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AUSTRALIAN CERAMBYCIDAE. VI.

Descriptions of New Species Mostly from Queensland.

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(Figures 1-11.)

This paper contains descriptions of two new genera, thirty-four new species, and the redescription of one species, the validity of which has hitherto been doubtful, and notes on several others. Much of the material is in the Australian Museum collection, but I am again indebted to Mr. A. R. Brimblecombe, Assistant Research Officer, Department of Agriculture and Stock, Brisbane, Queensland, who has sent me many specimens of exceptional interest and has permitted me to describe those species which appeared to be new to science. Judging from the richness of the material received from Mr. Brimblecombe and from other sources, it would appear that the Queensland Cerambycid fauna still contains many fine species which await description.

Genus Didymocantha Newman, 1840.

Didymocantha gracilis sp. nov.

3. Slender; red-brown varied with black and yellow. Head large, much broader than prothorax at its widest point; eyes large, coarsely granulate, almost contiguous; antennary tubercles small and inconspicuous; base and vertex closely punctate; median groove shallow, indistinct, but very strongly defined between antennary tubercles; frons depressed, concave, punctate; a prominent tubercle situated below eye; a few scattered colourless setae on apex and between eyes. Antennae brown, pubescent, more than twice as long as body, rather coarsely punctate; basal joint broad, thickened, expanded on one side at apex, coarsely punctate, nitid; joints 2-3 black, 4 clouded with black; joints 3-5 stout, remainder slender; joint 3 short; 4 almost twice as long as 3; 4-7 approximately equal, longer than 3; 8-10 approximately equal, longer than 4; apical joint almost as long as 8, slender, basal half yellow. Prothorax longer than wide, parallel-sided, with 2 or 3 small flattened lateral tubercles, disc very coarsely punctate with an indication of a small median tubercle near base; base and apex not marginate; disc with a few scattered pale stramineous setae. Scutellum narrow, rounded posteriorly, densely pilose. Elytra almost twice as wide as prothorax at base, nitid, coarsely punctate, with 2 raised concolorous costae on each elytron running from shoulder and uniting near but not at apex; a dark pitchy-brown patch over basal area and extending narrowly between suture and first costa to about a length, becoming black apically; a linear yellow area on first costa at about half-way, and an additional narrow, elevated yellow mark about 3, between costa and suture; remainder of elytra brown; a few scattered hairs near apex. Legs slender, ferruginous; femora slightly clavate; tibiae ringed with a broad yellow band near apex. Under surface reddish, pilose; sterna coarsely punctate. Long. 10 mm.; lat. 5 mm. Antennae 24 mm.

 ${\it Hab.}$ —Queensland: Bunya Mts. (A. J. Turner), February 1931. Holotype in Queensland Museum.

Comes nearest to *D. novica* Blackburn, but differs in the strong elytral costae, the strongly marked colour pattern, and ferruginous legs. The form of the prothorax readily separates it from *D. brevicollis* Pascoe.

Genus Notoceresium Blackburn, 1901.

Notoceresium elongata sp. nov. (Figure 1.)

Q. Elongate, slender, subnitid, and flavo-castaneus. *Head* broad, rounded, as broad as prothorax at widest, strongly constricted posteriorly; a deep impressed median line

extending from posterior margin to clypeal suture; clypeal suture almost straight; eyes large, emarginate, coarsely granulate; antennary tubercles inconspicuous, widely separated, intervening area with a few small punctures adjacent to median line. Antennae as long as body, bright ferruginous, coarsely punctate, pilose; basal joint long, swelling regularly to apex; joint 3 shorter than 4; 5-7 equal, longer than 4; 8-11 progressively decreasing in length; joints 3-5 stout, remainder slender. Prothorax viewed from above almost globular, sides slightly produced but not tuberculate about 3, sharply constricted on anterior and posterior areas, marginate; anterior margin procurved, anterior, straight; disc centrally slightly depressed, with a few small punctures, subnitid. Elytra broader than prothorax at widest, parallel-sided, shoulders prominent, apices acutely rounded; disc slightly shagreened, subnitid, lateral margin strongly, and suture lightly marginate; disc of elytra with two slightly elevated concolorous costae; margin of suture, costae and lateral margin with deep, widelyspaced seriate punctures and 3 longitudinal rows of smaller seriate punctures on lateral declivity, a long slender, almost colourless hair seated in each puncture; elytra bright castaneus with shoulders and lateral areas clouded with black but not reaching to apex on sides. Scutellum very small, triangular. Legs ferruginous; femora broadly clavate, nitid, slightly pubescent at apex, narrowly pedunculate; tibiae slender, pilose, especially towards apex; apically with two stout black spines; tarsi slender, clothed with dense pubescence mixed with stout hairs. Under surface subnitid, clothed with fine yellowish pile on sterna and first and second abdominal segments. Long. 12 mm.; lat. 3 mm.

3. Similar to female, but smaller and more slender; antennae longer than body, 8th joint reaching to apex of elytra. Long. 10 mm.; lat. 2 mm.

Hab.—Queensland: Bunya Mts., 3,000 feet (N. Geary), a series of twenty-eight specimens collected between January 1928 and February 1940. Holotype $\mathcal G$ in Australian Museum.

Comes close to the genotype, *N. impressiceps* Blackburn, but is readily distinguished by its larger size and large setose elytral punctures.

Notoceresium setistriatus sp. nov. (Figure 2.)

9. Robust; brown with pale elytral costae. Head rounded, ferruginous, considerably broader than prothorax at widest point; sides slightly developed near centre; vertex and frons evenly rounded; strongly nitid, with a narrow impressed median line with close fine punctures towards its anterior extremity; antennary tubercles small, inconspicuous, very widely separated; head not depressed between tubercles; eyes large. prominent, coarsely granulate, deeply marginate, superior lobe tending to become linear, inferior large and globular; cheeks very short; palpi short, pale ferruginous, apical joint short, broad, obliquely truncate. Antennae shorter than body, closely punctate, sparsely pilose, dark brown; basal joint stout, cuneiform with unilateral expansion; joints 3-4 equal, shorter than 1; 5-6 equal, slightly longer than 3; 7-8 equal, as long as 3; 9-10 equal, shorter than 3; apical joint shorter than 10, regularly pointed, pale. Prothorax globular from above, sides regularly rounded with slight, almost imperceptible tendency to a rounded angle near middle, ferruginous, flattened on disc, with a small median area closely and finely punctate; posterior border marginate. Scutellum small, narrowly triangular, acutely rounded behind. Elytra broader than prothorax (as wide as head), brown, parallel-sided, broadly rounded apically, nitid, coarsely and shallowly punctate; lateral margin and a slightly raised median costa on disc white, impunctate, not reaching apex; suture marginate, unicolorous; a single longitudinal row of fine erect setae along area between costa and suture; three rows of setae between costa and lateral margin. Legs pale stramineus; femora regularly and slightly clavate, not strongly pedunculate, glabrous, nitid; tibiae with a few short, pale setae towards apex; tarsi relatively broad, setulose; claws yellow. Long. 4 mm.

d similar to female, smaller, antennae not quite reaching apex of elytra. Long. 3.5 mm.

Hab.—Queensland: Bunya Mts. 3,000 feet (N. Geary), December 1937 (types); Brookfield (H. Hacker), 15 November 1926. New South Wales: Tweed River (W. W. Froggatt), Oct.—Nov. 1901—3. Holotype \circ and allotype \circ in Australian Museum.

Wholly unlike any other species in the genus by reason of its pale costae and robust form.

Genus Tessaromma Newman, 1840.

Tessaromma aurata sp. nov.

- Q. Slender, ferruginous, clothed with golden pile. Head narrow, slightly wider than prothorax at anterior margin, densely clothed with fine golden pile; constricted behind eyes; a deep median groove extending from base to clypeal suture; eyes relatively small, finely granulate; antennary tubercles prominent. Antennae scarcely as long as body, slender; basal joint tapering to base, almost straight sided; joints 3-4 equal, short; 5-7 equal, longer than 3; 8-9 equal, as long as 3; 10-11 approximately equal, shorter than 3. Prothorax longer than wide, anterior and posterior margins slightly constricted, broadly marginate; disc swollen, with an impressed median line; sides with a broad, blunt somewhat backwardly directed tooth- or thorn-like prominence about middle; densely clothed with fine, recumbent golden pile. Scutellum broad, rounded behind. Elytra broader than prothorax at widest, parallel-sided, tapering slightly at apex; apices squarely truncate, broadly marginate; shoulders prominent, not tuberculate; disc with a tendency to an obscure raised concolorous median longitudinal costa extending a little past half-way; derm dark ferruginous, subnitid, somewhat irregularly clothed with dense recumbent golden pubescence (irregularity in clothing may be due to abrasion); extremity of abdomen passing elytral apices. Legs dull ferruginous, slender, femora irregularly clavate, finely punctate; tibiae moderately slender; a single apical spine on hind tibiae; tarsi elongate, slender; lightly clothed with golden pubescence. Under surface with long golden pile. Long. 12 mm., lat. 3 mm.
- 3. Similar to female, but more reddish in colour; antennae longer than body, apex of 9th joint reaching extremity of elytra. Long. 11 mm.; lat. 2 mm.
- Hab.—New South Wales: Comboyne (H. J. Davidson), 1937 (\mathcal{Q}); Queensland: Emu Vale (A. R. Brimblecombe), 10 February 1939 (\mathcal{G}); Holotype \mathcal{Q} in Australian Museum; allotype \mathcal{G} in Queensland Museum.

Near T. sericans Er., but differing in the dense clothing of golden pile, and the squarely truncate and margined elytral apices.

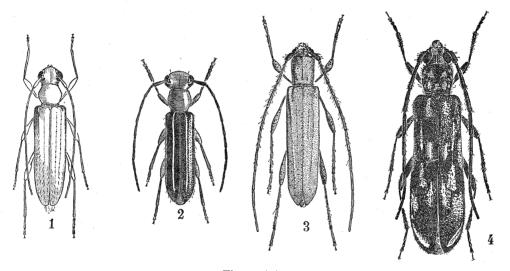
Tessaromma loxleyae sp. nov.

