

ON A NEW SPECIES OF THE GENUS *CHAETOSPANIA* KARSCH  
(DERMAPTERA : LABIIDAE) WITH A KEY TO SPECIES  
FROM THE INDIAN SUB REGION

By

G. K. SRIVASTAVA

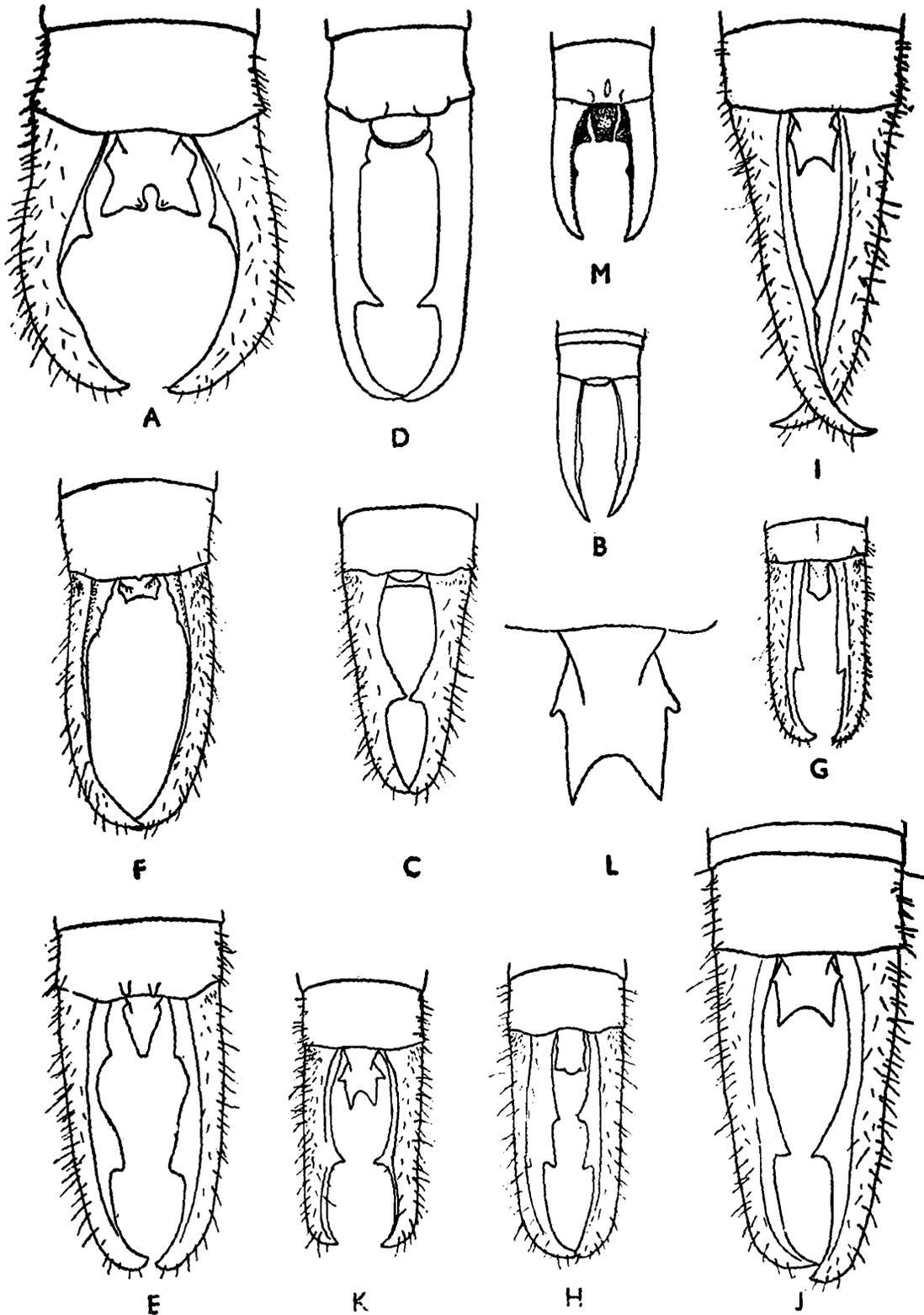
*Zoological Survey of India, Calcutta*

(With 2 Text-figures)

