

STUDIES ON SOME DERMAPTERA PRESENT IN THE
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(With 3 Text-figures)

INTRODUCTION

The present report is based upon a small collection of Dermaptera from Pakistan, India, Burma, Philippine Islands and New Guinea comprising 17 species (including 3 spp up to generic level which are represented by females only) under 16 genera of which one species each belonging to genera *Anisolabis* Fieber and *Paratimomenus* Steinmann, from New Guinea are described as new to science. The material from New Guinea was collected by 4th, 5th and 6th Archibold Expeditions to the area organised by the American Museum of Natural History, New York (U. S. A.) during the years 1953, 1956 and 1957, respectively.

PYGIDICRANOIDEA

PYGIDICRANIDAE

PYGIDICRANINAE

Tagalina sp.

Material examined : NEW GUINEA : Papua, Mt. Dayaman, Maneau Range, North slope, 7000 m, 1 ♀, 15-19. vii. 1953, Camp 6, 1 ♀, 29. iv. 1953, Camp 5 (*G. M. Tate*, 4th Archibold Expedition).

Remarks : Elytra and wings are variegated.

CARCINOPHOROIDEA

CARCINOPHORIDAE

CARCINOPHORINAE

Epilandex solomonensis Brindle

Epilandex solomonensis Brindle, 1970, *Pacif. Insects*, 12 (3) : 563.

Material examined : NEW GUINEA, Papua, Mt. Riu, Sudest Isl., 250-350 m, 4 ♀ ♀, 27. viii. 1956, 2 ♂ ♂, 4 ♀ ♀, 1-5. ix. 1956, No. 10 (*L.J. Brass*, 5th Archibold Expedition).

Remarks : Previously recorded from Solomon Islands in New Guinea area.

Euborellia annulipes (Lucas)

Forficisila annulipes Lucas, 1847, *Annls. Soc. ent. Fr.*, 15 : 84.

Material examined : INDIA : Ahwa, Dangs Dist., Bombay State, 1694 ft., 1 ♀, 27. ix. 1961 (*Coll. E. M. Shull*) ; BURMA : Htawgaw, 1 ♀, —iii. 1939 (Varny Cutting Burma Expedition).

