# ARADIDAE IN THE SOUTH AUSTRALIAN MUSEUM, ADELAIDE II. (HEMIPTERA-HETEROPTERA) 

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SUMLMARY

The athor describes three new genera, 19 new species and one new subspecies, all belonging to the subfamily Mezirinae Oshanin. They are as follows: Mastigocoris malayensis n. sp., Malay Peninsula; Aspisocoris n. ir. for A. termitophilus n. sp., West Australia; Artabanellus monamarai n. sp., New Guinea; Argocoris n. g. for A. grossi 1. sp., Queensland; Aegisocoris 11. g. for A. gramulatus n. sp., Queensland; Neophlocobia tuberculata n. sp., Queensland; Artabamms bilobiceps pupusiuus n, ssp., New Guinea; Artabanus truncutus n. sp., New Guinea; Artabanus tuberculatus n. sp., Malay Peninsula; Artabanus mofarlandi n. sp., Fiji; Ctenonenrus aberrans n. sp,, New Ghinea; Pictincllus propusicus n. sp., New Guinea; Pictinellus Leai n. sp., Fiji; Pictinellus maturiliensis n. sp., Fiji ; Pictinellus elongatus n. sp., Fiji ; Pictinellus lomgiceps n. sp.. Fiji ; Pichinellus malayensis n, sp., Malay Peninsula; Mezira wilsomi n. sp., Australia, Victoria and N.S.W.; Mezira elegans n. sp., Australia, N.S.W.; and Mezira rnigmatica n. sp,, New Guinea.

Mezira (Mesirella) infantulus Kiritshenko, 1959, previously placed hy this author in the geuus Pictinellus Usinger and Matsuda, 1959, is now transferred to the related genus Glochocoris Usinger and Matsuda, 1959.

The anthor does not agree with Blöte in synonymizing Daulocoris auritomentosa (Kormilev), 1955, with Daulocoris feanus (Bergroth), 1889, and gives differences for separation of these two species.

I want once more to express my sincere gratitude to Mr. Gordon F'. Gross, Senior Curator of Invertebrates at the South Australian Museum in Adelaide, by whose kind offices I have been privileged to study the Aradidae in the rich collections under his eare.

This paper treats the second and last section of the family sent to me for study, the subfamily Mezirinae Oshamin, 1908, The assemblage studied here proved to be no less interesting than the first*. Three gencra, all from Australia, and 19 species are new, and are described elsewhere in this paper. Of particular interest is a new

[^0]termitophilous genus from West Australia, and two aberrant new species of Ctenoneurus Bergroth, 1887, and Mezira, A.S., 1843, respectively, both from New Guinea.

All measurements indicated in this paper were taken with a micrometer eyepiece, 25 units equalling 1 mm ., with exception of Argocoris grossi n. sp., and Aegisocoris gramulatus n. sp., in which 10 units equals 1 mm . The first figure in the ratio represents the length, and the second the width of the measured part. The length of the abdomen was taken from the tip of scutellum to the tip of hypopygium ( $\delta$ ), or segment IX respectively (of), with the exception of Aspisocoris termitophilus n. g., n. sp., where it was taken on the ventral side.

Subfam. MEZIRINAE Oshanin, 1908
Gen. Mastigocoris Matsuda and Usinger, 1957
This genus was established on the base of a single male, but later Lsinger and Matsuda mentioned that they have also seen species from Java and Sumatra (1959; 222).

## 1. Mastigocoris malayensis n . sp .

Male. Brachypterous. Similar to Mastigororis angulatus Matsuda and Lisinger, 1957, from which it differs by the rounded antero-lateral angles of pronotnm, neither produced forward, nor sideways, and by the more protruding, and roumded, PE-VI. In the male, PE-II to PE-IV are not protruding, PE-V barely protruding, PE-VI distinctly protruding and rounded. In the female, PE-II to PE-VI are not protruding, PE-VII with a small tubercle, absent in male.

Measurements: head slightly shorter than width through the eyes, 6 $-14: 15.5$, ㅇ-16:17.5; proportions of antenual segments, I to IV, are: $\delta-7.5: 5: 7.5: 7$, $+7.5: 5: 7.5: 7$; pronotum less than half as long as maximal width, $8-11: 26$, ? $-14: 21$; abdomen longer than maximal width across segment VI ( 子 ), or V (\%), ठ- $37.5: 31$, 우-50:40.

Hemelytra with lateral border carinate basally; disc of corium with three divergent rows of finely granulate carinae (veins); hemelytra reach to $\frac{2}{3}$ of scutellum. Spiracles II to VI ventral, placed near the border, VII and VIII lateral and visible from above.

Colour: brown; tibiae and tarsi yellow-brown to yellow; round callons spots on central dorsal plate reddish brown.

Total length: $3-3.0$, $9-3.84 \mathrm{~mm}$. ; pronotal width: $3-1.04$, क -1.24 mm . ; abdominal width: \& -1.24 , $\div-1.60 \mathrm{~mm}$.

Hololype: of, Malay Peninsula, Lenggong-A. M. Lea and party coll.; deposited in the South Australiau Museum, Adelaide.

Allotype: of, collected with holotype; in the same collection.
Paratypes: 5 子, 11 \&, and 3 nymphs, collected with holo and allotype; in the same and author's collections.

## Aspisocoris new genus

Elongate, with parallel sides; upper surface covered with fine, setigerous granulation, setac erect and very short, giving the appearance ol' roughuess.

Meal as long as width across eyes; anterior process strong, constricted in the middle, and truncate in front, clypens free, rearhing to $\frac{3}{7}$ ol antennal segment 1 . Antenniforons tubercles thick, blunt, reaching slightly beyond the base of ant, segment I. Eyes small, immersed in the head. Postocular borders straight, strongly converging backward; postocular tubercles absent. Vertex convex. Antennae moderately heavy ; ant. segment I strongly incrassate, almost pyriform; II and III slightly tapering toward the base: IV cylindrical, rounded apically; II the shortest; I, III and TV subequal in length. Segment III and IV nearly half fused together (completely fused in nymphs). Rostral atrimm open ; rostral groove shallow, open posteriorly; rostrum reaching bevond fore border of prosternum.

Pronotum convex, half' as long as its maximal width; fore border deeply sinuate; collar fused with dise. Antero-lateral angles angular, strongly produced forward, but wot reaching eyes. Lateral borders subparallel, slightly convergent anteriorly; lateral notch absent; hind border angularly excavate. Dise divided into two lohes by a shallow depression; fore lobe twice as long as the hind lobe, triangularly raised in the middle, and depressed between median elevation and produced anterolateral angles. Miud lobe sloping backward, and towards the lateral margins.

Scutcllum elongate triangular, strongly raised medially; basal border convex; lateral borders barely sinuate, and carinate; tip narrowly rounded, reaching almost to posterior border of tergum II; dise deeply depressed between median ridge and lateral borders.

Hemelytra reduced, but still separated into corium, clavus, and membrane; the latter abbreviated and without veins, Clavus appearing as a narrow triangle, and separated from corium by a deep sulcus. Corium longitudinally raised along clavus, and along exterior border, depressed hetween both elevations; its exterior border convex
anteriorly, and slightly sinuate posteriorly, reaching to the middle of connexivam II. Mombrane rounded apically, reaching to the tip of scutellum. Hind wings absent.

Abdomen longer than maximal width. Lateral borders sobparallel, slightly convex. Tergum I covered by scutellnm in the middle, smooth, and separated from central dorsal plate by a distinet sulens. Terina TI to VI completely fused together, forming a rectangular, slightly convex plate, withont any demarcation between segments. Fore and hind borders of central dorsal plate simple, not raised; lateral borders carinate. Dise, with exception of tergum $\Pi$, which is smooth, covered with a setigerous granulation which is slightly finer than that of the head, pronotum, and scutellum. Tergum VII is different in both sexes: in the male, it is trapezoidal, with lateral borders converging posteriorly ; dise raised posteriorly, without granulation, and with two $(1+1)$ longitudinal ridges produced backward, and superimposed over hypopygimu as acute spikes; these ridges are flat as seen from above, with sharp borders, tapering backward. In the female, tergum VII is also trapezoidal, slightly raised in the middle, and with a dense, setigerous granulation like the rest of body. Connexivum separated from tergum by a deep sulcus; connexiva slightly longer than their maximal width; dises slightly raised, and finely setigerously granulate (as fine as on central dorsal plate). PE-angles not protruding from II to VI; PE-VII forms an acute angle in the male, but is not produced and rounded in the female. Spiracles very small, Il to VII ventral, placed well away from the lateral margins, VIII lateral and visible from above. Hypopygium large, suheordate, with a small, triangular ridge on the upper side medially, longitudinally depressed along the ridge. Paratergites small, clavate, adjacent to hypopygium. In the fomale, paratergites short, but wide, ronnded posteriorly, reaching to the middle of segment IX.

Metathoracic scent gland openings in the shape of a thin, short canal placed just over the middle acetabula. Tergal scent glands seen as alnost obliterated scars between III and IV, and between IV and V segments. Meso- and metastermum with a wide, shallow depression medially, which is prolonged on to sternum II. Stermm Ill with a median, triangular, low, and thin, carina. Sterna with straight posterior borders; in the male, sternum VTI twice as long as VI. In the female, posterior horder of sternum VI twice sinuate, similar to Neuroctenus; valves of VILI raised, forming a double carina.

Legs unarmed; trochanters semifused with femora; nrolia present.
Type species; Aspisocoris lermitophilus u. sp.

Aspisocoris n, gen. with its open rostral atrium, and abbreviated hemelytra, runs in Usinger and Matsuda's key to Artabanellus, but is far from it systematically. It is quite unique in the Mezirinae by virtue of the very long scutellum, and the completely fused together segments of the central dorsal plate, which form a rather flat, slightly convex plate.

## 1. Aspisocoris termitophilus n . sp .

Fig. 1-2
Male. Elongate, rather convex; brachypterous.
Measurements: head as long as width across the eyes; क-21:21, $8-20: 20,5$; proportions of antennal segments, I to IV, are: б-7.5:5:7:7, \&-7.5:4.5:5.5:7. Pronotum half as long as its maximal width: $\delta-16: 31$, \& $-16: 32.5$; scutellum longer than basal width: o $-25: 20$, $+-27: 20$; abdomen (measured on ventral side because of the length of scutellum) longer than its maximal width: $\delta-50: 38$, 우 - $53: 38$; hypopygium shorter than its maximal width: $15: 23$,

Colour: testaceons; tips of antennal segments IV, tergum II, and the middle of ventral side, from prosternum to sternum VI, lighter, yellow brown to pale yellow brown.