Slender; hyaline varied with spots and patches of brown. Head large, broad, constricted at base; a fine impressed median line extending from base to clypeal suture; vertex impunctate, frons finely punctured; eyes large, prominent, strongly emarginate, coarsely granulate; antennary tubercles small, acute, prominent; a strong ridge extending downwards over from antennary tubercle to clypeal suture. Antennae shorter than body, pubescent, dull yellow; apices of joints narrowly ringed with brown; basal joint narrowly clavate; joint 3 slightly longer than 4, shorter than 5; 6-7 approximately equal, shorter than 5; 8-11 progressively shorter. Prothorax exclusive of spines much narrower than head (little more than half as wide), rather strongly constricted behind anterior border; strong, dorsally flattened, recurved lateral spines about middle; anterior and posterior borders slightly curved, strongly marginate, anterior lightly edged with brown; disc with 2 rather laterally situated, well-developed elongate tubercles over which lies a blackish-brown trident-shaped mark with the points directed forwards and a curved linear dark mark on each side between it and lateral spine. Scutellum narrow, triangular. Elytra narrow, parallel-sided, rounding broadly to apices over apical sixth; apices squarely truncate, unarmed; disc with 2 irregular raised costae, the exterior one bifurcate at base and tending inwards towards suture at apical fourth, expanded near point of contact with sutural margin; the second costa extending from inner arm of bifurcation to about 2 elytral length; base of elytra granulate-punctate, remainder subnitid, lightly and closely punctate laterally; elytra white to creamy, hyaline, varied with spots and patches of brown, darkest and most continuous over base, with a dark area filling bifurcation of exterior costa; a ?-shaped mark (reversed on left elytron) near apex covering apical portion of costa and sutural margin, together with several small scattered patches; apical half of elytra with sparse erect colourless setae. Legs pale yellow; 2nd and 3rd coxae banded with brown, darker and wider on under side; femora strongly clavate, deeply notched on inner margin towards apex (especially strong on 2nd and 3rd pairs); tibiae slender; tarsi elongate, narrow. Under surface: thoracic segments black, finely punctate; abdomen yellow, subnitid. Long. 8 mm.

 ${\it Hab.}$ —New South Wales: Lugarno (Miss Loxley), July 1940. Holotype (unique) in Australian Museum.

A remarkable little species which comes closest in form to *T. undatum* Newman, but is readily distinguished by its peculiar colour pattern, hyaline integument, elytral costae and other structural characters, and small size.

Named for its discoverer, Miss Loxley, of Penshurst, New South Wales, who presented the unique specimen to the Museum.



Figures 1-4.

1. Notoceresium elongata, n. sp. 2. N. setistriatus, n. sp. 3. ? Tessaromma setosa, n. sp. 4. Opsidota gracilis, n. sp.

[N. B. Adams, del.

? Tessaromma setosa sp. nov. (Figure 3.)

Slender, greyish-brown, hairy. Head small, narrower than prothorax; eyes large, prominent, coarsely granulate; antennary tubercles small, not prominent; frons, clypeus, and antennary tubercles densely clothed with pale stramineous pile, long setae of the same colour projecting round mandibles; palpi long, apical joint spatulate, obliquely truncate; mandibles black. Antennae slender, longer than body; basal joint elongate, swollen; joints 3 and 6 equal; 4–5 equal, slightly longer than 3; 7–9 equal, shorter than 3; 10–11 shorter than 7, approximately equal; joints 1–10 pilose, pile on basal joint long and lax, 11 sparsely pubescent, subnitid; joints 1–3 with long, pale, erect hairs protruding from pilose covering over entire surface, and on 4–10 forming a sparse fringe. Prothorax \(\frac{1}{3}\) longer than wide, broadening slightly towards anterior border, sides almost straight, with a small lateral tubercle just before middle, clothed with dense grey-brown pile interspersed with scattered long, erect hairs; an indistinct raised median line about middle of length with a short, distinctly flattened line on either side, each lightly margined with long grey pile. Elytra almost twice as wide as prothorax at base, parallel-sided, apices narrowly rounded, clothed with close greyish-

brown pile, becoming sparser apically, interspersed with long erect hairs especially over apical area; numerous small glossy pustules on basal area and along suture for about $\frac{3}{4}$ length; over the whole elytral surface numerous small rounded nitid areas among the clothing tending to form regular lines. Legs: femora strongly clavate, shaft extremely slender, densely clothed with grey pile interspersed on expanded portions with numerous small rounded areas of exposed derm; tibiae and tarsi slender, pilose. Under surface wholly clothed with grey pile interspersed with numerous small, rounded, naked, nitid areas of exposed derm giving a uniformly spotted appearance; sides of metathorax coarsely punctate. Long, 18 mm.; lat. 3 mm.

 ${\it Hab.}$ —Queensland: Yarraman (A. R. Brimblecombe), March 1936. Holotype (unique) in Queensland Museum.

I am not entirely satisfied that this remarkable insect should be placed in the genus *Tessaromma*, the shape of the prothorax being altogether unlike that of any of the other allied species, although in other characters it conforms closely to those of the genus. I am reluctant to erect a new genus for its reception, and it appears advisable to place it in *Tessaromma* pending further material becoming available for study. I believe that the specimen before me is a male.

Viewed with the aid of a lens or the low power of a microscope, the whole surface of the elytra appears to be dotted with small shining pustules, but a high power reveals that the majority of these areas are quite flat, circular patches of naked derm showing through the pilous clothing, as described above.

The insect is quite unlike any other in the genus, and its remarkable appearance should render its identification easy.

Genus Plesarthrius Hope, 1834. Piesarthrius bleeserae sp. nov.

3. Robust, pale castaneous with sparse black markings. Head broad-constricted posteriorly, base coarsely punctate; antennary tubercles small and prominent, median impressed line obscure, wide and shallow; eyes large, very coarsely granulate; head clothed with coarse pale-stramineous hair, densest around eyes, posterior margin and froms. Antennae as long as, or very slightly shorter than, body, 9-laminate; basal joint stout, obconical, swollen toward apex, exterior apical angle produced, rounded, black, nitid, with scattered short white hairs; joints 3-10 short, progressively increasing in length; 10th markedly longest and bearing two laminae, each of the remaining joints one; laminae narrow, dull castaneous, very closely and finely punctate, densely pilose, produced on upper side of antenna only, gradually increasing in length from base to apex, on apical three joints of almost equal length. Prothorax cylindrical, almost as wide as long, narrower than elytra at base, sides gradually and regularly rounded, widest at centre, posterior border sinuate-marginate, very coarsely and shallowly punctate, some punctures confluent; derm highly nitid; clothed on disc with sparse recumbent stramineous hair, densely clothed on sides with white. Scutellum scutiform, narrowly rounded behind, clothed with dense white pile. Elytra regularly and gradually tapering; apex broadly rounded exteriorly, strongly unispinose on suture; basal half with very large punctures, some confluent, apical half more sparsely and shallowly punctate; a black lateral patch extending from shoulder to \frac{1}{3} elytral length, and an irregular broken transverse black line just past half-way, a broad and roughly U-shaped brown area on apex; centre of elytra palest; clothed with sparse coarse hairs mostly seated in punctures, densest over apical dark area and fringing apex. Under surface clothed with greyish hairs, densest along margins of abdominal segments, and a broad stripe of dense white pile extending along sides of thorax just below lateral margin of elytra; sterna coarsely punctate. Legs dark ferruginous, clothed with yellowish hairs; a dense brush-like fringe of short stiff pile along lower surface of femora (a character which may be sexual). Long. 22 mm.; lat. 6 mm.

Hab.—North Australia: Darwin (F. H. Taylor), September 1940. Caught at light. Holotype (unique) in Australian Museum.

Named for Mrs. Bleeser, of Darwin, at the request of Mr. F. H. Taylor, the collector.

The very remarkable arrangement of the antennary laminae serves to distinguish this species from all other members of the genus; the colour pattern is also distinctive.

Genus Opsidota Pascoe, 1863.

Opsidota gracilis sp. nov. (Figure 4.)

- Q. Relatively slender, pitchy-brown varied with yellow. Head small, closely rugosopunctate, sparsely clothed with recumbent pale-rufous hair; median impressed line clearly defined on vertex only, nitid; eyes medium, coarsely granulate; bases of mandibles coarsely rugoso-punctate. Antennae not reaching extremity of body, slender, basal joint obconical, strongly curved, closely punctate, nitid, with sparse erect hairs; remainder pilose with erect hairs; joint 3 longer than 4, closely punctate; 4-7 subequal; 8 shorter than 7; 9 shorter than 8; apical joint much shorter, cylindrical; joints 4-7 apically unilaterally angulate and slightly produced. Prothorax longer than wide, cylindrical, sides slightly and regularly rounded; anterior margin procurved, posterior straight; disc coarsely rugoso-punctate with an elongate nitid area in centre; 5 large round bright rufus pilose spots on disc, and 3-4 smaller lateral ones. scutate, pointed behind, clothed with fuscous pile. Elytra much wider than prothorax, parallel, widening very slightly to apex; very coarsely and shallowly confluent-punctate with indications of 3 indistinct raised costae much obscured by puncturation, one running close to and parallel with suture, the second rising inside shoulder and inclining gradually inwards until it appears to junction with 1st costa near apex, 3rd commencing on shoulder, parallel with lateral margin, extending about half-way; apices broadly rounded externally, roundly dehiscent, forming a broad regular point, unarmed; sparsely clothed throughout with short recumbent white hairs interspersed with erect black hairs which are thickest near apex. The pitchy derm is varied with small, irregular yellow areas, which, to the naked eye, appear to form 2 obscure pale fasciae. Under surface pitchy, glabrous, nitid; prothorax finely rugoso-punctate; mesothorax very closely and finely rugoso-punctate; metathorax and abdominal segments with sparse fine punctures. Legs slender, black, finely punctate, with erect black hairs. Long. 19 mm.; lat. 5 mm.
- J. Similar to female, but smaller; antennae considerably longer than body, compressed; joints 3-10 progressively increasing in length, apical joint longest; 3-10 with unilateral apical expansion; pale elytral clothing much denser. Long. 15 mm.; lat. 4 mm.

 $\it Hab.-$ Queensland: Injune (N. Geary), 2 November 1939. Holotype \lozenge and allotype \lozenge in Australian Museum.

Comes nearest to O. infecta Pasc., but is easily distinguished by its slonder form, elongate prothorax and coarse sculpture.

Genus Coptopterus Hope, 1834.

Coptopterus hirsutus sp. nov.

Q. Robust, stramineous with irregular black elytral markings. Head ferruginous, broad, with small and widely separated punctures, uniformly clothed with coarse, sparse pale stramineous hair extending over sides of muzzle and obscuring exterior face of mandibles, clothing especially dense in concavity of eye; antennary tubercles not prominent, nitid, clothed with hair. Antennae not reaching beyond second segment of abdomen, ferruginous; basal joint finely punctate; joints 1-5 clothed with coarse hair; 6-11 with short, close pile; joint 3 equal to 5; 4 shorter; 6-7 equal to 4; 8-10 approximately equal, shorter than 8; terminal joint compressed, slender, slightly notched laterally near apex. Thorax as broad as long, sides almost straight but contracting slightly anteriorly, dark ferruginous, very coarsely and irregularly punctate, somewhat thickly clothed with coarse pale-ferruginous to whitish hair; clothing on posterior margin concentrated into 3 patches, giving the appearance of short white lines; anterior

margin straight, posterior sinuate, narrowly marginate. Scutellum narrow, lingulate, posteriorly rounded, densely pilose; pile white. Elytra considerably wider than base of prothorax, parallel-sided, apices emarginate, acutely bispinose, lateral spine stouter than sutural, spines black; pale stramineous to cream, with a roughly triangular area extending from shoulder to suture at about one-fourth length, tinged with strong ferruginous-yellow, derm of this area highly nitid; 3 short and narrow longitudinal black markings near base, one behind and slightly inwards from shoulder, the 2nd near lateral margin and behind first, the 3rd and longest level with and parallel to this and close to suture, an irregular broken but somewhat W-shaped narrow transverse black marking at about 3 elytral length, an irregular black to ferruginous area developing from a longitudinal line and expanding over greater part of apical 1/4, suture ferruginous, lateral margin ferruginous tending to black at apex; basal half of elytra very coarsely and irregularly punctate, middle a coarsely, and apical a rather finely, punctate; distribution of punctures tending to form 3 indistinct and impunctate unicolorous longitudinal costae on basal 3, the central one extending to near apex where it is black; the whole elytron somewhat densely clothed with long, coarse, palestramineous hairs seated in punctures. Legs dark ferruginous, clothed sparsely with long white hairs, joints black; tarsi fringed with short yellow hairs. Under surface wholly clothed with dense decumbent white hairs. Long. 31 mm.; lat. 7 mm.

