

NOTES ON SOME DERMAPTERA PRESENT IN ZOOLOGISK MUSEUM,
COPENHAGEN

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ABSTRACT

Altogether 36 species (excluding one determined up to generic level) under 28 genera are dealt with, of which two species are described as new. A new combination *Gelotolabis formosae* (Borelli) is proposed.

INTRODUCTION

The present paper is based on a small collection of Dermaptera, mostly from various countries in the Oriental Region with a few exception from Palaearctic Region. Altogether 36 species (excluding one identified upto generic level which is represented by female only) under 28 genera are recognised of which one species each under the genera *Euborellia* and *Forficula* are described as new to science. Besides, *Euborellia formosae* Borelli is transferred under the genus *Gelotolabis* Burr.

Family PYGIDICRANIDAE

Subfamily PYGIDICRANINAE

Cranopygia vicina Hincks

Cranopygia vicina Hincks, 1959, *Syst. mono. Dermaptera* : 85.

Material examined.—JAVA : 1 ♂ (genitalia mounted between two coverslips and pinned with the specimen), 1908 (*Hj. Jensen*).

Subfamily ECHINOSOMATINAE

Echinosoma horridum Dohrn

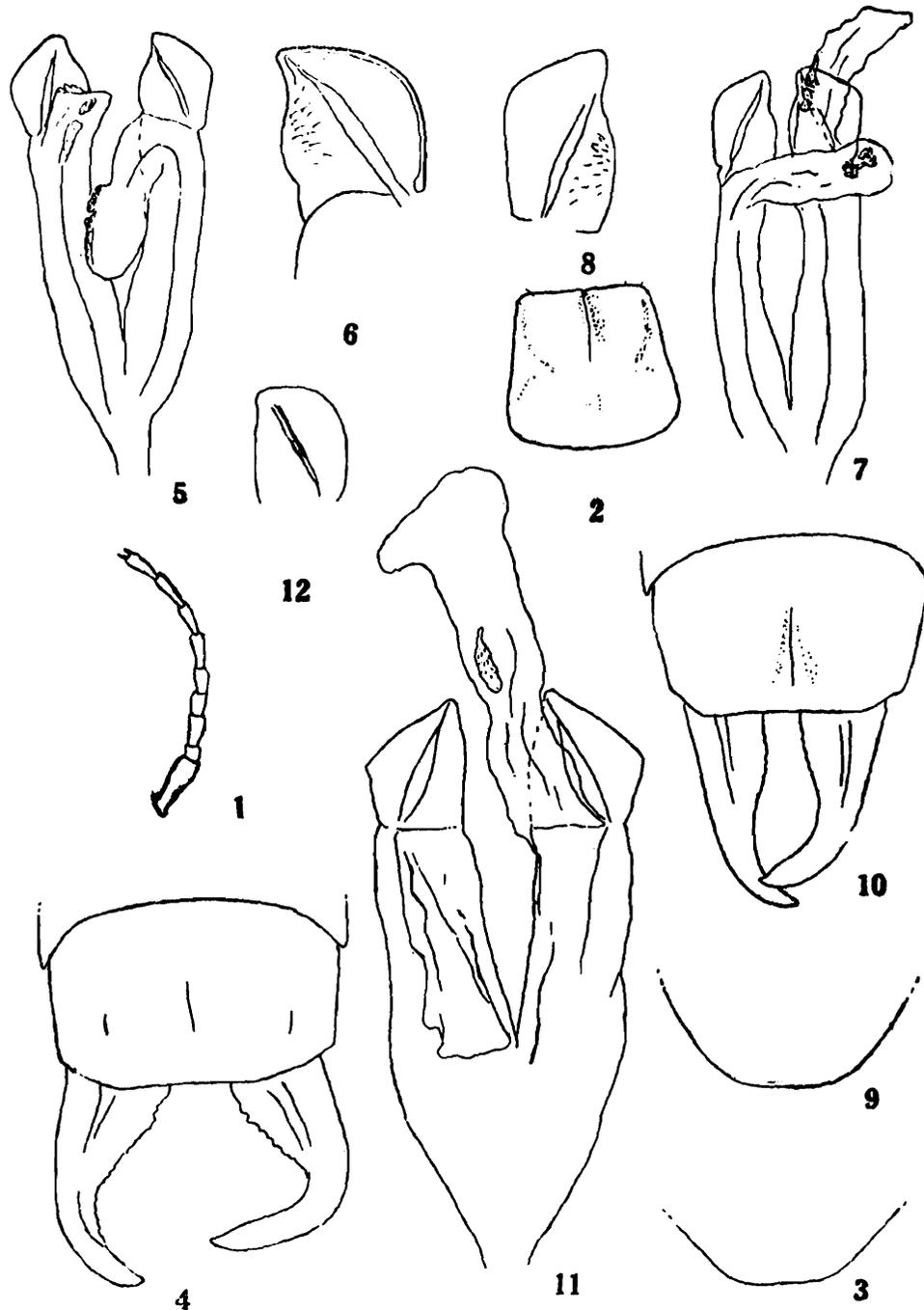
Echinosoma horridum Dohrn, 1863, *Stettin. ent. Ztg.*, 24 : 66.