The genus *Chaetospania* Karsch, is represented by 14 species from India, Nepal, Bhutan, Burma and Sri Lanka, of which the generic assignment of three, i.e., *C. cingalensis* (Dohrn) from Ceylon and *C. jeolikotensis* (Baijal and Singh) and *C. lakhamandiensis* Kapoor, Bharadwaj and Banerjee, both from India, is uncertain. The first one was originally described by Dohrn (1865) under *Forficula* L. Zacher (1910) examined the type ♀ as well another ♂ of the species and placed it provisionally under *Erotosis* Burr. This genus was synonymized by Burr (1911) under *Proreus* Burr, and in the same publication he transferred *F. cingalensis* to *Chaetospania* Karsch, but owing to the presence of a carina along the costal margin of elytra as stated by Zacher (*l.c.*) its inclusion in *Chaetospania* does not seem to be justified. Perhaps a new genus might be required for its reception. The figure of forceps and ♂ genitalia (vide Zacher, *l.c.*) are reminiscent of *Labia lutea* (Bormans). However, in order to ascertain its correct generic position, an examination of the type will be desirable. The types of other two species have been examined and neither belong to this genus. Their taxonomic status will be discussed elsewhere.

During the course of the present study some variation in the shape of pygidium and inner armature of forceps have been noted in some species which does not seem to have been recorded earlier. In *C. feae* Bormans, pygidium is narrow and sub-vertical at base, afterwards deplanate with sides straight and converging apically. But in a large series from Sikkim it has been seen that on sides it is often provided with a posteriorly directed tooth in middle, of variable size. Even the position of inner tooth of forces has also been found to vary. It may be either small and directed posteriorly or well developed and placed at right angles. In *C. nigriceps* (Kirby) it has been observed that the inner ventral margin of forceps forms a flange which may be provided with one or two teeth. Burr (1910) although treated this species as

distinct remarked ".....the case is not yet quite proven in favour of its inclusion as a varietal form of *P. thoracica*". Brindle (1972) has treated both these species as distinct on the basis of the shape of



Text-fig. 1. Ultimate tergite and forceps ♂, A. *Chaetospania anamalaiensis* Srivastava, B. *C. andersoni* Brindle (redrawn from Brindle, 1971), C. *C. kurseongae* Hebard, D. *C. malaisei* Hincks (redrawn from Hincks, 1947), E. *C. stiletta* Burr, F. *C. foliata* (Burr), G. *C. thoracica* (Dohrn), H. *C. nigriceps* (Kirby), I. J. and K. *C. feae* Bormans; Pygidium enlarged, L. *C. feae* Bormans, M. *C. mandax* Borelli (redrawn from Borelli, 1992)

pygidium and forceps. It has been observed by the author that the ♂ parameres of both are also different.

*Platylabia fallax* described by Bormans (1894) from Burma was synonymised subsequently by him (1900) under *C. nigriceps* (Kirby). Hebard (1927) and Bey-Bienko (1959) has treated the former as valid species. And on the basis of this, Srivastava (1976) treated it as distinct. However, after a careful comparison of the description of *P. fallax* with *C. nigriceps* it becomes evident that Bormans was right in placing the former as synonym of the latter.

### Genus *Chaetospania* Karsch

*Chaetospania* Karsch, 1886, *Berl. ent. Z.*, 30 : 87 ; Burr, 1911, *Dt. ent. natn-Biblthk.* : 60 ; Burr, 1911, *J. Asiat. Soc. Beng.*, 7 : 785 ; Burr, 1911, *Genera Insect.*, 122 : 53 ; Kapoor, 1968, *Agra Univ. J. Res. (Sci.)*, 16 (1) : 14 ; Srivastava, 1976, *Rec. zool. Surv. India. Occ. pap.*, 2 : 35.

*Platylabia* (part) Dohrn, 1867, *Stettin. ent Ztg.*, 28 : 347.

*Labidophora* (part) Scudder, 1876, *Proc. Boston Soc. nat. Hist.*, 18 : 297.

*Sparattina* Verhoeff, 1902, *Zool. Anz.*, 25 : 198 (Type-*Sparattina flavicollis* Verhoeff, 1902)

**Diagnostic characters.**—Body strongly depressed and pubescent. Head as long as broad or slightly longer, sutures weak or obsolete, emarginate posteriorly, eyes shorter than genae in length ; antennal segments long and cylindrical, 4th and 5th as long as 3rd or longer. Pronotum convex anteriorly. Legs short, hind metatarsus equal to 2nd and 3rd segment together. Elytra and wings well developed, thickly pubescent. Abdomen somewhat depressed with long pubescence laterally ; pygidium distinct, various ; forceps long, depressed, with long pubescence.

**Type-species.**—*Chaetospania inornata* Karsch, 1886

**Distribution.**—Oriental Ethiopian and Australian Regions.

All the known species from the Indian subregion can be separated by the following key based on males only. The three species, *i.e.*, *C. cingalensis*, *C. Jeolikotensis* and *C. lakhanmandiensis* have not been included owing to their uncertain taxonomic status.

1 (2). Ultimate tergite in middle posteriorly depressed and provided with two pair of compressed tubercles. ...