♂. Similar to female but more slender; antennae reaching to apex of elytra; joints 1-3 with hairy clothing, the remainder pilose. Clothing of under surface less dense. Long. 29 mm.; lat. 6 mm.

Hab.—Queensland: Bunya Mts. (N. Geary), 12 February 1940. Another example received from Mr. A. R. Brimblecombe is from Toowoomba, Queensland, 21 December 1928 (W. B. Bernard); it measures 28 mm. in length. Holotype \circ and allotype \circ in Australian Museum.

This species comes nearest to *C. musgravei* McKeown, but differs in the shape of the prothorax, the clothing and proportions of the elytral joints, the form of the scutellum, and other features.

Genus Uracanthus Hope, 1833. Uracanthus insignis Lea.

Trans. Roy. Soc. S. Aust., xl, 1916, p. 370.

The specimen of this fine species of *Uracanthus* before me differs in many respects from the original description by Lea, but I have no hesitation in placing it with *insignis*. It is, I consider, a female; that described by Lea appears to be a male. The characters of both male and female are set out below for purpose of comparison—that of the male is based on Lea's description and checked by two specimens in the Museum.

d. Head: muzzle about twice as long as wide; clypeus with a few conspicuous punctures, rounded posteriorly with the suture deep, triangular, and wide in the middle. Antennae thin, not passing 3rd abdominal segment, fifth to tenth joints rather feebly produced to one side at apex, tenth about 2 the length of eleventh. Prothorax much longer than wide, base about twice as wide as apex; glabrous portion with about 20 conspicuous corrugations. but irregular and with a small node on each side of middle. Elytra narrow, almost parallel-sided, each widely emarginate and strongly and acutely bispinose at apex, with remnants of feebly elevated lines; with dense and minute punctures, but on

Q. Head: muzzle almost twice as wide as long; clypeus rather densely and coarsely punctate, slightly rounded posteriorly; suture deep, triangular and wide in the middle. Antennae thin, not passing 3rd abdominal segment; fourth to tenth joints rather feebly produced at one side at apex, tenth equal in length to eleventh. Prothorax much longer than wide, base about twice as wide as apex, tapering much more regularly and with lateral tubercle much less strongly developed than in male: glabrous portion with about 25 conspicuous corrugations, but irregular and with a small node on each side of middle. Elytra narrow, almost parallelsided, very slightly emarginate and basal $\frac{1}{3}$ with rather large partially concealed ones. *Legs* thin, but not very long.

The clothing on the head is rather dense, but the muzzle, sides in front of eyes, base, and under surface are glabrous or almost so; the prothorax is widely glabrous along middle (widest in front), the pubescence on each side of the glabrous space appearing as a narrow white line; between each of these and the side, the pubescence is stramineous, then there is another white line, narrow at the apex and broad at the base; the scutellum and the suture for a slight distance beyond it are glabrous, then the suture for a slight distance is clothed with white pubescence, but from about the basal is narrowly dark brown and glabrous (although not conspicuously so), the apex of each elytron (for a space of about 23 as long as its width) is highly polished and much darker (the spines are black); on the under surface the clothing is white or whitish.

Dark piceo-castaneous, elytra (apex and suture excepted) paler. Densely clothed (except for some conspicuously glabrous spaces) with short stramineous and white pubescence. Long. 30 mm.

Hab.—New South Wales: Narara.

acutely bispinose at apex, but not so strongly as in male, with remnants of feebly elevated lines and small pustules tending to form lines; basal $\frac{2}{3}$ coarsely and conspicuously punctate, apical $\frac{1}{3}$ almost impunctate. Legs moderately stout but not very long.

The clothing on the head is dense, sides in front of eyes, clypeus, and under surface are more sparsely clothed; the prothorax is widely glabrous along middle, widest behind, the pubescence on each side of the glabrous space not margined with white; the pubescence on the side is buff, and there is no white line; the scutellum is pilose in the centre and there is no white pubescence on the suture or any glabrous area, the whole of the elytra is densely and uniformly clothed with buff pubescence, there is no nitid area at apex of elytra; the spines are black; on the under surface the clothing is reddishbuff.

Dark piceo-castaneous. Densely clothed (except for area on thorax) with coarse buff pubescence. Long. 25 mm.

Hab.—Queensland: Imbil (A. R. Brimblecombe).

Genus Rhinophthalmus Thomson, 1860. Rhinophthalmus hyalinatus sp. nov. (Figure 5.)

Slender, hyaline, creamy, with two transverse brown fasciae on elytra, and a lateral longitudinal line on prothorax and muzzle. Head relatively broad; muzzle stout, twice as long as broad; frons depressed, a narrow impressed median line extending from between antennary tubercles to 1 length of muzzle; muzzle coarsely and sparsely punctate; a lateral line of coarse pubescence along upper limits of lateral brown muzzle stripe. Antennae slender, pale yellow, considerably longer than body (apex of seventh joint just reaching extremity of elytra); basal joint elongate, lightly clavate, impunctate, subnitid; joints 2, 5-9 approximately equal; joints 3 and 10 shorter, approximately equal; 11 much shorter and narrowly tapering; 2-11 sparsely pilose. Prothorax elongate cylindrical, tapering anteriorly, hyaline, sparsely and irregularly punctate, strongly marginate anteriorly and posteriorly. Scutellum triangular, dark brown. Elytra narrow, wider than prothorax at base, slightly constricted before middle, tapering to apices; apices acutely rounded, unarmed; hyaline, subnitid, slightly shagreened at apex, not costate, a broad brown transverse fascia about middle, darkest on front border, not quite reaching lateral margin except on anterior limits, anterior border running obliquely inwards from just behind shoulder to suture; hind border straight; posterior brown patch extending along suture to apex and not reaching lateral margin except at apices, which are entirely dark; lateral margin narrowly marginate. Legs pale yellow, very long and slender, sparsely pilose; femora slightly thickened apically; tibiae linear, slender; tarsi very slender and elongate. Under surface dark chocolate-brown, pruinose. Long. 17 mm.; lat. 3 mm.

Hab.—Queensland: Bunya Mts. (N. Geary), 29 January 1940. Holotype (unique) in Australian Museum.

A very distinct species, close to R. nasutus Newman, but readily distinguished by its non-pubescent hyaline appearance and brown fasciae.

Rhinophthalmus parvus sp. nov. (Figure 6.)

- Q. Very slender, head and prothorax ferruginous, elytra bronze-brown with longitudinal pale costae. Head broad, muzzle relatively short, about 1¹/₄ times length of head; apex of head and muzzle finely and closely punctate. Antennae very slender, dark brown, considerably longer than body; basal joint elongate, rather strongly swollen apically, subnitid; joint 3 slightly shorter than 4; 5-9 equal, longer than 4; 10 shorter than 9; 11 shorter than 10, tapered; 2-11 coarsely and closely pubescent. Prothorax elongate, cylindrical, constricted anteriorly on basal \(\frac{1}{3}\); basal \(\frac{1}{3}\) with indications of 2 weak tubercles; coarsely and somewhat closely punctate, with irregular nitid areas between punctures. Elytra coarsely punctate, pilose, slightly wider than prothorax at base, almost parallel-sided, tapering slightly to apex; apices pointed, unarmed; lateral margin and a broad raised longitudinal costa pale cream, neither reaching apex, discal costa shorter than margin, curving slightly inwards near base and then running parallel to sutural lateral margin strongly marginate, suture not marginate; apices naked, finely corrugate, broadly acute. Legs slender, dark brown, pilose; pedicels of costae yellowish; costae slightly expanded towards apices; tibiae slender, linear; tarsi very elongate, narrow. Under surface concolorous, with close fine pile. Long. 10 mm.; lat. 1.5 mm.
- β . Similar to female, smaller; femora not pale at base. Long. 7 mm.; lat. 1 mm. Hab.—Queensland: Carnarvon Ranges (N. Geary), 14 December 1938. Holotype φ and allotype β in Australian Museum.

The smallest member of the genus. Comes closest to *R. marginipennis* Fairmaire, but is very much more slender in form; muzzle much longer and narrower; prothorax relatively longer and narrower; elytral costae narrower, further from suture, strongly convergent at base instead of almost parallel; elytral apices finely corrugate, less acute; legs much longer and slenderer; all femora more pedunculate, and hind femora considerably longer.

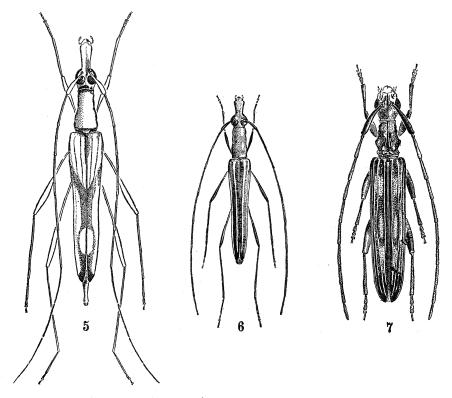
Genus Syllitus Pascoe, 1859. Syllitus bellulus sp. nov. (Figure 7.)

Robust, black, with 4 costae and lateral margin pale stramineous and an intricate pattern of stramineous lines and blotches. Head bright ferruginous-red clouded with brighter red on vertex and behind eyes; a relatively narrow deep impressed median line, not reaching to clypeal suture; finely and closely punctate, producing a shagreened appearance; eyes large, coarsely granulate; antennary tubercles medium; palpi slender, apical joint narrowly cylindrical. Antennae longer than body, slender, dull ferruginous, finely punctate, clothed with short erect pile; basal joint elongate, straight, externally somewhat swollen at apex, subnitid; joint 3 much shorter than 1, slightly longer than 4; joints 4-7 subequal; 7-8 subequal, shorter than 4; 9-11 subequal, shorter than 7; apical joint cylindrical, pointed, rather strongly curved. Prothorax elongate, cylindrical, more than twice as long as wide, anteriorly constricted, with a small lateral tubercle at about anterior 4, strongly tuberculate laterally on basal 1; posterior border very strongly marginate, forming a sharp lateral ridge; disc with an elongate median nitid area or low glossy tubercle; dark ferruginous shaded with black, dark areas tending to form median and lateral longitudinal stripes. Scutellum small, rounded, with a black median line. Elytra narrow, parallel, rounding exteriorly to apex; 1st costa pale stramineous, parallel to suture, but converging at centre, not reaching apex; 2nd costa

pale stramineous, parallel to 1st, but diverging strongly at centre, and then inclining to but not quite reaching suture near apex; 3rd costa rising from shoulder, straight, generally parallel to second, not reaching apex, basally and apically stramineous; 4th costa narrow, very close and parallel to 3rd, joining lateral margin near apex; lateral margin stramineous throughout; base black, area between suture and first costa black; a large elongate black spot with a pale stramineous centre at middle between costae 1 and 2, where they diverge; irregular black markings at apex, remainder stramineous; interspaces between costae closely, finely and regularly punctate. Legs: femora black, finely punctate; tibiae dark ferruginous, pilose; tarsi paler, pilose. Under surface glabrous, subnitid, finely punctate, blackish. Long. 14 mm.