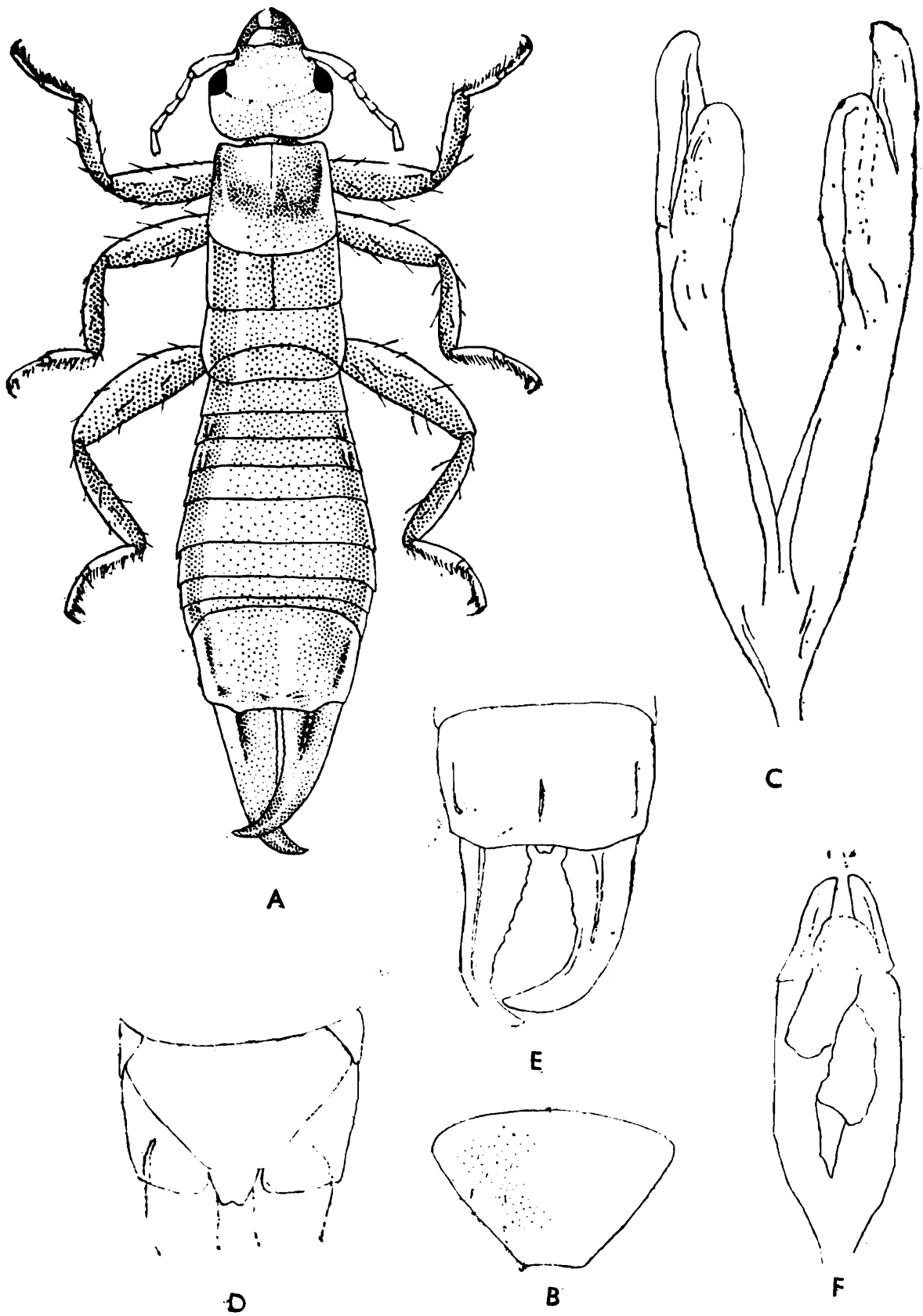
Anisolabis tatei sp. n.

(Text-fig. 1)

♂ : General colour shining brownish with varying shades on different body parts. Legs yellowish brown.

Head longer than broad, smooth, hind margin emarginate in middle, frons convex, sutures faintly marked. Eyes shorter than genae in length. Antennae partly broken (2 segments remaining on the right and 7 on the left but strongly crushed), basal segment stout, gently expanded apically ; 2nd small, almost transverse ; 3rd long and slender ; 4th slightly shorter than preceding ; 5th almost equal to 3rd ; 6th onwards gradually increasing in length and each gently expanded apically. Pronotum slightly broader than long, gently widened posteriorly, sides straight, feebly reflexed, hind margin rounded, prozona raised and well differentiated from flat metazona, median sulcus faint. Elytra and wings absent. Mesonotum posteriorly truncate and metanotum broadly concave. Legs typical of the genus. Abdomen with very fine pubescence above and obscurely punctulate, gently widened posteriorly, sides of segments 7th to 9th acute angled but median carina present on segments 7th and 8th only. Penultimate sternite triangular with hind margin subtruncate. Ultimate tergite impunctate but with faint, rough longitudinal stripes, transverse, gently narrowed posteriorly, median sulcus faint, hind margin in middle emarginate, on sides oblique. Forceps with branches contiguous and straight in basal two thirds thence strongly curved, trigonal above in basal half, afterwards depressed and attenuate, internal margin crenulate, but smooth a little before apex. Genitalia with parameres three times longer than broad, gently narrowed apically with apices broadly obtuse and faintly incurved, virga not visible, preputical sacs with fine chitinous teeth.

♀ : Agrees with male in most characters except that colour dark brownish black ; penultimate sternite obtuse posteriorly and forceps simple and straight.



Text-fig. 1A-F : *Anisolabis tatei* sp. n., Holotype ♂, A. Dorsal view ; B. Penultimate sternite, C. genitalia ; *Anisolabis perissa* Günther, Holotype ♂, D. penultimate sternite, pygidium and a portion of forceps in ventral view, E. Ultimate tergite and forceps, F. Genitalia.