Total length: o $-4.08, \%-4.52 \mathrm{~mm}$. ; width of pronotum: क -1.24 , ? - 1.30 mm . ; width of abdomen: o -1.52 , $\ddagger-1.52 \mathrm{~mm}$.

Holotype: s, West Australia, Mundaring-J. Clark coll., in a termite nest; deposited in the South Australian Museum, Adelaide.

Allotype: $\circ$, collected with holotype; in the same collection.
Paratypes: 2 3,79 and 11 nymphs, collected with holo- and allotype; in the same, and author's collection.

Gen. Artabanellus Matsuda and Usinger, 1957
Artabanellus Matsuda and Usinger was established on the basis of a single female specimen, from Palau Islands; the specimen described here, also a female, is from New Guinea (Papua).

## 1. Artabanellus menamarai n . sp.

Female. Ovate, micropterous; all elevations on the head and body covered with rufous curled hairs,

Head slightly shorter than width through the eyes (23:25), Anterior process long, with parallel sides, notched at the tip, reaching to $\frac{3}{4}$ of antennal segment I. Anterniferous tubercles dentiform, their exterior borders subparallel, reaching to $\frac{1}{4}$ of antennal segment $I$. Eyes moderately large, protruding. Postocular tubercles absent;
postocular borders slightly convergent posteriorly. Vertex with a high median ridge, covered with curled hairs. Antemae less than twice as long as head (38.5:23) ; segment I thick, clavate, II narrower, slightly tapering toward the base, III subcylindrical, also slightly tapering toward the base, IV fusiform. Proportions, I to IV, are: $10: 6: 13: 9.5$. Rostral atrium open; rostrum short, does not reach to the base of rostral groove.

Pronotum $\frac{1}{8}$ as long as its maximal width ( $15: 43$ ). Collar fused with dise; Iaterad of it are placed two $(1+1)$ small tubercles; anterolateral angles are extended into reflexed, rounded lobes; lateral borders convex ; hind border broadly convex. Dise with two $(1+1)$ moderately large tubereles placed laterad of median line, and with two $(1+1)$ high tubercles placed near postero-lateral angles; f'rom these tubercles run mosad, along posterior border, two $(1+1)$ thin, low carinae, evanescent before reaching each other.

Scutellum elevated in the form of a hump, shorter than width at the base ( $16: 23$ ); lateral borders straight, tip rounded,

Hemelytra reduced to small vertical pads.
Melanotum split into two $(1+1)$ large plates, elevated in the middle.

Abdomen shorter than maximal width across segment II (58:62). Tergum $T$ split by scutellum into two $(1+1)$ transverse plates. Central dorsal plate consisting of terga II to VI; median portion raised as a wide, moderately bigh ridge; the latter more raised at hind borders of terga II, IV and VI. Laterad of median ridge dise is more or less flat, with the exception of two $(1+1)$ short longitudinal ridges placed on terga III and IV laterally. Tergum VII depressed in the middle, raised at postero-lateral angles. Connexivum wide and reflexed. PE-II to PE-IV not protruding, PE-V to PE-VII progressively protruding as rounded tips. Paratergites conical, produced further than 1X; the latter is placed at lower level than paratergites, and truncate posteriorly, Spiracles II to VI rentral, placed far from the border; VII and VIII lateral and visible from above. Lateral horders of abdomen are subparallel, but because of reflexion they appear to converge backward.

Legs unarmed; trochanters free.
Colour: sepia to black; body covered with thin incrustation and dirt. Antennae, rostrum, legs, and some parts of body are greyish brown,

Total length, 4.56 mm ; width of pronotum, 1.72 mm , ; width of abdomen, 2.48 mm .

Holotype: $\%$, New Guinea, N.E. Papua, Mt. Lamington- C. T. MeNamara coll.; deposited in the South Australian Museum, Adelaide.

It is a pleasure to dedicate this species to Mr. C. T. MeNamara who collected so many of the rare species of Aradidae represented in the collection.

Artabancllus menamarai $n$, sp. differs l'rom $A$. infuscatus Matsuda and Usinger, 1957, by: (1) less converging postocular borders; (2) raised postero-lateral angles of pronotum; (3) vertically raised wing pads; and (4) abdomen with subparallel borders.

## Gen. Chelonoderus Usinger, 1941

Chelonoderus Usinger as now understood includes only a single species f'rom Queensland; the other two species previously attributed to this genus were transferred by Usinger and Matsuda to two different genera (1959: 230) : for (. Wackeri Drake, 1942 they erected the genus Drakiessa Usinger and Matsuda, 1959, and the seeond, C, busilewskyi Hoberland, 1956, from Africa, belongs to another genas, yet to be described.

## 1. Chelonoderus stylatus Usinger

Chelonoderus stylahus Usinger, 1941, Pan-Pacifie Ent., 17: 180, fig. 3.
1 \& and 3 \&, Anstralia, Northern Territory, Port DarwinW. D. Dodd coll. ; 2 के, Queensland, Mulgrave R.-Hacker coll.; 1 के and 1 \&, Queensland, Cairns Distr.-W. D. Dodd coll., and 1 s, Cairns Distr.-Darlington coll.

## Argocoris n. gen.

Ovate. The upper surface, particularly the head and pronotum, covered with rough rugulosities and tubereles. Apterous.

Mead as long as width through the eyes; anterior process strong, constricted in the middle, wide in front, and slightly notched, genae much longer than clypeus, and contignous, produced slightly beyond the tip of antemal segment L. Antenniferous tubercles strong, dentiform, blunt, slightly divergent, reaching to the middle of antennal segment I. Fyes semiglobose, protruding, but not stylate. Postocular tubercles small, blunt, not reaching to outer border of eyes. Vertex raised and covered with rough tubercles. Antennae slender; segment I clavate, slightly curved ontward, II half as long as I, others missing. Rostral atrium closed; rostrum short, not reaching to hind border of rostral groove; the latter wide and deep, open posteriorly.

Pronolum $\frac{1}{3}$ as long as its maximal width; collar raised and distinctly separated from dise; antero-lateral angles inflated, rohust
and produced forward, and slightly inward, though not reaching to fore border of collar. Lateral borders slightly convex; hind border convex in the middle, sinuate laterally. Disc with a very deep median sulcus, flanked by two $(1+1)$ high ridges, covered with rough tubercles, and bearing an "L'-shaped callosity.

Mesonotum slightly wider than pronotum; median ridge high, with a deep longitudinal sulcus, covered with rough tubereles. Laterad of median ridge, opposite to ridges of pronotum, are placed two $(1+1)$ smaller, robust subtriangular ridges, directed backward, but not reaching to hind border of mesonotum; mesad of lateral borders are placed two $(1+1)$ robust, ovate ridges. Apexes of metathoracic scent gland openings visible on lateral margins. Around median ridges are placed wide, deep, and irregularly shaped, depressions.

Metanotum slightly narrower than mesonotum, separated from lateral borders by connexivum II. In the middle it is raised and fused together with median ridge of mesonotum, and tergum I. Metanotnm is raised laterally as an irregular, deeply punctured trapezoid. Between median ridge and lateral elevations dise deeply depressed.

Abdomen as long as its maximal width across segment TV. Lateral borders regularly convex. Tergum I raised, with a median soleus, which is forked posteriorly, running along hind border. Suture between tergum I and central dorsal plate deep; the latter consisting of terga II to VI fused together and raised, forming a high plateau. Area of dorsal scent glands higher, forming a wide median ridge, surrounded by eight $(4+4)$ deep, round depressions; sloping sides of plateau rugose with irregular, or S-shaped, carinae. Tergum VII also highly raised, but depressed in the middle, and posteriorly. ('onnexivum wide, and uneven; all segments clearly separated from each other; PE-angles not protruding; exterior borders straight from II to V, slightly sinuate on V1 and VII. Spiracles II to VII ventral, placed far from the border; VIII lateral and visible from above. Paratergites (f) short, in the form of tubercles, reaching to middle of a short, tricuspidate segment IX.

Prosternum with a high median ridge; meso- and metasternum depressed in the middle. Metathoracic scent glands with long, oblique canals. Venter with sterna iugose, punctured, depressed medially, and with six $(3+3)$ rows of larger and smaller round, eallous spots.

Legs unarmed; trochanters free; femora fusiform, as long as tibiae; claws without arolia.

Type species: Argocoris arossi n. sp.

Argocoris $\mathrm{n} . \mathrm{g}$. in Usinger and Matsuda's key runs to Chelonoderus Usinger, 1941, to which it is related, but differs by the different shape of body, the presence of small postocular tubercles, and in particular in the different topography of upper surface of the body.

## 1. Argocoris grossi n. sp.

Fig. 3-4
Female. Ovate, with very rugose upper surface, naked and shiny. Apterous.

Measurements: head as long as width through the eyes (21:20); proportions of antennal segments, I to II, are: 7:4:-:- (others missing). Pronotum much shorter than maximal width (10:31); mesonotal width-35, metanotal width-33; abdomen as long as maximal width $50: 49$.

Colour: reddish brown to dark brown; area of dorsal scent glands, antennae, rostrum, and trochanters, yellow brown.

Total length, 9.10 mm . ; pronotal width, 3.10 mm ; abdominal width, 4.9 mm .

Holotype: ㅇ, Queensland, Bowen-A. Simson coll.; deposited in the South Australian Museum, Adelaide.

It is a pleasure to dedicate this species to Mr. Gordon F. Gross, Senior Curator of Invertebrates at the South Australian Museum, Adelaide.

## Aegisocoris n. gen.

Ovate; apterous; very convex on upper surface, covered with ridges, protruberances, and round tubercles of different sizes; on salient portions partially covered with rust coloured hairs.

Head shorter than width through the eyes. Anterior process strong, constricted in the middle, widened in front and incised, genae being longer than clypeus and contiguons, reaching slightly beyond the tip of antennal segment. I. Antenniferous tubercles stont, blunt, slightly divergent, reaching almost to the middle of antennal segment I. Eyes globose, slightly pedunculate. Postocular tubercles blunt, reaching to outer border of eyes. Postocular margins strongly convergent backward. Vertex with two $(1+1)$ rows of strong tubercles; clypeus with much finer tubercles. Antennae slender; segment I clavate, II and III tapering toward the base, IV pyriform. Rostral atrium closed, placed far from the tip of the head. Rostrum reaching to hind border of a deep rostral groove which is closed posteriorly.