Hab.—Queensland: Injune, 2 November 1939. Holotype in Australian Museum.

One of the largest described species of *Syllitus*, comparable in size only with *heros* Blkb. and *acanthias* McKeown. In superficial appearance it comes close to the latter, but on examination is very distinct from all species known to me.



Figures 5-7.
5. Rhinophthalmus hyalinatus, n. sp. 6. R. parvus, n. sp. 7. Syllitus bellulus, n. sp. [N. B. Adams, del.

Syllitus deustus Newman.

Entomologist, i, 1841, p. 95.

Slender, dark ferruginous; suture, lateral margin and 3 elytral costae pale. Head medium; antennary tubercles not prominent; median impressed line defined only on vertex; an oval subnitid depression extending from base of antennary tubercle to clypeal suture on each side; eyes large, prominent. Antennae stout, ferruginous; basal joint stout, elongate, considerably swollen to apex; joint 3 shorter than 1; 4–7 subequal, shorter than 3; 8–11 subequal, shorter than 4. Prothorax cylindrical, base broader than apex, not tuberculate, finely and closely punctate, laterally suffused with black. Scutellum small, scutiform. Elytra wider than prothorax at base; suture pale throughout; 1st costa pale, shorter than 2nd,

parallel to suture, curving slightly inwards to suture but not reaching apex; 2nd costa parallel to 1st, almost reaching apex, inclining to suture at extremity; 3rd costa parallel to 2nd, arising from shoulder, well defined over basal $\frac{1}{3}$, but becoming narrower and somewhat obscure over remaining $\frac{2}{3}$; lateral margin pale throughout. Legs dark ferruginous, femora blackish. Under surface: head and prothorax bright ferruginous-red, remainder black with fine close pubescence. Long. 8 mm.

Hab.—New South Wales: Bogan River (J. Armstrong); N.W. Victoria: Linga (F. E. Wilson col.).

In my revision of the genus *Syllitus* (Rec. Aust. Mus., xx, 2, 1937, p. 110) I stated that, in common with other workers on the group, I had never seen an insect that conformed with Newman's description of *S. deustus*. I have recently had the opportunity of examining three specimens which answer so closely to the exceedingly brief description of the 'lost' species that I have little hesitation in assigning them to *deustus*. It is on this assumption that I have redescribed the insect in some detail above.

Syllitus unistriatus sp. nov.

Slender, black; elytra with suture, 1 costa and lateral margin pale, and 3 costae concolorous. Head ferruginous, medium, glabrous, nitid, sparsely punctate; median line verý fine; eyes medium; antennary tubercles large, prominent, approximate. Antennae black, coarsely punctate, shorter than body; basal joint long, slender, strongly curved; joint 3 shorter than 1, longer than 4; 4-11 subequal. Prothorax ferruginous clouded with black, stout, about twice as long as width at broadest point, strongly constricted on anterior half, swelling strongly just past half-way and contracting gradually to base; disc with 4 minute nitid tubercles arranged in a rectangle; a low nitid lateral tubercle at basal 3. Elytra narrow, parallel, tapering regularly at apex; suture stramineous; 1st costa concolorous, narrow, running close to and parallel with suture, not quite reaching apex and curving sharply inwards to join 2nd costa; 2nd costa broad, stramineous, parallel to 1st and reaching apex; costa 3 narrow, concolorous, extending from shoulder, parallel to 2 and reaching to apex; costa 4 concolorous, extremely narrow, rising just outside shoulder, parallel to 3, reaching to apex; lateral margin strong, stramineous; interspaces between costae strongly and closely punctate, punctures between 1 and 2 finer and less regular than on remainder of elytra. Legs: 1st pair ferruginous; 2-3 black, finely punctate. Long. 6 mm.

Hab.—Queensland: Bunya Mts. (N. Geary), 4 January 1938. Holotype in Australian Museum.

Comes near *dubius* McKeown, but is very easily distinguished from that species by the pale suture, lateral margin and single pale costa, and very different sculpture. It is the only species known to me with but a single pale costa.

Genus Simocrysa Pascoe, 1871. Simocrysa tricolor sp. nov.

Slender, head black, prothorax orange-red, elytra dark blue. Head broad, black, highly nitid, finely and regularly punctate, deeply excavated between antennary tubercles; frons broad, with a deeply impressed median line, somewhat concave with a strong lateral ridge running from antennary tubercles to insertion of mandibles; mandibles prominent, exposed; eyes large, prominent, finely granulate. Antennae as long as body, slender, basal joint elongate-clavate, dark metallic blue, highly nitid; joints 3, 4 and 6 equal; 4 and 7 equal, longer than 3; 8-11 shorter than 3, subequal; joints 3-9 basally yellow, apically blue; 10-11 entirely blue. Prothorax longer than wide, constricted anteriorly, nitid, disc with 5 smooth tubercles, 4 low and rounded, the central one small, acute; a lateral tubercle at about \(\frac{2}{3} \); anterior and posterior borders straight, broadly marginate, posterior strongly clouded with black. Scutellum minute, triangular. Elytra very coarsely reticulate-punctate, parallel-sided, apices acutely rounded; disc with 3 very narrow concolorous raised costae; junction of costae at apex forming a strongly and irregularly raised pustule or tubercle. Legs dark blue, slender; the 2 anterior pairs of femora slightly swollen; hind femora elongate, slightly swollen

to apex; tibiae linear, slender; tarsi narrow. *Under surface*: prothorax concolorous with upper surface; meso- and meta-thorax and abdominal segments dark blue, but with a reddish tinge, finely punctate. Long. 6 mm.; lat. 1 mm.

Hab.—New South Wales: Nepean River, Glenbrook Creek (A. Musgrave), 31 October, 1915. Holotype (unique) in Australian Museum.

A striking species, very distinct from S. unicolor Pascoe, the only other species in the genus, and quite unmistakable.

Genus Mecynopus Erichson, 1842. Mecynopus annulicornis sp. nov.

Slender, fuscous varied with cream and red. Head black, nitid, broad, vertex full, domed, coarsely punctate, punctures widely spaced, closer on frons; frons clothed with sparse hairs; clypeal suture strongly procurved, deeply impressed; eyes large, prominent, finely granulate; antennary tubercles inconspicuous, strongly flattened basally. Antennae slender, considerably longer than body, base of 8th joint just reaching apex of elytra, dark fuliginous, apical 3 of 9th joint and whole of 10th glistening white; coarsely punctate, clothed with dense concolorous pile; basal joint short, swollen; joints 3-4, 8-9 approximately equal; 5-6 equal, longer than 3; 7 longer than 5; 10 shorter than 3; 11 shorter, cylindrical. Prothorax broad, slightly narrower than elytra at shoulders, sides slightly curved, constricted anteriorly and posteriorly; disc bright red, irregular, with a highly nitid elongate low median tubercle; punctures large and sparse; anterior margin strongly marginate, coarsely and closely punctate, black; posterior margin lightly marginate, coarsely punctate, black; sides lightly rounded. Scutellum small, triangular. Elytra narrow, slightly constricted from below shoulder, very coarsely, deeply and closely punctate, dark fuscous with a longitudinal median costa of creamy-yellow extending to apex; apices broadly and strongly rounded from lateral margin, with a small tooth-like spine on suture. Legs long and slender. Anterior pair fuliginous; femora swollen, reddish at base, with sparse pile; tibiae slender, densely clothed with pile mixed with long hairs; tarsi stout, hairy. Middle pair: femora swollen, strongly reddish at base, pilose; tibiae strongly swollen (almost clavate) apically, with sparse hairs; tarsi short, stout, hairy. Posterior pair: femora slender, elongate, extending past apex of elytra, orange-yellow over basal 1, with sparse hairs; tibiae very long, slender, wholly fuliginous, very hairy; tarsi long, slender, glistening white, apical joint and claws fuscous, hairy. Under surface: thorax densely and coarsely punctate, with scattered hairs; pleura with dense white clothing; abdominal segments reddish, subnitid, finely punctate, with a sparse clothing of scattered hairs. Long. 7 mm.; lat. 1.5 mm.

Hab.—New South Wales: Rope's Creek (type). Queensland: Mt. Coot-tha (H. Hacker), 8 November 1924; Mt. Tambourine (W. H. Davidson). Holotype in Australian Museum.

This beautiful little species appears to be somewhat variable; in the specimen from Mt. Coot-tha only the basal portion of the costa is yellow; in that from Mt. Tambourine (which may be the female) the elytra are wholly unicolorous and the prothorax entirely black.

This species is much smaller and of very different coloration to M. cothurnatus Er., and lacks the oval glassy spot of M. semivitreus Pasc. The white coloration of the two penultimate joints of the antennae gives the insect an appearance very different from any other member of the genus.

Genus Eroschema Pascoe, 1859. Eroschema apicipenne sp. nov.

Slender, stramineous-yellow, apices of elytra and antennae black; legs varied. *Head* medium, narrower than prothorax at anterior margin, densely clothed with long yellow pile; eyes large, prominent, coarsely granulate; antennary tubercles full, prominent. *Antennae* shorter than body; basal joint stout, obconical; joint 3 as long as basal; 4 shorter than 3; 5 as long as 3; 6-11 subequal, slightly shorter than 5; joints 1-4 with erect hairs; 5-11 slender, tapering, pilose. *Prothorax* longer than broad,

expanded into stout lateral spines, clothed with dense yellow pile; disc tuberculate, strongly constricted before and (slightly less) behind; a black longitudinal stripe along side of prothorax passing over upper surface of lateral spine. Scutellum narrowly triangular (apparently), densely clothed with long erect pile obscuring shape. Elytra narrow, parallel, apices rounding to a blunt sutural angle; disc with 3 concolorous raised, nitid costae; interspaces shallowly reticulate-punctate; suture and lateral margin strongly marginate; basal third clothed with long yellow pile, then almost glabrous to apical $\frac{1}{8}$ which is black, nitid; apices fringed with short black hairs. Legs: femora slightly thickened, 3rd longest, 1st and 2nd yellow, black at base and apex, 3rd wholly black; tibiae stout, black, with long golden pubescence towards and around apex; tarsi black, fringed with short yellow hairs. Under surface black, nitid. Long. 11 mm.; lat. 2.5 mm.

