NOTES ON AUSTRALASIAN AND MELANESIAN DERMAPTERA.

BY MORGAN HEBARD.

(Text-figures 1-4.)

The following studies are based on the last collections of this Order belonging to the author which have not already been studied. The most important series in it are a small but interesting collection made at Kuranda, Queensland, by F. P. Dodd and a number of specimens received in exchange from the Burr Collection, the data on which has either not been fully published or in some cases not published at all; while some of the determinations are incorrect. To this material has been added a small but very important unstudied collection belonging to the Australian Museum at Sydney, New South Wales. A total of twenty-seven species are treated, of which two are described as new.

In recent years little has appeared on the Dermaptera of the regions here treated, Mjoberg's studies in 1913 and 1924 being among the most important. These are evidently that author's first efforts on this difficult Order where there is still sufficient confusion existing to show plainly why a number of species were incorrectly placed generically by Mjoberg, this and the great individual variation which occurs in many species accounting for a number of synonymic names proposed. Several interesting species were there described, however, and valuable data given on other known forms.

PYGIDICRANIDÆ.

Tagalina semperi Dohrn.

Mt. Lamington, Northern Division, Papua, V, 1927 (C. T. McNamara), 1 large juv. \mathfrak{P} .

In this specimen the pronotum has two dark bands which are convexconvergent to meet meso-caudad and which reach the cephalic margin laterad, that margin being as broadly dark brown. The head is very dark brown except for the pale dorsal and caudal portions of the occiput.

In an adult male from Friederich-Wilhelmshafen, New Guinea, in the author's collection, merest traces of such pronotal marking are present.

Dicrana daemeli (Bormans).

Cairns, Queensland, Australia, (J. F. Illingworth), 1 juv. 3.

Echinosoma yorkense Dohrn.

Mt. Lamington, Northern Div., Papua, V and VII, 1927, (C. T. McNamara), $2\,$ 3, $1\,$ 9. Kuranda, Queensland, I, 3 and 9, 1925, (F. P. Dodd), $1\,$ 3, $1\,$ 9.

There is also a similar male from Waigana, Milne Bay, New Guinea, taken September 9 to 14, 1912 by Carson in the author's collection, received in exchange from the Burr Collection.

We find that sumatranum and yorkense are variable in coloration and the characters which have been used to separate them can not always be trusted. A minute pale tegminal spot is present in all but the Mt. Lamington female, though very faint in the Kuranda female. Such a spot, believed to be present in yorkense but absent in sumatranum, is even more distinctly present in a male of sumatranum from the Tengger Mountains, Java. Males are, however, easily separated by the abdominal tergites, the fifth to eighth inclusive being laterally heavily keeled and acutely produced in yorkense, these roundly produced laterad with only the fifth and sixth weakly keeled in sumatranum.

LABIDURIDÆ.

Titanolabis colossea (Dohrn).

Barrington Tops, New South Wales, Australia, I, 13 and 19, 1927, (T. G. Campbell), $5\,$ \$\tilde{\Sigma}\$ (three with total length about 31, two about 39 mm.), [Austral. Mus.] Cutlers Pass, Williams River, N.S.W., X, 28, 1922, (Musgrave and Campbell), 2 small juv., [Austral. Mus.] Hazelbrook, Blue Mountains, N.S.W., IX, 1922, (L. Abrahan), $1\,$ \$\tilde{\Sigma}\$ (total length $34\cdot$ 5 mm.). Blue Mountains, N.S.W., II, 20, 1910, $1\,$ \$\tilde{\Sigma}\$. Booloombayt, Nyall Lakes, N.S.W., IX, 2, 1922, (A. Musgrave), 1 small juv.

A male labelled "N.S.W." is in the author's collection the total length of which measures 53.6 mm.

Gonolabis pacifica (Erichson).

Bairndale, Victoria, (Spry), 13 (stenolabic), determined by Burr. Barrington Tops, New South Wales, I, 19, 1927, (T. G. Campbell), 13 (moderately platylabic), [Austral. Mus.) Cutlers Pass, Williams River, N.S.W., X, 28, 1926, (Musgrave and Campbell), 29, [Austral. Mus.].