*C. decipiens* (Kirby)

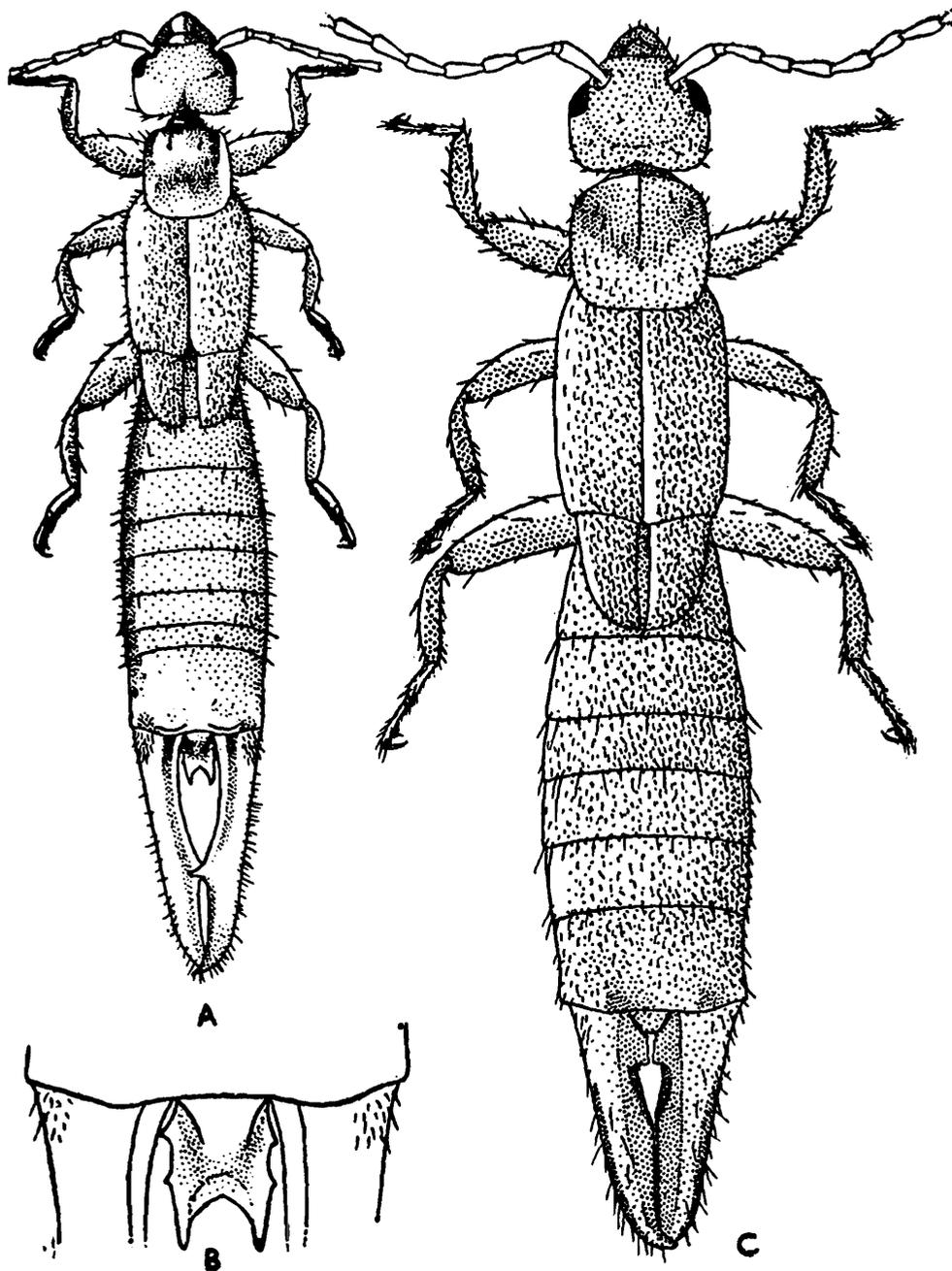
2 (1). Ultimate tergite without any compressed tubercles in middle posteriorly (excepting in *C. stiletta* Burr where there is a pair of compressed tubercles extending beyond the posterior margin)