Hab.—Queensland, Port Denison. Holotype (unique) in Australian Museum.

Comes nearest to *E. affine* Pascoe, but differs from that species in the narrower and much less basally-expanded prothorax, the nitid black elytral apices, and the particoloured first and second femora.

Genus Chaodalis Pascoe, 1865. Chaodalis taylori sp. nov.

- Q. Robust, orange-yellow, a stripe on each side of prothorax, legs, antennae and under surface black. Head small, narrower than prothorax; eyes large, prominent, finely granulate; vertex with a narrowly triangular area of bright orange pile; area of frons between lower lobes of eyes and clypeal suture densely clothed with long, coarse, stramineous hair: antennary tubercles prominent, acute. shorter than body; basal joint small, weak, obconical; joints 3-7 broadly expanded, cordate, flattened; 8-10 similar, very much narrower, decreasing in size; apical joint narrowly ovoid. Prothorax as long as broad, strongly constricted anteriorly, with a strong and broad tooth or spine; disc with a conspicuous raised median line and 2 small obtuse tubercles on discal edge above lateral tooth, the posterior the larger; centre of disc with a triangular area of close velvety orange pile, sides black, velvety. Scutellum triangular, with short pile. Elytra flattened and somewhat dilated posteriorly; each elytron with 4 weak longitudinal costae; lateral margin strongly marginate; base very finely and sparsely punctate; remainder apparently impunctate, clothed throughout with a very fine, close pubescence mixed with longer fine golden hairs, densest at base. Legs black, subnitid, sparsely pilose. Under surface black, finely and closely punctate throughout, with a narrow lunulate band of dull white pubescence on edge of each abdominal segment. Long. 18 mm.; lat. 6 mm.
- 3. Smaller; antennae as long as body; joints more elongate, expanded on one side only of apex, decreasing progressively in width, wholly pubescent; joints 3-4 equal, shorter than 5; 5-11 subequal; centre of elytra rich dark brown with a yellow border around margin, broadest apically; under surface glabrous, lacking lunulate pubescent abdominal patches. Long. 13 mm.; lat. 4 mm.

I have seen a pair of this species taken *in cop*. in the late H. J. Carter's collection, so have no hesitation in associating the specimens before me as sexes.

Differs from *C. macleayi* Pascoe in the strongly marked colour pattern of the prothorax, which completely reverses that of Pascoe's species, and in the much coarser sculpture of the elytra.

Genus Pytheus Newman, 1840. Pytheus castaneus sp. nov.

Slender, chestnut-brown, costae pale, head, antennae, and legs black. *Head* small, narrower than prothorax; vertex coarsely and sparsely punctate; from with very large shallow contiguous punctures; cheeks prominent, finely and closely punctate; eyes

small, finely granulate; antennary tubercles scarcely developed. Antennae shorter than body, not passing beyond hind coxae, black; basal joint obconical, nitid, sparsely punctate, with erect hairs; joints 3-4 short, rounded, nitid, with erect hairs, equal; 5-6 longer than 3, equal; 7 longer than 5, 8-11 subequal, flattened, progressively decreasing in width; apical joint obtusely pointed; joints 5-11 dull, pilose. Prothorax elongate, cylindrical, sides almost straight, marginate. Scutellum narrowly triangular, finely punctate. Elytra narrow, regularly tapering to apex; apices rounded; disc coarsely reticulate-punctate; 2 raised costae on each elytron, the inner rising inside prothoracic breadth, curving slightly outwards towards shoulders and then continuing straight to apex where it curves sharply inwards and joins suture; the 2nd costa rising at shoulder and continuing almost parallel to lateral margin which it joins at apex; suture very narrowly marginate, concolorous; 1st costa rich stramineus clouded with black about 3; lateral margin widely marginate, concolorous; colour on disc darkest along sutural area; sparsely clothed with fine erect hairs throughout. Legs black, femora clavate, glabrous, nitid; tibiae short, stout, with erect hairs; tarsi apically wide. Under surface dark brown, subnitid, finely punctate. Long. 8 mm.; lat. 2 mm.

Hab.—Queensland: Bunya Mts. (N. Geary), 4 January 1938. Holotype (unique) in Australian Museum.

Nearest in form and elytral sculpture to P. rugosus Newman, but differs markedly in the shape and sculpture of the prothorax, rounded elytral apices, and colour pattern.

Genus Titurius Pascoe, 1875. Titurius intonsodorsalis sp. nov.

Slender, light-brown with purplish lustre near base, head and prothorax black. Head large and broad, as wide as prothorax, coarsely rugoso-punctate; eyes small, finely granulate, deeply emarginate; antennary tubercles small, inconspicuous. Antennae dark brown, short, reaching to hind coxae, stout; basal joint short, obconical; joint 2 relatively large, rounded; joints 3-4 equal, shorter than 5; joints 6-7 equal, shorter than 5, slightly longer than 3; joints 8-11 subequal, shorter than 6; 6-11 thickening progressively to apex, which is broad and rounded. Prothorax regularly oval, sides evenly rounded, expanded very slightly at basal \(\frac{1}{3}\), nitid, coarsely rugoso-punctate, laterally clothed with dense felted grey pile. Elytra narrow, parallel-sided, slightly constricted about basal 4, apices rounded; coarsely and regularly punctate over apical 3, punctures near suture tending to form regular parallel lines; subnitid, glabrous with the exception of a line of dense grey pile along suture. Legs dark ferruginous; first and second femora strongly clavate, hind longer, swelling gradually to apex, nitid; tibiae stout, linear, 1st and 2nd with short scattered hairs, hind not apically spined; tarsi narrow. Under surface dark brown, finely punctate, nitid, laterally clothed with dense grey pile throughout. Long. 8 mm.; lat. 1.5 mm.

Hab.—Queensland: Brisbane. Holotype (unique) in Australian Museum.

I believe the specimen to be a female. It differs from *T. calcaratus* Pascoe in the form of the prothorax, more slender build, more constricted elytra, together with the sparser and less regular puncturation and the stouter antennae. Pascoe suggests that the apical spine on the tibia in *T. calcaratus* might be a sexual character, but it is present in both sexes of that and the following species.

Titurius salebrosus sp. nov.

Q. Slender, red-brown shading to blackish near apex; head and prothorax black. Head relatively large, constricted basally, narrower than prothorax, nitid, coarsely and closely punctate; antennary tubercles low, transverse. Antennae shorter than body, reaching behind hind coxae, black; basal joint obconical, finely punctate, nitid, with fine erect hairs; joints 3-4 equal, shorter than 5; 5-6 equal; 7 shorter than 5, longer than 3; 8-11 equal, as long as 3; 6-11 broadening progressively; 2-11 finely and closely punctate, dull, pilose. Prothorax very coarsely and irregularly punctate, with fine erect hairs; longer than wide, strongly tuberculate laterally; constricted strongly behind anterior margin; posterior area slightly constricted, dorsally depressed; disc with several

obscure tubercles; anterior border widely marginate, posterior immarginate. Scutellum small, rounded, with grey pile. Elytra narrow parallel-sided, very slightly constricted about middle; apices rounded; disc with an obscure raised costa running from shoulder almost to apex; interspace between suture and costa regularly and deeply seriate-punctate, between costa and lateral declivity coarsely and regularly punctate, laterally finely and closely punctate; a longitudinal stripe of pale grey pile along suture; remainder of elytra with sparse fine hairs. Legs dark red-brown; 1st and 2nd coxae short, clavate, finely punctate; 3rd long, slender, expanding gradually to apex, coarsely and sparsely punctate with fine erect hairs; hind tibia with a long, projecting apical spine; 1st and 2nd tibiae shorter than 3rd, punctate, with erect hairs, densest near apex; tarsi narrow, black. Under surface concolorous, laterally pilose throughout. Long, 9 mm.; lat, 2 mm.

 \circ . Similar to female; antennae longer than body; joints 3-4 equal, shorter than 5; 5-11 subequal; prothoracic punctures sparser; hind tibiae apically spurred. Long. 6 mm.; lat. 1 (+) mm.

Hab.—New South Wales: Kurrajong (Masters), Hazelbrook (J. Armstrong). Holotype Q and allotype Q in Australian Museum.

Superficially close to the previous species, but differs in elytral sculpture, thoracic form and sculpture, antennae, etc.

Genus Pempsamacra Newman, 1838.

Pempsamacra carteri sp. nov.

- Q. Slender, bright cinnamon-brown clouded with black. Head small, finely rugosopunctate; eyes small, very finely granulate; antennary tubercles small, not prominent. Antennae not reaching to hind coxae; basal joint elongate-cylindrical, coarsely rugosopunctate; joint 3 longer than 4, slightly longer than 5; 5 apically expanded on one side; 6-11 flattened and bilaterally expanded to form a broad club; 3-6 subnitid; 7-11 finely punctate. Prothorax narrow, slightly wider than head, coarsely rugoso-punctate, constricted anteriorly and posteriorly, sides evenly rounded; disc with 2 elongate, parallel, low tubercles, depressed between, and a strong longitudinal lateral ridge. Elytra narrow, broader than prothorax, parallel-sided, tapering to apices; apices narrowly rounded, sharply depressed dorsally; coarsely rugoso-punctate throughout, puncturation coarsest towards base; disc with 2 obscure raised longitudinal costae; no apparent adherent scales. Scutellum broadly triangular, surrounded by a pale nitid area on elytra extending backwards along suture for a short distance. Legs dark chestnutbrown; femora narrowly clavate, finely and closely punctate, with scattered silvery scales especially dense on inside; tibiae slender, finely punctate; tarsi narrow. Under surface sparsely clothed with small silvery scales largely concentrated towards sides of abdominal segments. Long. 9 mm.; lat. 2 mm.
 - 3. Similar to female, but smaller. Long. 7.5 mm.; lat. 2 (-) mm.

Hab.—S. Queensland: Wyberba (E. Sutton), on Paper-bark Tea Tree. Holotype \circ and allotype \circ in Australian Museum.

Somewhat similar in general appearance to *P. argentata* Pascoe, but entirely lacking the dense clothing of golden scales upon the elytra. There is no indication in a series of 5 specimens that this absence of adherent scales is due to abrasion or other cause, and appears to be normal. The form of the prothorax and absence of the dark elytral spots separate it from *P. tillides* Newman.

Named for the late H. J. Carter at Mr. Sutton's request.

Genus Nungena nov.

Slender medium sized insects. Antennae situated laterally in front of a deep transverse suture on frons and in advance of eyes; eyes finely granulose, almost or completely divided into two distinct parts; antennary tubercles very large, broad, strongly transverse, approximate. Prothorax strongly tuberculate on disc. Elytra parallel-sided, not costate, unarmed. Legs: femora clavate; tibiae stout; first joint of tarsi longer than 2–3 combined.

Genotype: the following species.

Nungena binocularis sp. nov. (Figure 8.)

