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Dermaptera collected by the Noona Dan Expedition in the Philippine and Bismarck Islands.

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This paper is a report on the Dermaptera collected by the Danish "Noona Dan" Expedition 1961—62 to the southern parts of the Philippine Islands and to various islands of the Bismarck Archipelago (see Petersen 1966 for details, maps etc.). The collection was placed at the disposal of the author through the kindness of Dr. Børge Petersen of the Zoological Museum, Copenhagen.

The collection contains a total of 303 specimens of which only 61 are from the Philippines. The remainder, 242 specimens, is from the Bismarck Islands including a few specimens from Guadalcanal in the Solomon Islands. About thirty nymphs are undetermined as well as a few females which could not be determined without the male sex.

Our knowledge of the Philippine Dermaptera is to a large extent based on the works of Borelli (1915, 1916, 1923 and 1926) and no significant information is available before these four studies. The Philippine collection consists of 19 species (in 16 genera). Three of these species are considered new to science.

The Dermaptera of the Bismarck Archipelago has remained neglected though reports on the earwigs of the surrounding Melanesian Islands and New Guinea are not scarce in literature. *Echinosoma yorkense* Dohrn (Burr 1907) and *Apachyus beccari* Dubrony (Brindle 1966) are previously known from New Britain. Prof. G. J. Bey-Bienko of the Academy of Sciences, U.S.S.R., was kind enough to inform the author about records from these islands of *Tagalina semperi semperi* Dohrn, *Anisolabis verhoeffi* Zacher, *Marawa wallacei* Dohrn, *Marawa subaptera* (Kirby) (both

these species are now considered synonymous with *Marawa arachidis* (Yersin)) and *Chelisoches morio* (Fabr.). He cites Zacher (1911), Burr (1912) and Günther (1933) as the sources of these records. Hincks (1938) has no additions to these in his check-list of the Dermaptera of Oceania. Rehn (1948) refers to the presence of *Tagalina grandiventris* (Blanchard) in New Ireland, but Hincks (1955) limits the distribution of this species to New Guinea.

Our knowledge of the Dermaptera of the Bismarck Islands is thus very limited and the present study is therefore of interest. The examination of the Noona Dan collection shows the presence of 29 species (in 22 genera) of which 2 genera and 11 species are considered new to science. A significant feature of the collection is that nearly all of the species are represented by the male sex which helped in the determination to specific rank. This is particularly true of uniques which otherwise would have remained unknown. The great diversity in the taxa of this small collection suggests the existence of more species in the islands.

The general composition of the material is indicative of a strong Indo-Malayan influence on the fauna, and the presence of *Brachylabis* Dohrn and *Euenkrates* Rehn in this region adds to our knowledge of the discontinuous distribution of these genera.

The two genera described below, *Physogaster* gen. nov. and *Parapericomus* gen. nov., present interesting affinities. They belong to the family Labiidae and are characterised by a keel on the costal fold of the elytra. With this character four genera are known in this family, but only one of these (*Nesogaster* Verhoeff) is known from the present geographical region. Of the other three, two (*Pericomus* Burr and *Strongylopsalis* Burr) are Neotropical while the third (*Vandex* Burr) is restricted to Central Africa. The general build together with the nature of the antenna and the male genitalia prevents the inclusion of *Physogaster* and *Parapericomus* in any of these subfamilies, though they bear a superficial resemblance to *Pericomus* in the pubescence of the body, sculpturing of the pronotum and the organs of flight. In view of their size, which is rather large for the family, a new subfamily, Physogastrinae nov., is proposed for these genera.

Before giving the List of Species — arranged according to the modified classification of the order outlined by Popham (1965) — a key to the genera of the earwigs of the Bismarck Islands is presented as an aid to future students.

Generic Key to the Dermaptera of the Bismarck Islands.

1 (16) Male genitalia with paired distal lobes

2 (5) Both distal lobes reflected downwards

3 (4) Large insects measuring more than 30 mm.; second tarsal segment short and broad, forming a ring around base of third ..... *Tagalina* Blanchard.

4 (3) Small insects hardly exceeding 10 mm.; second tarsal normal ..... *Echinosoma* Serville.

5 (2) One of the distal lobes projected up

6 (9) Pygidium fused with ultimate tergite and drawn into an anal process

7 (8) Anal process very large, occupying more than three-fourths the area enclosed by forceps; pronotum elliptical ..... *Apachyus* Serville.

8 (7) Anal process broad, indistinct, very little produced beyond base of forceps; pronotum rectangular .. *Dendroiketes* Burr.

9 (6) Pygidium free from ultimate tergite, narrow and of different kinds

10 (15) Totally apterous; tergites 6—9 of abdomen of male blunt laterad; antennal segments not clavate

11 (12) Mesonotum keeled; ultimate tergite with two distinct tubercles above base of forceps, the region in between deeply sinuate ..... *Brachylabis* Dohrn.

12 (11) Mesonotum not keeled; ultimate tergite truncate caudad

13 (14) Metasternum rounded and forming a lobe between legs ..... *Anisolabis* Burr.

14 (13) Metasternum almost truncate, not produced beyond legs ..... *Parisolabis* Verhoeff.

15 (10) Elytra at least well developed, tergites 6—9 of abdomen of male acute and carinate laterad; antennal segments clavate ..... *Epilandex* Hebard.

16 (1) Male genitalia with single distal lobe

17 (34) Second tarsal segment distinct, not produced below third

18 (23) Elytra with a distinct keel on costal fold

19 (20) Small insects with slender forceps; abdomen smooth, antennal segments clavate ..... *Nesogaster* Verhoeff.

20 (19) Large insects with body covered by dense hairs; antennal joints subconical or subcylindrical; femora incrassate, tibiae sulcate in apical half

21 (22) Elytra and wing scales distinctly rugose, antennal segments slender and subcylindrical; parameres broad and short ..... *Parapericomus* gen. nov.

22 (21) Elytra and wing scales not rugose, antennal segments sub-

conical; parameres very long and narrow
..... *Physogaster* gen. nov.

23 (18) Costal fold of elytra without a keel

24 (25) Head strongly depressed; pronotum drawn into a neck anteriorly ..... *Auchenomus* Karsch.

25 (24) Head tumid; pronotum not drawn into a neck anteriorly

26 (29) Eyes as long as or longer than first antennal segment; sutures of head obsolete

27 (28) Antennal segments pyriform ..... *Marava* Burr.

28 (27) Antennal segments subcylindrical ..... *Spongovostox* Burr.

29 (26) Eyes shorter than first antennal segment; sutures of head distinct

30 (33) Antennal segments cylindrical, 4th and 5th as long as or longer than third

31 (32) Pronotum rectangular, not narrowed anteriorly . *Labia* Leach.

32 (31) Pronotum longer than broad, narrowed anteriorly
..... *Chaetospania* Karsch.

33 (30) Antennal segments conical, 4th and 5th shorter than 3rd
..... *Prolabia* Burr.

34 (17) Second tarsal segment drawn into a lobe below or forming wing-like expansions on either side of base of third

35 (44) Second tarsal produced into a lobe below third

36 (37) Tibiae not flattened and sulcate in distal half, tarsi long and slender ..... *Adiathetus* Burr.

37 (36) Tibiae flattened and sulcate in distal half, tarsi short and broad

38 (39) Small black insects with a dense coating of uniformly short hairs ..... *Hamaxas* Burr.

39 (38) Large insects with a smooth body or with a few long bristles

40 (41) Head depressed, antennal segments very long and slender; colour with a shade of brown ..... *Proreus* Burr.

41 (40) Head tumid, antennal joints short and thick

42 (43) Pitch black insects; head sutures sunken between inflated areas of frons and occiput; male forceps with heavy armature
..... *Chelisoches* Scudder

43 (42) Reddish brown insects with a slender build; sutures of head obsolete; forceps slender and almost smooth
..... *Euenkrates* Rehn

44 (35) Second tarsal segment forming wing-like expansion on either side of base of third

45 (46) Pronotum large, as broad as long, cephalic angles smooth
..... *Kosmetor* Burr.

46 (45) Pronotum narrow, longer than broad, cephalic angles each with a distinct tubercle or spine .... *Acanthocordax* Günther.

List of Species.

Superfamily **PYGIDICRANOIDAE.**

Family **PYGIDICRANIDAE.**

Subfamily PYGIDICRANINAE.

Tagalina grandiventris (Blanchard).

Forficula grandiventris Blanchard, 1853, Voy. Pole Sud 4:349, Orth. pl. 1, f. 1 (♀ Solomon Islands).

Tagalina semperi, Burr (nec Dohrn), 1912, Ann. Naturf. Hofmus. Wien, 26:27 (partim, Solomon Islands).

Tagalina semperi semperi Dohrn, Rehn, 1948, Trans. Amer. ent. Soc., 74:159 (Solomon Islands).

Bismarck Islands. — NEW BRITAIN: Yalom, 1000 m, 2 ♂, 1 ♀, 10 May, 1 ♀, 19 May 1962. — NEW IRELAND: Lemkamin, 900 m, 2 nymphs, 17 April 1962. — DYAUL: Sumuna, 2 ♂, 1 ♀, 3 nymphs, 11 March 1962. — MUSSAU: Talumalaus, 1 nymph, 22 Jan. 1962; Boliu, 1 ♀, 5 June 1962.

Subfamily ECHINOSOMATINAE.

Echinosoma yorkense Dohrn.

Echinosoma yorkense Dohrn, 1869, Stettin. ent. Ztg., 30:234 (♀ Australia, Cape York).

