

CHALCIDOIDEA AND PROCTOTRUPOIDEA FROM LORD HOWE AND NORFOLK ISLANDS, WITH DESCRIPTIONS OF NEW GENERA AND SPECIES.

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Through the kindness of the South Australian Museum, the writer has had the opportunity of examining Micro-Hymenoptera collected on Lord Howe and Norfolk Islands by the Museum Entomologist, Mr. A. M. Lea.

The fauna of more or less isolated islands is always interesting, and the present collection bears out this generalisation. The Chalcidoidea show very close relationship to Australian forms, and mainland species are represented; it is rather interesting to find the striking *Metapelma westwoodi*, Girault, in the collection. The occurrence of such peculiar genera as *Cratomus*, Dalman, *Aplatygerrhus*, Girault, and *Hetreulophus*, Girault, calls for remark. The Proctotrupoidea, however, are, on the whole, widely separated from Australian relations; the prevalence of wingless or aborted-winged forms is a typically insular characteristic. *Pseudoceraphron* is a noteworthy discovery, and the species of *Baryconus*, Foerster, and *Hadronotus*, Foerster, are of particular interest.

Superfamily CHALCIDOIDEA.

Family CHALCIDIDAE.

CHALCIS, Fabr.

The collection contains one male of a species near *C. victoria*, Girault, and *C. atrata*, Kirby, labelled "Norfolk Island, A. M. Lea."

STOMATOCERAS, Kirby.

There are two females labelled "Lord Howe Island, A. M. Lea," representing different species and closely allied to the many described forms from Australia. Both are black, the antennae wholly black; one has the legs (except the coxae) red, with a conspicuous black blotch at apical half of posterior femora centrally; the other has the abdomen at its basal half beneath rufous, the legs wholly dark, except the knees and tarsi.

Family AGAONIDAE.

AGAON, Dalman.

A very large series of females; one male, labelled "Reared from Banyan figs, Lord Howe Island, A. M. Lea," would appear to belong here.

Family CALLIMOMIDAE.

Subfamily IDARNINAE.

SYCORYCTES, Mayr.

There is a large series of females, labelled "Reared from Banyan figs, Lord Howe Island, A. M. Lea." I am not aware which *Ficus* is inferred, presumably an introduced tree.⁽¹⁾ Hence it seems safer not to describe the insect, which is wholly metallic-green, the legs wholly yellow.

⁽¹⁾ *Ficus columnaris*. F. v. M. (A. M. Lea).

TRICHAULUS, Mayr.

Two females, yellow, with dusky-barred abdomens, labelled "Reared from Banyan figs, Lord Howe Island, A. M. Lea," can only be referred to this genus.

Family CLEONYMIDAE.

APLATYGERRHUS, Girault.

This genus was erected to contain a single Tasmanian species, with a peculiar antennal structure. The following species are certainly congeneric, and one resembles the genotype, *A. magnificus*, Girault. I have also three or four undescribed forms from Queensland.

Aplatygerrhus imperialis, n. sp.

♀. Rather dark metallic-green, the head, pronotum, and mesonotum with purple reflections; antennae yellow-brown, the apical joint black; legs yellow-brown, the tarsi paler, the posterior coxae metallic.

Head densely, rather finely reticulate, and with a sparse pubescence; eyes large, pubescent; lateral ocelli one-half closer to the eyes than to the median ocellus; vertex moderately broad and long; viewed from in front the head is much wider than deep; antennal scrobes obsolete; a faint depression above antennal insertion. Antennae inserted much below ventral ends of eyes and well separated, 11-jointed, the club solid; scape rather short; pedicel somewhat longer than its greatest width, and longer than funicle 2; funicle somewhat incrassate; joint 1 very small, transverse, like a ring-joint; 2 much larger but somewhat wider than long, the remainder gradually increasing in size, but all somewhat wider than long; apical funicle joint with a long lateral extension, or spinous process, that embraces the conical club. Thorax normal; sculpture coarser than that of the head and thus closely reticulate-punctate, the whitish pubescence denser; pronotum rather short; parapsidal furrows about half complete from anteriorly; scutellum simple, longer than wide; axillae rather well separated; propodeum smooth, shining, rather long, narrowed posteriorly, with a complete median carina, at base with a short foveate area that is produced at meson for a short distance on either side of the median carina. Forewings ample, normal; hyaline, marked with brown as follows: a cross-dash at rather more than half-way from base to the marginal vein; a rounded blotch just beneath base of marginal vein; a triangular area involving the stigmal vein, its base resting on the anterior costa, its distal margin straight, its apex half-way across wing and connected with a narrow extension of a long narrow stripe along posterior margin, this latter also connected with a rather narrow stripe along the distal margin of the wing; venation dusky; marginal vein rather long, not much shorter than the submarginal; stigmal vein very long and oblique, fully half as long as the marginal, the postmarginal one-half longer than the stigmal. Abdomen no longer than the head and thorax united; depressed above, gently convex beneath; with a very short petiole; segment 2 (first body segment) about as long as 4; 3 very short, transverse; 5 somewhat longer than 4; 6 plainly longer than 5; 7 hardly as long as 5; 8 shorter than 4; 2 and 3 smooth and polished, also posterior half of 4 and 5; 6 and 7, and basal half of 4 and 5, with open scaly sculpture; 2, 4, and 5 with a tuft of white hairs on either side laterally; 6-8 with scattered pubescence. Legs normal; posterior coxae moderately long; anterior and posterior femora feebly swollen, unarmed. Length, 3.50 mm.