Slender, pale, ferruginous, darker on head and prothorax. Head with sparse erect hairs, broad, short, rounded, constricted behind, a deep transverse depression or groove in front of eyes and behind antennary tubercles; median impressed line extending from this groove to clypeal suture; antennary tubercles very large, swollen, transverse, approximate; eyes small, finely granulate, each divided into 2 parts connected only by a fine black line (not faceted), the upper somewhat broadly comma-shaped, the lower round, a broad shallow depression between the two portions. Antennae slender, longer than body, dark ferruginous, coarsely punctate, with erect hairs or setae; basal joint elongate, cylindrical, swollen slightly to apex, slightly curved, attachment to tubercle extremely fine; joints 3-4 subequal, about same length as 1; 5 longer than 3; 6-7 subequal, as long as 3; 8-9 subequal, shorter than 3; 10 shorter than 8; terminal joint wanting. Prothorax longer than wide at broadest point; disc strongly swollen in 2 large rounded tubercles, separated by a deep median sulcus extending down over sides; strongly constricted anteriorly and posteriorly; sparsely punctate on tuberculate area, closely on constricted areas; subnitid with sparse erect hairs. Scutellum small, rounded. Elytra slightly wider than prothorax at broadest point, parallel-sided, rounding sharply to apex; apices narrowly rounded, unarmed; stramineous, darker on suture, lateral margin and apex, finely and sparsely punctate, punctures densest on base and lateral declivity. Legs ferruginous; femora irregularly clavate, sparsely punctate, glabrous; tibiae stout, densely and finely punctate with erect hairs; tarsi with 1st joint stout, elongate, cylindrical, 4 times length of 2, punctate, with erect hairs, joint 2 short, stout, punctate, claws slender. Under surface finely punctate; sterna with sparse recumbent pile; abdominal segments glabrous, black. Long. 8 mm.; lat. 1.5 (+) mm.

Hab.—Queensland: Condamine (N. Geary), 26 January 1939. Holotype (unique) in Australian Museum.

A very remarkable little species, of which I am unable to indicate the systematic position, except that it falls in the Cerambycinae. The only genus known to me in which the eyes are almost or entirely divided into two parts is *Tetraglenes* Newman, from the East Indies, with which the present species seems to have but remote affinity. It has, therefore, been considered necessary to erect a new genus for its reception. Even when examined under a high power of the microscope the extremely narrow black line, the only indication of connection between the lobes, appears wholly without facets. The antennary tubercles are completely separated from the eyes by the transverse frontal sulcus, and are so large and tumid that they completely cover the vertex of the head, and so transverse that the antennae appear to be situated laterally.

While this paper was in galley proof I received from my young friend Master Roy Pullen three further specimens of this remarkable species taken at Armidale, New South Wales, together with several branches infested with larvae. It is therefore possible to add further particulars. The holotype, described above, is a female. Another female in the series measures $8\frac{1}{2}$ mm. The missing terminal joint of the antenna is slender and slightly curved, equal in length to 9 and longer than 10.

3. Smaller and darker than Q; antennae longer. Long. $7\frac{1}{2}$ mm.

Hab.—Armidale, New South Wales, 6 May, 1942. Allotype in Australian Museum.

Host Plant: "Cypress Pine." The larval tunnels are broad and shallow, and situated immediately under the bark, but a few penetrate the wood of the branch—these are smaller and more circular.

Genus Stenellipsis Bates, 1874. Stenellipsis cruciata Breuning.

This little species was originally described by Breuning with the somewhat wide locality of 'Queensland'. There are a number of specimens in the Museum collection with the undermentioned localities.

Hab.—New South Wales: Comboyne (H. J. Davidson), 1937; Clarence River (A. M. Lea). Queensland: Macpherson Range.

Stenellipsis spencei sp. nov.

Robust, piceus varied with buff pile. Head large, broad (as wide as prothorax), widely and shallowly concave between antennary tubercles; impressed median line very indefinite; eyes small, not prominent, deeply emarginate; frons with whitish pubescence; antennary tubercles low, transverse. Antennae stout, as long as body, dull ferruginous; basal joint clavate, notched at base on inner side; joints 3-4 subequal, longer than 1 (= 1 and 2 together); 5-11 progressively decreasing in length and thickness; 3-11 with a pale basal band. Prothorax longer than wide, cylindrical, slightly and regularly rounded on sides, very finely and closely punctate, densely pruinose with small irregular patches of a pale shade. Elytra wider than prothorax, gradually tapering, rounding to apex; apex acutely rounded; shoulders prominent; disk deeply and regularly punctate at base; base densely clothed with yellowish pile forming a low crest between suture and shoulder; a broad pilose fascia of simliar colour crossing elytron a little before apex; central area of disc pruinose with a purplish lustre varied with small linear whitish areas; disc strongly depressed behind pilose area at about 1/3. Legs brown; femora basally banded with yellow; front femora broadly clavate, middle slightly clavate, hind swollen. Under surface black, subnitid, finely punctate; 1st abdominal segment coarsely punctate. Long. 4 mm. Several specimens long. 2.5 mm. are possibly males, but do not differ save that the basal clothing is more extensive.

Hab.—New South Wales: Tuggerah (Dr. K. K. Spence), October 1934 (type); Lane Cove (Dr. K. K. Spence), October 1934; Ulong, E. Dorrigo (W. Heron); Galston (W. W. Froggatt); Gosford (W. W. Froggatt); and Sydney. Holotype in Australian Museum.

Easily distinguished from *S. cruciata* Breuning by the absence of the pale coloured X mark on the elytra which is replaced by a pale fascia. The more rugose appearance will also aid in identification. A large series is very consistent in coloration, but in some specimens the legs are wholly dark.

Named in honour of Dr. K. K. Spence, of Sydney, to whose skill as a collector, especially of small forms, many Australian workers are indebted.

Genus Karadinia nov.

Large, robust insects. *Head* medium, eyes finely granulate, not strongly emarginate; cheeks prominent; antennary tubercles transverse. *Antennae* stout; basal joint elongate, broadening regularly to apex; joint 3 longest, remainder progressively decreasing; joint 6 with stout apical spine. *Thorax* strongly transverse, tuberculate on disc, laterally spined. *Elytra* broad, parallel-sided. *Legs*: femora strongly clavate with a spine-like structure, welded throughout its length to extreme base of petiole.

Genotype: the following species.

Karadinia nubila sp. nov. (Figure 9.)

Robust, fuliginous varied with buff and small black spots ringed with white. Head medium, narrower than prothorax; an impressed median line extending from base to clypeal suture; clypeal suture irregular, marginate; cheeks prominent; vertex impunctate save for a few large punctures around eyes; frons with a few small scattered punctures; eyes medium, finely granulate, not strongly marginate, fringed (especially anteriorly) with buff pile; antennary tubercles stout, transverse, prominent. Antennae stout, slightly longer than body, brown, pubescent, banded except for apical joint with white about middle of each joint; basal joint elongate, broadening regularly to apex, sparsely punctured; joint 3 longer than basal; joint 4 shorter than 3 (about 3 length); remaining joints progressively decreasing in length; joint 6 with a stout nitid black apical spine projecting almost at right angles. Prothorax strongly transverse (breadth of prothorax including lateral spines slightly greater than length of head and prothorax combined); a broad, acutely pointed lateral spine at middle with a small obtuse tubercle above and somewhat in front of it; disc strongly and irregularly tuberculate, with large scattered punctures; central basal tubercle on this area high, smooth, regular elongate--ovoid; thoracic margins almost straight, anterior slightly, posterior strongly marginate; thorax constricted before and behind tuberculate area, with many large irregularly dispersed punctures. Scutellum broadly costate, truncate behind, pilose. Elytra much broader than prothorax at widest, parallel-sided, somewhat roundly truncate at apex; shoulders prominent; base sparsely punctate and with small tubercles forming 2 short longitudinal ridges between shoulder and suture; an irregular shallow depression at about 1/3, remainder of elytra smooth, densely pilose and (apparently) almost or quite impunctate; extreme base dark brown with a few large punctures narrowly ringed with white; behind this an irregular wavy black transverse band (broken at centre), narrowly and somewhat irregularly margined with white behind; behind this again and extending to apex is a large irregular area of buff pile clouded with brown crossed at about 3 by a zig-zag transverse black line and a large lateral black patch margined posteriorly with white; this area is liberally sprinkled with small, round, black pilose spots, each narrowly margined with white. Legs blackishbrown: femora stout, broadly clavate, petiole slender, elongate, lightly marbled with grey pubescence, subnitid, petiole with a black, nitid, spine-like structure slightly projecting, but firmly welded throughout its length to the extreme base of shaft; tibiae stout, banded centrally with greyish-white pubescence, fore-tibiae somewhat expanded apically, sparsely punctate; tarsi broad, black, margined with black bristles and white hairs, claws black. Under surface black, subnitid, with a sparse greyish pubescence and a few spots of buff pile; abdominal segments subnitid, with sparse greyish pubescence (especially laterally) and a few small marginal spots of buff pile on apical segments. Long. 22 mm.; lat. 8 mm.

Hab.—Queensland: Carnarvon Ranges (N. Geary), 16 January 1940. Holotype (unique) in Australian Museum.

Host plant.—Mr. Geary informs me that this insect was bred from a pupa found in the branch of a wattle (Acacia sp.); a second pupa died.

Genus Ancita Thomson, 1864. Ancita albopicta sp. nov. (Figure 10.)

Robust, piceous, densely clothed with close dark-ferruginous pile varied on prothorax and elytra with patches of very dense snowy-white pile; antennae banded with white. Head broad, as wide as prothorax exclusive of lateral spines; vertex full, strongly convex, finely and closely punctate, densely pilose; an obscure median line extending from apex to clypeal suture; clypeal suture irregular, recurved, widely marginate; eyes small, granulation moderately fine, cheeks not prominent; frons coarsely pilose with large scattered punctures; antennary tubercles strongly transverse, moderately prominent. Antennae longer than body, stout, pilose, fringed beneath with long hairs; basal joint stout, regularly obovate, finely and closely punctate; joint 3 long (about ½ longer than 4), remaining joints progressively decreasing in length; apical joint short, slender; joints, 4, 6, 8 and 10 basally banded with white. Prothorax transverse, wider than long, acutely spined laterally; disc naked, tuberculate, nitid, lateral tubercles low, densely and coarsely punctate, median rather high and glossy; a narrow median pubescent stripe extending from base to apex, dividing at centre to surround base of median tubercle, anterior portion buff, posterior snowy-white; a broad longitudinal lateral curved stripe above lateral spine; sides anteriorly to lateral spine coarsely punctate; anterior thoracic border sinuate, not marginate, posterior sinuate, marginate. Scutellum scutate, broadly rounded behind, with coarse grey pubescence and a broad longitudinal naked line. Elytra broad, considerably wider than prothorax, gradually tapering; apices rounded, shoulders prominent, coarsely pubescent with naked areas of derm appearing as irregular spots and patches; base coarsely rugose, punctate central area with large, sparse punctures concentrated (apparently) mainly on naked areas; apical 4 almost impunctate; a short diagonal line inclined to suture about basal 1, a large irregular patch about centre not reaching suture or lateral margin, and a small cordate spot near apex, all of dense, velvety, snowy-white pile. Legs stout, brown, with long whitish pubescence; femora strongly clavate. Under surface: sterna coarsely and sparsely punctate, with coarse mixed grey and brown pubescence; abdominal segments

with close grey and brown pile, a lateral longitudinal white pilose stripe; apical segment with a median white pilose area. Long. 15 mm.; lat. 6 mm.