Pronotum very short and wide; collar thin, poorly separated from dise; anterior borders, slightly receding towards the sides; anterolateral angles extended into small, rounded lobes, and reflexed; postero-lateral angles with high, round tubereles $(1+1)$. Dise with two $(1+1)$ high ridges which are divergent backward, each of them bearing two large tubercles; laterad of ridges dise covered with moderately large, round granules.

Mesonotum wider than pronotum ; in the middle with a stout, high median ridge fused with tergum I posteriorly; median ridge bearing a longitudinal sulcus flanked by two $(1+1)$ ridges; laterad of them with two $(1+1)$ large, round tubercles opposed by two $(1+1)$ others which are salient l'rom fore border; further toward lateral borders dise flat, only hind border thinly carinate. On lateral borders are placed two $(1+1)$ large tubercles, slightly inclined posteriorly; in front and somewhat lateral to these apices of metathoracic scent gland openings visible.

Metanotum slightly narrower than mesonotum, but wider than pronotum, separated from lateral borders by the forwardly produced conrexiva II. Dise split into two $(1+1)$ large, rather flat plates, bearing in the middle posteriorly a cluster of tubercles.

Aldomen ovate, shorter than maximal width across segment IV, and strongly elevated on central dorsal plate. Tergum I is strongly elevated and granulate in the middle, abruptly sloping laterally; it is separated from mesonotum and central dorsal plate by deep sulci. Central dorsal plate consists of terga II to VI fused together, forming a large hump. This hump in the middle, on terga II to IV, has a cross-shaped elevation, covered with rough, round granules, and behind it, on terga V and VI, a subtriangular ridge sloping backward. Dise of central dorsal plate covered with rough, round granules. Connexivum wide and horizontal; hind borders of connexiva II to VI carinate; PE-angles slightly protruding, rounded. Tergum VII strongly and rotundly elevated laterally, depressed in the middle and posteriorly ; also covered with rough, round granules. Spiracles II to VII ventral, placed far from the border; VIII lateral and visible from above. Paratergites (o) small, triangular, reaching to $\frac{3}{3}$ of segment IX, which is truncate posteriorly.

Prosternum with a longitndinal ridge; plenra and venter with rough, round granules. Venter strongly convex.

Legs unarmed; trochanters free.

[^1]Aegisocoris n. gen. is related to Drakiessa Usinger and Matsuda, 1959, from which it differs by a different topography of the upper surface and rough round granules dispersed over the body.

## 1. Aegisocoris granulatus n. sp.

FIG. 5-6
Female. Strongly convex on upper surface, less so on lower; covered with smooth, shiny, round granules of different sizes.

Mensurements: head shorter than width through the eyes (42:46); proportions of antennal segments, I to IV, are: 14:8.5:14:12; pronotum very short and wide (16:56) ; mesonotum wider than pronotum (75) ; metanotum narrower than mesonotum, but wider than pronotum (65); abdomen slightly shorter than maximal width (96:100).

Colour: black; antennae, rostrum, and legs, reddish brown; tarsi yellow brown ; curled hairs ferruginous.

Total length, 7.12 mm ; width of pronotum, 2.24 mm ; width of abdomen, 4.0 mm .

Holotype: ${ }^{\circ}$, Queensland, Cairns district-A. M. Lea coll.; deposited in the South Australian Museum, Adelaide.

Gen. Drakiessa Usinger and Matsuda, 1959

1. Drakiessa hackeri (Drake)

Chelonoderus hackeri Drake, 1942, Pan Pacific Ent., 18: 190.
Drakiessa hackeri Usinger and Matsuda, 1959, Class. Aradidae; p. 231.
7 o and 7 \&, Queensland, Mt. Tambourine-A. M. Lea coll.; 3 of and 3 \&, Qneensland, Blackall Range-A. M. Lea coll.

## 2. Drakiessa parva Kormilev

Drakiessa parva Kormilev, 1965, Proc. Roy. Soc. Queensland, 77: 24. 1 o, Qucensland, Mt. Tambourine-A. M. Lea coll.

Gen. Neophloeobia Usinger and Matsuda, 1959
Neoploeobia was known from two species, both from Australia, here I describe a third, also from Australia. Usinger and Matsuda described this genus as apterous, but then later go on to speak about hemelytra. Actually Neoploeobia is micropterous, the hemelytra are present but reduced to very small pads.

## 1. Neophloeobia montrouzieri Usinger and Matsuda

Neoploenbia montrouzieri Tsinger and Matsuda, 1959, Classif. Aradidae; p. 234, fig. 68.

Usinger and Matsuda mentioned in the generic description of Neophloeobia that the eyes are small; in N. montrouzieri they are slightly stylate.

1 if, Queensland, Mt. Tambourine-A. M. Lea coll.

## 2. Neophloeobia tuberculata $n$. sp.

Fig. 7-8
Male. Elongate ovate; opaque, but with sliny yellow brown, round callons spots, and shiny, red brown, tubercles of different size, similar to those on Aegisocoris tuberculatus $\mathrm{n} . \mathrm{sp}$.

Head shorter than width through the eyes (36:41). Anterior process stout, with subparallel sides, very slightly widening toward the tip, and deeply notched in front, reaching a little beyoud the tip of antemal segment I; genae longer than clypeus and contiguous. Antemiferous tubercles strong, blunt, divaricating, reaching to the middle of antennal segment I. Eyes globose, salient, slightly stylate. Postocular tubercles dentiform, acute, directed obliquely backward, reaching to outer border of eyes. Antennae slender; segment I robust, clavate; II and $I I I$ tapering toward the base, much more slender; IV pyriform. Proportions of antemal segments, I to IV, are: 12.5:9:12:11. The rostrum reaches slightly over the base of a deep rostral groove, the latter is open posteriorly.

Pronotum very short and wide ( $15: 56$ ) ; collar thin, but distinet; fore borders straight, slighfly receding posteriorad; antero-lateral angles produced into small, rounded lobes, placed obliquely ; posterolateral angles bearing two $(1+1)$ small tubercles. Lateral borders between lobes and tubercles short, and deeply incised. Hind border convex in the middle, sinuate laterally. Dise depressed medially, and provided with eight $(4+4)$ low, longitudinal ridges, diminishing from inner ones to outer ones.

Mesonotum wider than pronotum ( $60: 56$ ), semifused in the middle with metanotum, but the suture is still discernible. It is raised medially, and provided with a yellow brown, glabrons median line, prolonged posteriorly over the metanotum and tergum I. Laterad of median ridge are placed two $(1+1)$ large, round, yellow brown, callous spots. In the middle of each side dise is raised again but depressed near lateral borders.

Metanotum as wide as mesonotum (60:60), raised medially, and in the middle of each side, and fused posteriorly with tergum I. From lateral borders it is separated by the forwardly produced connexiyum II.

Hemelytra reduced to very small, bean-shaped pads, just behind which are secn the apexes of metathoracie scent gland canals.

Abdomen slightly longer than maximal width across segment $V$ ( $82: 80$ ). Tergnm T raised medially, and sloping laterally. It is separated from the central dorsal plate by a distinct sulcus. Central dorsal plate consists of terga II to VI, which are fused together. Disc raised medially, and sloping laterally; the highest point being on tergum V. Scars of dorsal scent glands placed between terga III and 1V. Dise covered with an irregular pattern of shiny, round tubercles, sometimes forming rows. A series of yellow brown, round, callous spots are placed in four rows with following formula: tergum $\amalg$ : $\ldots$ - $\Pi$ : $1-1$; TV: 1111 ; V:-11-, and VI: - $11-$ Tergum VII is raised in the middle posteriorly for the reception of the hypopygium: the latter is cordate, with a low, large, triangular ridge on the upper surface. Paratergites small, clavate, reaching slightly beyond the middle of hypopygium. Spiracles II to VII ventral, placed far from border; VIIT lateral and visible from above.

Legls unarmed; arolia absent.
Colour: Dark brown, with yellow brown, round, callous spots, and red brown, shiny thbercles; legs, antemae, and rostrum yellow brown, partially influseate.

Total length 6.16 mm .; width of pronotnm, 2.24 mm .; width of abdomen, 3.20 mm .

Holotype: b, Queensland, Cairns district-A. M. Lea coll.; deposited in the South Australian Museum, Adelaide.
N. luberculata n. sp. stands a litlle apart from other two species of the genus, particularly in that the round, shiny tubercles (similar as those on Angisocoris) are not fond in other species, but the topograply of the pronotum is similar to other species of Neophlocobiu. On the other hand the topography of the abdomen is so different from that of Aegisocoris that $N$, tuberculata cannot be congeneric with the former, and it is hest to place it in Neophloeobia.

All the genera Irom Chelonoderus to Ncophlocobia form a very distinct group of Australian apterous or micropterous genera, and with all their apparent diversity in topography of their bodies they nevertheless have a few important characters in common, particularly the shape of the head, position of spiracles, and in that all segments
of the connexiva are clearly separated from each other. All these genera save Drakiessa have pronotum depressed, or sulcate on median line.

Gen. Rossius Usinger and Matsuda, 1959
Rossins was established on the base of a single species from New Guinea, Crimia polyacantha Walker, 1873 , previously attributed to the genus Barcinus Stål, but in reality more related to Artabanus Stål, as Usinger and Matsuda have stated (1959; 260).

## 1. Rossius polyacanthus (Walker)

Fig. 9
Crimia polyacantha Walker, 1873, Cat. Hem. Het. Brit. Mus., 7: 17. Barcinus polyacanthus Distant, 1902, Ann, Mag. Nat. Hist., (7) 9: 359. Rossius polyacanthus Usinger and Matsuda, 1959, The Olass. Aradidae, p. 258 , fig. 75.

Rossius polyacanthus (Walker) is a rather variable species referring to the length of genae and the shape of lateral lobes of abdominal segments VI and VII. Genae in some specimens are distinctly shorter than antennal segment I, in other reaching to, or even produced beyond the apex of the latter. Lateral lobes of segments VI and VII vary in width, and even in shape: sometimes they are similar, sometimes those of segment VI are narrower than VII, some of them are obliquely truncate, and other not.

1 o and 1 is, New Guinea, Wareo, Finsch Haven-Rev. L. Wagner coll.

## Gen. Artabanus Stâl, 1865

Artabanus is an Oriental gemus penetrating into Oceania and Australia. It is rather heterogenous, but all species have in common a peculiar stridulatory apparatus.