We do not consider the characters given for *Mongolabis* Zacher sufficient to warrant recognition of that genus.

Bormans described brunneri but stated that it was possibly the same as pacifica. Burr in 1908 gave briefly the features which distinguish these species.

Gonolabis tasmanica (Bormans).

Mt. Wellington, Tasmania, 4,000 feet, 1 ♂, 1 ♀, determined by Burr. Interlaken, Tasmania, I, 24, 1928, (A. Musgrave), 1 ♂, [Austral. Mus.].

This insect was placed by Kirby in *Anisolabis* in 1904. The presence of vestigial tegmina afforded Burr's sole reason for referring it to *Euborellia* in 1912. Its agreement with other species of *Gonolabis* is actually very evident.

Anisolabis xenia (Kirby).

Norfolk Island, 13, 12.

Nala lividipes (Dufour).

Nepean River, New South Wales, I, 1905, (A. Musgrave), $1 \updownarrow$ [Austral. Mus.]. Sydney, N.S.W., $1 \circlearrowleft$, $1 \updownarrow$ (male forceps unarmed), [Austral. Mus.]. Minmi, N.S.W., $1 \circlearrowleft$ (forceps toothed). Gippsland, Victoria, XI, 10, 1919, (H. Bodley), $2 \updownarrow$.

This species is generally distributed over the tropics of the Old World and was probably originally introduced in Australia.

Labidura riparia truncata Kirby.

It is exceedingly difficult to decide whether the forms of this plastic species should be recognised as races or as mere variants. In all Australian material referable to truncata the ultimate tergite has (unlike pluvialis) a transverse caudal margin, the males do or do not have an internal tooth near the middle of the forceps and there is a tooth or swelling near their apices. This latter feature is peculiar to Australian material, so that racial recognition of truncata would appear to be warranted.

Mjoberg's $Labidura\ leucotarsata$, described from Perth, Western Australia, in 1924, is evidently a synonym.

Pawella, Queensland, (F. Bradshaw), 1 \$\frac{\pi}{\pi}\$ (medium, forceps with postmedian tooth prominent, a very faint sub-apical swelling present), [Acad. Nat. Sci. Phila.]. Mt. Morgan District, Queensland, (Mrs. McC. Metzer) 1 \$\frac{\pi}{\pi}\$ (medium robust, forceps with post-median tooth prominent, a marked sub-apical swelling present), [Austral. Mus.]. Goulburn, New South Wales, 1 \$\frac{\pi}{\pi}\$ (slender, forceps with median tooth absent, sub-apical tooth distinct), [Austral. Mus.]. Penrith, Nepean River, N.S.W., IV, 17, 1918, (A. Musgrave), 1 \$\frac{\pi}{\pi}\$ (forceps with sub-median and sub-apical teeth present), [Austral. Mus.]. Port Kembla, N.S.W., III, 1927, (M. E. Higs), 1 \$\frac{\pi}{\pi}\$ (very robust, forceps with post-median tooth present, a very faint sub-apical swelling indicated). Waterfall, N.S.W., IV, 1928 (E. Shaw), 1 \$\pi\$, [Austral. Mus.]. Cadia near Belubula, N.S.W., V, 1923, (Miss S. E. Hosie), 1 \$\pi\$. Warrawee, Sydney, N.S.W., (H. C. Fitzhardinge), 1 \$\pi\$, [Austral. Mus.]. Arneliffe, Sydney, N.S.W., IV, 2, 1916, (B. Stoyles), 1 \$\frac{\pi}{\pi}\$ (slender, forceps with post-median and sub-apical teeth prominent). Lawler, Western Australia, 1 \$\frac{\pi}{\pi}\$ (post-median and sub-apical teeth prominent).

Only the Penrith and Lawler specimens have fully developed tegmina and wings, the latter represented by minute concealed rudiments in all the others.

APACHYIDÆ.

Apachyus queenslandicus Mjoberg.

Kuranda, Queensland, (Dodd), $1 \, 3$, $1 \,$ large juv. 3, from Burr, labelled beccarii.

We are satisfied that Mjoberg was correct in describing this species. Only the inner margins of the wings are pale in this dark brown insect. The distal margin of the pygidium is slightly more produced than in *beccarii* and the forceps become gradually instead of suddenly spatulate distad.