Measurements : (in mm)

	Holotype	
	♂	♀
Length of pronotum	1.9	2.0
Width of pronotum	2.2	2.25
Length of body	13.2	16.5
Length of forceps	2.6	3.4

Material examined : NEW GUINEA, Papua, Mt. Dayman, Maneau Range North Slope, 1550 m, Camp 5, *Holotype* ♂ ; 1 ♀ and 1 nymph, July 3-4, 1953 (Coll. G. M. Tate, 4th Archibold Expedition) ; deposited in American Museum of Natural History, New York (U. S. A.).

Remarks : With Steinmann's (1979) key to the species belonging to the genus *Anisolabis*, from New Guinea, the described species runs down close to *A. perissa* Günther, but differs in having the pronotum transverse (vs. as long as broad in *A. perissa*) ; penultimate sternite subtruncate posteriorly (vs. emarginate in middle posteriorly) and genitalia with both distal lobes flexed forward and parameres comparatively broader (vs. one of the distal lobe flexed backwards and parameres comparatively narrower). From *A. maritima* Bonelli, it differs by the shape of penultimate sternite and parameres and by the absence of virga.

I refer under this species 1 ♀ and 1 nymph with some hesitation from the same locality as the Holotype since these are dark brownish black and the former is slightly larger in size.

LABIDURIDAE

NALINAE

Nala lividipes (Dufour)

Nala lividipes Dufour, 1828, *Annls. Sci. nat.*, 13 : 340.

Material examined : PHILIPPINE ISLANDS : Leyte, Abuyog 35 M. i. s. Tacloban, 1 ♂, 7. vii. 1961 (P. I. Natl. Mus. & Am. Mus. Nat. Hist. Expedition).

Nala sp.

Material examined : NEW GUINEA : Papua, Peria Creek, Kwagira River, 50 m, 6 ♀ ♀, 18-19. viii. 1953, Camp 7 (G. M. Tate, 4th Archibold Expedition).

Remarks : In having rugose elytra and wings these specimens come close to *N. tenuicornis* (Bormans) but in the absence of males it is not possible to identify them up to specific level.

LABIDURINAE

Labidura riparia (Pallas)

Forficula riparia Pallas, 1773, *Reise Russ. Reichs.*, 2 : 727.

Material examined : INDIA : Ahwa, Dangs Dist., Bombay State, 1694 ft. 1 ♀, 20. x. 1963, 1 ♂, 22. x. 1963, 1 ♂, 26. x. 1963 (Coll. *E. M. Skull*); PAKISTAN : (Sind) Hyderabad City and environs, 1 ♂, 1 ♀, -ix, 1959-iii. 1960 (Coll. *Dr. Roy Tasker Indus Exped. Dept. Anthrop. A. M. N. H.*).

Forcipula quadrispinosa (Dohrn)

Forcipula quadrispinosa Dohrn, 1863, *Stettin. ent. Ztg.*, 24 : 311.

Material examined : INDIA : Ahwa, Dangs Dist., Bombay state, 1694 ft., 1 ♂, 6. x. 1961, 1 ♂, 3. x. 1965, 1 ♂, 26. x. 1963, 1 ♀, 16. vii. 1963, 2 ♂ ♂, 17. x. 1963, 1 ♀, 22. x. 1963.

FORFICULOIDEA

LABIIDAE

SPONGIPHORINAE

Irdex papuana (Brindle)

Argusina papuana Brindle, 1970, *Entomologist* : 147.

Material examined : NEW GUINEA, Papua, Fergusson Isls., Mts. between Agamoia and Ailuluai, 900 m, 1 ♂ (genitalia mounted between two coverslips and pinned with the specimen), 5-17. vi. 1956, No. 4. (*L. J. Brass*, 5th Archibold Expedition).