Material examined.—JAVA : 2 ♂ ♂ (genitalia mounted between two coverslips and pinned with the specimen), 1904 (*Hj. Jensen*).

Echinosoma burri Hincks

Echinosoma burri Hincks, 1959, *Syst. mono. Dermaptera* : 158.

Material examined.—JAVA : Buitenzorg, 1 ♂ (genitalia mounted between two coverslips and pinned with the specimen), 1 ♀, 1904 (*Hj. Jensen*).



Figs. 1-12. *Euborellia burmensis* sp. n. Holotype ♂, 1. A few basal antennal segments, 2. Pronotum, 3. Posterior margin of penultimate sternite, 4. Ultimate tergite and forceps, 5. Genitalia, 6. Paramere enlarged; Paratype ♂, 7. Genitalia, 8. Paramere enlarged; *Gelotolabis formosae* (Borelli) ♂, 9. Posterior margin of penultimate sternite, 10. Ultimate tergite and forceps, 11. Genitalia; *Euborellia anulipes* (Lucas) ♂, 12. Paramere.

Subfamily PROLABISCINAE

Prolabisca infernalis (Burr)*Chaetospania infernalis* Burr, 1913, *Ent. Mitt.*, 2 : 6.*Material examined*.—SUMATRA : Goal,
1500 m, 1 ♂, 1.xi.1916 (*O. Hagerup*).

Family CARCINOPHORIDAE

Subfamily CARCINOPHORINAE

Euborellia burmensis sp.n.

(Figs. 1-8)

Male : General colour brownish black, mouth parts, sides of pronotum, and legs yellowish brown, abdomen and forceps shaded with black.

Head longer than broad, hind margin slightly emarginate in middle, frons convex, smooth, sutures feebly marked. Eyes slightly shorter than post-ocular length. Antennae 15-segmented or more, a few preapical segments yellow, 1st segment slightly shorter than the distance between antennal bases, narrowed at base ; 2nd small, about as long as broad ; 3rd long and slender ; 4th and 5th subconical, remaining segments gradually increasing in length successively but each segment narrowed basally. Pronotum slightly longer than broad, gently widened posteriorly, sides straight, gently reflexed, anterior margin straight, hind margin rounded, median sulcus distinct, prozona raised and well differentiated from flat matazona ; mesonotum and

metanotum transverse, former with hind margin straight and latter concave. Legs typical for the genus, hind metatarsus almost equal in length to pro- and mesotarsus together. Elytra and wings absent. Abdomen moderately depressed, punctulate, enlarging posteriorly up to 9th tergite, sides of segments 5th to 9th acute angled but longitudinal carina present on 6th to 9th only and rugosely punctate. Penultimate sternite narrowed posteriorly, hind margin in middle truncate with faint emargination in the centre, sides oblique and straight. Ultimate tergite transverse, more strongly punctulate above, laterally with an oblique carina, median sulcus distinct along the whole length, hind margin in middle straight, thickened and area just above forceps depressed and striate, sides oblique and concave. Forceps with branches remote at base, trigonal above in basal on third, afterwards narrowed, depressed, right branch more strongly curved than the left, inner margin serrated. Genitalia with parameres of *Euborellia* type *i.e.*, about as long as broad, outer apical angle rounded and internally near apex concave ; parameres of Paratype ♂ slightly longer than broad but basic structure same.

Female : Agress with males in most characters except that the sides of abdominal segments obtuse, penultimate sternite triangular, ultimate tergite narrower posteriorly and forceps simple and straight.