The adult here recorded has the abdomen gradually widening distad.

Apachyus athertonensis Mjoberg.

Kuranda, Queensland, II, 4, 1925, (F. P. Dedd), 23, 49.

Mjoberg described a female, not a male as he supposed. The latter sex has the genitalia very much as in queenslandicus; the pygidium, however, has its distal margin armed with seven distinct points whereas in queenslandicus the median and lateral points have between them more numerous but very minute points.

The distinctive coloration is well described by Mjoberg. The present series agrees closely except that the entire sutural half of the wings is whitish. In a recessive example the head is reddish, not darkened caudad, and in several specimens the paler rows of latero-dorsal spots on the abdomen are fused to form broad latero-dorsal longitudinal bands.

LABIIDÆ.

Nesogaster amoenus (Stål.).

Mt. Lamington District, Northern Div., Papua, VII, 1927, (C. T. McNamara), $3 \, \updownarrow$ (one with short tegmina, two with long tegmina and fully developed wings).

These specimens differ from Sumatran individuals in having the tegmina immaculate and of a more metallic purplish black and the emargination following the proximo-internal projection of the forceps is more decided. Specific separation may be indicated, but males are necessary to determine this. The lateral margins of the pronotum are yellow buff, these areas broadening caudad. In all other respects close agreement with our Sumatran material is shown.

In the winged females the wing pads have a large proximo-internal spot of yellow buff.

The general appearance of this small earwig agrees closely with that of certain species of the genus Labia.

Nesogaster erichsoni (Dohrn).

LeGuillou's Forficesila oceanica, described in 1841 has been placed as a synonym of Chelisoches morio, with the type locality the Marquesas Islands. That author's specimen from Vavau Island, figured and named Forficula oceanica

by Blanchard in 1851 is a dark insect with pale wings; surely not the present species. Burr was therefore in error in suggesting oceanica as a synonym of erichsoni. We were equally at fault in 1927 in placing pulchripes Bormans in synonymy here.

Lithgow, New South Wales, VI, 1924, (H. E. P. Bracey), 13, [Austral. Mus.]. Melbourne, Victoria, (Edwards), 13. Launching Place, Yarra River, Vict., (Spry; under bark), 13, 1 large juv. \bigcirc , from Burr determined as erichsoni.

The male pygidium agrees in its linguliform type with that of amoenus, but this large elongate red-brown species is otherwise very distinct and in appearance suggests certain species of the Ancistrogastrinae.

Nesogaster pulchripes (Bormans in Burr).

Kuranda, Queensland, II, 2, 1925, (F. P. Dodd), 1 \, McPherson Range, National Park, Queensland, XII, 18, 1926, (A. Musgrave), 1 \, , [Austral. Mus.].

This is a distinctive species and it is unfortunate that it has been twice incorrectly placed in synonymy, under amoenus by Burr in 1911 and under erichsoni by Hebard in 1927. It agrees with the former species in size and Labiine appearance, with the latter in colour and unarmed forceps. The male pygidium, as it was originally described and also in being broader than long, is very different from the linguliform type found in those species.

Apovostox hilaris (Bormans).

Kuranda, Queensland, I, 24 and 27, 1925, (F. P. Dodd), $1 \stackrel{>}{\circ}$, $1 \stackrel{>}{\circ}$.

This insect agrees closely with A. semiflavus (Bormans) in the majority of characters used for generic separation, the more quadrate pronotum and decidedly longer second caudal tarsal joint suggesting that they may be generically distinct from the genotype, A. pygidiatus (Dubrony).

The very short female forceps, proximad fitting tightly about the rounded pygidium, thence with inner margins straight and attingent to the apex further suggest that *hilaris* may be found to be generically distinguishable from either of those species when the Austro-Melanesian genera are better understood.

The male agrees closely with the originally described male except that it is considerably larger, the pronotum is suffused with brown except laterocephalad, the wings are dark brown and the feeble proximo-internal projection of the forceps is near the base instead of near the apex of the pygidium. These differences may well have specific significance, but without more material we can not determine this and the great variation shown in the present material of Marava feae and Marava wallacei indicate that extreme caution must be used in considering related Austro-Melanesian species.