Bismarck Islands. — NEW BRITAIN: Yalom, 1000 m, in rotten wood, 6 ♂, 10 ♀, 19 nymphs, 10—21 May 1962. — NEW IRELAND: Kalili Bay, Danu, 1 nymph, 30 April 1962.

Echinosoma sp.

Echinosoma yorkense Dohrn, 1869, Stettin. ent. Ztg. 30:234 (♀ Au-

nymphs, 15 Aug. — 8 Sept. 1961.

Family **DIPLATYIDAE.**

Subfamily DIPLATYINAE.

Diplatys sublobatus Borelli.

Diplatys sublobatus Borelli, 1923, Boll. Mus. Zool. comp. Torino, 38 (N.S.) nr. 13: 3.

Philippines. — TAWI TAWI: Tarawakan, 1 ♀, 9 Nov. 1961.

Diplatys sp.

Philippines. — BALABAC: Dalawan Bay, 1 ♀, 9 Oct. 1961.

The only other species of *Diplatys* known from the Philippines is *D. mixtus* Borelli, of which the female is unknown. It is not possible to determine the present female in the absence of the other sex.

Superfamily **LABIOIDEA.**

Family **CARCINOPHORIDAE.**

Subfamily PARISOLABINAE.

Parisolabis sp.

Bismarck Islands. — NEW IRELAND: Lemkamin, 900 m, 1 ♀, 16 April 1962.

The genus *Parisolabis* has four species included and is known from N. India, Java and New Zealand (Popham & Brindle 1966). In the absence of the male sex it is not possible to determine the present female.

Subfamily BRACHYLABINAE.

Brachylabis yaloma spec. nov. (Figs. 1—5).

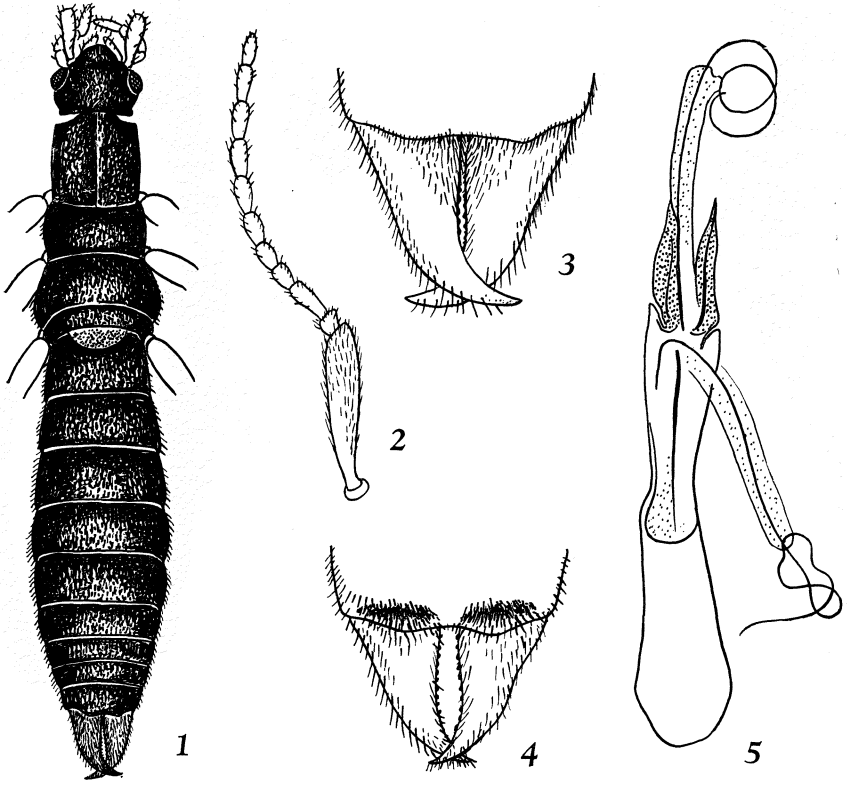
Bismarck Islands. — NEW BRITAIN: Yalom, 1000 m, 1 ♂ (Holotype), 1 ♀ (Allotype), 17 May 1962. In the Zoological Museum, Copenhagen.

Male: General colour dark brown except terminal antennal segment pale; whole body including head punctulate and microsetulose.

Head, tumid, short, broadest across eyes, occipital margin subsinuate; eyes very small, about half the length of genae. Antenna, 11 segments, 1st large and conical, obliquely truncate apically, 2nd very small, 3rd long and slender, conical, 4th about one third the length of third, thick, rest a trifle longer than 4th, subcylindrical and thick. Pronotum, rectangular, longer than broad, slightly expanded caudad, anterior margin convex, caudal margin rounded, sides truncate. Abdomen, cylindrical, broadest across tergites 5 and 6, contracted beyond. Ultimate tergite, normal for the genus. Forceps, very short, beak-like, inner margin crenulate. Penultimate sternite, rectangular, caudal margin rounded, emarginate. Male genitalia, Fig. 5.

Body length 8.5 mm., length of forceps 0.95 mm.

Female: Agrees with male in general; parallel sided except for



Figs. 1—5. *Brachylabis yaloma* spec. nov. (1) Holotype male, dorsal view. (2) Antenna of male. (3) Forceps of female. (4) Forceps of male. (5) Male genitalia.

ultimate tergite slightly contracted; forceps, of the same nature as in male but more robust.

Body length 7 mm., length of forceps 1 mm.

The genus *Brachylabis* Dohrn as known at present (Popham and Brindle 1966a) includes five species of which *B. canaca* Burr and *B. manawatawhi* Giles are known from the present geographical region, the former from New Caledonia and the latter from New Zealand. The present species is quite distinct from *manawatawhi* and differs from *canaca* in the much longer virga.

Subfamily CARCINOPHORINAE.

Euborellia plebeja (Dohrn).

Psalis plebeja Dohrn 1863, Stettin. ent. Ztg. 24:322.

Euborellia plebeja (Dohrn), Hebard, 1927, Proc. Acad. nat. Sci. Philad. 79:27.

Philippines. — TAWI TAWI: Tarawakan, 2 ♀, 20 and 25 Oct., 1 ♂, 16 Nov. 1961.

This species is known for the great variation in the development of the organs of flight. These three specimens are all macropterous.

Genus **Epilandex** Hebard.

Epilandex Hebard, 1927, Proc. Acad. nat. Sci. Philad., 79:26 (type *Landex burri* Borelli).

Landex Burr, 1915, J. R. micr. Soc. 445 (pars).

Landex burri Borelli, 1921, Bull. Mus. Hist. Nat. Paris, 79.

Besides the type of the genus two species are recorded, viz. *E. handschini* Hincks, 1954, Verh. Naturf. Ges. Basel, 65, 1:12—14, and *E. undulata* Ramamurthi, 1963, Ann. Mag. nat. Hist., 13 (6): 672—3. The new species described below is nearer to *E. handschini* Hincks. I have the pleasure in naming it after Dr. Børge Petersen.

Key to Species of *Epilandex*.

1 (4) Penultimate sternite of male with a distinct carina in the caudal half, produced into a process; metaparameres short, broad at base, narrowed apically.

2 (3) Forceps of male with a distinct cleft basad on inner margin; tip of parameres pointed and curved. ..... *E. undulata* Ramamurthi.

3 (2) Inner margin of forceps of male entire basad; apex of parameres blunt ..... *E. burri* Borelli.

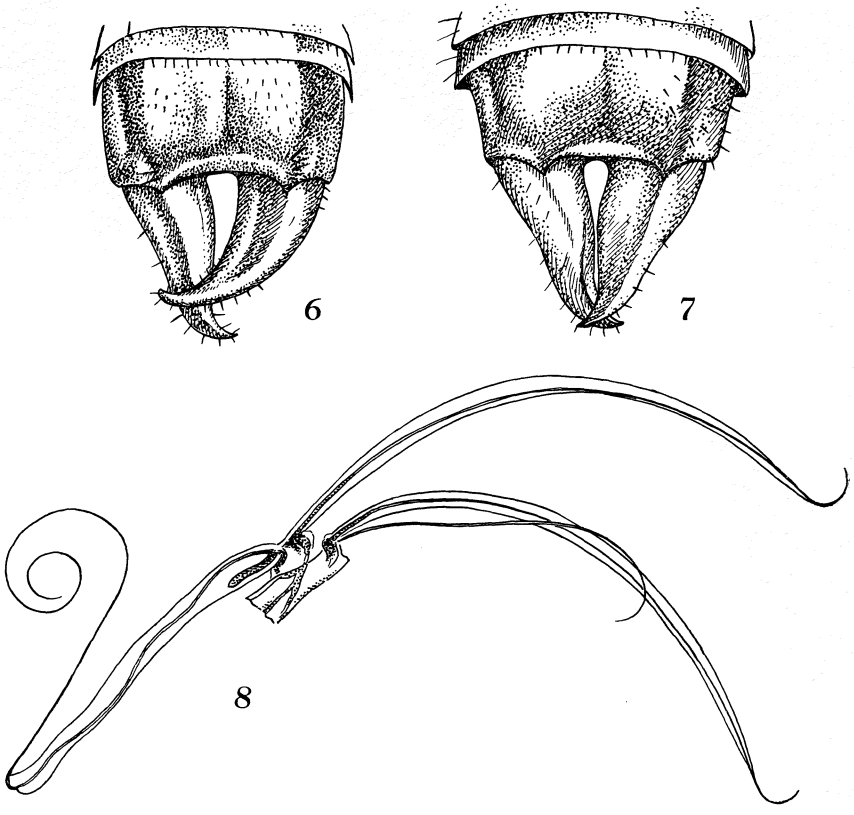
4 (1) Carina of penultimate sternite weak, not produced into a process; metaparameres very long, uniformly narrow, pointed apically.