Measurements.—(in mm)

	Holotype		Paratypes	
	♂	♂	3 ♀	♀
Length of body	13.7	12.1	13.2-13.9	
Length of forceps	3.00	2-3	1.9-2.75	

Material examined.—THAILAND : Rangoon,

Holotype ♂ (genitalia mounted between two coverslips and pinned with the specimen),

Paratypes 1 ♂, 3 ♀ ♀ and 1 nymph, Res-landing fra (*Lovendal*), no further data ; all types deposited in Zool. Mus. DK Copenhagen, except Paratypes 1 ♂, 1 ♀ with the author at the Zoological Survey of India, Calcutta.

Remarks.—Amongst the apterous species of the genus *Euborellia* Burr, known from the Oriental Region, the described species comes close to *E. annulipes* (Lucas) and *E. rajasthanensis* Srivastava (1977) but it can be easily separated from both by its larger size and distinctive parameres in males which are about as long as broad with apical margin slightly oblique and forming a rounded angle at the point of junction with the lateral margin and the inner apical concavity deep and short. Parameres in case of *E. annulipes* are about as long as broad but inner concavity is feeble whereas in *E. rajasthanensis* inner concavity is broad but not so deep and oblique inner margin in apical half together

with oblique apical margin make the parameres look like a triangular plate in upper half.

Anisolabis maritima (Bonelli)

Forficula maritima Bonelli in Gene, 1832, *Ann. Sci. Regno Lombards-Veneto*, 2 : 221.

Material examined.—EGYPT : Quati, 1 ♂ (genitalia mounted between two coverslips and pinned with the specimen), x.46 (*Lathea*).

Remarks.—Probably due to the immature condition of specimen, both the distal lobes of genitalia are flexed forward.

Gonolabis electa Burr

Gonolabis electa Burr, 1910, *Fauna Brit. India Dermoptera* : 79.

Material examined.—MAURITIUS : 1 ♂ (genitalia mounted between two coverslips and pinned with the specimen) ; 15.ix.1929 (*Th. Mortensen*).

Gelotolabis formosae (Borelli) comb. nov.

(Figs. 9-11)

Anisolabis formosae Borelli, 1927, *Boll. Lab. Zool. gen. agr. Portici*, 20 : 69.

Material examined.—TAIWAN : Shanghai, 1 ♂ (genitalia mounted between two coverslips and pinned with the specimen), 1 ♀, 25.ii.05 (ex. coll. *Houschild*).

Remarks.—On account of projecting external apical angles of parameres it is transferred to the genus *Gelotolabis* Burr.

Subfamily BRACHYLABINAE

Isolabis ocellata Srivastava

Isolabis ocellata Srivastava, 1978, *Annali Mus. civ. Stor. nat. Giacomo Doria*, 82 : 325.

Material examined.—JAVA : 1 ♂ (genitalia mounted between two coverslips and pinned with the specimen), 1904 (Hj. Jensen).

Remarks.—Hitherto described from Burma and is recorded from Java for the first time.

Family LABIDURIDAE

Subfamily ALLOSTETHINAE

Allostethus setiger Verhoeff

Allostethus setiger Verhoeff, 1904, *Arch. Naturgesch.*, 70 : 117.

Material examined.—JAVA : 2 ♂ ♂ (1 ♂ with genitalia mounted between two coverslips and pinned with the specimen), 1 ♀ and 1 nymph, 30.iii.1908 (Hj. Jensen).

Remarks.—Wings are yellow and scarcely projecting beyond the elytra. Apical third of femora is yellow.

Gonolabidura piligera (Bormans)

Anisolabis piligera Bormans, 1899, *Annali Mus. civ. Stor. nat. Giacomo Doria*, 20 : 453.

Material examined.—SUMATRA : Somban, Djollo, 1200 m, 1 ♂, 1 ♀ and 1 nymph, Sept., 1916 (O. Hagerup); JAVA : 1 ♂ (genitalia mounted between two coverslips and pinned with the specimen), 2 ♀ ♀ and 1 nymph, 1904 (Hj. Jensen).

Subfamily NALINAE

Nala lividipes (Dufour)

Forficula pallipes Dufour, 1820, *Ann. Gener. Sci. Phy. Bruxelles*, 4 : 316.

Forficula lividipes Dufour, 1828, *Ann. Sci. Nat.*, 13 : 340 (new name proposed).

Material examined.—INDIA : Karnataka, Mudigera area, ca 900 m, 2 ♂ ♂, 14 ♀ ♀, 2-10.xi.1977; Bihar, Santal Parganas, 1 ♂, 1 ♀, 20.xi.1929 (Dr. Bögghed).