Marava feae (Bormans)

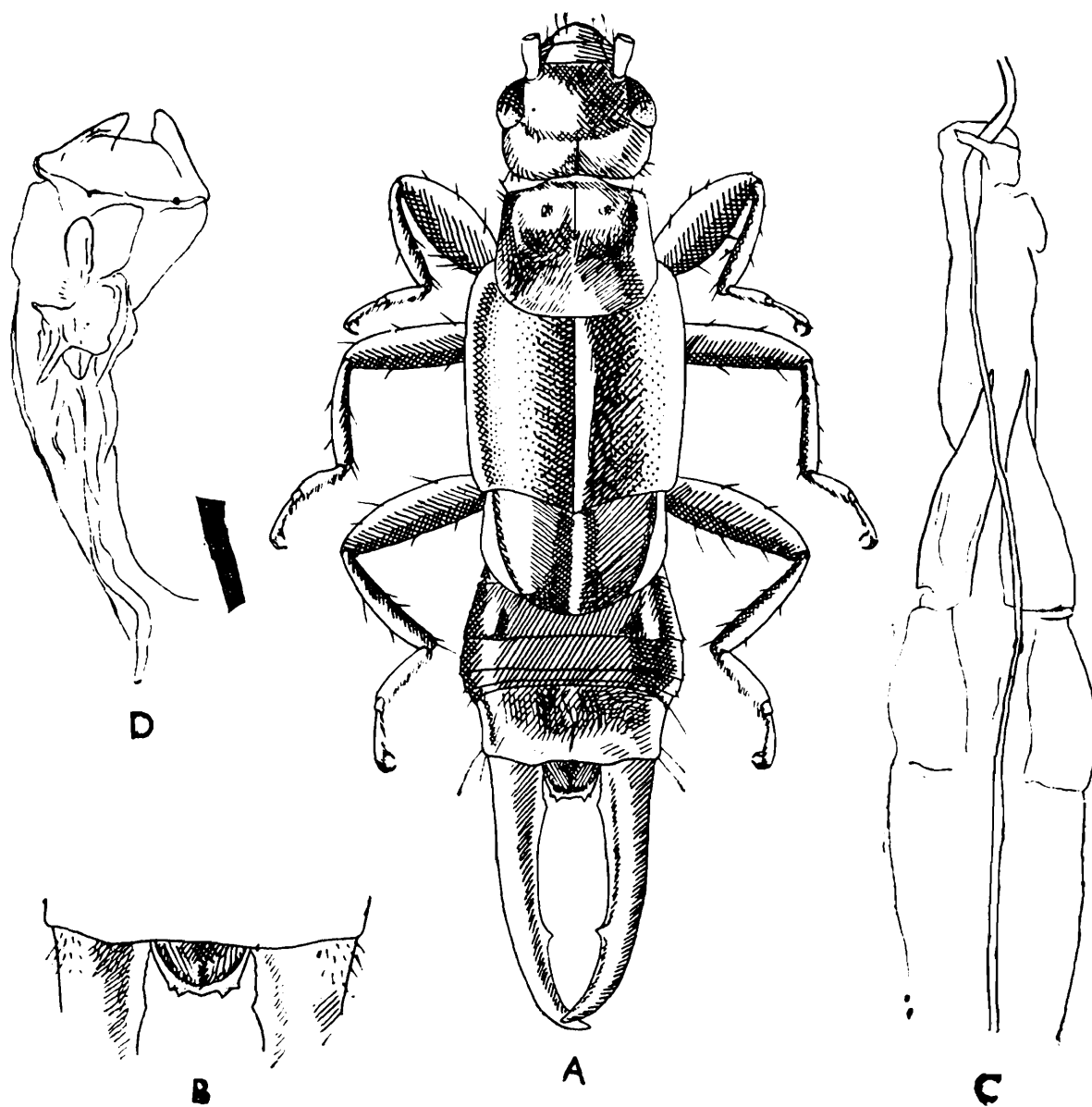
(Text-fig. 2)

Labia feae Dubrony, 1879, *Annali Mus. civ. Stor. nat. Giacomo Doria*, 14 : 368.

Marava feae : Brindle, 1971, *Ent. Tidskr.*, 29 (1-2) : 16.