5 (6) Inner margin of forceps of male concave basad, with a distinct hump at middle, gently curved beyond; smooth ..... *E. handschini* Hincks.

6 (5) Inner margin of male forceps entire, left branch abruptly narrowed near apex and with or without a sub-apical tooth ..... *E. peterseni* spec. nov.

Epilandex peterseni spec. nov. (Figs. 6—8).

Philippines. — TAWI TAWI: Tarawakan, 1 ♂ (Holotype), 22 Oct. 1961. — PALAWAN: Pinigisan, 600 m, 1 ♂, 2 ♀ (Paratypes), 10 and 20 Sept. 1961, 1 ♀ (Allotype), 24 Sept. 1961; Tagembung, 1150 m, 1 ♂ (Paratype), 19 Sept. 1961.



Figs. 6—8. *Epilandex peterseni* spec. nov. (6) Ultimate tergite and forceps of male. (7) Ultimate tergite and forceps of female. (8) Male genitalia (broken).

Bismarck Islands. — NEW BRITAIN: Yalom, 1000 m, 3 ♀ (Paratypes), 16 and 20 May 1962. — NEW IRELAND: Lemkamin, 900 m, 1 ♀ (Paratype), 7 April 1962.

Types in the Zoological Museum of Copenhagen except for two paratypes in my collection.

Male: colour, Head black, rest of the body brownish, legs paler. Head, transverse, smooth, tumid, sutures indistinct. Antenna, 17 segments, clavate, 12—17 whitish and more narrowly elongated basally than the rest. Pronotum, narrower than head anteriorly, slightly expanded caudad, sides truncate, posterior margin rounded; tumid except for very narrow depressed areas laterad. Elytra, less than one and a half times longer than pronotum. Wings, well

developed. Abdomen, expanded caudad, tergites pubescent, 6—9 acute and carinate laterad. Ultimate tergite, broader than long, comparatively smooth, weakly punctate; disc with a distinct median sulcus and a shallow caudal depression; posterior margin truncate mesad, obliquely sinuate laterad. Forceps, asymmetrical, inner margin entire; left branch abruptly narrowed at apex, right branch gently arcuate. Penultimate sternite, broadly rounded, carina of caudal half very weak.

Genitalia, Fig. 8.

Length of body 6—8 mm.; of forceps 1.5—2 mm.

Female: Agrees with male in general. Abdominal tergites 6—9 blunt at sides; forceps symmetrical.

Length of body 8 mm.; of forceps 1.5 mm.

Family **LABIIDAE.**

Subfamily NESOGASTRINAE.

Nesogaster aculeatus (Bormans).

Labia aculeata Bormans 1900, Annals Mus. Civ. Stor. Nat. Genova, ser. 2, 20:456 (Papua).

Nesogaster atropas Rehn, Hincks 1951, Ann. Mag. nat. Hist. 12 (iv): 565 (new synonymy).

Bismarck Islands. — DUKE OF YORK: Manuan, 1 ♂, 1 nymph, 19 July 1962.

Nesogaster aculeatus var. **apoensis** Rehn.

Nesogaster apoensis Rehn 1946, Acad. nat. sci. Philad. 48:235 (Mindanao, Philippines).

Nesogaster aculeatus subsp. *apoensis* Rehn, Hincks 1951, Ann. Mag. nat. Hist. 12 (iv): 567.

Bismarck Islands. — NEW BRITAIN: Yalom, 1000 m, 1 ♂, 1 ♀, 8 and 9 May 1962. — NEW IRELAND: Lemkamin, 900 m, 2 ♀, 1 nymph, 20 April 1962.

The Philippine material studied by Rehn are characterised by absence of wings and penultimate segment of antenna paler. In the present series, the females from Lemkamin have no wings but the antenna has no paler article at apex. The pair from Yalom have fully developed wings and the subapical article of antenna is pale.

Nesogaster apicalis Hincks.

Nesogaster apicalis Hincks 1951, Ann. Mag. nat. Hist. 12 (iv): 568—570, f. 10, 11 (♂ ♀ New Hebrides).

Bismarck Islands. — NEW BRITAIN: Valoka, 1 ♂, 12 July 1962, rain forest.

Nesogaster amoenus (Stål).

Forficula amoenus Stål, 1885, Öfvers. Kungl. Vet-Akad. Förhandl., 12:350.

Philippines. — TAWI TAWI: Tarawakan, 1 ♀, 11 Oct. 1961.

Three species of this Indo-Pacific genus have been known from the Philippines so far, viz. *N. aculeatus* var. *apoensis* Rehn, *N. mounseyi* Burr and *N. burri* Rehn. The present female differs from these species in the nature of the pronotum and the well developed wings, agreeing more closely with females of *N. amoenus* reported in its macropterous form from Australia (Hebard 1933).

Subfamily PHYSOGASTRINAE nov.

Characters: Large insects with the whole body covered by long and stiff hairs; sutures of head obsolete, eyes shorter than first antennal segment; elytra with a distinct keel running the entire length of costal fold; femora incrassate, tibiae flattened and sulcate in apical half.

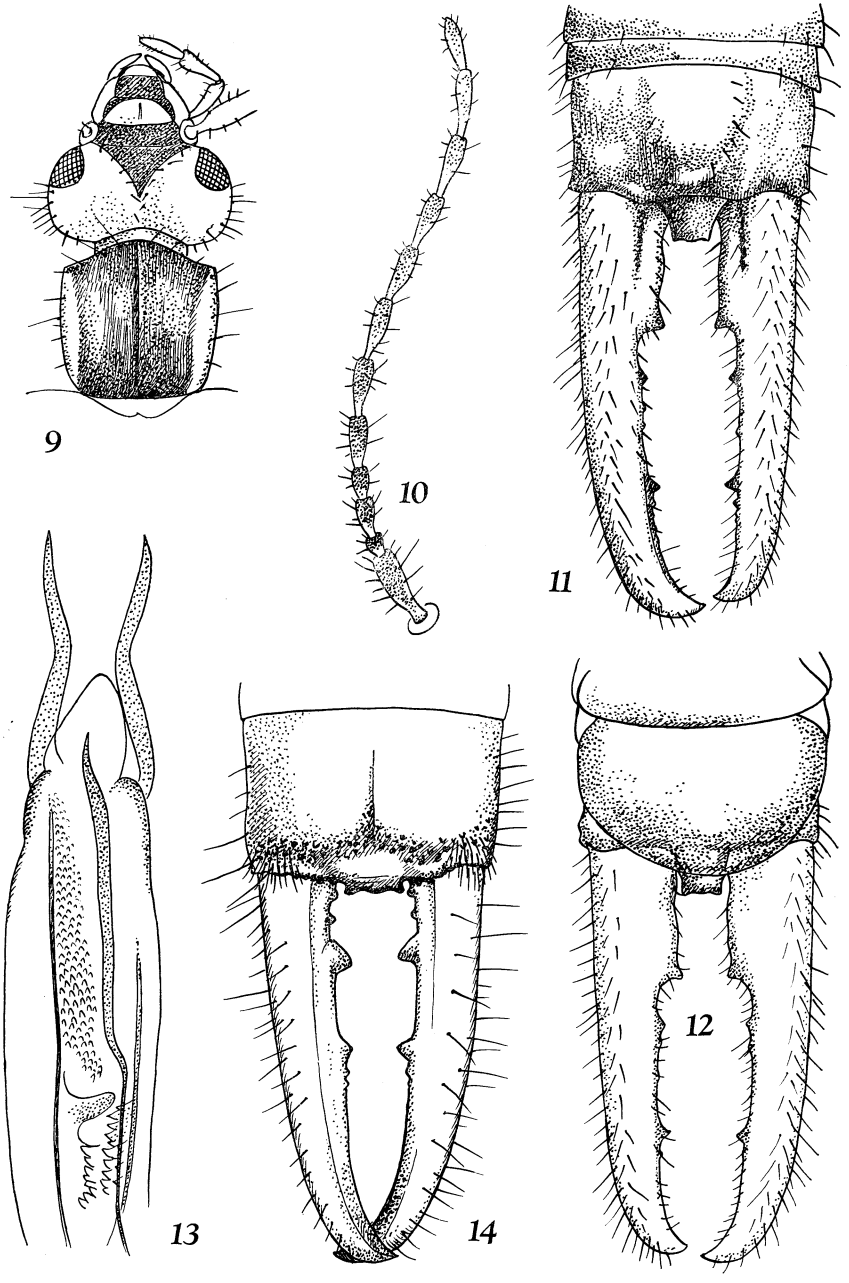
The genera for which the above subfamily is erected include earwigs which do not fit into any genus in the family Labiidae. In the sturdy build, incrassate femora and flattened and sulcate tibiae they resemble some forms of the family Chelisochidae. They can be distinguished from that family by the comparatively large second tarsal segment not produced into a lobe under base of third.

Physogaster gen. nov.

Characters: Body moderately depressed; antennal joints 3 and 5 subequal and cylindrical, 4th half as long as 5th and swollen at apex, rest subconical; metasternal lobe broad and flat, caudal margin deeply sinuate mesad.

Physogaster scabinatus gen. et spec. nov. (Figs. 9—13).

Bismarck Islands. — NEW IRELAND: Lemkamin, 900 m, 1 ♂ (Holotype), 15 April 1962, under bark of fallen tree, 4 nymphs, 15—20 April 1962. — NEW BRITAIN: Yalom, 1000 m, 3 nymphs,



Figs. 9—13. *Physogaster scabinatus* gen. et spec. nov., Holotype male. — (9) Head and pronotum. (10) antenna. (11) Ultimate tergite and forceps. (12) Penultimate sternite. (13) Genitalia. — Fig. 14. *Physogaster* sp.? Female, ultimate tergite and forceps.