THAILAND : Bangkok, 1 ♂, 4.ix.11.

SUMATRA : Padang, 1 ♀, 2.iv.82 (Klein); Vedi, Klathen, 3 ♂ ♂, 3 ♀ ♀, (Skoogcad).

Nala basalis Bey-Bienko

Nala basalis Bey-Bienko, 1970, *Zool. Zshurn.*, 49 : 1841.

Material examined.—SIAM? (now THAILAND) : 1 ♂ (genitalia mounted between two coverslips and pinned with the specimen), 1 ♀, no further data.

Remarks.—First record from the area.

Subfamily LABIDURINAE

Labidura riparia (Pallas)

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

Material examined.—BURMA : Inlakka, marines feusen, 1901, Tailen, Redn., 2 ♂ ♂; JAVA : 1 ♀ (no further data); SOUTH INDIA : Karnataka, Mudigera area, ca 900 m, 3 ♀ ♀, 2-10.xi.1977; Jersopa (Jog falls), 1 ♂, 19-24.xi.1977.

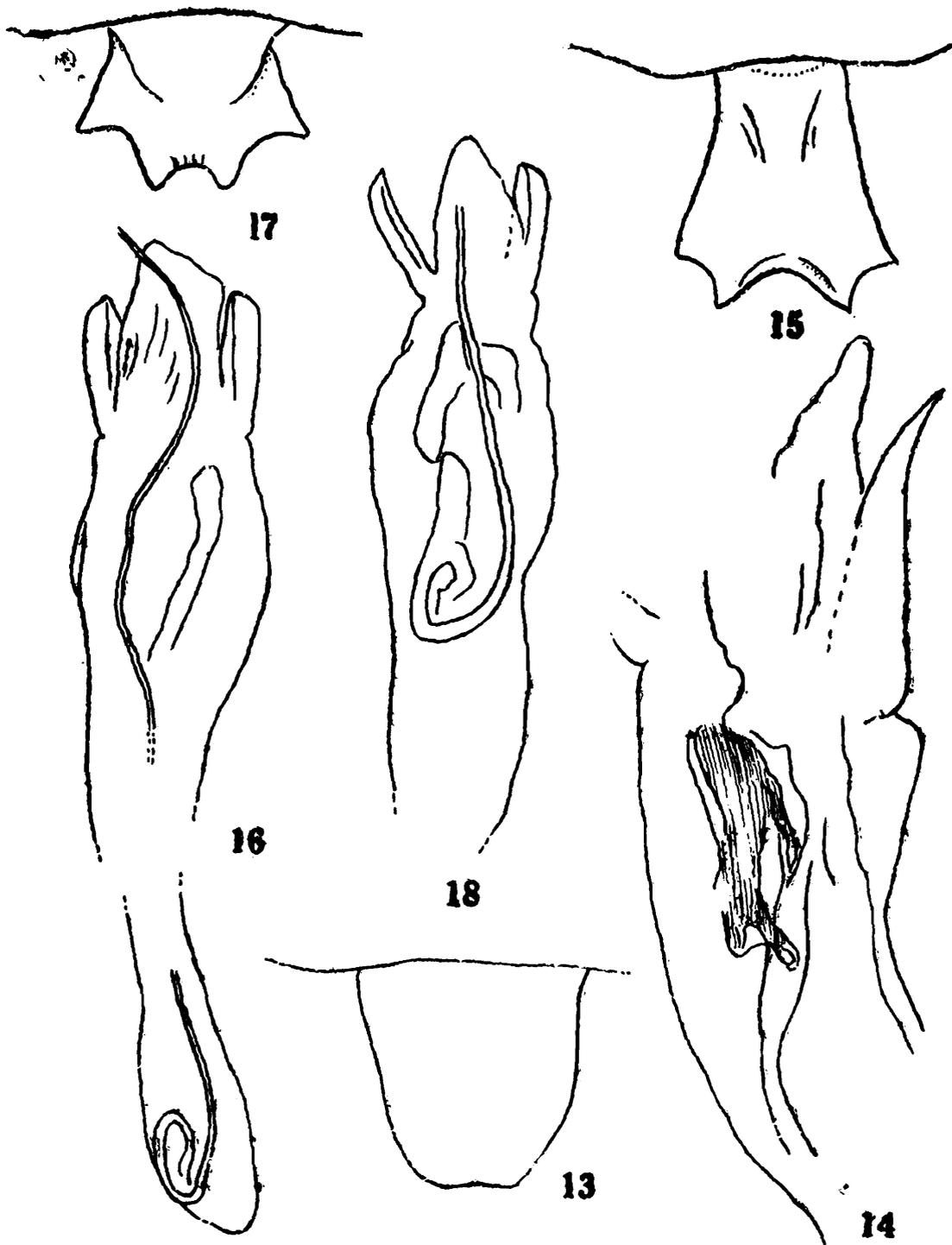
Forcipula quadrispinosa (Dohrn)