Length of body 3 7.8, 9 7.9: length of forceps 3 2.8, 9 1.1 mm.

A much smaller female from Kuranda (length of body 6, length of forceps 9mm.) with pronotum dark brown, wings with a meso-proximal spot of buff and abdomen dark brown but paler towards the margins of the tergites dorsad (instead of solidly red-brown, becoming dark brown laterad and on ultimate tergite) may represent a distinct but related species.

Chætospania brunneri (Bormans).

Macpherson Range, National Park, Queensland, XII, 15, 1926, (A. Musgrave), 1♀, [Austral. Mus.]. Sydney, New South Wales, 1♂ (small, pale, stenolabic), [Austral. Mus.]. Fern Tree Gully, Victoria, IX, 1912, (Spry), 1♂ (eurylabic), 1♀, determined by Burr.

Chætospania australica (Bormans).

Kuranda, Queensland, (Dodd), 3♀, determined by Burr.

The coloration of this species is much more uniform and less brilliant than in *brunneri*. The female pygidium has two points between the small but sharply projecting latero-caudal angles and the forceps have a distinct flange which suddenly terminates before the moderately incurved apices.

Labia minor (Linnaeus).

Sydney, New South Wales, (C. Gibbons), 19, [Austral. Mus.].

This is undoubtedly an introduction in Australia. The species is wide-spread in Europe, has been introduced and become extensively established in temperate North America and has also been recorded from temperate South America and South Africa.

Marava (Burr).

Burr's Andex falls as a synonym of his Marava. Both were described in 1911, the latter having page priority.

Marava wallacei (Dohrn).

Burr noted in 1912 that *Labia grandis* Dubrony described in 1879 was a synonym of *Labia wallacei* described by Dohrn in 1864. Rehn's *Labia nigro-flavida*, genotype by monotypy of *Andex* Burr, was based on a female from Cairns, Queensland, of the present species and is therefore another synonym.

In 1913 Mjoberg described Spongiphora australica from Kimberley, North-west Australia and in 1924 figured the insect and referred it to Spongovostox. Considerable series now before us convince us that that name is still another synonym, based upon a robust condition in which the male forceps are bidentate. Such material is before us from Java, normal specimens being also present in that series.

Mt. Lamington, Northern Div., Papua, IV to VII, 1927, (C. T. McNamara), 5 ♂, 10 ♀ (one female with short tegmina and no wings, other macropterous; forceps of four males unarmed, in one with a meso-distal tooth), [Austral. Mus.]. Ighibirei, New Guinea, VII to VIII, 1890, (Loria), 2♂ (macropterous, forceps

unarmed in one, with a meso-distal tooth in one). Stephansort, Astrolabe Bay, New Guinea, 1897, (Biro), $1 \, \mathcal{J}$, determined by Burr as grandis (macropterous, forceps unarmed). Siwai, Bougainville Island, X, 1, 1922, (E. O. Pockley), $1 \, \mathcal{J}$ (short tegmina, no wings, forceps with a meso-distal tooth). Ysabel Island, Solomon Islands, V, 30, 1925, (N. S. Hefferman), $1 \, \mathcal{I}$ (macropterous), [Austral. Mus.]. Kuranda, Queensland, (F. P. Dodd), $10 \, \mathcal{I}$, $10 \, \mathcal{I}$ (macropterous; male forceps unarmed in seven, with a meso-distal tooth in three).

Marava feæ (Dubrony).

This insect, though smaller and with very distinct male genitalia, agrees fully with *Marava wallacei* in all generic features. The pyriform antennal joints prevent the association with *Spongovostox* indicated by Burr in 1911.

Kuranda, Queensland, (Dodd), $1 \ 3$, $1 \ 4$, determined by Burr (tegmina short and whitish disto-laterad wings absent; male eurylabic); (F. P. Dodd), $7 \ 3$, $12 \ 4$ (macropterous, tegmina uniform black, wings buff proximo-laterad; three males eurylabic, three intermediate, one stenolabic).

CHELISOCHINÆ.

Hamaxas nigrorufus (Burr).