8—23 May 1962. — MUSSAU: Talumalaus, 1 ♂ (Paratype), 19. Jan. 1962. In the Zoological Museum, Copenhagen, except a paratype in my collection.

Male: General colour dark brown, apices of femora and tibiae and tarsi light yellow, forceps orange, apical antennal joints whitish. Thoracic sternites smooth, whole of abdomen pubescent.

Head, transverse, distinctly tumid, sutures obsolete, cheeks broadly rounded, genae smooth, caudal margin deeply sinuate; antenna 12 segments, 3 and 5 subequal, cylindrical, 4 half as long as 5, rest elongate, slender, subconical. Pronotum, almost a square, cephalic margin convex, sides and posterior margin truncate, cephalic angles sharp, caudal angles rounded. Elytra, nearly twice longer than pronotum, costal fold keeled, surface covered by well spaced short hairs and a few scattered longer ones; cephalic margin oblique exposing a broadly triangular scutellum. Wing scales, same texture as and concolourous with elytra. Abdomen, moderately depressed, expanded caudad, surface of tergites with dense microsetae and a row of long hairs along posterior border; glandular folds on segments 3 and 4 well developed. Ultimate tergite, transverse, smooth, disc not separated from sides, median sulcus moderately distinct; disc with two distinct tubercles basad, the region below and between the forceps sunken; region above base of forceps denticulate; posterior margin trisinuate. Pygidium, vertical looked from above, flat, broad at base, contracted caudad. Forceps, depressed, broad at base, tapering to apex, tip incurved; a prominent ridge laterad at the point of insertion, lower inner margin with a distinct tooth one third the distance from base, crenulate beyond, another prominent tooth a short distance from apex. Penultimate sternite, almost a square, broadly rounded caudad, sinuate mesad.

Male genitalia, Fig. 13.

Body length 13 mm., length of forceps 4.5 mm.

Physogaster sp. ? (Fig. 14).

Bismarck Islands. — NEW BRITAIN: Yalom, 1000 m, 1 ♀, 21 May 1962. — NEW IRELAND: Lemkamin, 900 m, 1 ♀, 12 April 1962.

These two females differ from *P. scabinatus* in the pitch black colouration and the punctulate body. The antennal segments are more slender and cylindrical with the fourth almost as long as

third and cylindrical. The metasternal lobe resembles that of *P. scabinatus*. The discovery of the male alone can confirm the status of this species.

Body length 11—13 mm., length of forceps 3—4 mm.

Parapericomus gen. nov.

Characters: Head, pronotum, elytra and wing scales rugose and punctulate; sutures of head obsolete; abdominal tergites 4 and 5 with a row of distinct tubercles associated with long sensory hairs; metasternal lobe narrow and rounded, caudal margin entire.

Parapericomus noonadanae gen. et spec. nov. (Figs. 15—18).

Bismarck Islands. — NEW BRITAIN: Yalom, 1000 m, 1 ♂ (Holotype), 20 May 1962, 1 ♀ (Allotype), 23 May 1962. Types in the Zoological Museum, Copenhagen.

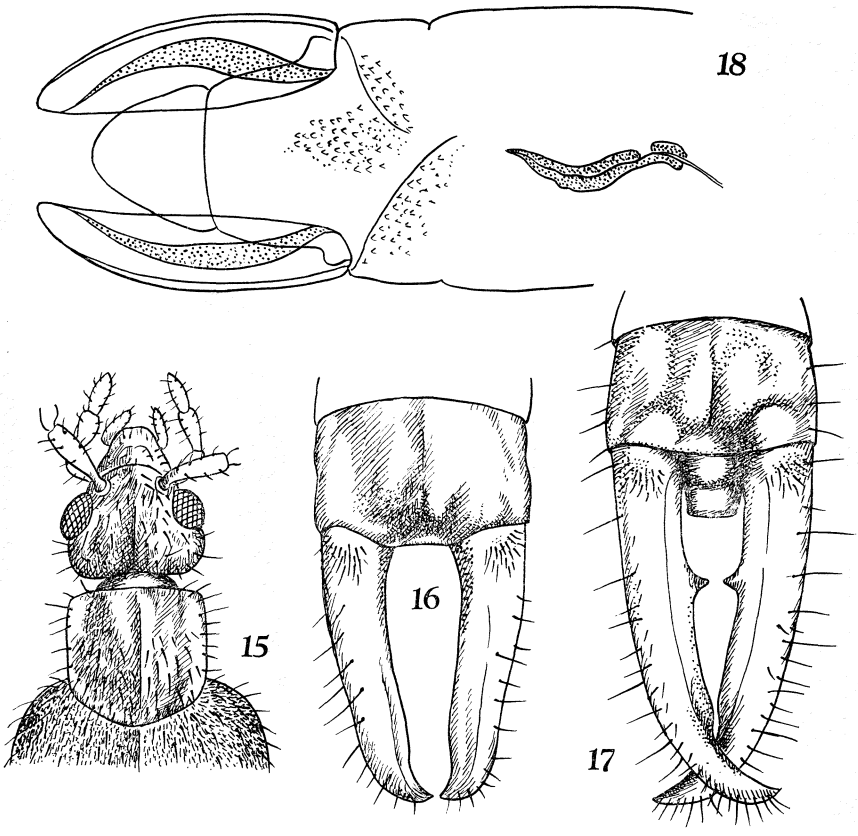
Male: General colour reddish brown mixed with yellow, distal half of femora and tibiae clear yellow; surface of body with a greasy lustre.

Head, tumid with coronal suture moderately visible, caudal margin sinuate; eyes large, as long as genae; antenna broken, 1st long uniformly thick, 2nd small, 3rd longer, rest a little longer than 3rd, all subconical. Pronotum, narrower than head, shield-shaped, prozona tumid, sulcus distinct. Elytra, nearly twice longer than pronotum, caudal margin obliquely truncate. Wing scales, nearly half elytral length. Abdomen, convex beyond 5th segment, expanded caudad, tergum of 4th and 5th segments with a row of denticles on caudal margin, rest of tergites except last weakly punctulate. Ultimate tergite, smooth, disc feebly separated from sides. sulcus weak, region above base of forceps tumid leaving a narrow rectangular area in between; caudal margin weakly sinuate, raised above base of forceps. Pygidium, short and transverse, concealed in dorsal view. Forceps, triquetrous, with a distinct keel basad, inner margin smooth, sinuate basad, scooped into a spoon near apex, outer margin with long sensory bristles. Penultimate sternite, broadly rounded. Male genitalia, Fig. 18.

Body length 10 mm., length of forceps 3 mm.

Female: Agrees with male in general. Pygidium more prominent, declivent. Forceps, with a distinct tooth on inner margin less than half the distance from base.

Body length 12.5 mm., length of forceps 5 mm.



Figs. 15—18. *Parapericomus noonadanae* gen. et spec. nov. (15) Allotype female, head and pronotum. (16) Holotype male, ultimate tergite and forceps. (17) Allotype female, ultimate tergite and forceps. (18) Holotype male, genitalia.

Subfamily SPONGIPHORINAE.

Spongovostox semiflavus (Bormans).

Spongophora semi-flava de Bormans, 1894, Ann. Mus. Stor. nat. Genova, (2) 14:385 (Burma).

Apovostox semiflavus (de Borm.), Hebard, 1927, Proc. Acad. nat. Sci. Philad. 79:32.

Spongovostox semiflavus (de Borm.), Borelli, 1932, Bull. Raffles Mus., 7:83.

Apovostox semiflavus (de Borm.), Bey-Bienko, 1958, Rev. Ent. U.R.S.S., 38, 3:611.

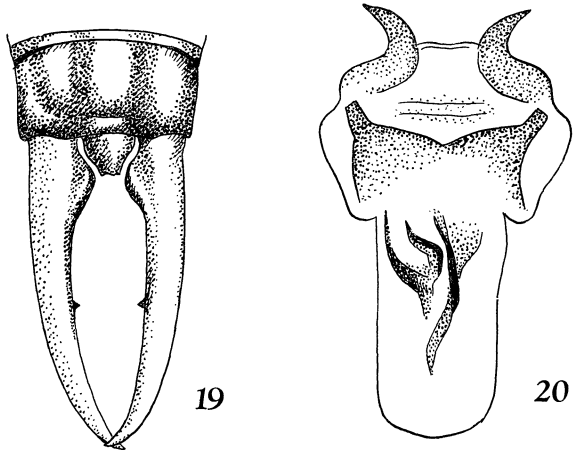
Philippines. — PALAWAN: Brooke's Point, Uring Uring, 1 ♀, 14 Aug. 1961.

Bismarck Islands. — DYAUL: Sumuna, 1 ♂, 4 March 1962.

Spongovostox hakeni spec. nov. (Figs. 19 and 20).

Philippines. — TAWI TAWI: Tarawakan, 1 ♂ (Holotype), 14 Nov. 1961. In the Zoological Museum, Copenhagen.