- 3 (4). Pygidium divided into two halves by a deep median cleft extending from apex up to middle (Text-fig. 1A) ... *C. anamalaiensis* Srivastava
- 4 (3). Pygidium devoid of any cleft in apical half
- 5 (10). Pygidium short and transverse
- 6 (7). Size smaller (up to 6.5 mm); forceps remote, slender and lacking any sharp tooth internally (Text-fig. 1 B) ... *C. andersoni* Brindle
- 7 (6). Size larger (9.9 to 18.5 mm) forceps depressed, armed internally with one or two teeth
- 8 (9). Size smaller (9.9 to 10.2 mm), pygidium with hind margin truncate (Text-fig. 1C) ... *C. kurseongae* Hebard
- 9 (8). Size larger (15 to 18.5 mm), pygidium with hind margin semicircular (Text-fig. 1D) ... *C. malaisei* Hincks
- 10 (5). Pygidium projecting, about as long as broad or longer
- 11 (12). Ultimate tergite with a pair of compressed tubercles in middle posteriorly, pygidium triangular with apex acute (Text-fig. 1E) ... *C. stiletta* Burr
- 12 (11). Ultimate tergite without any compressed tubercles in middle posteriorly; pygidium various but not as above
- 13 (14). Pygidium about as long as broad (Text-fig. 1F) ... *C. foliata* (Burr)
- 14 (13). Pygidium longer than broad
- 15 (18). Pygidium almost of uniform width throughout
- 16 (17). Pygidium with hind margin triangular with a tubercle in middle (Text-fig. 1G) ... *C. thoracica* (Dohrn)
- 17 (16). Pygidium with hind margin straight with three small tubercles, one in middle and one each on angle (Text-fig. 1 H) ... *C. nigriceps* (Kirby)
- 18 (15). Pygidium either broader at base or narrowed in middle, in apical half generally sides convex or angular and sometimes provided with one or two fine teeth
- 19 (22). Pygidium emarginate posteriorly with angles produced into sharp point
- 20 (21). Pygidium on sides straight and converging apically and often provided with a minute teeth (Text-fig. 1 I-L) in middle ... *C. feae* Bormans
- 21 (20). Pygidium with sides broadly convex and provided with a pair of teeth, placed a little apart (Text-fig. 2A, B) ... *C. shillongensis* sp. n.
- 22 (19). Pygidium with hind margin truncate (Text-fig. 1 M) ... *C. mandax* Borelli

***Chaetospania shillongensis* sp. nov.**

(Text-fig. 2 A-C)

Head pronotum, elytra and wings black, antennae dark brownish black with a few preapical segments somewhat lighter or whitish ; legs clear yellow. Abdomen reddish brown with a few basal segments blackish on sides ; pygidium and forceps dark reddish brown. Form depressed, pubescent.



Text-fig. 2. *Chaetospania shillongensis* sp. n. ♂. A. Holotype B. Pygidium enlarged and C. Paratype ♀.

*Male*.—Head cordiform, about as long as broad, smooth, depressed, median suture well marked but transverse suture obliterated, hind margin emarginate in middle. Eyes small, much shorter than genae

in length. Antennae with (partly damaged) 13 segments remaining, 1st stout, narrowed at base, about as long as the distance between the antennal bases; 2nd small; 3rd long and slender and almost equal to 5th in length which is slightly stouter, gently expanded; 5th onwards segments gradually increasing in length and becoming more slender apically. Pronotum about as long as broad, sides parallel, hind margin subtruncate, median sulcus faintly marked in anterior half only; prozona moderately convex and metazona flat. Elytra and wings well developed. Legs typical of the genus. Abdomen depressed, gently dilated in middle, faintly punctulate. Penultimate sternite broadly rounded posteriorly with slight emargination in middle. Ultimate tergite weakly transverse, disc depressed and with stripes of punctate and smooth areas alternating, faintly raised above the root of forceps and intervening space slightly depressed, hind margin faintly emarginate in middle. Pygidium narrow and subvertical at base, afterwards deplanate, sides convex with a pair of minute points of which the posterior one is larger, hind margin deeply emarginate with angles produced into sharp point. Forceps with branches depressed, stout, at base separated by the pygidium, almost straight, tapering, gently curved near apex with tip pointed, internally in basal third dorsal and ventral margin sharp, afterwards forming a flange with a sharp pointed tooth in middle.

*Female*.—Agrees with ♂ in most characters except that pygidium short, subvertical and convex, gently narrowed posteriorly; forceps with branches contiguous at base, almost straight with apices gently hooked and pointed, internally with a rectangular lamellate area, afterwards margin below forming a flange and faintly serrated.

*Measurements* (In mm) :

	Holotype ♂	Paratype ♀
Length of body	7.0	6.4
Length of forceps	2.45	1.5
Length of pygidium	0.55	

*Material examined*.—INDIA : MEGHALAYA : Shillong, nr. Police Bazar, 28. xi. 1974, Holotype ♂, Paratype 1 ♀, under the bark of log (Coll. *T. Sengupta*) ; in the Zoological Survey of India, Calcutta.

*Remarks*.—The described species comes very close to *C. feae* but differs in having a pair of minute teeth, situated a little apart on the sides of pygidium.

## ACKNOWLEDGEMENTS

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