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

Material examined.—SIAM (now THAILAND) : Prae (Poul Fough Coll. Rosenberg), 1 ♂ (no further data).

Forcipula trispinosa (Dohrn)

Forcipula trispinosa Dohrn, 1863, *Stettin. ent. Ztg.*, 24 : 310.



Figs. 13-18 : *Nesogaster rufices* (Erichson) ♂, 13. Pygidium, 14. Genitalia (left paramere not shown); *Irdex pygidiata* (Dubrony) ♂, 15. Pygidium, 16. Genitalia; *Irdex stella* (Bormans) ♂, 17. Pygidium, 18. Genitalia.

Material examined.—INDIA : U. P., Dehra Dun Valley, ca 700 m, 1 ♂, 4-13.viii. 1978.

Forcipula tuberculata Srivastava

Forcipula tuberculata Srivastava, 1977, *Dtsch. Ent.*, N. F. 24 (4-5) : 289.

Material examined.—Bengalen (INDIA : West Bengal), Hugli, Galathea ; 1 ♀ (no further data).

Family LABIIDAE

Subfamily NESOGASTRINAE

Nesogaster ruficeps (Erichson)

(Figs. 13-14)

Forficula ruficeps Erichson, 1842, *Arch. Naturgesch.*, 8 : 246.

Material examined.—Nyholland (AUSTRALIA), 1 ♂ (genitalia mounted between two coverslips and pinned with the specimen).

Remarks.—Male genitalia and pygidium are figured.

Subfamily SPONGIPHORINAE

Irdex nitidipennis (Bormans)

Spongophora nitidipennis Bormans, 1894, *Annali Mus. civ. Stor. nat. Giacomo Doria*, 14 : 382.

Material examined.—JAVA : Tjibodas, 1 ex. (hind portion of body missing), 1 ♂, 2 ♀ ♀, 25.iii.1910 (*Schorjeo*).

Irdex pygidiata (Dubrony)

(Figs. 15-16)

Labia ? pygidiata Dubrony, 1879, *Annali Mus. civ. Stor. nat. Giacomo Doria*, 14 : 364.

Material examined.—JAVA : Tjibodas, 1 ♂, (genitalia mounted between two coverslips and pinned with the specimen), 14-22.viii.1922 (Dr. Th. m).

Remarks.—Pygidium and male genitalia are figured.

Irdex stella (Bormans)

(Figs. 17-18)

Spongiphora stella Bormans, 1899, *Annali Mus. civ. Stor. nat. Giacomo Doria*, 20 : 454.

Material examined.—S. SIAM (= THAILAND) : Bangabao, Bandon, 1 ♂ (genitalia mounted between two coverslips and pinned with the specimen), 31.i.1941 (*A. M. Hemingsen*).

Remarks.—The material referred to *I. pygidiata* by Srivastava (1976) from Philippines belongs to this species. Pygidium and male genitalia are figured here.

Spongovostox semiflavus (Bormans)

Spongophora semi-flava Bormans, 1894, *Annali Mus. civ. Stor. nat. Giacomo Doria*, 14 : 385.

Material examined.—JAVA : 2 ♀ ♀ (ex. *Mus. Westerman*)—no further data.

Marava arachidis (Yersin)

Forficula arachidis Yersin, 1860, *Annl. Soc. ent. Fr.*, (3) 8 : 509.

Material examined.—BURMA : Skibmed Ris fra Akyab Köbenhavn, 11 ♂ ♂, 20 ♀ ♀, 20 nymphs, 23.x.1878 (*flamen K. Lovendal*) ; NEW BRITANNIA : Matufi, 1 ♂, 1 ♀ (Capt. Hertmann).

Remarks.— All specimens are brachyp-terous.

Subfamily LABIINAE

Labia curvicauda (Motschulsky)

Forficesila curvicauda Motschulsky, 1863, *Bull. Soc. Imp. Moscou*, 36 : 2.