Male: Head, dark brown, tumid, sutures very faint; eyes longer than first antennal joint, cheeks smooth, caudal margin feebly sinuate. Antenna, 16 joints, 4th half as long as 3rd, 5th and 6th subequal and shorter than 3rd, rest a little longer, subcylindrical, all segments shorter than 3rd. Pronotum, chestnut, paler along sides, trapezoidal, anterior border narrower than head; prozona tumid and well raised over depressed metazona and sides, median sulcus distinct. Elytra, brownish with a yellow band extending the entire length, lateral regions pubescent. Wing scales, yellow with a fuscous band near inner margin. Legs, femora brown, tibiae and tarsi yellow, first tarsal longer than third, second about half as long as third. Abdomen, chestnut brown, broadest across middle, glandular fold on segment 3 distinct. Ultimate tergite, transverse, smooth, disc distinct, feebly sulcate in the caudal half, caudal margin gently sinuate and slightly raised over base of forceps. Pygidium, broad at base, narrowed at free end. Forceps, moderately depressed, straight, broad at base, tapering towards apex, smooth except for a single well developed tooth dorsomesad; inner margin swollen near base and with a feeble carina dorsad



Figs. 19—20. *Spongovostox hakeni* spec. nov. (19) Holotype male, ultimate tergite and forceps. (20) Male genitalia.

in this region. Penultimate sternite, broadly rounded, posterior margin sinuate mesad. Genitalia, Fig. 20.

Total body length 7 mm.; length of forceps 3 mm.

Of the two species *(S. semiflavus* and *S. gracilis* Borelli) so far known from the Philippines, *hakeni* has a closer resemblance to *semiflavus,* from which it differs in the nature of the forceps. The genitalia is of a peculiar shape and does not resemble that of any other species of the Spongiphorinae in which it is figured.

Irdex philippinensis spec. nov.

Philippines. — TAWI TAWI: Tarawakan, 2 ♀ (Holotype and Paratype), 21 Oct. 1961. In the Zoological Museum, Copenhagen.

These two females offer characters sufficient to establish a new species even without the male. They differ from *I. nitidipennis* (Borm.) and *I. novaeguineae* Boeseman (the only two species known under this genus) in the dense pubescence of the body and the much narrower pronotum with parallel and truncate sides. Female: General colour, orange, antenna, pronotum and elytra lighter. Head, depressed, cordiform, median suture alone distinct; Antenna, typical of the genus. Pronotum, narrower than head, longer than broad, rectangular, angles sharp. Elytra, nearly one and a half times longer than pronotum, sides parallel, margins truncate. Abdomen, broadest across middle, glands on tergites 3 and 4 distinct. Ultimate tergite, sparsely pubescent, distinctly tumid above base of forceps. Forceps, trigonal, broad at base, gently narrowed and curved at apex; lower inner margin with a distinct concavity basad terminating in a tooth, dentate beyond, subapical region smooth. Penultimate sternite, rectangular, caudal margin broadly rounded.

Length of body 6.5 mm.; of forceps 2.5 mm.

Subfamily LABIINAE.

Chaetospania thoracica (Dohrn).

Platylabia thoracia Dohrn 1867, Stett. Ent. Ztg., 28:348.

Bismarck Islands. — NEW BRITAIN: Yalom, 1000 m, 1 ♂, 21 May 1962.

Several species are mixed up under this name and the real status of *thoracica* should await a revision of the genus.

Chaetospania sp.

Bismarck Islands. — NEW BRITAIN: Yalom, 1000 m, 1 ♀, 10 May 1962, in rotten wood.

Labia pilicornis (Motsch.).

Forfiscelia pilicornis Motschulsky 1863, Bull. Soc. Nat. Moscou, 36 pt. 11:2 (Ceylon).

Labia rehni Hebard 1917, Ent. News, 28:317—319. New Syn.

Bismarck Islands. — NEW BRITAIN: Yalom, 1000 m, 2♀, 23 May 1962. — MUSSAU: Talumalaus, 1 ♀, 1 Feb. 1962. — MANUS: Lorengau, 1 ♂, 19 June 1962.

Philippines. — PALAWAN: Pinigisan, 600 m, 2 ♀, 7 and 19 Sept. 1961.

One of the females of this series was sent to Dr. H. Radcliff Roberts of the Academy of Natural Sciences, Philadelphia, for comparison with the type female of *Labia rehni* Hebard which this species resembled. Dr. Roberts found the type specimen carrying an extra label with the name *L. pilicornis* (Motsch.) written by Hebard in 1932. This synonymy has not been mentioned in literature so far. Dr. Roberts has also compared *rehni* with *pilicornis* from the Hawaiian Islands, Tahiti, Guam and Sumatra and found them conspecific.

Labia curvicauda (Motsch.).

Forfiscelia curvicauda Motschulsky 1863, Bull. Soc. Nat. Moscou, 36 pt. 11:2 (Ceylon).

Bismarck Islands. — NEW BRITAIN: Yalom, 1000 m, 1♂, 8 May 1962; Valoka, 1 ♀, 8 July 1962; — NEW IRELAND: Lemkamin, 900 m, 3 ♂, 7 ♀, 15 and 16 April 1962.

Philippines. — MINDANAO: Curuan district, Sapamoro, 1 ♂, 2 ♀, 3 nymphs, 20 Dec. 1961.

Labia bihastata (Borg).

Platylabia bihastata Borg 1904, Ark. Zool., 1:572 (Cameroon).

Labia curvicauda (Motsch.), Burr 1907, Berl. ent. Zeit., 52:205 (in part) and subsequent authors.

Labia bihastata (Borg), Hincks 1948, Ent. mon. Mag., 84:94 (redescription and male genitalia).

Bismarck Islands. — NEW BRITAIN: Yalom, 1000 m, 1 ♀, 10 May 1962.

Prolabia sp.

Bismarck Islands. — NEW BRITAIN: Valoka, 1 ♂, 9 July 1962. — DYAUL: Sumuna, 1 ♀, 4 March 1962.

Prolabia spec. nov.? (Figs. 21—22).

Philippines. — PALAWAN: Brooke's Point, Uring Uring, 1 ♂, 14 Aug. 1961. — TAWI TAWI: Tarawakan, 1 ♀, 4 Nov. 1961.

This pair is quite distinct from *P. luzonica* Dohrn, the only allied species known from the Philippines. It also differs from the other Oriental species *P. nigrella* (Dubrony) in general colouration and length of forceps. The male is unfortunately broken in a way which prevents examination of the genitalia, and the species must be left unnamed untill a good male is available for detailed description.

Subfamily SPARATTINAE.

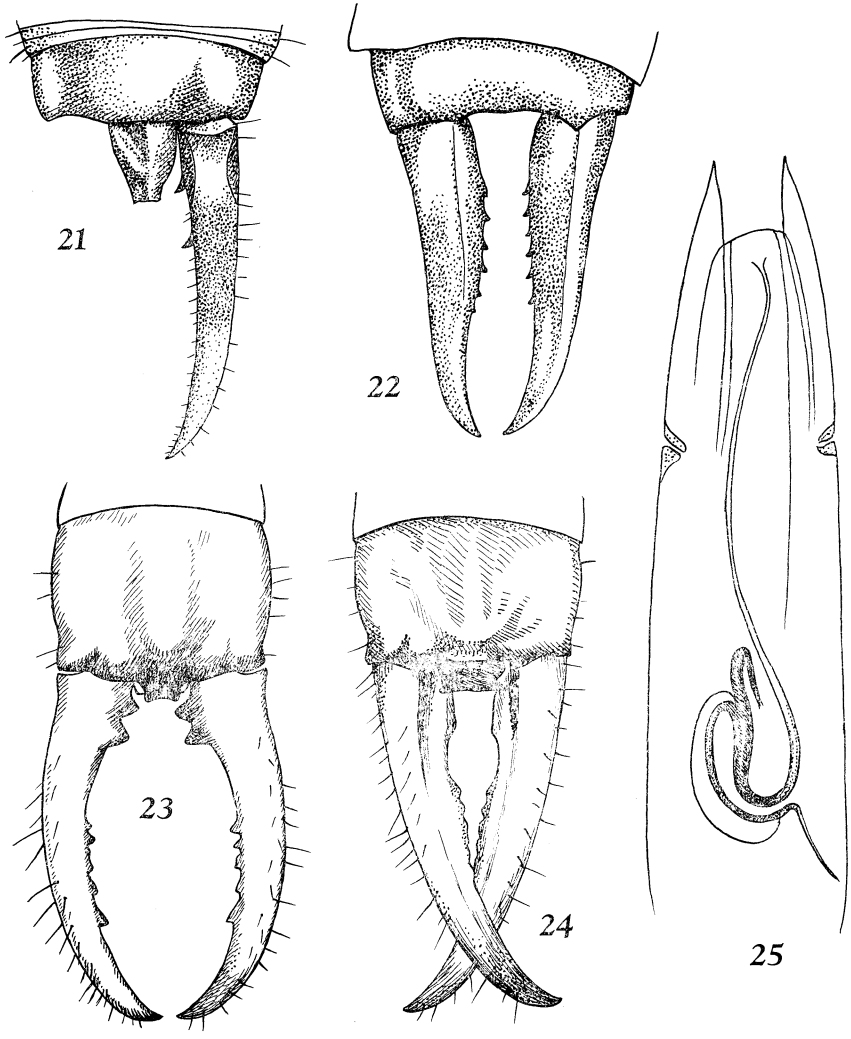
Auchenomus forcipatus spec. nov. (Figs. 23—25).

Bismarck Islands. — NEW BRITAIN: Yalom, 1000 m, 1 ♂ (Holotype), 13 May, 1 ♀ (Allotype), 14 May and 3 ♂, 1 ♀ (Paratypes), 14—21 May 1962. — LAVONGAI: Banatam, 1 ♂, 2 ♀ (Paratypes), 25 March 1962. In the Zoological Museum, Copenhagen, except two paratypes in my collection.

Male: General colour, head, pronotum, legs and 1st antennal joint clear yellow, rest of antennal joints and abdomen reddish brown, wings dark brown, forceps orange. Pubescence restricted to sides of abdomen and forceps.