Burr was correct in assigning this species to *Hamaxas* in 1915, but Mjoberg repeated the original incorrect assignment to *Spongiphora* in 1924.

Mt. Lamington, Northern Div., Papua, V and VII, 1927, (C. Y. McNamara; one at light), $1 \, \Im$, $3 \, \bigcirc$, [Austral. Mus.].

The limits of distribution of this species are now known to be Queensland and Hawaii.

Proreus duruoides new species. Text-figures 1 and 2.

This insect is readily separated from other Australian species by the general dark coloration, red-brown antennæ and limbs, buffy wings, abdomen with caudal margins of tergites very finely tuberculate, ultimate tergite nedulose distad and male forceps which curve outward and downward and then converging straighten out distad, these forceps very similar to those developed in males of the American genus *Doru*.

The species agrees closely with *Chelisoches*, its decidedly smaller size and general appearance indicating that it had best be referred to the very closely related *Proreus*.

Type.—♂; Kuranda, Queensland, Australia. February 3, 1925. (F. P. Dodd). [Hebard Collection Type No. 1220.]

Size medium for the genus, form slender as in the genotype, only moderately depressed. Head large, slightly broader than pronotum, moderately flattened, evenly weakly convex dorsad to very weak extensive depressions

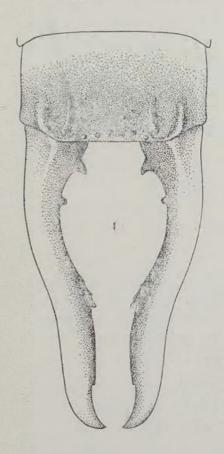
meso-caudad of eyes on occiput, caudal margin feebly bi-convex. Eye considerably shorter than cheek. Antennæ with sixteen joints; first elongate, almost equal to combined length of second, third and fourth; third half again as long as broad, succeeding joints increasing in length, subpyriform but rapidly becoming elongate and rod-like. Pronotum glabrous, appreciably longer than wide, lateral margins very faintly divergent to the rather broadly convex caudal margin. Tegmina and wings fully developed, not keeled, glabrous. Abdomen with second gland prominent; surface microscopically very finely pitted and with caudal margins of tergites very finely tuberculate. Ultimate tergite elevated latero-caudad with two short longitudinal carinæ on each of these elevations, caudal portion conspicuously tuberculate. Pygidium vertical, rounded triangular with apex truncate, ventro-laterad before apex with a very small sharp projection on each side, much as in Chelisoches ater but not as pronounced. Forceps moderately stout and elongate, curving outward and downward in proximal two-fifths, thence straight convergent to incurved apices, at inner side of base thickened and terminating in a small sharp projection, ventro-internal margin from a brief distance beyond very minutely toothed to distal fifth where the shaft is horizontal, the first of these teeth more nearly a node than the others and the more distal along the edge of a lamella which gradually widens to the base of the distal portion. Penultimate sternite impresso-punctulate, these becoming coarse distad, apex broadly and shallowly Limbs short. Caudal metatarsus pilose ventrad with two or emarginate. three adjacent ventro-external spines, short but equal to combined length of the succeeding joints; second joint hirsute, very narrow, extending ventrad half the length of the third joint.

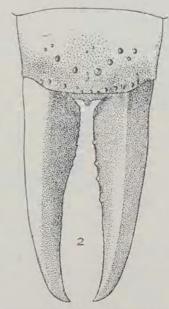
 $Allotype:\ \ \ \, ;\ \ \, \text{same data as type but taken January 24, 1925.}$ [Hebard Collection.]

Resembles the male closely, differing as follows. Ultimate tergite less elevated on each side toward caudal margin and without carinæ but more conspicuously tuberculate. Pygidium moderately convex declivent, slightly shorter, with a small blunt apical projection. Forceps moderately stout and elongate, straight then curving feebly distad to apex, simple, moderately triquetrous; internal margin moderately emarginate about pygidium, thence very feebly toothed to distal portion, no tooth more conspicuous than the others. Penultimate sternite with distal margin evenly convex.