Material examined.—NORTH THAILAND : Doi Sutep, 1100 m, 1 ♂, 19.ix.1958 (*B. Degerb + l leg.*).

Labia lutea (Bormans)

Spongophora lutea Bormans, 1894, *Annali Mus. civ. Stor. nat. Giacomo Doria*, 14 : 383.

Material examined.— India Orient, Kofod, 1 ♀, (*Mus. Sch. V T L.*)

Family CHELISOCHIDAE

Subfamily CHELISOCHINAE

Chelisoches morio (Fabricius)

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

Material examined.— CEYLON : Kalutara, 1 ♂, 26.x.1951 (Dr. H. Lemche) ; JAVA : 1 ♂ (no further data), 1 ♂, 1 nymph (*Hedermann*, 1860) ; 2 ♀ ♀, 1904 (*Hj. Jensen*) ; Amboma, 1 ♂, ii.1922 (*Th. Mortensen*).

Proreus simulans (Stål)

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

Material examined.— THAILAND : Bangkok, 1 ♀, 1-8.ii. ; 1 ♀, 20.ii.1929 (*Christian Shamm ded*) ; JAVA : Tjiboda, 1 ♂ (no further data).

Remarks.— The ♂ from Java has short forceps which represent mesolabis form.

Proreus sp.

Material examined.— JAVA : 1 ♀, 1904 (*Hj. Jensen*).

Remarks.— In the absence of a ♂ it is not possible to determine it up to specific level.

Hamaxas semiluteus (Bormans)

Chelisoches semiluteus Bormans in Burr, 1899, *Ann. Mag. nat. Hist.*, (7) 4 : 259.

Material examined.— JAVA : 1 ♂ (genitalia mounted between two coverslips and pinned with the specimen), 1904 (*Hj. Jensen*).

Euenkrates elegans (Bormans)

Chelisoches elegans Bormans, 1899, *Annali Mus. civ. Stor. nat. Giacomo Doria*, 20 : 464.

Material examined.— JAVA : Tjibodas, 1 ♂ (genitalia mounted between two coverslips and pinned with the specimen) ♀ (no further data).

Family FORFICULIDAE

Subfamily ANECHURINAE

Anechura bipunctata (Fabricius)

Forficula bipunctata Fabricius, 1781, *Spec. Ins.*, 1 : 340.

Material examined.— USSR : Tadzhikistan, Province Shungan, at Amu Darja, 2 ♂ ♂, 2 ♀ ♀, ...x.1899 (*Ove Paulsen leg.*)

Subfamily FORFICULINAE

Elaunon bipartitus (Kirby)

Sphingolabis bipartitus Kirby, 1891, *Trans. Linn. Soc. London*, 11 (1) : 526.

Material examined.— SOUTH INDIA : Karnataka, Nandi Hills, 1200-1500 m, 2 ♀ ♀, 28.x.1977.

Forficula beelzebub (Burr)

Chelisoches beelzebub Burr, 1900, *Ann. Soc. ent. Belg.*, 44 : 51.

Material examined.— INDIA : U. P., Mussoorie, ca 1500-2200 m, 1 ♂, 3-14.viii. 1978.

Forficula lurida (Erichson)