Hab.—Queensland: Rockhampton. Holotype (unique) in Australian Museum.

A very large robust species which, by reason of its very distinct colour-pattern of brown and white pubescence, cannot be confused with any of its described congenors. The nitid areas on the elytra are not, I think, due to abrasion as they are too regular in form and distribution.

Genus Temnosternus White, 1855.

Temnosternus catulus sp. nov.

Robust, black clothed with greenish pile varied with yellow. Head not wider than prothorax at anterior margin; apex sparsely and coarsely punctate, short impressed median line: frons and cheeks clothed with yellow pile; eyes large, emarginate, coarsely granulate, with a narrow yellow pilose edging; antennary tubercles small, inconspicuous. Antennae longer than body, stout, finely punctate, pruinose with a sparse fringe of black hairs beneath; basal joint elongate, cylindrical, centrally swollen, very closely and finely punctate, sparsely pilose; joint 4 longer than 3; 5 shorter than 3; 5-11 becoming progressively shorter. Prothorax considerably broader than long, wider at base than apex, sides regularly curved, with an acute spine about half-way; anteriorly and posteriorly marginate; disc with a broad, naked, subnitid longitudinal median area with, on either side, a broad stripe of dense yellow pile, and an almost naked stripe on side of thorax embracing lateral spine; median and lateral naked areas with very large sparse punctures. Scutellum small, truncate behind. Elytra considerably wider at base than prothorax at widest, tapering sharply to apex; apices obliquely truncate, forming a blunt lateral spine; clothed with thin greenish pile with irregular patches of dense yellow pile placed rather laterally, largest near apex, but a few very small yellow spots close to suture near middle; disc coarsely and sparsely punctate over basal 3; a broad, raised, longitudinal costa extending from centre of base to about \(\frac{3}{4} \), a row of small shining tubercles extends costa across base almost to scutellum. Legs brown, stout, femora clavate, nitid, sparsely pilose; tibiae pilose, hairy at apex; tarsi broad, hairy. Under surface wholly clothed with dense buff pile. Long. 11 mm.; lat. 4 mm.

Hab.—Queensland: Southport (H. Hacker), 26 January 1939; Tambourine Mt. (H. Hacker). New South Wales: Tweed River. Holotype in Queensland Museum.

Smaller specimens measuring 9.5 mm. in length and 3 mm. broad may be males, but I can detect no differences in structure or clothing. The elytral costae in some specimens are naked and shining, a condition due possibly to abrasion.

A distinctive species coming possibly close to *T. vitulus* Pasc., but readily separated from that insect by its elytral clothing and the elytral costae.

Temnosternus flavolineatus sp. nov.

Q. Slender, dark ferruginous, clothed with close light-brown pubescence. *Head* relatively broad, but narrower than anterior border of prothorax, apex with a shallow impressed median line, clothed with brown pile, antennary bases prominent, entire frons and antennary bases densely clothed with yellow-buff pile, cheeks and clypeus with thinner brown pile. *Antennae* slender, slightly longer than body, clothed with sparse, fine pubescence; basal joint swollen tending to clavate; joint 4 scarcely longer than 3; 5-11 equal, shorter than 3; joints 3-10 sparsely fringed beneath with black hairs. *Prothorax* about \(\frac{1}{3}\) broader than long, approximately rectangular, angles not prominent, strongly marginate on anterior and posterior borders, a stout lateral spine about middle, disc coarsely punctate; a median longitudinal area of naked reddishbrown derm, on each side of this an elongate ovoid patch of bright golden-yellow pubescence; remainder of disc with sparse brown pile, lateral angles coarsely punctate. *Scutellum* scutiform with an impressed median line, lightly clothed with brown pubescence. *Elytra* gradually tapering to apical \(\frac{1}{3}\), abruptly to apex, broader at base

than prothorax at widest, with sparse but evenly distributed punctures throughout, a few small shining black tubercles near scutellum, a tendency to a raised costa parallel to but at some distance from suture, but converging towards it slightly at apical 1/3, then diverging; lateral margin wholly and suture apically marginate; apices diagonally truncate producing a broad external point; elytra clothed throughout with close brown pubescence varied with narrow linear areas of dense golden-yellow pubescence; taking the pattern over both elytra, these yellow lines are: a somewhat roughly O-shaped marking at base surrounding, but distant from, scutellum, on its lower portion the line divides and then reunites so as to form two small lightly pubescent dark areas within the circumference of the circle; at centre of elytra an X-shaped mark with upper limbs wider than lower; at apex two figures like opposed but broken F's, their stems being pale cream in colour and extending to extreme apical point. brown, clothed with sparse greyish pile; tibiae encircled with long golden hairs at apex. Lower surface: sterna with large patches of golden-yellow pubescence on sides; abdominal segments, with the exception of terminal, each with two large yellow densely pubescent patches margined with close grey-brown pile. Long. 10.5 mm.; lat. 3 mm. (type). Another female long. 12 mm.; lat. 5.5 mm.

3. Similar to female but smaller and more slender; antennae longer than body, eyes larger; anterior angles of prothorax more prominent, flattened and slightly upturned; yellow markings differing slightly; basal more shield-shaped with procurved are connecting sides. Area extending from elytral base to lower limbs of X mark (including lateral areas) coarsely punctate; apical area impunctate. Long. 8 mm.; lat. 2 mm.

Hab.—Queensland: Mt. Glorious (H. Hacker), 8 September 1937 (type); Mt. Gipps (H. Hacker), January 1930; Kuranda (A. J. Turner), 30 September 1929. Holotype Q and allotype Q in Queensland Museum.

This insect bears little resemblance to any other described species.

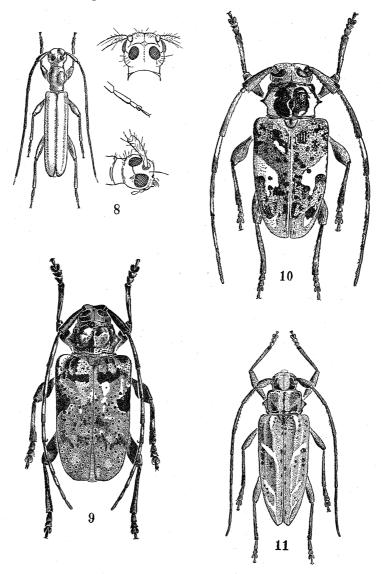
Temnosternus niveoscriptus sp. nov. (Figure 11.)

3. Moderately robust, pitchy, clothed with dense buff pile varied with white linear pattern. Head narrower than anterior border of prothorax, finely and irregularly punctate on exposed derm; a broad area, bisected by a deep, narrow, median line extending from prothoracic margin across vertex, laterally contiguous with eyes, covering antennary tubercles, and continuing over frons to clypeal suture; clothed with pale yellow-buff pile; area behind eyes naked, finely and sparsely punctate, subnitid; a lateral longitudinal pale stripe below eye. Antennae slender, reaching to extremity of elytra; basal joint clavate, clothed with fine sparse pubescence; remaining joints finely pubescent; joints 2-9 fringed beneath with sparse black hairs; joint 3 3 length of 4; 5-11 equal, each about half length of 3. Prothorax roughly rectangular, broader than long; anterior angles strongly produced, flattened, slightly upturned, tipped with black, nitid; a stout and acute lateral spine at middle; disc with a broad naked median longitudinal line, the derm pitchy, nitid; on either side of this a broad longitudinal band of light buff; between this and anterior angles a darker area with coarse scattered punctures showing through pile; on posterior margin of this area an isosceles triangle of naked derm with a few large punctures; sides with bright buff pubescence; a narrow longitudinal area extending from below anterior angle with many minute glossy tubercles. Scutellum truncate-triangular, clothed with buff pile; 2 naked patches near centre. Elytra broader than prothorax, parallel-sided to \(^3\) length, where they taper sharply to apex; apices diagonally truncate; the whole of the elytra densely clothed with buff pile marked with linear lateral markings of dense snowy-white pile; these markings are (on right elytron-reversed on left): a short longitudinal stripe on line extending from anterior margin to about \(\frac{1}{3} \) towards centre of elytron; a curved linear marking extending from lateral flexure at about 13 and extending towards, but not reaching, suture at about ½ elytral length, widest laterally, tapering towards suture; an F-shaped mark (or coalesced marks) extending over most of apical 1/3; basal 1/8 of elytron with numerous glossy-black, irregularly dispersed tubercles; remainder of elytron with sparse, large, black punctures each surrounded by a naked black nitid area mainly

concentrated in middle of elytron, but tending to form lines on suture and along lateral flexure, smaller punctures along lateral margin; a strong longitudinal raised costa nearly parallel to but somewhat distant from suture extending from basal white line almost to apex; between this and lateral margin another less distinct and broadly rounded raised costa reaching to about $\frac{2}{3}$. Legs clothed with sparse buff pubescence; femora somewhat clavate. Under surface densely clothed with bright buff pile with a central and two lateral longitudinal dark brown, subnitid, longitudinal stripes extending from base of abdomen to anterior margin of terminal abdominal segment; abdominal segments with scattered large black punctures. Long. 13 mm.

Hab.—Queensland: Mt. Gipps (H. Hacker), 20 April 1930. Holotype (unique) in Queensland Museum.

In colour and pattern this insect is very distinctive and bears no resemblance to any described Australian species.



Figures 8-11.

8. Nungena binocularis, n. sp. 9. Karadinia nubila, n. sp. 10. Ancita albopicta, n. sp. 11. Temnosternus niveoscriptus, n. sp. [N. B. Adams, del.

Temnosternus quadrituberculatus sp. nov.