Head, proximal portions of antennæ, abdomen and forceps shining blackish brown. Pronotum and tegmina very slightly paler, the former with narrow lateral portions which widen caudad translucent brown. Antennæ becoming gradually paler distad, chestnut in some, ferruginous in paler individuals. Wings cream colour. Limbs moderately translucent, chestnut in the darker examples, ferruginous in the others.

The measurements of three pairs of paratypes, bearing the same data as the type, and two large immature females, taken January 24 to February 4, follow those of the allotype. Length of body $3 \cdot 10.8$, $9 \cdot 10 \cdot 10.3$; length of pronotal disk $3 \cdot 1.63$, $9 \cdot 1.7$ to 1.65; width of pronotum $3 \cdot 1.42$, $9 \cdot 1.49$ to 1.5; length of tegmen $3 \cdot 2.48$, $9 \cdot 2.34$ to $9 \cdot 2.48$; length of exposed portion of wing $3 \cdot 92$, $9 \cdot 85$ to 92; length of forceps $3 \cdot 3.8$, $9 \cdot 2.8$ to $9 \cdot 3.8$.





Text-fig. 1.—Proreus doruoides new species. Male. Type. Kuranda, Queensland, Australia, Dorsal view of ultimate tergite and forceps (greatly enlarged).
Text-fig. 2.—Proreus doruoides new species. Female. Allotype.

Kuranda, Queensland, Australia. Dorsal view of ultimate tergite and forceps (same scale as Fig. 1).

CHELISOCHES Scudder.

Burr's Kleiduchus, described in 1911, with monotypic genotype Forficesila australicus Le Guillou, differs only from Chelisoches Scudder 1876, with genotype Forficula morio Fabricius, in having the tarsi more dilated. This feature is variable in the species of Chelisoches and insufficient to warrant the recognition of a genus. We therefore place Kleiduchus as a synonym of Chelisoches. Mjoberg questioned the validity of Kleiduchus in 1924.

Chelisoches australicus (Le Guillou).

Murray Island, Torres Straits, 1907, (Hedley and McCulloch), 13. Chelisoches ater (Bormans).

Described and figured as *Psalidophora australica* by Dubrony in 1897 from Somerset, Australia, this species was named ater by Bormans in 1900

when it was found that it and Forficesila australica Le Guillou 1841 were both referable to Chelisoches.

Murray Island, Torres Straits, 1907, (Hedley and McCulloch), 13.

FORFICULIDÆ.

Elaunon bipartitus (Kirby).

Kuranda, Queensland, I, 29 and 30, 1925, (F. P. Dodd), 23 (one macrolabic, one delicately brachylabic), 19. Coonabarrabran, New South Wales, (H. J. Carter) 19, [Austral. Mus.]. Upper Colo River, N.S.W., X, 1922, (J. R. Kinghorn) 23, 29, [Austral. Mus.]. Uki, Tweed River, N.S.W., I, 9, 1923, (A. Musgrave), 49, [Austral. Mus.].

Forficula auricularia (Linnaeus).

Interlaken, Tasmania, I, 23 and 24, 1928, (G. P. Whitley), 2 \Im (one moderately macrolabic, one brachylabic), [Austral. Mus.]. New Zealand, 1 \Im (brachylabic), 1 \Im .

This common European species has been widely introduced in temperate North America and has as surely reached the Antipodes by the same means.

STENIXUS new genus.

A monotypic genus, including only *S. rhachynotus*, is here described. The very small longitudinal pronotum but large head and broad organs of flight suggest *Opisthocosmia* Dohrn, but the male abdomen with ultimate tergite narrow and both sloping and narrowing strongly caudad indicate closer affinity to *Narberia* Burr.

The remarkable tooth at each latero-cephalic angle of the pronotum readily distinguishes the genus, which is further characterized as follows.

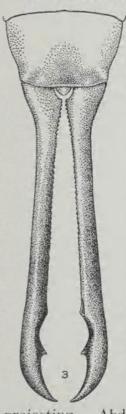
Size medium small, form extremely slender. Head moderately tumid with sutures distinct. Antennæ with twelve segments, all very elongate and cylindrical except the minute second. Organs of flight fully developed; tegmina ample, not keeled. Abdomen with second lateral tubercle prominent and its apical glandular development distinct. Male abdomen scarcely widened mesodistad, unarmed laterad. Pygidium very small and narrow in both sexes. Forceps elongate and slender, of male nearly contiguous throughout. Limbs very slender, tarsi very small, caudal metatarsus very slightly longer than combined length of the two succeeding joints.