Material examined : NEW GUINEA : Papua, WaiKaiuna, Nomandy Isl., 0-50 m, 1 ♂, 3 ♀ ♀, 25. iv. 1956, No. 1 (*L.J. Brass*, 5th Archibold Expedition).

Remarks : The forceps in present ♂ are more elongated (representing forma macrolabia) and armed internally with a faint tooth near base and another more prominent one at apical third. Pygidium posteriorly is somewhat convex in middle with a pair of small tubercles postero-laterally. The ♂ genitalia is figured here for the first time.



Text-fig. 2 A-D : *Marava feae* (Bormans), ♂, A. Dorsal view, B. Hind portion of abdomen showing pygidium enlarged, C. Genitalia ; *Spongovostox gracilis* Borelli, ♂, D. Genitalia.

Spongovostox gracilis Borelli

Spongovostox gracilis Borelli, 1916, *Boll. Musei Zool. Anat. comp. R. Univ. Torino*, 31 : 2.

Material examined : PHILIPPINE ISLS. : Leyte, Abuyog 35, M. i. S. Tacloban, 1 ♂, 1 ♀, 11. vii. 1956 (P. I. Natl. Mus. and Am. Mus. Nat. Hist. Expedition).

Remarks : Body is covered with fine yellow pubescence. General colour is dark brownish black with antennae, tarsi and forceps yellowish. Elytra along with the costal margin and wings at base externally are yellow. Male genitalia is figured here for the first time.

CHELISOCHIDAE

CHELISOCHINAE

Proreus simulans (Stål)

Forficula simulans Stål, 1860, *Eug. Resa, Ins.*, : 302.

Material examined : PHILIPPINE ISLS. : Leyte, Abuyog 35, M. i. S. Tacloban, 2♂♂, 14.vii. 1961, 1♀, 11.vii. 1961 (P. I. Natl. Mus. and Am. Mus. Nat. Hist. expedition).

Chelisoches morio (Fabricius)

Forficula morio Fabricius, 1775, *Syst. Ent.*, : 270.

Material examined : NEW GUINEA : Papua, Modewa, Modewa Bay, 0-50 m, 1♀, 1956, No. 17 (*L. J. Brass*, 5th Archibold expedition).

FORFICULIDAE

FORFICULINAE

Forficula beelzebub (Burr)

Chelisoches beelzebub Burr, 1900, *Annl. Soc. ent. Belg.*, 64 : 51.

Material examined : BURMA : Htawgaw, 1♀, March, 1939 (Varny Cutting Burma expedition).

Remarks : The present specimen agrees so well with other females of the species from India that it can be referred here without hesitation.

