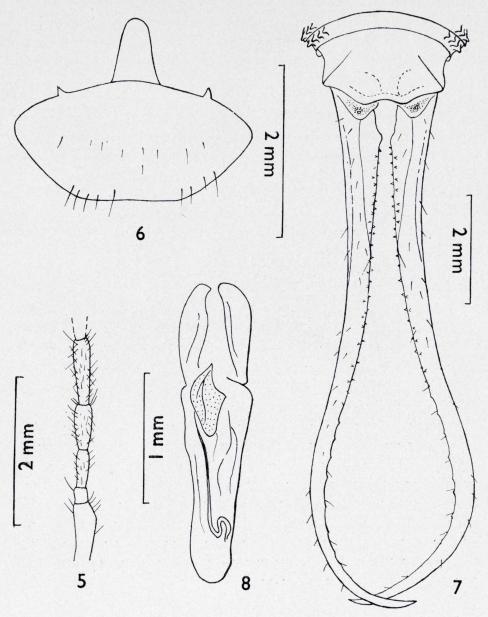


Fig. 5-8.—*Timomenus nathani* n. sp.: 5) Ist five antennal segments; 6) Penultimate sternite and manubrium; 7) Ultimate tergite and forceps; 8) Genitalia.

tumid elevations above the bases of forceps, median suture absent excepting a weak depression in the centre. Penultimate sternite (fig. 6) ample, subquadrate, with a few shallow punctures in the anterior half, posterior margin very slightly emarginate in middle. Forceps (fig. 7) with branches long and cylindrical, subremote at base, rather depressed in basal third with an oblique ridge dorsally, extending from middle of base to inner margin; gradually diverging from base to apical two third, then strongly curved, tapering to pointed apices, crossing each other, inner margin provided with numerous small teeth. Genitalia (fig. 8).

Female: Unknown.
Measurements of male:

Length of head	1.71 1	nm
Width of head	1.80	"
Length of pronotum	1.61	"
Width of pronotum	1.61	"
Length of elytra	2.94	"
Width of elytra	1.71	"
Length of wings	1.04	"
Length of ultimate tergite	1.33	"
Width of ultimate tergite	2.27	"
Length of forceps	9.12	"
Length of body (without forceps)	10.26	"

Material.—Holotype, &, Anamalai Hills, Chinchona, 3500 ft., v. 1968, P. S. Nathan; genitalia mounted between two cover slips and penultimate sternite mounted on a card and both pinned with the specimen and deposited in the Zoological Survey of India, Calcutta.

Affinities.—This species agrees in most characters with the description of *Timomenus inermis* Borelli, 1915 from China but differs in having the colour of head, pronotum and abdomen shining black with greenish purple sheen, sides of abdominal segments rounded, ultimate tergite with an oblique ridge at caudal angles and posterior margin between the bases of forceps deeply concave, penultimate sternite with posterior margin feebly emarginate in middle and in having the branches of forceps long, very slightly shorter than the body, with a faint longitudinal ridge in basal third.

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