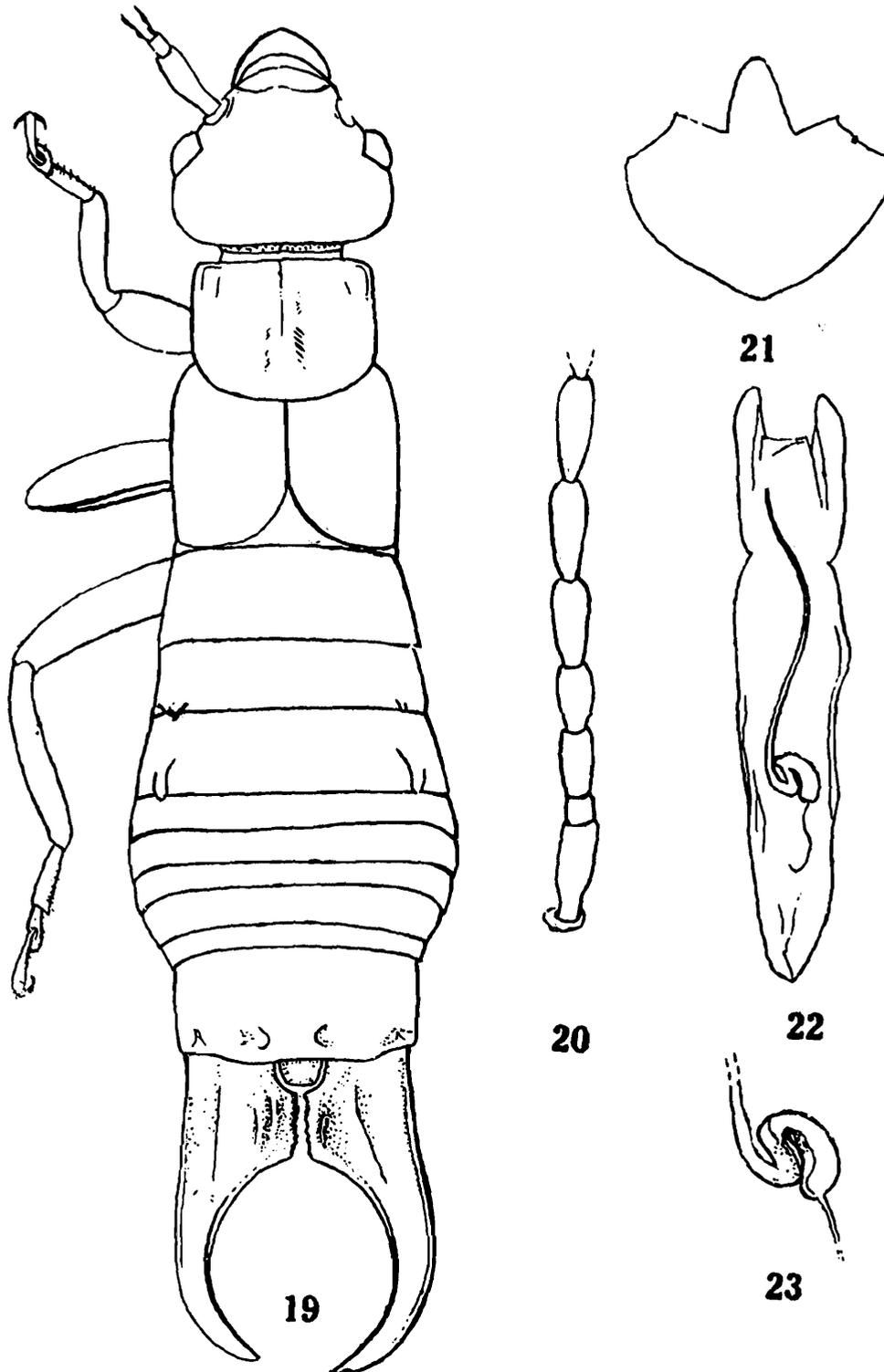
Forficula lurida Fischer, 1853, *Orth. Eur.* : 75.

Material examined.— IRAN : Shah Bazair, ca 80 km NE Dezful, Lok 53, 5 ♂ ♂, 2 ♀ ♀, 15.iv.1937 (*E. W. Kaiser*).

Forficula kashmirensis sp. n.

(Figs. 19-23)

Male : General colour yellowish brown



Figs. 19-23 : *Forficula kashmirensis* sp. n. Holotype ♂, 19. Dorsal view, 20. A few basal antennal segments, 21. Penultimate sternite, 22. Genitalia, 23. Basal vesicle:enlarged.

with shades of black in parts in the middle of pronotum, abdominal tergites and forceps ; head except mouth parts, ultimate tergite, and the pygidium complete black.

Head slightly longer than broad, convex above in middle, sutures obsolete, smooth, hind angles rounded and margin straight. Eyes about half as long as the post-ocular length. Antennae 12-segmented (or more because a few apical segments appear to be broken), 1st antennal segment stout, narrowed basally, slightly shorter than the distance between antennal bases ; 2nd about as long as broad ; 3rd long, slender, about as long as 5th ; 4th shorter than 3rd but stouter and narrowed basally, 6th onwards segments gradually increasing in length, mostly segments stout except one or two apical ones thinner. Pronotum slightly broader than long, smooth, anterior and lateral margins straight, hind angles and margin rounded, prozona moderately raised with faint median sulcus and not much differentiated from weakly raised metazona. Elytra abbreviated, only slightly longer than the pronotum, shoulder not prominent, meeting along the sutural margin, hind margin with inner angles rounded off ; wings absent. Legs typical. Abdomen spindle shaped, convex, faintly punctulate, sides of segments obtusely rounded, punctulations comparatively more pronounced, lateral tubercles on 3rd tergite weakly and on 4th well marked. Penultimate sternite transverse, faintly punctulate, hind margin rounded but obtuse in middle posteriorly. Ultimate tergite transverse, longitudinal stripes of punctulate and smooth areas alternating, sides straight, slightly raised posteriorly above the bases of forceps, hind margin slightly emarginate in middle, laterally weakly oblique and emarginate. Pygidium subvertical, slightly longer