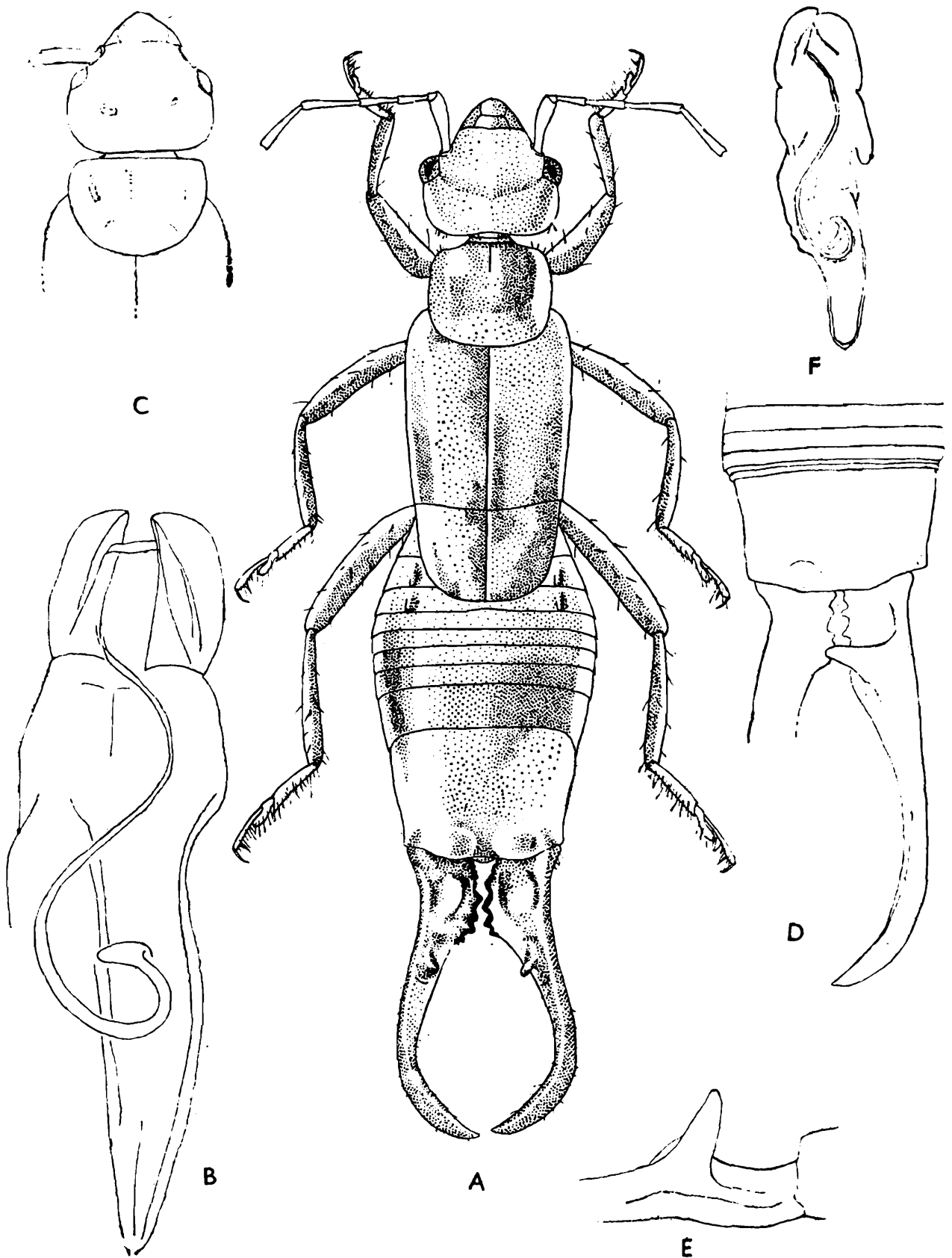
OPISTHOCOSMIINAE

Paratimomenus archiboldi sp. n.

(Text-fig. 3)

♂ : General colour chocolate brown, lighter in middle of abdominal tergites, ultimate tergite dark blackish brown in posterior half only ; forceps reddish black with apices and vertical hook black, pronotum on sides and posteriorly and legs yellowish brown. Elytra and wings light brownish black, former with longitudinal irregular yellow stripe in middle and the latter with an oblique yellow stripe medially. Fine and sparse pubescence present.

Head only slightly longer than broad, smooth, frons and occiput raised, sutures fine but distinct, hind margin freely emarginate in middle. Eyes small, about half as long as the post-ocular length. Antennae partly broken (3 segments remaining on right side and 5 on the left), 1st stout, gently narrowed basally, longer than combined length of 2nd and 3rd ; 2nd small, about as long as broad ; 3rd onwards segments gradually increasing in length, long



Text-fig. 3 A-F : *Paratimomenus archiboldi* sp. n., Holotype ♂, A. Dorsal view, B. Genitalia ; *Forficula burgerisi* Günther, Paratype ♂, C. Anterior portion of body showing head, pronotum and a portion of elytra, D. Hind portion of body showing only right branch of forceps ; E. Basal portion of forceps in profile showing dorsal tooth.