Head, flattened, broadest across eyes, post ocular region convex, frons tumid with a slender longitudinal ridge near margin of eyes; caudal margin distinctly notched mesad. Antenna, 13 + segments, 1st narrow and constricted basad, expanded and parallel sided beyond, 2nd very small, 3rd and 4th subequal and cylindrical. Pronotum, longer than wide, sublateral region with a distinct carina running down to two thirds the length; prozona tumid and separated from sides and metazona by a dark line; sides truncate, caudal angles rounded. Elytra, nearly one and a half times the length of pronotum, costal and humeral margins parallel, humeral angles rounded, cephalic margin oblique, with a broad scutellum hidden by pronotum; caudal margin weakly sinuate; sparse pubscence. Wing scales, with inner and outer margins parallel, caudal margin truncate. Legs, normal for the

genus. Abdomen, expanded caudad, tergites with fine pubescence and a pair of strong setae on posterior border well separated from the median line. Ultimate tergite, very large, almost a square, a broad 'V' shaped puncture in the caudal region; caudal margin



Figs. 21—22. *Prolobia* spec. nov.? Ultimate tergite and forceps of male (21) and female (22).

Figs. 23—25. *Auchenomus forcipatus* spec. nov. (23) Holotype male, ultimate tergite and forceps. (24) Allotype female, ultimate tergite and forceps. (25) Holotype male, genitalia.

trisinuate, obliquely raised above base of forceps, mesal cavity very dark and with a prominent tubercle above margin of pygidium. Pygidium, short, transverse, declivent, the upper region produced into a pair of mammae. Forceps, broad at base, narrowed and arcuate behind, inner margin with a pair of large pyramidal tubercles, the region beyond smooth up to one third the distance, then serrated up to apical third, subapical region smooth and curved. Penultimate sternite, almost a square, sides and caudal margin convex, caudal angles rounded. Male genitalia, Fig. 25.

Body length 10—11 mm., length of forceps 2—3 mm.

Female: Agrees with male in general. Caudal angles of wing scales rounded giving a different shape to the wing as compared with male. The arms of the 'V' shaped puncture of the ultimate tergite more divergent. Pygidium unusually as in male. Forceps not expanded basad, with a concavity a short distance beyond base, serrated and tuberculate beyond, subapical region smooth and curved.

Length of body 9—10 mm., length of forceps 2.75—3 mm.

This species does not resemble any of the described forms and the shape and the armature of the forceps are distinctive as compared with other species.

Superfamily **FORFICULOIDEA.**

Family **LABIDURIDAE.**

Subfamily LABIDURINAE.

Labidura riparia var. **inermis** Brunner.

Labidura riparia var. *inermis* Brunner, 1882, Prodr. Europ. Orthopteren, Leipzig.

Philippines. — BALABAC: Dalawan Bay, 1 ♂, 8 Oct. 1961.

Subfamily APACHYINAE.

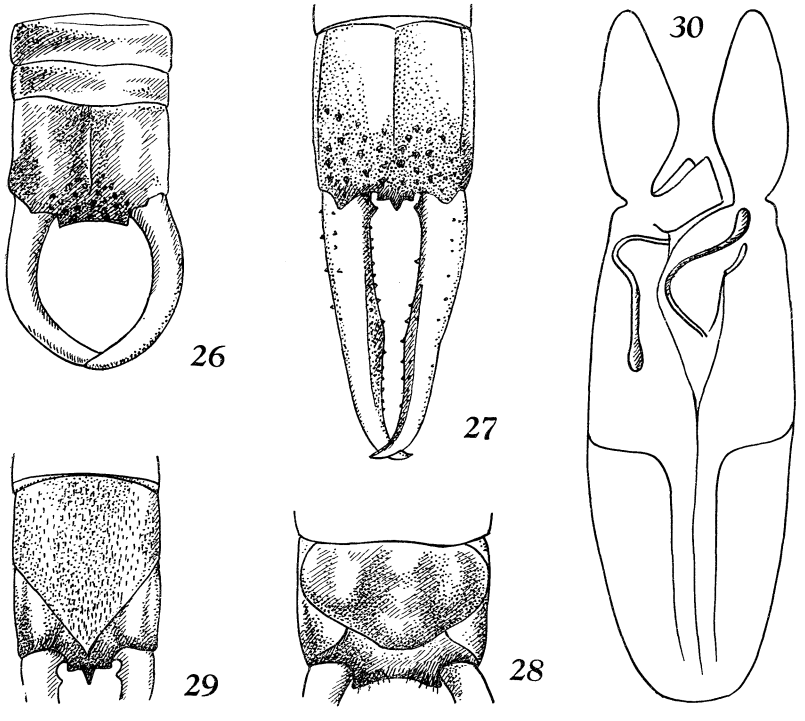
Apachys beccari Dubrony.

Apachys beccari Dubrony 1879, Ann. Mus. Stor. nat. Genova, 14:349.

Bismarck Islands. — NEW BRITAIN: Yalom, 1000 m, 3 ♀, 4 nymphs, 16 May 1962.

Dendroiketes similis spec. nov. (Figs. 26—30).

Bismarck Islands. — NEW BRITAIN: Yalom, 1000 m, 1 ♂



Figs. 26—30. *Dendroiketes similis* spec. nov. (26) Holotype male, last three tergites and forceps. (27) Allotype female, last tergite and forceps. (28) Penultimate sternite of male. (29) Penultimate sternite of female. (30) Male genitalia.

(Holotype), 1 ♀ (Allotype), 16 May 1962, 3 ♂, 1 ♀, 29 nymphs, 9—22 May 1962. In the Zoological Museum, Copenhagen, except for two paratypes in my collection.

Male: General colour dark brown with dirty whitish patches on head, tegmina and wings; body smooth except last abdominal tergite, granulose.

Head, transverse, tumid, sutures distinct; eyes half as long as genae; occipital region with two distinct tumid areas, the region in between dirty-whitish. Antenna, more than 35 segments, 1st very thick, 2nd small, 3rd longer than first, slender and cylindrical, 4—8 short, as broad as long, rest conical, stout up to middle, slender beyond. Pronotum, rectangular, median sulcus distinct, prozona tumid, metazona depressed and with a dirty-whitish patch on either side of median line; cephalic and caudal

margins truncate, sides thick, angles rounded. Elytra, nearly twice as long as pronotum, weakly punctured and with a broad whitish area in the anterior half; cephalic margin obliquely trunctate exposing a broad and pointed scutellum, caudal margin obliquely rounded. Wing scales, nearly three fourths the length of elytra, sides brown, inner margin brownish yellow. Legs, femur very long and rectangular, dark brown except distal region, yellowish, tibiae and tarsi clear yellow, 1st tarsal slightly expanded distally, third slender and cylindrical, longer than first. Abdomen, feebly depressed, slightly expanded caudad, tergites very weakly punctulate. Ultimate tergite, rectangular with a deep furrow at middle, caudal half sparsely denticulate. Anal process, very little produced, concave with a row of short yellow hairs along ventral margin. Forceps, short, cylindrical, inner margin of apical half obliquely compressed; arcuate. Penultimate sternite, transverse, caudal margin broadly triangular. Male genital armature, Fig. 30.

Body length 21.5 mm., length of forceps 3 mm.

Female: Agrees with male except in the nature of anal process, ultimate tergite and forceps. Anal process very narrow and dorsal surface triangular and drawn into a peg, ventral surface flat and looked from above appearing like a wing on either side of the peg. Ultimate tergite longer than broad with a triangular depression mesad on anterior border, caudal half strongly punctulate and with strong denticles. Forceps, very long, inner surface compressed, lower inner margin with a prominent tubercle near anal process, drawn into a hump at middle, gently tapering to apex; tip incurved; upper surface denticulate. Penultimate sternite rectangular, caudal margin acuminate.

Body length 24—26 mm., length of forceps 6.5—7 mm.

This species is closely related to *D. novoguineae* Boeseman, from which it could be distinguished by differences in general colouration and the smoothly rounded outer margin of male forceps.

Subfamily ALLOSTETHINAE.

Allostethus sp.

Philippines. — PALAWAN: Brooke's Point, Uring Uring, 1 nymph, 18 Aug. 1961.

Family CHELISOCHIDAE.

Proreus ludekingi (Dohrn). (Fig. 31).

Lobophora ludekingi Dohrn, 1865, Stettin. ent. Zeit., 26:73.

Philippines. — PALAWAN: Brooke's Point, Uring Uring, 6 ♂, 6 ♀, 14—26 Aug. 1961. — TAWI TAWI: Lapid Lapid, 1 ♀, 21 Nov. 1961. — MINDANAO: Curuan district, Sapamoro, 1 ♀, 14 Dec. 1961.

Proreus simulans (Stål).

Forficula simulans Stål 1860. Kungl. Svenska Freg. Eugenie's Resa, 1:302 (Java).

Bismarck Islands. — MUSSAU: Talumalaus, 1 ♀, 10 Feb. 1962.

This species is widely distributed throughout the Oriental region.

Chelisoches morio (Fabr.).

Forficula morio Fabricius 1775, Syst. Ent. p. 270.

Philippines. — PALAWAN: Brooke's Point, Uring Uring, 20 Aug. 1961. — TAWI TAWI: Tarawakan, 1 ♂, 14 Nov. 1961.

Bismarck Islands. — NEW BRITAIN: Valoka, 1 ♂, 3 ♀, 7—10 July 1962; Yalom, 1000 m, 2 ♂, 6 ♀, 1 nymph, 8—18 May 1962. — NEW IRELAND: Lemkamin, 900 m, 2 ♂, 3 ♀, 3 nymphs, 16—23 April 1962. — LAVONGAI: Banatam, 1 ♂, 20 March 1962; Undalago, W. of Banatam, 1 ♂, 2 ♀, 22 Feb. 1962. — MUSSAU: Talumalaus, 1 ♀, 5 Feb. 1962.