Robust, dark brown densely clothed with close fuscous pile varied with pale fawn. Head much narrower than prothorax; a broad band of pale fawn silky pubescence extending from base to (and including) clypeus and laterally to eyes and interior faces of antennary tubercles, pubescent band divided by a naked median longitudinal line from base to clypeal suture with a small widened area at junction with prothorax; vertex with 4 or 5 large nitid punctures, angulate between antennary bases; frons depressed, with a few large punctures revealing the nitid derm beneath; sides of head dark brown, pilose; antennary tubercles stout, prominent, flattened on inner faces; eyes relatively small, finely granulate. Antennae as long as body, brown, lightly pubescent; joints 3-9 sparsely fringed with black hairs beneath; joints slightly greyish basally; basal joint stout, clavate; joint 3 equal to 4; remaining joints much shorter, approximately equal. Prothorax strongly transverse with a stout lateral spine about middle, above this and between it and anterior margin a strong obtuse tubercle on edge of disc; anterior border narrowly, posterior widely marginate; disc with a strongly raised longitudinal median line, highest in centre, and with 2 separated naked areas of nitid derm; centrally depressed on either side of median line, depressions with a few large punctures, sides coarsely and rugosely punctate; a broad longitudinal band of pale fawn pubescence along centre of disc (continuing that on head) and extending narrowly along anterior margin; sides brown with a narrow longitudinal lateral fawn stripe crossing under surface of lateral spine. Scutellum broadly cordate, rounded behind, clothed with dense fawn pubescence and a closely defined nitid black longitudinal median line. Elytra broad (as wide as greatest prothoracic width), tapering gradually to apex; apices obliquely truncate, forming an exterior angle; disc with a raised nitid black costa running roughly parallel to suture, but converging sharply towards it at about 4 length and again less strongly at about 3, just beyond this point it junctions with a less distinctly defined lateral costa arising at about 1 and becoming almost obsolete beyond junction; disc with sparse large punctures, strongest and most numerous basally and laterally; suture and lateral margin strongly marginate, suture with a single row of large shallow black punctures; area along suture with patches of fawn pile, basal and central broadly diamond-shaped, the apical irregularly narrower. Legs light-brown, pilose; femora with a pale band before apex; tibiae with long white hairs apically; tarsi broad, with long pale hairs. Under surface densely clothed with close, pale pile; centre of abdominal segments castaneous, lateral margins lightly marked with the same tint. Long. 15 mm.; lat. 5 mm.

Hab.—Queensland: Imbil (A. R. Brimblecome), 1938. Holotype \circ in Queensland Museum.

Comes close to the preceding species, but differs strongly in the elytral costae, colour and pattern, and in the abdominal clothing and the tuberculate prothorax. A very distinct species, unlikely to be confused with any other.

Temnosternus undulatus sp. nov.

Moderately robust, derm black, densely clothed with light brown pile varied with zig-zag lines and patches of pale yellow-buff. Head relatively narrow, with a broad longitudinal band of dense dull yellowish pile extending from base to (and covering) clypeus and laterally clothing interior planes of antennary tubercles, divided by a distinct naked longitudinal line not reaching to clypeal suture; sides brown; apex with two irregular lines of large punctures extending over frons; antennary tubercles not prominent. Antennae as long as body, light brown, sparsely pilose; joints 3-9 with scattered long black hairs beneath; basal joint narrowly clavate; joints 3-4 equal; 5 much shorter than 4, longer than 6; remaining joints becoming progressively shorter; a tendency to a pale ring basally and apically on each joint. Prothorax transverse, with a strong, slightly upturned lateral spine about middle; anterior discal angles blunt, with a short, deep impressed groove running backwards from each; anterior and posterior borders narrowly marginate; a deep impressed transverse groove or fold running parallel with and in front of posterior margin; a broad longitudinal band

of dense yellow pile with a naked longitudinal median line on centre of disc (continuous with that of head); sides brown with 2 narrow lateral pale stripes separated by lateral spine; disc with 2 shallow depressed areas, each with 5-6 large punctures; sides coarsely rugoso-punctate, especially towards antenior margin. Scutellum broadly and shallowly cordate, densely clothed with yellow pile, a nitid black median line not reaching to apex. Elytra slightly broader than prothorax including lateral spines, tapering gradually to apex; apices concave, truncate, forming an acute external angle; raised costa almost obsolete and conspicuous only (possibly due to abrasion) at 4 where it approaches the suture slightly; suture and lateral margin narrowly marginate; coarsely and sparsely punctured throughout, but especially strongly at base; a few small glossy tubercles on shoulder; clothed throughout with close light-brown pile varied with intricate zig-zag linear markings and irregular patches of pale yellow-fawn pile, especially at $\frac{1}{3}$, $\frac{2}{3}$, and just before apex. Legs dark brown; femora with a pale ring at base and near apex; tibiae narrow with a pale ring towards apex; tarsi narrow, with sparse pale hairs. Under surface clothed with pale buff pubescence, with small scattered brown spots; abdominal segments (except apical) brown and nitid in centre with a small lateral dark area on each segment. Long. 15 mm.; lat. 4 mm.

Hab.—Queensland: Cairns. Holotype in Australian Museum.

Superficially very close to the preceding species, but easily separated from it by the absence of the strong anterior discal tubercles, its distinct pattern of intricate zig-zag lines and other features.

Genus Penthea Castelneau, 1840. Penthea lichenosus sp. nov.

- Q. Robust, brown, varied with black and white, densely pilose. Head broad, deeply excavated between antennary tubercles, densely clothed with dark brown pile varied with cinnamon and speckled with black; median line narrow, extending from apex to to elypeal suture, clearly defined throughout; eyes medium, finely granulate; antennary tubercles prominent, transverse. Antennae shorter than body, stout, black, sparsely pilose, subnitid; joints ringed with sparse greyish pubescence; basal joint obconical; joints 3-4 approximately equal; remainder progressively decreasing. Prothorax broad, as wide as long; lateral post-apical spine stout, above and slightly behind (on edge of lateral declivity) a smaller spine-like tubercle; disc swollen, somewhat irregular, coarsely and sparsely punctate, densely clothed with close pile, dark brown varied and mottled with cinnamon, black and grey, the latter forming 2 parallel longitudinal pale stripes (1 on either side of median line) and an irregular pale area on side. Elytra considerably wider than prothorax, shoulders prominent, apices broadly rounded; clothed with dense, short pile, dark brown varied with bright cinnamon and sprinkled with small rounded black spots; at basal 4 a light cinnamon area crosses the elytron forming a pale band, on this is an irregular lateral white spot, several small white patches and a 3-shaped sutural white mark (reversed on left elytron); on apical ½ 2 irregular discal white markings with black spots in the centre, and a sutural mark behind. Legs stout, clothed with grey pile and mottled with black. Under surface densely clothed with long grey and cinnamon pile mottled with black. Long. 15 mm.; lat. 5 mm.
- 3. Similar to female, but smaller; antennae slightly longer than body. Long. 13 mm.; lat. 5 (-) mm.
- $\mathit{Hab}.$ —Queensland: Coen River (W. D. Dodd). Holotype \lozenge and allotype \circlearrowleft in Australian Museum.

A small species easily distinguished by its striking and distinctive elytral pattern and structural characters.

Genus Corrhenes Pascoe, 1865. Corrhenes cordata sp. nov.

Robust, fuscous, with a cordate black nitid glabrous patch at base of elytra. *Head* relatively small (narrower than prothorax), densely clothed with pale fuscous pile; antennary tubercles inconspicuous, transverse; eyes moderate, finely granulate. *Antennae*

shorter than body, clothed with fuscous pile tending to form apical rings on antennal joints, fringed with sparse long hairs beneath; joints 3-4 curved, subequal; joint 5 shorter; 5-11 progressively decreasing in length. *Prothorax* as long as broad, widest posteriorly, disc convex, sides evenly rounded; lateral anterior spine small; clothed with dense recumbent fuscous pile, darkest in centre of disc. *Scutellum* broad, widely rounded behind. *Elytra* slightly wider than prothorax, parallel, apices truncate, densely clothed with long recumbent fulvous pile; an obscure pale oblique fascia extending outwards about apical 4; a large black cordate nitid glabrous, coarsely punctate area at base of elytra and surrounding scutellum. *Legs* medium, irregularly clothed with fine pubescence. *Under surface* densely clothed with long lax buff pile. Long. 9 mm.; lat. 3·5 mm.

Hab.—Queensland: Endeavour River. Holotype in Australian Museum.

Close to *C. pauxilla* Pasc., but may be readily distinguished by the glabrous black cordate area at base of elytra surrounding scutellum. This area might possibly have been considered to have been caused by abrasion, but is invariably constant throughout a series of five specimens.

Corrhenes nigrothorax sp. nov.

Robust, head and prothorax black, elytra light brown. Head broad, finely punctate, clothed with fine erect grey hairs; antennary tubercles transverse, not prominent; eyes small, finely granulate. Antennae much shorter than body, with erect hairs throughout; basal joint obconical, coarsely punctate; joint 3 longer than 4; 4 considerably longer than 5; 5–11 very short, progressively decreasing in length, basally ringed with white. Prothorax broad, a little longer than wide, finely and closely punctate, with scattered erect hairs; disc with an indistinct, subnitid median longitudinal carina; lateral anterior spine very small. Scutellum broad and short, truncate behind. Elytra subnitid, coarsely and sparsely punctate, lightly pubescent, with long erect hairs throughout; apices somewhat narrowly rounded. Legs stout, brown, with recumbent white pile. Under surface brown with sparse grey pile. Long. 5 mm.; lat. 2-5 mm.

Hab.—North-west Australia. Holotype in Australian Museum.

The smallest species of *Corrhenes* known to me. Close to *pauxilla* Pasc., but is very distinct from that species, the marked division of black head and thorax and light brown elytra being very striking and consistent throughout the series.

Genus Sodus Pascoe, 1854.

? Sodus zic-zac sp. nov.

Q. Robust, dark ferruginous, densely clothed with blackish-brown pubescence; elytra with two transverse white zig-zag bands. Head broad, widely and shallowly concave between antennary tubercles, densely clothed with close dark-brown pubescence; frons coarsely punctate; median impressed line inconspicuous except on extreme vertex and frons; antennary tubercles strongly transverse, not prominent; eyes moderate, finely granulate, deeply emarginate. Antennae stout, much shorter than body (extending little beyond posterior femora), closely pilose with scattered erect hairs; basal joint strongly obconical, apex rounded; joint 3 much longer than 4; 4 much longer than 5; 5-11 progressively decreasing in length; joints 2-11 speckled with white pubescence (densest on 5-7) and apically narrowly ringed with white. Prothorax broad, as wide as long, disc strongly swollen, depressed on anterior and posterior borders, closely pilose, with a white irregular transverse patch (broadest laterally and tapering to centre) about middle, not reaching median line; lateral post-apical spine stout, well developed. Elytra wider than prothorax, shoulders prominent, sides parallel, rounding slightly to apex; apices obliquely truncate; densely clothed with blackish-brown pile, palest at apex, with short erect hairs; a broad transverse zig-zag band of dense pure white pile at basal 4, not quite reaching suture or lateral margin; a similar but narrower white band on apical 4; behind this with scattered minute patches of white pile and a row of white pilose spots along suture. Legs robust, pilose with erect hairs; brown speckled with white. *Under surface* uniformly brown, pilose; abdominal segments speckled with white (densest on apical segment); basal segment fringed with yellowish hairs. Long. 13 mm.; lat. 4.5 mm. (others in series 11 and 14 mm. long.).

Hab.—Queensland: Bowen and Port Denison. Holotype in Australian Museum. I have somewhat doubtfully placed this insect in Sodus. I am not familiar with the species S. venosus Pascoe, recorded from Cape York, but the insect before me appears to agree with reasonable closeness to the definition of Sodus by Pascoe and the information given by Lacordaire. Its characters are sufficiently distinct to exclude it from Penthea or Corrhenes. If it cannot be retained in Sodus it will, I consider, be necessary to erect a new genus for its reception. From Pascoe's description, the species described above is very distinct from venosus.