and slender. Pronotum smooth, quadrat, slightly wider than long, anteriorly as wide as head, sides almost depressed, feebly convex, hind margin rounded, median sulcus faint, prozona raised and well demarcated from flat metazona. Prosternum longer than broad ;

meso-sternum about as long as broad with hind margin rounded ; metasternum transverse, hind margin between hind coxae narrow and truncate posteriorly. Legs normal, hind metatarsus almost equal to protarsus, 2nd segment lobed with hind margin entire, clad with fine pubescence on underside ; femora compressed, apically smooth above, not sulcate. Elytra and wings well developed, smooth. Abdomen spindle shaped, convex, tergites smooth, sides of segments smooth, convex. Penultimate sternite rounded posteriorly. Ultimate tergite transverse, smooth, convex above, sloping backwards, narrowed posteriorly with hind margin trisinate, faintly tumid above the bases of forceps. Forceps stout, depressed in basal one third, internally strongly serrated, dorsally with an oblong depression, afterwards branches gently raised, tapering, compressed and strongly curved enclosing an oval space, armed above with a sharp vertical, posteriorly directed tooth at a little before middle. Pygidium scarcely visible from above, obtuse. Genitalia with parameres flat, narrowed apically ; virga stout.

♀ : Unknown.

Measurements : (in mm)

	Holotype
	♂
Length of body	9.3
Length of forceps	3.15

Material examined : NEW GUINEA : Papua, Eastern High Land District, No. 6, Pengagi Camp East Slopes Mt. Wilhelm, 2770 m, *Holotype* ♂, 3. vii. 1959 (L. J. Brass, Sixth Archibold Expedition), deposited in the American Museum of Natural History, New York (U. S. A.).

Remarks : The described species can be easily separated from the other two known species of the genus viz., *P. flavocapitatus* (Shiraki) from Formosa and *P. nathani* (Srivastava) from India by following key based on males only.

1 (2). Elytra brownish black with an irregular yellow stripe in middle ; pronotum transverse ; forceps shorter in being about one third of body in length, dilated in basal one third with internal margin serrated. ...

P. archiboldi sp. n.

2 (1). Elytra unicolourous ; pronotum not transverse ; forceps longer in being only slightly shorter than body in length, cylindrical, often armed with dorsal tooth or provided with minute teeth internally. ...

- 3 (4). Pronotum as long as broad ; sides of abdominal segments 7th to 9th with several tubercles; forceps long and slender, rather depressed in basal one third with an oblique ridge above ; internally provided with numerous small teeth. ... *P. nathanis* (Srivastava)
- 4 (3). Pronotum slightly longer than broad ; sides of abdominal segment without tubercles ; forceps long, slender, armed with a strong dorsal tooth. ... *P. flavocapitatus* (Shiraki)

This species however, shows close resemblance with *Forficula bürgersi* Günther (1929), from New Guinea but differs in having the pronotum quadrat, weakly transverse (vs. strongly transverse, somewhat semi-circular in *F. bürgersi*) ; forceps armed with a dorsal tooth, directed posteriorly (vs. tooth directed anteriorly) and male genitalia with parameres broad with apices obtuse and well separated from each other (vs. tip obtuse but slightly incurved and contiguous).

Type of *F. bürgersi*, has been examined. Its generic position will be discussed elsewhere since it does not belong to the genus *Forficula* L.

Eparchus simplex (Bormans)

Opisthocosmia simplex Bormans, 1894, *Annali Mus. civ. Stor. nat. Giacomo Doria*, (2) 14 : 396.

Material examined : BURMA : Htawgaw, 1 ♂, March, 1939 (Varny Cutting Burma Expedition).

Remarks : The present specimen has been compared with the syntypes of the species.

Opisthocosmia sp.

Material examined.—NEW GUINEA : Papua, Mt. Dayaman, Maneau Range, North Slope, 700 m, 2 ♀ ♀, 15-19. vii. 1953 (*G. M. Tate*, 4th Archibold Expedition) ; Fergusson Isl., Mt. between Agamoia and Ailuluai, 900 m, 2 ♀ ♀, 5-17. vi. 1956, No. 10 (*L. J. Brass*, 5th Archibold Expedition).

Remarks : In the absence of males it is not possible to identify them upto specific level.

SUMMARY

The present paper deals with 17 species under 16 genera from various countries in Oriental Region and New Guinea. Of these, one new species each under the genera *Anisolabis* Fieber and *Paratimomenus* Steinmann are described from New Guinea.

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