In 1873 Stă described Artabanus sinuatus from New Guinea. In the same year Walker described Crimiu doreica also from New Guinea, which later was transferred by Distant to Artabanus (1902: 359), The description of Stal is pretty good for his time, so that it was not difficult to identify this species among specimens from New Guinea. The description of Walker is bad, but I have had an opportunity to examine his type at the British Museum (N.H.), and it resulted to be conspecific with $A$, sinuatus Stal, so that these two species should be synonymized, but I was not able to determine which name has priority.

## 1. Artabanus bilobiceps (Lethierry)

Brachyrrhymchus bilobiceps Lethierry, 1888, Ann. Mus. Civ. Stor. Nat., Genova, 26: 464.
Artabamus atkinsoni Bergroth, 1889, Ann. Mus. Civ. Stor. Nat., Genova, 27: 724, tab. 12, fig. 5.
Artabanus bilobiceps Bergroth, 1892, Ann, Mus. Civ. Stor. Nat., Genova, 32: 715.

1 \&, Java, Buitenzorg-A. M. Lea coll.
Ia. Artabanus bilobiceps papuasicus n. subsp.
Similar to A. bilobiceps from Java, but lateral teeth on the pronotum reduced to half the size of those of bilobiceps s. str Other characters as in parent species.

Holotype $\delta$, allotype ㅇ, and 3 우, paratypes-New Guinea, N.E. Papua, Mt. Lamington, $1,300-1,500$ feet-C. T. MeNamara coll.; deposited in the South Australian Museum, Adelaide, and (1 paratype) in author's collection.

## 2. Artabanus truncatus n. sp.

Female. Elongate ovate; partially covered with short, curled, ferruginous hairs.

Related to Artabanus lativentris Esaki and Matsuda, 1951, from which it differs by: antero-lateral angles of pronotum obliquely truncate, without any teeth and forming a trapezoidal lobe; by different proportions of antennal segments, segment III being relatively shorter, and by the colour, which is uniformly dark brown; bases of antennal segment, and legs, reddish brown; rostrum and tarsi yellow brown.

Measurements: head almost as long as width through the eyes (33:32) ; proportions of antemnal segments, I to IV, are: $17: 12: 22: 12$; pronotum half as long as maximal width ( $34: 72$ ); scutellum shorter than width at the base ( $30: 47$ ) ; abdomen as long as maximal width across segment IV (89:88).

Total length, 7.48 mm . ; width of pronotum, 2.88 mm ; width of abdomen, 3.52 mm .

Holotype: 오, New Guinea, Finsch Haven, Wareo-Rev. L. Wagner coll.; deposited in the South Australian Museum, Adelaide .

Paratype: 1 \& , collected with holotype; in author's collection.

## 3. Artabanus tuberculatus n. sp.

Female, General aspect of A. geniculatus Stål, 1870, but the head is shorter, as long as width through the eyes; anterior process with
contiguous juga, reaches slightly beyond the middle of antennal segment I. Vertex raised, granulate, flanked by two $(1+1)$ oblique, diverging posteriorly, deep furrows. Pronotum and scutellum similar to A. geniculatus. Baso-lateral border of corium carinate, and sinuate. Abdomen Jonger than maximal width (as long as wide in A. geniculatus). Posterior borders and postero-interior angles of connexiva are both inflated. Tergum VII semicirenlarly depressed in the middle, and with a semicircular ridge around depression (with two lateral humps and median depression in A. geniculatus). On ventral side are dispersed, round, shiny, tubercles of different sizes: a row along rostral groove, and a few behind eyes; on meso- and metapleura, and acetabula; a row of finer tubereles on hind borders of sterna IV and $V$, and a group on sterna VI laterally. These tubercles are absent in other species.

Measurements: head, $31: 30$; proportions of antennal segments: $15: 10: 18: 12.5$; pronotum, $30: 67$; scutellum, $30: 35$; abdomen, $80: 77$.

Colour: dark reddish brown; antennal segment I at base, III and TV entirely, and trochanters, are lighter; rostrum and tarsi yellow.

Total length, 6.64 mm ; width of pronotum, 2.68 mm .; width of abdomen, 3.08 mm .

Holotype: ㅇ, Malay Peninsula, (rap (Fraser Hill)-A. M. Lea and wife coll.; deposited in the South Australian Museum, Adelaide.

## 4. Artabanus mefarlandi n. sp.

Fig. 16
Male. Elongate ovate; partially covered with short, curled yellow brown hairs.

Head as long as width through the eyes ( $\ddagger-17: 17$, o $-18: 18$ ). Anterior process long and slender, slightly constricted in the middle, and deeply incised in front, genae much longer than clypeus and rounded apically, reaching slightly beyond the tip of antennal segment 1. Antenniferous tubereles dentiform, strong, divaricating, reaching to the middle of antennal segment I. Eyes globose, stylate. Postocular borders firstly sinuate, then slightly convex. Vertex with two $(1+1)$ curved carinae. Antennae slender, one and a half times as long as head ( $3-25: 17$, 오-25:18). Proportions of antennal segments, I to TV, are: © - $7: 5: 8: 5$, क-7:5:8:5. Rostrum reaches to the base of head; rostral groove deep, open posteriorly; rostral atrium narrowly open.

Pronotum much shorter than maximal width ( $5-13: 32$, ㅇ - $-13: 34$ ), Collar sinuate in front, distinetly separated from disc. Antero-lateral angles expanded into large, subtriangular lobes, produced forward
beyond collar, and sideways. Lateral notch deep, rounded. Lateral borders of hind lobe convex, rounded; hind border three times sinuate: in the middle, and laterally. Interlobal depression deep. Fore lobe with four $(2+2)$ longitudinal ridges, and with a median depression; hind lobe granulate.

Scutellum slightly shorter than width at the hase (o $-14: 15$, of-14;18) ; all borders carinate; lateral borders straight, slightly sinuate before the tip; median carina high and slender, bifurcate at base, and produced forward, slightly overlapping pronotum. Dise transversely, roughly rugose.

Itcmelytra reach to the iniddle of tergum VII ( z ), or to posterior border of tergum VI (오). Baso-lateral border of eorium slightly expanded, angularly prodnced anteriorly, straight posteriorly; apical angle of corium rounded; apicat border straight exteriorly, deeply, and roundly, excised interiorly.

Abdomen slightly longer than maximal width across segment IV in male $(39 ; 37)$, slightly shorter than maximal width across segment $V$ is female (42:45). Abdomen slightly widening posteriorly in male, ovate in fomale. Comexivum wide and horizontal; PE-angles angularly protruding from IT to V , rounded in VI , produced as small rounded lobes directed backward in VII. Tergum VII raised posteriorly, and depressed along hind border, which is raised. Paratergites reach to ${ }^{3}$ of hypopygium ; the latter transverse, much shorter than maximal width $(5: 13)$, with a short median ridge, ronnded apically, and surrounded by a sulcus. In the female, tergum VII raised laterally, and depressed in the middle; paratergites large, rounded, produced as far as small segment IX; the latter incised posteriorly. Spiracles II to VI ventral, VII and VIII lateral and visible from above. Stridulatory apparatus consists of a high, sharp cariua running obliquely from a lind portion of stermum III across sternum IV, and of' sharp, setigerous grantles on hind femora.

Golour ; testaccous; hind half of head, fore lobe of pronotum in the middle, dise of scutellnm, tip of corium, membrane, large spots on connexiva TII and IV, and small on V and VI, tergum VII, hypopygium, and most of ventral surface, and logs, are black, or infuscate.

Total length: s -8.5 , $\$-9.1 \mathrm{~mm}$. ; width of pronotum: $8-3.2$, \& - 3.4 mm ; width of abdomen: $\ddagger-3.7$, 우 -4.5 mm .

Ilolotype: 8, Fiji, Viti Levu, Suva-A. N. MeFarland coll. 6th Nov, 1964; under loose bark of decaying logs, in an old woodpile on the ground; deposited in the South Australian Museum, Adelaide.

Allotype: o, collected with holotype; in the same collection.

Paratypes: 6 o, 3 q, and 10 nymphs of different instars, all collected with holo- and allotype; in the same and author's collection.

It is a pleasure to dedicate this species to its collector, Mr. A. N. McFarland.

Artabanus mafarlandi n. sp. belongs to the "dorcicns group', and is related to A. doreicus (Walker), 1873 (or A. simuatus Stål, 1873, whichever of these names proves to have priority), but it is smaller, and the antero-lateral lobes of the pronotum are differently shaped; abdomen in males with straight borders, not constricted at segment V .

## 5. Artabanus doreicus (Walker)

Crimia doreica Walker, 1873, Cat. Hem. Het. Brit. Mus., 7: 17. Artabanus sinqutus Stål, 1873, Enum. Hem., 3: 141. Artabanus doreicus Distant, 1902, Ann. Mag. Nat, Hist., (7) 9: 359.

3 of and 1 of. New Gninea, N. E. Papua, Mt. Lamington-C. T. MeNamara coll.: 1 t, New Guinea, Finsch Haven, Wareo-Rev. L. Wagner coll.

Gen. Ctenoneurus Bergroth, 1887
Ctenoneurus Bergroth is curiously distributed in two separate areas: the first extends from New Zealand and Australia northward across New Guinea to Fiji and New Caledonia, the second area covers Central Africa (Ruanda, Congo, Gabon) to Sāo Tomé Island in the Gulf of Guinea and Madagascar. One of the main characters in this genus is a transverse carina near the fore border of sterna $\mathrm{TV}, \mathrm{V}$ and VI. A new species from New Guinea described here has all the other characters of Ctenoneurus save this one, it has no carina on sterna IV, V and VI. It has a convex head, with a long and narrow anterior process reaching to the tip of antennal segment I. Also the general aspect of the body, rather convex on the ventral side, with small spines at basal angles of scutellum and most of all the spiracles, large and placed close to the border, are characters of Ctenoneurus, and not of Meziru A.S., I have deemed it better to place it in Ctenoneurus.

1. Ctenoneurus bergrothianus Kirkaldy

Ctenoneurus bergrothianus Kirkaldy, 1908, Proc, Linn. Soc., Sydney, 33 : 350 .

2 s and 2 ㅇ, Fiji, Viti Leva-A. M. Lea coll.
2. Ctenoneurus halaszfyi Kormilev

Ctenoneurus halaszfyi Kormilev, 1958, Jour. N.Y. Ent. Soc., 66: 92.
$4 \delta^{\delta}$ and 3 q, New Guinea, Finsch Haven, Wareo-Rev. L, Wagner coll.