than broad, narrowed apically with apex convex. Forceps depressed in basal one third with its inner margin straight and finely crenulate, afterwards gradually narrowing, cylindrical and moderately curved with apices gently hooked and pointed, not meeting with that of opposite side. Genitalia as seen in figure 22.

Measurements.—(in mm)

	Holotype
	♂
Length of head	1.7
Width of head	1.7
Length of pronotum	1.2
Width of pronotum	1.4
Length of elytra	1.4
Length of body	8.3
Length of forceps	2.6

Material examined.—INDIA : Kashmir, Gulmarg, ca 2600-3000 m, *Holotype* ♂ (genitalia mounted between two coverslips and pinned with the specimen), 1.viii.-5.ix.1978 (Copenhagen Zool. Mus. Exp.) ; deposited in Zool. Mus. DK, Copenhagen.

Remarks.—The described species comes close to *Forficula beebei* Burr (1911), *F. lucens* Brindle, *F. distendens* Brindle (1975) and *F. jayarami* Srivastava (1972), all known from India and adjacent countries on brachypterous forms with the exception of *F. beebei*, in which macropterous form (fully winged) is also met with. All these species can be easily separated by the following key.

- 1(4). Size larger (14.5 to 15.5 mm including forceps), pronotum strongly transverse
- 2(3). Abdomen greatly distended, parallel sided ; forceps almost straight, inner dilation of forceps extending in less than basal half, afterwards branches almost straight, cylindrical*F. distendens* Brindle

- 3(2). Abdomen greatly enlarged in middle, forceps with inner dilation extending in basal half or beyond, afterwards branches strongly curved with a faint, obtuse projection, a little before apex
.....*F. jayarami* Srivastava
- 4(1). Size smaller (8.5 to 11 mm including forceps), pronotum transverse
- 5(6). Pygidium distinct, rectangular, subvertical, sides almost straight, hind angles projecting in the form of minute point and in middle with another point; forceps with branches curving gradually from base to apex, slightly broader at base with faint tubercle or ridge close to inner margin above
.....*F. beebei* Burr
- 6(5). Pygidium short obtuse; forceps deplanate in basal one third to half, afterwards branches tapering.
- 7(8). Head orange, sutures distinct; pronotum with hind margin rounded, feebly obtuse in middle; abdominal tergites strongly punctate; ultimate tergite strongly transverse; forceps slender with basal dilation extending in basal half*F. lucens* Brindle
- 8(7). Head black, sutures obsolete; pronotum with hind margin briefly rounded, abdominal tergites finely punctulate; ultimate tergite transverse; forceps stouter with basal dilation extending in basal one third only
.....*F. kashmirensis* sp. n.

Subfamily EUDOHRNINAE

Eudohrnia metallica (Dohrn)

Forficula metallica Dohrn, 1865, *Stettin. ent. Ztg.*, 26 : 90.

Material examined.—INDIA : Dehra Dun Valley, ca 700 m, 1 ♀, 13.viii.1978.

Subfamily OPISTHOCOSMIINAE

Eparchus insignis (Haan)

Forficula insignis Haan, 1839-1844, *Verh. Nat. Ges. nederl. Overzee. Bezitt.*, : 243.

Material examined.—SOUTH INDIA : Mudi-

gera area, ca 900 m, 1 ♂, 2-10.xi.1977 ; JAVA : 1 ♂, (no further data), Buitenzarg, 1 ♂, 1907 (*Hj. Jensen*).

Cordax forcipatus (Haan)

Forficula forcipata Haan, 1839-1844, *Verh. Nat. Ges. nederl. Overzee. Bezitt.*, : 242.

Material examined.—JAVA ; 1 ♂, 1904 (*Hj. Jensen*) ; Tjibodas, 1 ♀, 14-22.viii.1922 (*Dr. Th. m.*)

Remarks.—Both the specimens are without wings.

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