Solomon Islands. — GUADALCANAL: Honiara, 1 ♂, 1 ♀, 27 July 1962.

This large series of one of the cosmopolitan species exhibits a wide range in intraspecific variation of forceps and body colour.

Chelisoches imitator spec. nov.

Bismarck Islands. — LAVONGAI: Banatam, 1 ♂ (Holotype), 1 ♀ (Allotype), 24 March 1962. In the Zoological Museum, Copenhagen.

This species is very close to *C. morio* in major external characters but can be easily distinguished by the small stature. The antennae and wing scales are reddish brown, the legs golden yellow. Pygidium of the female is distinct, drawn into a cylindrical rod. The meta-parameres are narrower and the virga short. The basal region of preputial sac carries a dense cluster of chitinous papillae.

Body length of male 13 mm.; of forceps 4 mm.
Body length of female 12 mm.; of forceps 4.5 mm.

Chelisoches diodontus spec. nov. (Fig. 32).

Bismarck Islands. — LAVONGAI: Banatam, 1 ♂ (Holotype), 17 March 1962. In the Zoological Museum, Copenhagen.
Male: Body black, limbs golden yellow. Head, with inflated frons and occipital regions. Pronotum, longer than broad, not broader than head anteriorly, slightly expanded caudad, caudal angles rounded, cephalic angles sharp, anterior margin convex mesad, sides truncate. Elytra and wings, well developed. Abdomen, cylindrical, smooth. Ultimate tergite, tumid above base of forceps, not crested. Forceps, cylindrical, heavy, broad at base, narrowed to apex, inner margin with two strong peg-like teeth half way

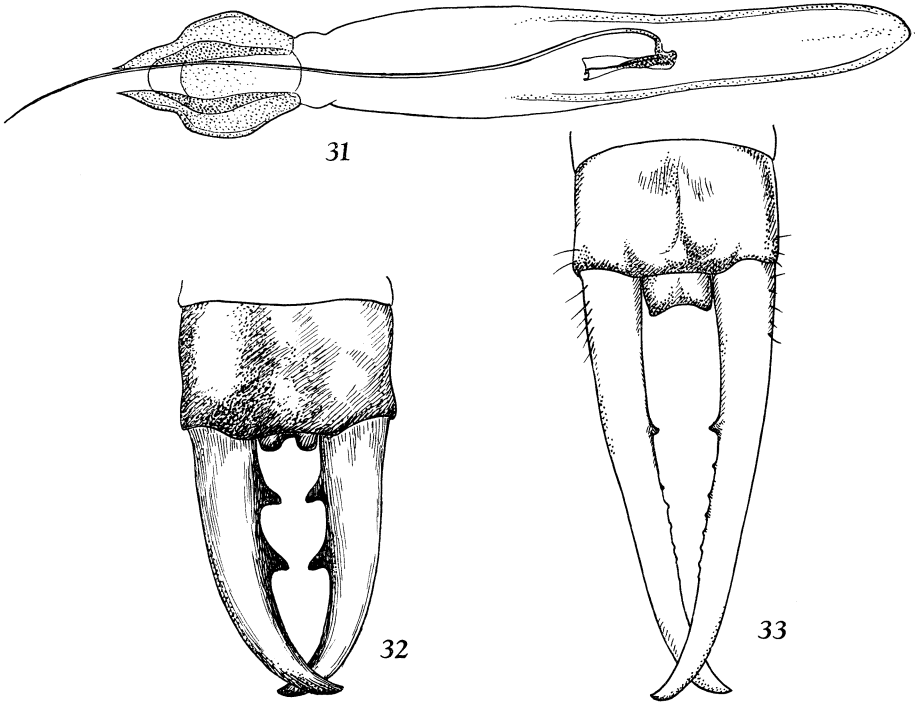


Fig. 31. *Proreus ludekingi* (Dohrn). Male genitalia. — Fig. 32. *Chelisoches diodontus* spec. nov. Holotype male, ultimate tergite and forceps. — Fig. 33. *Adiathetus proreoides* spec. nov. Holotype male, ultimate tergite and forceps.

from base. Pygidium, short but distinct, strongly emarginate, appearing bilobed seen from above.

Body length 10.5 mm., length of forceps 2.5 mm.

This male is more closely related to *C. bimammatus* Hebard from which it could be distinguished by the colour of the limbs and the armature of the forceps.

Adiathetus proreoides spec. nov. (Fig. 33).

Bismarck Islands. — NEW BRITAIN: Yalom, 1000 m, 1 ♂ (Holotype), 9 May 1962. In the Zoological Museum of Copenhagen. Male: Head, prozona and ultimate tergite orange, sides of pronotum, legs, elytra and forceps golden yellow, antenna, wing scales and abdomen dark brown.

Head, transverse, depressed, frons and cheeks moderately inflated; antenna, 17+ segments, 3rd long, clavate, 4th short, oval, rest gradually elongated, subcylindrical.

Pronotum, narrower than head, almost a square; prozona tumid, sides and metazona depressed, sulcus distinct, extending to caudal margin, lateral margins truncate, caudal margin deeply convex, angles rounded. Elytra and wing scales, fully developed. Legs, normal for the genus. Abdomen, cylindrical, segments 1—9 punctulate, 4—8 with a row of fine tubercles along posterior border. Ultimate tergite, smooth, disc not separated from sides, sulcus very weak, basal region tumid over base of forceps, caudal margin feebly sinuate mesad. Forceps, very long and slender, cylindrical, broad at base, tapering to apex, compressed for a short distance basad, with a prominent tooth less than half the distance from base, a few indistinct tubercles inside on apical half. Pygidium, short and broad, deeply sinuate mesad. Penultimate sternite, broad, rectangular, caudal margin rounded, emarginate mesad.

Body length 10 mm., length of forceps 5 mm.

The genus *Adiathetus* Burr includes five species of which three are confined to the Indian subcontinent. The present male is unique in its colouration resembling some members of *Proreus*. In the long and slender forceps it is closer to *A. shelfordi* (Burr) described from Sarawak, but could be distinguished from it by the nature of the abdominal tergites and the more simple forceps.

Genus **Euenkrates** Rehn.

Euenkrates Rehn 1927, Ent. News 38: 148—9 (type *Sphingolabis variegata* Kirby).

Enkrates Burr 1907, Trans. ent. Soc.: 126, 132.

Rehn discusses the need for renaming Burr's *Enkrates* due to the confusion created by the latter in misidentifying *Forficula flavipennis* Fab. (a member of *Chelisoches)* and designating it as the type of *Enkrates* in the place of *Sphingolabis variegatum* for which the genus was in fact meant. Consequently, *Enkrates* became isogeneric with *Chelisoches.* In spite of this clarification, Boeseman (1954) refers the other species *elegans* Burr under the genus *Enkrates.* Also, Towns (1945), in his list of generic names, treats *Euenkrates* as monotypic for *S. variegatum.* These discrepancies in literature could, perhaps, be attributed to Towns and Boeseman not consulting Burr (1912a) and Rehn (loc. cit.), respectively.

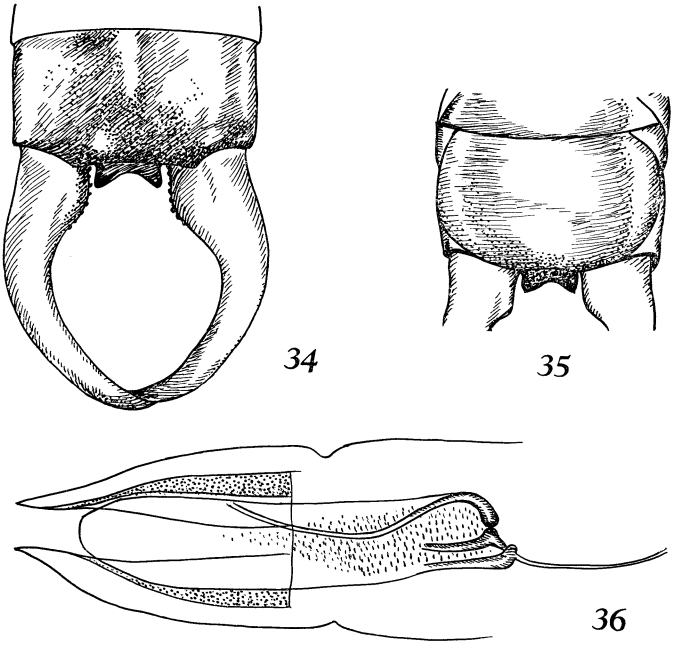
The genus *Euenkrates,* as known at present, should include two species, *E. variegatum* and *E. elegans,* the former restricted to Tropical Africa and the latter known only from Java and Sumatra. The species described here differs from both of these in the more slender build and the narrower pronotum. Besides, the forceps is characteristically arcuate and smooth except for a few indistinct tubercles at base.

Euenkrates simplex spec. nov. (Figs. 34—36).

Bismarck Islands. — NEW IRELAND: Lemkamin, 900 m, 1 ♂ (Holotype), 15 April 1962. — MANUS: Lorengau, 1 ♂ (Paratype), 18 June 1962. In the Zoological Museum, Copenhagen.

Male: General colour, uniformly reddish brown except narrow lateral areas of pronotum, pale yellow.