## 3. Ctenoneurus aberrans $n$. sp.

## Fig. 10-11

Female. Elongate ovate, rather convex; finely granulate.
Head as long as width through the eyes (27.5:27); anterior process long, with parallel sides and slightly notched in front, reaching to the tip of antennal segment 1. Antemniferous tubercles short, acute, convex exteriorly, reaching to $\frac{1}{t}$ of antennal segment I. Eyes semiglobose, protruding. Postocular tubercles form an obtuse angle and do not reach to outer border of eyes. Vertex convex, granulate; mesad of eyes are placed two $(1+1)$ ovate callosities. Antennae strong; proportions of anteunal segments, I to IV, are: 10:9:10:12. Rostrum reaches to lind border of head; rostral atrium closed; rostral groove deep, open posteriorly.

Promotum half as long as maximal width (25;52); collar slightly simuate in front; antero-lateral angles rounded, produced forward as far as collar. Lateral borders parallel at humeri, convergent anteriorly. Hind border broadly sinnate. Depression between the lobes weak. Fore lobe with two $(1+1)$ low, round elevations, and laterad of them with two $(1+1)$ longitudinal, low ridges, which are semiobliterated. Hind disc granulate.

Scutellum shorter than basal width (25:35) ; small spines at hasal angles of scutellum present; lateral borders carinate and slightly sinuate; tip angularly rounded; median carina low, tapering backward; dise irregularly, finely rugose.

Hemelytra reach to hind horder of tergum VI; apical angle of corium acute; apical border straight, but slightly receding and rounded interiorly. Membrane with anastomosing veins.

Abdomen longer than maximal width across segment IV (67:60). Sateral borders subparallel, barely convex; connexivum moderately wide, sloping inwardly; midlaterai area indistinctly separated from comexivum. PF-angles not protruding. Tergum VII weakly raised, and slightly depressed in the middle. Paratergites conical, divergent, produced beyond tip of small segment $I \mathrm{X}$, which is rounded posteriorly, Spiracles II to VI ventral, large, placed near the border; VII sublateral but visible from above; VIII terminal. Sternum VI once sinuate in the middle; sterna IV to VI without transverse carina anteriorly.

Leys unarmed; trochanters free; arolia thin and long.
Colour: sepia-brown; antennae and tibiae lighter, brown; rostrum and tarsi yellow brown.

Total length, 5.70 mm ; width of pronotum, 2.08 mm .; width of abdomen, 2.40 mm .

Holotype: ${ }^{\circ}$, New Guinea, N.E. Papua, Mt. Lamington-C. T. McNamara coll.; deposited in the South Australian Museum, Adelaide.

Ctenoneurus aberrans n. sp, resembles C. australis Kormilev, 1965, but is wider, scutellum with almost straight sides; corium not sinuate interiorly, and carinae on sterna IV to VI absent.

## Gen. Neuroctenus Fieber, 1861

Neuroctenus is an almost cosmopolitan genus but does not reach Europe, or other colder areas. In the South Pacific Islands and New Zealand it is replaced by Ctenoneurus.

## 1. Neuroctenus hanschini Kormilev

Neuroctenus hanschini Kormilev, 1953, Verh. Naturf. Ges. Basel, 64: 342.

Distributed in Australia: Northern Territory and Queensland.
Various specimens from Port Darwin, Batchelor, and Stapleton, in the Northern Territory, and from Somerset, and Bluff, in Queensland.

## 2. Neuroctenus majusculus Bergroth

Neuroctenus majusculus Bergroth, 1887, Ofv. Finska Vet. Soc.-Förh., 29: 181.

1 of and 2 o, West Australia, Warren R.-W. D. Dodd coll.
3. Neuroctenus proximus (Walker)

Mezira proxima Walker, 1873, Cat. Hem. Het. Brit. Mus., 7: 28.
Neuroctenus proximus Bergroth, 1887, Ofv. Finska Vet.-Soc. Förh., 29: 187.

1 \&, Tasmania, W. Tamar.

## 4. Neuroctenus serrulatus Stal

Neuroctenus serrulatus Stål, 1870, Ofv. Vet. Ak. Förh., 27: 674.
2 o, Queensland, Somerset-C. T. McNamara coll.; 2 o and 1 o, Queensland, Kuranda-F. P. Dodd coll.; 2 i and 2 \&, New Guinea, Papua, Misima I.-H. K. Bartlett coll.; 3 ㅇ, Malaya, SingaporeA. M. Lea and C. T. McNamara coll.; 1 क and 3 \&, Malay Peninsula, Gap (Fraser Hill)-A. M. Lea and wife coll.

## 5. Neuroctenus meziroides Kormilev

Neuroctenus meziroides Kormilev, 1958, Jour. N.Y. Ent. Soc., 66; 94. 3 \& 3 \&, New Guinea, Port Moresby, Bisiatabu-W. N. Lock coll.; 2 오, New Guinea, Finsch Haven, Wareo-Rev. L. Wagner coll.; 5 के and 5 क. New Guinea, Papua, Misima I.-Rev. H. K. Bartlett coll.

## 6. Neuroctenus nitidulus Bergroth

Neuroctenus nitidulus Bergroth, 1887, Off. Finska Vet.-Soc. Förh., 29: 177.

8 of and 2 \%, Malay Peninsula, Gap (Fraser Hill)-A. M. Lea and wife coll.; 3 of and 4 क, New Guinea, Finsch Haven, WareoRev. L. Wagner coll.; 1 ô, New Gninea, Papaa, Mt. LamingtonC. T. McNamara coll.

## 7. Neuroctenus vicinus Signoret

Neuroctenus vicinus Signoret, 1880, Ann. Mus. Civ. Stor. Nat., Genova, 15: 542 .

4 ond 4 ㅇ. New Gninea, N.E. Papua, Mt. Lamington-C. T. MeNamara coll.

Gen. Barcinus Stal, 1873

## 1. Barcinus truncatus Kormilev

Barcinus truncatus Kormilev, 1955, Ann. Mag. Nat. Hist., (12) 8: 196.
2 ㅇ, New Guinea, N.F. Papna, Mt. Lamington-(. T. McNamara coll.; 2 ó, New Guinea, Finsch Haven, Wareo-Rev. L. Wagner coll.

Gen. Crimia Amyot and Serville, 1843

1. Crimia tuberculata Amyot and Serville

Crimia tuberculatı Amyot and Serville, 1843, Hemipt., p. 305.
1 s, Malay Peninsula, Gap (Fraser Hill)-A. M. Lea and wife coll.
Gen. Pictinellus Usinger and Matsuda, 1959
Tsinger and Matsuda listed only four species of Pictinellus, though they mentioned that they have seen up to 15 species (1959: 290).

In 1959, almost simultaneously with the appearance of the Classification of Aradidae by Usinger and Matsuda, Kiritshenko published a new species from Japan, which he put into a new subgenus of Mezira A.S., naming it Mezira (Mezirella) infantulus Kiritshenko, 1959. From the description and a very good drawing, I could see that it was not a subgenus of Mezira, but belonged to one of the new genera of Usinger and Matsuda, so I transferred it tentatively to Pictinellus.

Later I got, by the kind offices of Dr. I. M. Kerzhner, a paratype of Mezira (Mezirella) infantulus, and can now see that it belongs not to Pictinellus, but to a related genus, Glochocoris Usinger and Matsuda, 1959. The new combination is therefore Glochocoris infantulus (Kiritshenko), 1959.

In this lot were a few species of Pictinellus from Malay Peninsula, Fiji, and New Guinea. Below is a key to the Pictinellus species from Fiji.

Key for species of Pictinellus Usinger and Matsuda from Fiji.

1. Head longer than width through the eyes
Head as long, or shorter, than width through the eyes 3
2. Smaller species, female less than 4.25 mm., with segment IX comical; lateral borders of pronotum distinctly sinuate $P$. clongatus n. sp.,

Viti Levu
Larger species, female over 4.50 mm .,
with segment IX rectangular, truncate posteriorly; lateral borders of pronotum almost straight
P. longiceps n. sp.,

Viti Levu
3. Lateral borders of pronotum distinctly sinuate

4
Lateral borders of pronotum almost straight, barely sinuate
P. moturikiensis n. sp., Moturiki, Viti Levu
4. Spiracles VII sublateral, and slightly visible from above; antennal segment II narrowly fusiform (4.5:2) .. .....
Spiracles VII sublateral, but not visible from above; antennal segment II widely fusiform (3.5:2) . . . . . . . . P. fungicola (Kirkaldy), 1908, Viti Levu

1. Pictinellus papuasicus n. sp.

Fig. 12-13
Male. Elongate, subparallel; hind lobe of pronotum finely granulate.

Head short, almost as long as width through the eyes. Anterior process of the head strongly constricted in the middle, slightly notched in front, reaches to the middle of antennal segment I. Antenniferous tubercles transversely truncate in front, slightly convex exteriorly,

Anterior angles of pronotum produced forward, acute; lateral borders sinuate. Hypopygium cordate, with a high, triangular ridge, reaching almost to the tip of hypopygium; paratergites long, strongly dilated and incised, reaching to the tip of hypopygium, with spiracle placed laterally,

Measurements: head as long as maximal widih (12:12.5); proportions of antennal segments, I to IV, are: $5: 2.5 ; 6: 5.5$; pronotum less than half as long as maximal width (11:24); scutellum almost as long as basal width ( $12: 13$ ) ; abdomen much longer than maximal width (43:27) ; hypopygium almost as long as wide (8:9). Spiracles: II lateral and visible from above, III to VI ventral, placed far from the border; VII sublateral, but not visible from above; VIII lateral and visible.

Colour: testaceous; membrane blackish, white at the base.
Total length, 3.28 mm ; width of pronotum, 0.96 mm ; width of abdomen, 1.08 mm .

Molotype: d, New Guinea, N.E. Papua, Mt. Lamington-C. T. MeNamara coll.; deposited in the South Australian Museum, Adelaide.

Pictinellus papuasicus is related to P. fungicoln (Kirkaldy), 1908, from which it differs by the different shape of its hypopygium and paratergites, and by a lighter colouration.

## 2. Pictinellus fungicola (Kirkaldy)

Ctenonewrus fungicola Kirkaldy, 1908, Proc. Lim. Soc., Sydney, 33: 352.

Pictinellus fungicola Usinger and Matsuda, 1959, Class. Aradidae; p. 269 .