Stenixus rhachynotus new species. Text-figures 3 and 4.

This is not only one of the slenderest but also one of the most distinctive of the known earwigs.

Type.: ♂; Mt. Lamington, Northern Division, Papua. May, 1927. (C. T. McNamara) [Australian Museum.]

Size medium small, form extremely slender. Head with paired impressions on frons, occiput showing impression at sutures. Pronotum very small, decidedly narrower than head, considerably longer than wide; prozonal portion moderately convex to very narrow lateral portions, defined from metazona by a broadly convex sulcus; metazona narrow, feebly convex with caudal margin cingulate and broadly convex; lateral margins of pronotum cingulate, faintly converging caudad, terminating at latero-cephalic angles in a small acute-conical projection directed dorsad and weakly laterad. Tegmina decidedly broader than head, full, with caudal margin transverse. Wings very





Text-fig. 3.— Stenizus rhachynotus new species. Male. Type.
Mt. Lamington, Northern Division, Papua. Dorsal view of ultimate tergite and forceps (greatly enlarged).

Text-fig. 4.—Stenizus rhachynotus new species. Male. Type. Mt. Lamington, Northern Division, Papua. Dorsal view of pronotum. (x 15)

scrongly projecting. Abdomen smooth, moderately convex dorsad. Ultimate tergite simple, slightly longer than its apical width, slightly impressed mesocaudad. Pygidium minute, strongly declivent, in dorsal aspect appearing rounded and with projection equal to width. Forceps very elongate and slender, straight and subattingent to near apex with ventro-internal margin very narrowly lamellate and serrulate, this becoming gradually very weak distad, this terminating suddenly at less than distal quarter with inner surface then weakly concave to a ventro-internal tooth situated mesad in this section, thence concave due to the shaft curving inward from that point to the acute apex. Penultimate sternite broader than long, lateral margins convergent, rounding into the very feebly concave, truncate apex. Caudal tarsus only one-third as long as caudal tibia.

Allotype: Q; same data as type. [Australian Museum.]

Very similar to male, larger. Pygidium unusually similar. Forceps proportionately shorter, attingent, straight to the unspecialized and weakly incurved apices, ventro-internal narrow lamellation similarly toothed and gradually disappearing distad, shaft mesad triquetrous. Penultimate sternite with apex convex.

Head and pronotum shining black. Tegmina and wings the same or slightly paler, deep chestnut brown. Abdomen and forceps hazel with sides darkened in one specimen. Antennæ with first two joints brown, thence buffy brown becoming gradually more and more suffused distad. Limbs clear testaceous with a very faint tawny tinge.

The measurements of a female paratype, bearing the same data, follow those of the allotype. A fragmentary paratype bearing the same data is also before us. Length of body 3.8.8, 9.10 and 10.3; length of pronotal disk (not including neck) 3.92, 9.92 and 1.06; greatest (cephalic) width of pronotum (not including projections the tips of which reach slightly beyond the lateral margins) 3.85, 9.88 and 9.87; length of tegmen 3.2.4, 9.2.5 and 9.62; width across tegmina 3.1.77, 9.1.98 and 9.05; length of exposed portion of wing 3.1.25, 9.1.49, and 9.05; greatest (meso-distal) width of abdomen 3.1.63, 9.1.77 and 9.98; length of forceps 3.4.1, 9.98 and 9.98 and 9.98 mm.

chit32

FREDERICK PHILLIPS, Government Printer, Brisbane.



Hebard, Morgan. 1933. "Notes on Australasian and Melanesian Dermaptera." *Memoirs of the Queensland Museum* 10, 145–156.

View This Item Online: https://www.biodiversitylibrary.org/item/214374

Permalink: https://www.biodiversitylibrary.org/partpdf/214961

Holding Institution

Queensland Museum

Sponsored by

Atlas of Living Australia

Copyright & Reuse

Copyright Status: Public domain. The BHL considers that this work is no longer under copyright protection.

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at https://www.biodiversitylibrary.org.