Head, tumid, smooth, sutures obsolete, caudal margin sinuate; antenna, 17+ segments, 1st large and swollen, 2nd smallest, 3rd and 5th subequal, 4th shorter than 3rd, rest a trifle longer than 3rd, subconical. Pronotum, as broad as long, slightly contracted caudad, sides convex, cephalic and caudal margins truncate, anterior angles sharp, posterior angles rounded; prozona tumid and well separated from the depressed sides and slightly elevated metazona; sulcus strong and extending to more than three fourths the distance of metazona. Elytra and wings well developed, the former twice as long as pronotum, smooth and caudal, margin obliquely sinuate away from sutural margin. Abdomen, moderately depressed, parallel sided, very feebly punctulate, glandular folds on 3 and 4 well developed. Ultimate tergite, transverse, smooth, area above base of forceps tumid, the region in between



Figs. 34—36. *Euenkrates simplex* spec. nov. Holotype male. (34) Ultimate tergite and forceps. (35) Penultimate sternite. (36) Genitalia.

sloping down; caudal margin trisinuate and raised above base of forceps. Pygidium, short, free margin deeply sinuate. Forceps, short, arcuate, swollen at base, slender and tapering beyond, inner margin with indistinct denticles at base. Penultimate sternite, broadly rounded, feebly emarginate mesad.

Male genitalia, Fig. 36.

Body length 7.5—9 mm., length of forceps 2 mm.

Hamaxas nigrorufus (Burr).

Spongiphora nigrorufa Burr, 1902, Term. Fuzet., 25:4.

Hamaxas nigrorufus (Burr), Burr, 1915, Tijd. Ent. Suppl., 58:118.

Sparattina nigrorufa (Burr), Zimmerman, 1948, Insects of Hawaii, 2:210, fig. 114.

Bismarck Islands. — NEW BRITAIN: Bita Paka, S.E. of Kokopo, 1 ♂, 10 July 1962. — LAVONGAI: Banatam, 1 ♂, 19 March 1962. — MUSSAU: Talumalaus, 4 ♂, 2 ♀, 19 Jan. — 1. Feb. 1962. — MANUS: Lorengau, 4 ♂, 5 ♀, 14—21 June 1962.

Philippines. — PALAWAN: Pinigisan, 600 m, 2 ♀, 8 and 11 Sept. 1961; Tagembung, 1150 m. 1 ♀, 20 Sept. 1961.

The Philippine females agree with those of the good series from the Bismarck Islands, except for the shape of pronotum. Only the discovery of a male from the Philippine locality could confirm their identity.

It should be mentioned that Zimmerman's figure of this species is different from the males in the Bismarck material, and it is possible that the Hawaiian male is a distinct species.

The specimens from Manus and Mussau have black legs while in others the legs are reddish brown.

Family **FORFICULIDAE.**

Subfamily EUDOHRNINAE.

Kosmetor tagalensis Borelli.

Kosmetor tagalensis Borelli, 1915, Bull. Mus. Zool. Anat. comp. Torino, 30 nr. 697:6.

Philippines. — MINDANAO: Curuan district, Sapamoro, 1 ♀, 22 Dec. 1961.

Bismarck Islands. — NEW BRITAIN: Yalom, 1000 m, 1 ♀, 18 May 1962.

Subfamily OPISTHOCOSMINAE.

Opisthocosmia cervipyga Kirby (Fig. 37).

Opisthocosmia cervipyga Kirby, 1891, Jour. Linn. Soc. Zool. 23: 523, pl. 12, f. 12.

Philippines. — PALAWAN: Pinigisan, 600 m, 5 ♂, 3—10 Sept. 1961.

These males agree well with the original description by Kirby.

Genus **Acanthocordax** Günther.

Acanthocordax Günther, 1929, Mitt. Zool. Mus. Berlin, 5:72.

Stenixus Hebard, 1933, Mem. Queensland Mus., 10, pt. 3: 154—156. (type *S. rachynotus)*.

Stenixus Hebard, Günther 1934, Konowia 13:287 (new synonymy).

While *Acanthocordax* was characterised by a strong spine at the cephalic angles of pronotum, Hebard distinguished *Stenixus* by the presence of a distinct tubercle in this region. Günther, however, did not consider this difference sufficient enough to merit generic distinction and thus Hebard's genus was sunk in *Acanthocordax, rachynotus* being treated only as a subspecies of *A. papuanus* Günther.

In the nature of the forceps, the species described below bears a closer resemblance to *rachynotus* than to either of the species of *Acanthocordax*. Further, the cephalic angles of pronotum are also characterised by the tubercle only. It is possible that Hebard's genus may have to be revalidated when the male genitalia of *rachynotus* and *A. bispinosus* (type of *Acanthocordax)* are available for comparison.

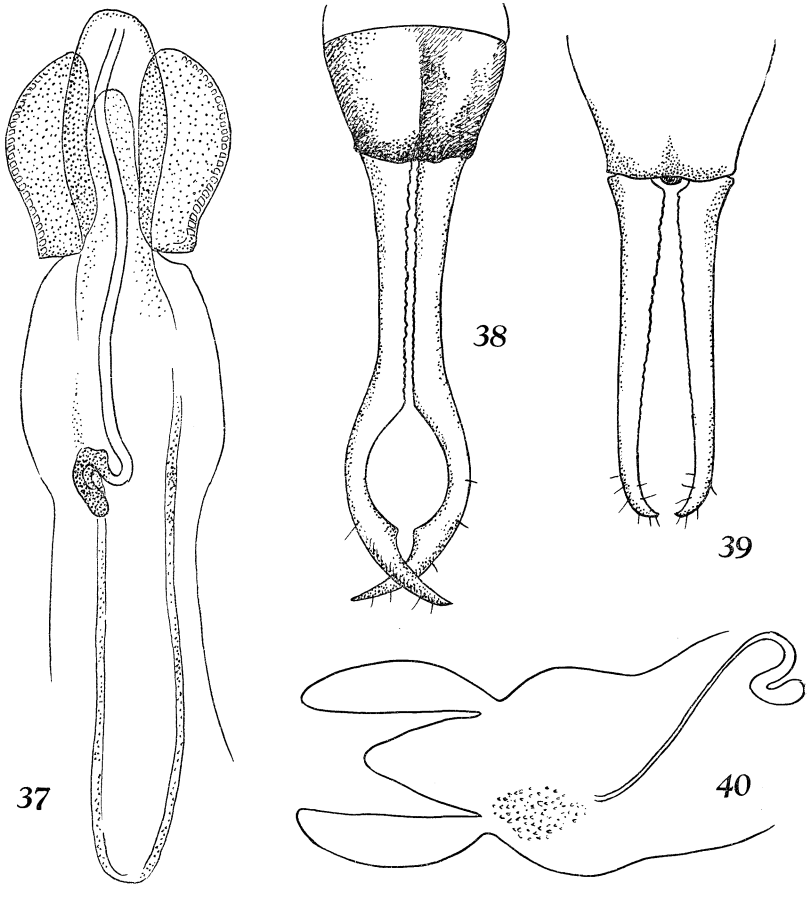


Fig. 37. *Opisthocosmia cervipyga* Kirby. Male genitalia. — Figs. 38—40. *Acanthocordax spatulatus* spec. nov. (38) Holotype male, ultimate tergite and forceps. (39) Allotype female, ultimate tergite and forceps. (40) Holotype male, genitalia.

Acanthocordax spatulatus spec. nov. (Figs. 38—40).

Bismarck Islands. — NEW BRITAIN: Yalom, 1000 m, 1 ♂, 1 ♀ (Paratypes), 2 nymphs 12—19 May 1962. — NEW IRELAND: Lemkamin, 900 m, 1 ♀ (Allotype), 7 April 1962, 1 ♀ (Paratype), 17 April 1962. — LAVONGAI: Banatam, 1 ♂ (Holotype), 18 March 1962. Types in the Zoological Museum, Copenhagen, except for a paratype in my collection.

Male: General colour reddish brown.

Head, tumid, sutures sunken; eyes shorter than genae; antenna, 12 segments, 1st long and thick in distal half, 2nd very short, 3—6 subequal, slender, shorter than 1st, rest longer. Pronotum, long and narrow, prozona tumid, separated from depressed metazona by a transverse ridge, lateral margins thick leaving a fine groove along entire length. Elytra, smooth, shoulders broadly rounded, cephalic margin oblique exposing a distinct scutellum. Wing scales, nearly half the length of elytra. Abdomen, tergites finely granulose, 3rd broadly sinuate. Ultimate tergite, a distinct blunt tubercle above base of forceps. Forceps, long, shaft cylindrical up to half the distance, inner margin crenulate, then slightly flattened, deeply bowed, a distinct tooth at the tip of concavity, subapical region arcuate and smooth. Pygidium, very small, hidden as seen from above. Penultimate sternite, triangular, broadly rounded. Male genitalia, Fig. 40.

Body length 6.5 mm., length of forceps 3.5—4 mm.

Female: Agrees with male in general. Pygidium more distinct and appearing in the form of a lobe seen from above. Forceps simple, inner margin crenulate.

Body length 10 mm., length of forceps 3 mm.

This species differs from *Acanthocordax papuanus rachynotus* Hebard, described from New Guinea in the more specialised subapical region of the forceps.

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Summary.

Records are made of Dermaptera from the Philippines (Palawan, Balabac, Tawi Tawi and Mindanao), the Bismarck Islands (including Manus I. in the Admiralty group) and Guadalcanal, Solomon Islands. One new subfamily is proposed. It contains two genera new to science, both from the Bismarck Islands. A total of 13 new species are described, belonging to the following genera: *Brachylabis, Epilandex, Physogaster* gen. nov., *Parapericomus* gen. nov., *Spongovostox, Irdex, Auchenomus, Dendroiketes, Chelisoches, Adiathetus, Euenkrates* and *Acanthocordax*. A generic key to the Dermaptera of the Bismarck Islands is presented.

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