As the description of Kirkaldy dealt mostly with the colouration, I am giving a short redescription.

Hend as long as width through the eyes ( $3-12: 12$, $+-12.5: 12.5$ ); anterior process slightly constricted in the middle, dilated and incised in l'ront, reaches to the middle of antennal segment I. Antenniferous tubercles obliquely truncate in front. Anterior angles of pronotum produced forward, acute; lateral horders sinuate. Hypopygium cordate, short, median ridge thin and lower than in preceding species. Paratergites simple, clavate, not incised. In the female, paratergites large rounded, reach to $\frac{1}{3}$ of a trapezoidal segment IX. Spiracles: II lateral and visible from above, TII to VI ventral, placed far from the border; VII sublateral, but not visible from above; VIII lateral and visible. Antennal segment II wide (3.5:2).

Proportions of antennal segments, I to IV, are: $\delta$ - $6: 4: 6: 5.5$, ㅇ-6 6.5:3.5:6:6. Pronotum half as long as maximal width ( $\ddagger-12: 24$, q-12:26) ; scutellum almost as long as basal width (3-12:13, ¢-12.5:14); abdomen longer than maximal width ( $\%-40: 25.5$, ㅇ-46:28).

Colour: ferrugineous; connexivum, rostrum, tarsi and ventral side lighter.

Total length: $\delta-3.12, ~ \&-3.48 \mathrm{~mm}$; width of pronotum: $\delta-0.96$, 우- 1.04 mm . ; width of abdomen : $\ddagger-1.02$, +-1.12 mm ,

1 of and 5 ㅇ, Fiji, Viti Levr-A. M. Lea coll.

## 3. Pictinellus leai n , sp .

Fig. 14-15
Female. Elongate ovate, widening posteriorly; finely granulate.
Head as long as width through the eyes; anterior process tapering forward, incised in front, reaching to $\frac{1}{3}$ of antennal segment I; antenniferous tubercles obliquely truncate in front, divergent. Anterior angles of pronotum produced forward, acute; lateral borders sinuate; abdomen with regularly rounded borders. Paratergites large, rounded, reaching to the middle of segment IX; the latter trapezoidal, slightly convex apically. Spiracles: II lateral and visible from above, III to VI ventral, placed far from the border; VII sublateral and slightly visible from above; VIII lateral. Antennal segment II narrower than in $P$. fungicola (4.5;2).

Measurement: head, 14:14; proportions of antennal segments, I to IV, are: $7.5: 4.5: 8: 6.5$; pronotum, $13: 28$; scutellum, $14: 15$; abdomen, $55: 35$.

Colour: ferrugineous; membrane blackish, white at the base; tarsi yellow.

## LEGEND TO FIGURES

Fig. 1. Anterior half of Aspisocoris termitophilus n. sp.
Fig. 2. Termination of abdomen of Aspisocoris termitophilus $\mathrm{n} . \mathrm{sp}$.
Fig. 3. Head knd pronotum of Argocoris grossi. u. sp.
Fig. 4. Termination of abdomen of Argocoris grossi n. sp.
Fig. 5. Head and pronotum of Aegisocoris granulatus w, sp.
Fig. 6. Termination of abdomen of Aegisocoris granulatas n. xp.
Fig. 7. Head and pronotum of Neophlocobia tuberculata n. sp.
Fig. 8. Termination of abdomen of Nrophlocobia tuberculata n. sp.
Fig. 9. Termination of abdomen of Rossius wagneri n. sp.
Fig. 10. Head and pronotum of Ctenoneurus aberrans in. sp.
Fig. 11. Termination of abdomen of Ctenoneurus aberrans n. sp.
Fig. 12. Head and pronotum of Pictincllus papuasicus n. sp.
Fig. 13. Termination of abdomen of Pietinellus papuasicus n. sp.
Fig. 14. Hend and pronotum of Pictinellus Toai n. sp.
Fig. 15. Termination of abdomen of Pictinellus leai n. sp.


Total length, 3.88 mm . width of pronotum, 1.12 mm ; width of abdomen, 1.40 mm .

Holotype: q, Fiji, Viti Levu-A. M. Lea coll.; deposited in the South Australian Museum, Adelaide.

Paratypes: 49 , collected with holotype; in the same, and author's collection.

This species is dedicated to Mr. A. M. Lea, who collected so many new species represented in this lot.

## 4. Pictinellus moturikiensis n . sp .

Fig. 17-18
Female. Elongate, with subparallel sides; finely punctured.
Mead slightly shorter than width through the eyes; anterior process slightly constricted in the middle, dilated and incised in front, reaches $\frac{2}{5}$ of antennal segment I; antenniferous tubercles obliquely truncate in front. Anterior angles of pronotum produced forward, acute; lateral borders straight, or barely sinuate. The body is wider than in $P$. fungicola. Spiracles: II lateral and visible from above, III to VI ventral, placed far from the border; VII sublateral, but not visible from above; VIII lateral. Paratergites large, rounded, reaching to $\frac{1}{3}$ of a conical, rounded posteriorly segment LX. Hypopygium of the male small, cordate; paratergites very small, clavate, reaching to the middle of hypopygium.

Measurements: head almost as long as width through the eyes ( $9-13 ; 15, \quad$ - $-12: 13$ ) ; proportions of antennal segments, I to IV, are: $9-8: 5: 7: 7$, $3-7: 4.5: 7: 7$; pronotum short and wide ( $+-13: 31$, §-12:27.5); scutellum shorter than basal width ( $\circ-15: 17.5$, f $-13: 15$ ) ; abdomen longer than maximal width ( $+-53: 35$, в - $44: 30$ ) ; hypopyginm 6:7.5.

Colowr: ferrugineons; membrane white, hyaline, rarely slightly infuscate; tarsi yellow brown.

Total length: $q-3.92$ to $4.00,3-3.92 \mathrm{~mm}$.; width of pronotum: क -1.24 to $1.26, \quad \delta-1.10 \mathrm{~mm}$; widfh of abdomen: $\$-1.40$, © $-1,20 \mathrm{~mm}$.

Holotype: + , Fiji, Moturiki-A. M. Lea coll.; deposited in the South Australian Museum, Adelaide.

Allotype: 8, Fiji, Viti Levu-A. M. Lea coll.; in the same collection.

Paratypes: 3 \& collected with holotype, and 2 8, collected with allotype; in the same, and author's collection.

Pictinellus moturikiensis n. sp. is related to $P$. fungicola (Kirkaldy), 1908, but is slightly larger, and distinctly wider; lateral borders of pronotum straight, or almost straight, and anterior process of the head relatively shorter.

## 5. Pictinellus elongatus n . sp .

Fig. 19-20
Female. Elongate, with subparallel sides; granulation distinct.
Ilead longer than width through the eyes; anterior process with subparallel sides, incised in front, reaching to $\frac{2}{5}$ of antennal segment I; antenniferous tubercles dentiform, subparallel exteriorly. Anterior angles of pronotum produced forward, but blunt apically; lateral borders distinctly sinuate. Segment IX conical, rounded apically; paratergites large, rounded, reaching almost to the tip of IX. Hypopygium of the male small, cordate; paratergites clavate, reaching slightly beyond the middle of hypopygium. Spiracles: I[ lateral and visible from above, III to VI ventral; VII sublateral, but not visible from above; VIII lateral and visible.

Measurements: head: o - $15: 12$, o- $13: 11$; proportions of antennal segments, I to IV, are: $+-8.5: 5: 10: 8$, 子-7.5:5:8:7.5; prono-
 abdomen: 우- $57: 32$, \& $-47.5: 29$; hypopygium: $6.5: 6.5$.

Colour: light ferrngineous; membrane white, hyaline.
Total length: $9-4.12$, of -3.5 mm . ; width of pronotum: $9-1.04$, d-0.94 mm . ; width of abdomen: q $-1.28, \quad \delta-1.16 \mathrm{~mm}$.

Molotype: 오, Fiji, Viti Levu-A. M. Lea coll.; deposited in the South Australian Museum, Adelaide.

Illotype: \& , collected with the holotype; in the same collection.
Paratype: 1 \&, collected with holo- and allotype; in author's collection.

## 6. Pictinellus longiceps $n$. sp.

Fig. 21-22
Female. Elongate ovate, with indistinct, very fine granulation.
Mead longer than width through the eyes; anterior process with parallel sides, barely incised in front, reaches to $\frac{1}{3}$ of antennal segment I; antenniferous tubercles dentiform, acute, subparallel exteriorly. Anterior angles of pronotum produced forward, acute with blunt tip; lateral borders almost straight, barely sinuate. Segment IX rectangular, truncate posteriorly; paratergites large, tapering and
rounded, sinuate ontside, reaching to the tip of IX. Spiracles: II lateral and visible from above, III to VI ventral; VII sublateral, but not visible from above; VIII lateral and visible.

Measurements: head, $17: 13$; proportions of antennal segments, I to IV, are: $10: 6: 12.5: 8$; pronotum $18: 30$; scutellum $15: 17$; abdomen 68:38.5.

Colour: dark ochraceous; head, antennal segment I, pronotum, with exception of lateral borders, scutellum, and corium, infuscate; antennal segments II to IV pale testaceous; connexivum ochraceous.

Total length, 4.72 mm . width of pronotum, 1.20 mm ; width of abdomen, 1.54 mm .

Holotype: \&, Fiji, Viti Levu-A. M. Lea coll.; deposited in the South Australian Museum, Adelaide.

Pictinellus longiceps n. sp. is related to P. elongatus n. sp., both forming together a separate group with a long head; their differences are indicated in the key.
7. Pictinellus malayensis n . sp .

## Fig. 23-25

Female. Elongate, with parallel sides, roughly granulate.
Head as long as, or slightly shorter than width through the eyes; anterior process thin, with parallel sides, slightly incised in front, reaching slightly beyond the middle of antennal segment $I$; antenniferous tubercles small, dentiform, exteriorly parallel, or slightly divaricating. Anterior angles of pronotum slightly expanded, rounded; lateral borders parallel at humeri, very slightly sinuate in front. Segment IX trapezoidal, tricuspidate, apically; paratergites short, rounded, reaching to $\frac{1}{4}$ of IX. Hypopygium of the male large, conical, inflated on the disc; paratergites very small, clavate, reach to $\frac{1}{3}$ of hypopygium. Spiracles: II lateral and visible from above, III to VI ventral; VII sublateral, but not visible from above; VIII lateral and visible.

Measurements: head; $\&-15: 16$, o $-15: 15$; proportions of antennal segments, I to IV, are: $9-7: 5: 7.5: 7.5$, o-7:4.5:-:- (two apical segments missing) ; pronotum: of $-16: 35$, 子 $-15: 32$; scutellum: 우-16:17, ठ-15:15; abdomen: 워-66:38, ठ-62:36; hypopygium: 14:14.

Colour: dark ferrugineons; connexivum pale ferrugineons; membrane infuscate, white at the base; tarsi yellow.

Total length: $q-4.64$, क -4.40 mm . ; width of pronotum: $\$-1.40$, s -1.30 mm .; width of abdomen; $8-1.52$, क -1.44 mm .

Holotype: $\circ$, Malay Peninsula, Gap (Eraser Hill)-A. M, Lea and wife coll.; deposited in the South Australian Museum, Adelaide.

Allotype: ${ }^{3}$, collected with holotype; in the same collection.
Paratypes: 3 of, collected with holo- and allotype; in the same, and author's collection.

Pictinellus malayensis n. sp. differs from the ofther species by having rounded anterior angles to the pronotum, which are barely produced beyond the fore border of the collar.

Gen. Glochocoris Usinger and Matsuda, 1959
Glochocoris is a small genus, related to Pictinellus, and distributed in the Oriental Region, Micronesia, New Guinea, and Australia; one species has been recorded as far west as the Seychelles.

## 1. Glochocoris monteithi Kormilev

Glochocoris monteithi Kormilev, 1967, Proc. R. Soc. Qd., 79: 77.
2 \&, Queensland, Mt. Tambourine-A. M. Lea coll.
Gen. Arictus Stål, 1865
Arictus is distributed in the Oriental Region, Micronesia, New Caledonia, New Guinea, and Australia.

## 1. Arictus izzardi (Kormilev)

Mezira izzardi Kormilev, 1955, Rev. Ecuatoriana Ent. Par., 2: 503, Arictus izzardi Usinger and Matsuda, 1959, Class. Aradidae, p. 314. 1 子, Fiji, Viti Levu-A. M. Lea coll.

## 2. Arictus beta (Kormilev)

Mezira beta Kormilev, 1955, Rev. Ecnatoriana Ent. Par., 2: 501. Arictus beta Usinger and Matsuda, 1959, Class. Aradidae, p. 314. 1 b, New Guinea, Finsch Haven, Wareo-Rev. L. Wagner coll.

## 3. Arictus Iobuliventris (Kormilev)

Mesira lobuliventris Kormilev, 1953, Verh. Naturf. Ges., Basel, 64 : 340. Arictus lobuliventris Usinger and Matsuda, 1959, Class. Aradidae, p. 314.

4 of and 6 of from New Guinea (Mt. Lamington; Finsch Haven, Wareo; Torricelli Mts.; Mt. Gyrifrie, and Misima Island).

## 4. Arictus thoracoceras (Montrouzier)

Aradus thoracoceras Montrouzier, 1855, Ann. Soc. Phys., Lyon, (2)
7: 107.

Arictus thoracoceras Stâl, Öfv. Sv. Vet. Ak. Förh., 27: 672.
Brachyrhynchus thoracoceras Bergroth, 1886, Verh. Bot. Zool. Ges., Wien, $\mathbf{3 6}$ : 59.
Mesira thoracocera Kormilev, 1953, Verh. Naturf. Ges., Basel, 64 : 340. Arictus thoracoceras Usinger and Matsuda, 1959, Class. Aradidae, p. 314.

15 z and 12 of, from New Guinea (Torricelli Mts.; Mt. Gyrifrie; Port Moresby; Finsch Haven, Wareo; Mt. Lamington, and Misima I.).

## 5. Arictus monteithi Kormilev

Arictus monteithi Kormilev, 1965, Proc. Roy. Soc. Queensland, 77: 32.
10 o and 9 o Australia, Northern Territory, Queensland, and N.S.W. (Bathurst 1.; Port Darwin; Howard R.; Bluff R.; Mackay; Groote Eyland; Magnetic L.; Bowen; Cairns Distr. and Dorrigo).

It is common in Queensland and the Northern Territory.
Gen. Mezira Amyot and Serville, 1843
A cosmopolitan genus, distributed all over the world, with the exception of the colder areas. In Europe and Siberia it is rather rare.

## 1. Mezira australis (Walker)

Crimia australis Walker, 1873, Cat. Hem. Het. Brit. Mus., 7: 22.
Brachyrhynchus anstralis Distant, 1902, Ann. Mag. Nat. Hist., (7) 9: 360.

Mesira australis Usinger and Matsuda, 1959, Class Aradidae, p. 379.
This species is distributed from the Northern Territory to South Anstralia, but I have never seen it in large series.

3 s and 2 \&, Northern Tervitory, Stapleton-G. F. Hill coll.; 4 \% and 1 of, Northern Territory-Tepper coll.; 1 of, Queensland, Bowen-A. Simson coll.; 1 क, N.S.W., Mullaley-F. E. Wilson coll.; 1 i and 1 \&, N.S.W., Gunnedah-F. E. Wilson coll.; 4 3,1 of and 7 nymphs, South Australia, Melrose-A. M. Lea coll.; 2 \&, South Australia, Mt. Remarkable-F. E. Wilson coll. ; 2 子, South Australia, Flinders Range, Parachilna-H. Hale coll.

## 2. Mezira wilsoni n . sp.

Male. Closely related to Mesira anstralis (Walker), 1873, and probably frequently confused with it in the past. The main difference is in the pronotnm: in M. australis the antero-lateral angles are only slightly expanded, rounded, but do not reach to the fore border of the rather well developed collar; the four $(2+2)$ longitudinal ridges
of the fore lobe are less developed, all four are the same height, In M, wilsoni $n$. sp. the antero-lateral angles are also rounded, but produced forward beyond the collar; the inner pair of the four ridges are much higher, and superimposed slightly over the collar. The other characters are as in Mezira australis (Walker).

Measurements: head shorter than width through the eyes ( $5-26: 30$, $+\frac{27}{}-23$ ), or across postocular tubercles ( $3-26: 33$, Q-27:34). Proportions of antennal segments, I to IV, are: \$-10:11:15:12.5, \& $-10: 10: 15: 12$. Pronotum less than half as long as maximal width ( $5-35: 73$, $\circ-36: 76$ ) ; scutellum shorter than basal width ( $5-31: 40$, $9-34: 40$ ) ; abdomen longer than maximal width aeross segment TV ( $\delta-95: 90, \&-103: 100)$. Spiracles all ventral, placed far from the border.

Colour: uniformly black; rostrum and tarsi yellow brown.
Total length: $\delta-7.52$, क -8.40 mm ; width of pronotmin: 8-2.92, $9-3.04 \mathrm{~mm}$.; width of abdomen: $8-3.60$, क -4.00 mm .

Molotype: 3, Anstralia, Victoria, Lorne-F. E. Wilson coll. $27 . \mathrm{X} .18$; deposited in the South Australian Museum, Adelaide.

Allotype: \&, New South Wales, Jindabine-F. E. Wilson coll. 26 Feh. 52 ; deposited in the same museum.

Paralypes: 1 of and 2 , collected with allotype; in the same, and author's collection.

It is a pleasure to dedicate this species to its collector, Mr. F. Bi, Wilson.

## 3. Mezira elegans $n$. sp .

At first sight this new species looks more like a Neotropical Mesira than an Australian species, however the hind border of pronotum is more deeply sinnate than in the Neotropical species.

Female. Elongate, slightly widening posteriorad; lateral borders of pronotum and abdomen finely serrate.

Head shorter than width through the eyes (18:22.5), or across postocular tubercles (18:24). Anterior process tapering forward (the apex is slightly mutilated) reaching over the middle of autennal segment I: antenniferous tubercles dentiform, acute, with parallel exterior borders, and slightly divergent tips, reaching to $\&$ of antennal sugment I. Fyes semiglobose, protruding. Postocular tubercles dentiform, distinctly produced beyond outer border of eyes; infraocular carinao low, granulate, vertex roughly granulate; mesad of eyes are placed two $(1+1)$ ovate callosities. Antemnae robust; antennal segment I strongly dilated toward the tip; II tapering toward the
hase, other missing; proportions, T to 1I, are: 8:9;-:-- Rustrum does not reach to the base of a deep rostral groove; the latter is open posteriorly.

Pronotum half as long as maximal width (22:44). Collar distinct, slightly sinuate in front; antero-lateral angles slightly expanded, rounded, produced as far as collar; lateral borders slightly convex; lateral notch absent; hind border deeply sinuate in the middle, convex laterally. Fore dise with four $(2+2)$ low, oblique ridges; depressed between them. Hind dise evenly granulate; granulation setigerous, setae very fine and very short.

Scutellum shorter than basal width (22:25); all borders finely carinate; lateral borders straight, slightly sinuate near the tip; the latter incised. Dise flat, finely transversely rugose; median carina thin and low.

IIemelytra reach to $\frac{2}{3}$ of tergum VI; corium reaches almost to posterior border of connexivum III; baso-lateral border carinate, straight; apical border straight, not simuate interiorly, and carinate; apical angle acute; membrane finely granulate.

Abdomen longer than maximal width across segment IV (81:55); lateral borders evenly rounded; midlateral area half as wide as connexivum; connexiva longer than wide, flat, dises roughish; exterior borders of connexiva finely serrate; PE-angles not protruding; PE-VII rounded. Paratergites large, rounded, divergent, reaching to it of IX; the latter tricuspidate, but valves slightly longer than oviduct. All spiracles ventral, placed far from the border.

Legs unarmed.
Colour: dark ferrugineous; connexivum bicolorons; light Perrugineous inside, in sharp contrast, dark ferrugineous at exterior border. Rostrum and tarsi light ferrugincous. Venter pale ferrngineous; genital segments and exterior borders dark ferrugineous.

Total length, 5.80 mm .; width of pronotum, 1.76 mm ; width of ahdomen, 2.20 mm .

[^2]

Holotype: \&, Australia, New South Wales, Dorrigo-W. Heron coll.; deposited in the South Australian Museum, Adelaide.

Mezira elegans n. sp, is quite distinct from all other Ausuralian species of Mezira.

## 4. Mezira sulcata Kormilev

Mezira sulcata Kormilev, 1958, Jour. N.Y. Ent. Soe., 66: 91.
This curious species is pretty common in Queensland.
2 ㅎ, Queensland, Kuranda-F. P. Dodd coll.; 11 of and 11 , Queensland, Cairns Distr.-A. M. Lea coll.; 4 क and 6 os, Qucensland, Cairns Distr.-E. Allen coll.

## 5. Mezira subtriangula Kormilev

Mezira subtriangula Kormilev, 1957, Ann. Mag. Nat. Hist., (19) $\mathbf{1 0}$ : 269.
Numerous specimens from N. New Guinea and Papua, and also from Bougainville, Solomon Islands.

## 6. Mezira membranacea Fabricius

Aradus membranaceus Fabricius, 1803, Syst. Rhyng., p. 118.
Brachyrhynchus membranaceus Stål, 1868, Hem. Fabr., 1: 96.
Mezira membranacea Kormilev, 1953, Verh. Naturf. Ges., Basel, 64: 333.

Widely distributed in the Oriental Region, penetrating into New Guinea. Recently it has been fonnd in Hawaii (importel). This species breaks up into varions geographical subspecies, one of which is M. micronesica Esaki and Matsuda, 1951, from Micronesia. Though specimens from Micronesia show some small differences to the nymotypic form of $M$. membranacea, including the parameres, snarp limits between them are impossible to determine.

In this lot were numerous specimens from New Guinea, New Britain, Solomon Islands, and Fiji, Viti Levu, which I refer to M. membranacea micronesica Esaki and Matsuda, rather than to M. membranacea,

Note.-Recently Blöte published a Catalogue of the Aradidae in the Rijksmuseum van Natuurlijke Historia in Leiden (1965; 1-41) in which he put Daulocoris auritomentosa (Kormilev 1955), into the synonymy of Daulocoris feanus (Bergroth 1889). With this I eannot concur, because they are certainly two different species, and easy to distinguish: in $D$. feanus the anterior process of the head only reaches to the tip of antennal segment I; the antero-lateral angles of the pronotum have expanded lateral borders placed more longitudinally,
and the postocular tubercles directed slightly lowward. In D. auritomentosa the anterior process of the head is distinctly produced beyond the tip of autemal segment I; the lateral borders of the antero-lateral angles of the pronotum are placed more obliquely, and the postocular tubercles are directed sideways.

## 7. Mezira enigmatica $n$. sp.

Fig. 26-27.
This species stamis apart from all other species of the genus, particularly in its angular postocular borders, practically without tuhereles; by its sinnate lateral horders of the abdomen, which diverge posteriorly; all of which are more indicative of the genns Arictus Stal, than ol Mezira A.S., and by spiracles VIl being ventro-lateral in position, and clearly visible from ahove. But the general aspect of the body is that of Mesira, and this is where I am putting it tentatively, at least mitil a general revision of the genus.

Female, Elongate ovate, widening posteriorly; evenly covered with fine, black inernstation, looking like dirt, throngh which pass microscopical, erect, white hairs; under this inerustation the body is black and shiny.

Mearl longer than width lhrough the eyes (36:33). Anterior process long, constricted in the middle, and narrowly incised in front, produced far beyond the tip of antennal segment I. Antenniferous tubercles dontiform, acute, slightly divaricating, reaching to $\frac{2}{5}$ of antennal segment 1. Eyes semiglobose, protruding. Postocular horders angular and not reaching to onter border ol eyes; infraocular carina very low, practically absent; vertex with " V ''-shaped gramulate carinae, obliterated by incrustation. Antennae strong, more than one and a half times as long as the head $(59: 36)$; antennal segment I clavate, slightly curved sideways; II and III tapering toward the base IV fusiform. Proportions of antennal segments, I to TV, are ; 14:14:17:14. Rostrum reaches to fore border of prosternum; rostral atrium narrowly open; rostial groove wide and deep, transversely ragose, and open posteriorly.

Pronotwm shorter than maximal width $(34: 75)$, divided into two Iobes by a deep furrow: lore lobe much narrower than hind lobe $(52: 75)$. Collar fine, simuate in front; antero-lateral angles slightly expanded, rounded, produced anteriorly as far as collar. Lateral horders slightly converging posteriorly, strongly converging and slightly sinuate anteriorly. Hind border widely sinuate in the middle, and then again slightly sinuate mesad of rounded posterior angles.

Fore disc with two $(1+1)$ high, rounded elevations, and a depression between them; two $(1+1)$ smaller longitudinal ridges placed laterally near lateral borders. Hind dise granulate.

Scutellum shorter than basal width (35:45); all borders carinate; lateral borders straight, tip rounded; dise granulate, with eross-shaped median carina.

Hemelytra reach almost to hind border of tergum VI; baso-lateral border of corium carinate, and slightly sinuate; apical angle acute; apical border twice shallowly sinuate. Membrane with anastomosing veins.

Aldomen slightly shorter than width across segment V (95:98). Lateral borders divergent, and slightly convex from II to V ; slightly receding at VI; strongly receding, and sinuate at VII. PE-angles from II to V progressively protruding, rounded; PE-VI form a right angle with a rounded tip; PE-VII form a subtriangular lobe, directed backward; its romded tip is produced beyond the tips of paratergites. Paratergites triangular, produced as far as LX; the latter trapezoidal, truncate posteriorly. Spiracles II to VI ventral, placed far from the border; VII ventro-lateral, clearly visible from above; VIII terminal.

Metathoracic gland openings short, and wide open, almost reaching the lateral border. Sternum VI widely sinuate posteriorly; sterna III to V with a triangular, VI with an ovate, callous spot medially,

Legs unarmed; trochanters free; thin, seta-like arolia are present.
Colour : black; rostrum, trochanters, callous spots on venter, tarsi, and apical half of antennal segment IV, red brown.

Total length, 8.12 mm . ; width of pronetum, 3.00 mm ; width of abdomen, 3.82 mm .

Holotype: ${ }^{\text {o }}$, New Guinea, N.E. Papua, MIt, Laungton-C. T. MeNamara coll.; deposited in the South Australian Museum, Adelaide.
references
Blöte, H. C., 1965: Catalogue of the Aradidae in the Rijksmuseum van Natuurlijke Historie, Kool. Verh.; No. 75, pp. 1-41, 37 figs.
Usinger, R. L. and Matsuda, R., 1959: Classification of the Aradidac, British Museum (N.II.), London; 410-V11 19. 101 figs.

## RESUMFN ESPANOL

[^3]
## APPENDLX—TYPE REGISTRATIONS

Due to an oversight when the first part of Mr. Kormilev's paper was published, the registration numbers being placed on the new type material were omitted from the text.

To maintain the same format registration numbers have similarly been omitted from this, the second and last part of Mr. Kormilev's present studies.

The registration numbers for the type material of both papers are given below.

| Species. | Status. | Registration Number(s). |
| :---: | :---: | :---: |
| Aradus erraticus Kormilev | Holotype | I 20,280 |
| Arudus fuscicornis Kormilev | Holotype | I 20,281 |
|  | Allotype | I 20,282 |
|  | Paratypes | I 20,283-20,290 |
| Calisius grossi Kormilev | Holotype | I 20,291 |
| Calisius leai Kormilev . | Holotype | I 20,292 |
| Calisius magdalenae Ko | Holotype | I 20,293 |
|  | Allotype | I 20,294 |
|  | Paratype | I 20,295 |
| Calisius notabilis Kormilev | Holotype | I 20,296 |
| Calisius septimus Kormilev | Holotype | I 20,297 |
| Carventus brachypterus Kormilev | Holotype | I 20,298 |
| Carventus malayensis Kormilev | Holotype | I 20,299 |
| Carventus ovatus Kormilev | Holotype | I 20,300 |
|  | Paratype | I 20,301 |
| Carventus robustus Kormilev | Holotype | I 20,302 |
|  | Allotype | I 20,303 |
|  | Paratypes | I 20,304-20,312 |
| Acaraptera dimorpha Kormilev | Holotype | I 20,313 |
|  | Allotype | I 20,314 |
| Acaraptera minuta Kormilev | Holotype | I 20,315 |
|  | Paratypes | I 20,316-7 |
| Acaraptera (Lissaptera) denticeps |  |  |
| Mastigocoris malayensis Kormilev . | Holotype | I 20,318 |
|  | Holotype | I 20,319 |
|  | Paratypes | I 20,321-20,331 |
| Aspisocoris termitophilus Kormilev | Holotype | I 20,332 |
|  | Allotype | I 20,333 |
|  | Paratypes | I 20,334-20,340 |


| Species. |  |  |  |
| :--- | :--- | :--- | :--- |
|  |  |  | Status. | | Registration |
| :---: |
| Number(s). |



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Kormilev, Nicholas A. 1967. "Aradidae in the South Australian Museum, Adelaide II. (Hemiptera: Heteroptera)." Records of the South Australian Museum 15, 513-550.

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[^0]:    " Aec: Nicholas A. Kormilev, Aradidue in the South Australian Museum, Adelaide (Hemipt-ra-Hrteroptera) ; Records of the South Austratian Muscum, 1966, 15: $\mathbf{2 7 5 - 3 0 7}$,

[^1]:    Type speries: Aegisocoris gramulatus n. sp.

[^2]:    Fig. 16. Head and pronotum of Artabanus mefarlandi n. sp.
    Fig. 17. Head and pronotum of Pictinellas moturikiensis n. sp.
    Fig. 18. Termination of abdomen of Pictinellus maturikienxis n. xp.
    Fig. 19. Head and pronotum of Pictinellus elongatius n. sp.
    Fig. 20. Termination of abdomen of Pictincllus elongatres n. sp.
    Fig. 21. Head and pronotum of Pictinellus longiceps n. sp.
    Fig. 22. Termination of abdomen of Pictinellus longiceps n. sp.
    Fig. 23. Head and pronotum of Pictinellns meldaycnsis n. sp.
    Fig. 24. Termination of abdomen of Pictinellus melayensis n. sp. Femalo.
    Fig. 25. Termination of abdomen of Pictinellus melayensis n. sp.
    Fig. 26. Head and pronotum of Mezira enigmatica n. sp.
    Fig, 27. Termination of abdomen of Merira enigmatioe $n$. sp,

[^3]:    En la sugunda parte de los Arádidos del Museo de Australia del Sur, en Adelaide, el antor ha tratado la subfamilia Mezirinae Oshanin, 1908. Tres géneros y dieninueve espécies resultaron ser nuevos para la ciencia $y$ han sido descritos en este trabajo. De un interís particular es un género nuevo termitófilo de Australia Occilental, llamado Aspisocoris trrmitophilue n. g., Th. Sp.