One female, labelled "Norfolk Island, A. M. Lea." Type, I. 14545, South Australian Museum, a female on a card.

The wing pattern is very distinct from that of the genotype.

Aplatygerrhus regalis, n. sp.

♀. Dark metallic-green with purplish reflections; antennae yellow-brown, the scape yellow, the club black; legs very pale yellow (almost white), the posterior coxae metallic for two-thirds of their upper surface.

In general structure agreeing with *A. imperialis*. Head closely, densely reticulate, with a punctate tendency. Antennae inserted very slightly below ventral ends of eyes; scape moderately long; pedicel somewhat longer than funicle 2, which is somewhat wider than long; all funicle joints somewhat wider than long, 1 small but not very transverse. Sculpture and pubescence of thorax as in *A. imperialis*, the sculpture of the scutellum not noticeably finer than that of the scutum; propodeum shining, but with faint surface sculpture, broader, and not as long as in *A. imperialis*; in both species there is a foveate sulcus running straight from the spiracle to the posterior margin and along the latter obliquely almost to the median carina, and laterad of the spiracle is a patch of white pubescence. Forewings lightly stained, hyaline beyond the stigmal vein; there is a large pyramidal, smoky-brown cross-stripe appended from the distal half of the stigmal vein, its apex proximad and produced, its distal margin straight. Abdomen a little longer than head and thorax united; apparently sessile; segment 2 as long as 4, 3 very short, 5 twice as long as 4, 6 hardly longer than 5, 7 distinctly shorter than 5, 8 short; 2 and 3, less than posterior half of 4, and posterior margin of 5, smooth and shining; rest of 4 and 5 and 6 (except posterior margin) densely reticulate with a punctate tendency; 7, 8, and posterior margin of 6, with faint sculpture and white pubescence. Posterior coxae with punctate reticulation; posterior femora rather more swollen than in *A. imperialis*. Length, 5.5 mm.

One female, labelled "On *Kentia canterburyana*, Mt. Ledgbird, Lord Howe Island, A. M. Lea." Type, I. 14546, South Australian Museum, the above female on a card.

This species resembles *A. magnificus*, Girault, with cotypes of which it has been compared, in the unifasciate wing, but there are several important differences; *A. magnificus* has dark antennae, deep-coloured legs, the sculpture of the scutellum is very much finer than that of the scutum, and segment 3 of the abdomen is not much shorter than 4, while 6 is much longer than 5.

Family ENCARTIDAE.

Tribe EUPELMINI.

EUPELMUS, Dalman.

Two specimens, labelled "Lord Howe Island, A. M. Lea"; the species is metallic-green, the legs partly metallic, the wings hyaline, the oviposital valves not exerted, and falls in with *E. mawsoni*, Girault, *E. lambi*, Girault, and *E. worcesteri*, Girault.

ANASTATUS, Motschulsky.

One female, labelled "Lord Howe Island, A. M. Lea"; this is a species in which the oviposital valves are very long. I have the same, or a very similar form, from North Queensland.

METAPELMA WESTWOODI, Girault. Mem. Q'd Mus., iv., 1915, p. 28.

One female, labelled "Lord Howe Island, A. M. Lea." This insect was originally described from Tweed Heads, New South Wales, and the author has a very long series from North Queensland; evidently it is a widely distributed species.

Tribe APHELININI.

APHELINUS, Dalman.

One specimen, labelled "Norfolk Island, A. M. Lea," is black, the abdomen partially yellow, the antennae and legs wholly yellow, and is closely related to *A. dies*, Girault, *A. par*, Girault, and *A. nox*, Girault, among the many Australian species.

Tribe ECTROMINI.

ANUSIA, Foerster.

The following species falls both in Ashmead's (1904) and Girault's (1915) tables of genera near *Anusia*, and is placed in that segregate for lack of a more suitable position. The multiple genera of the Encyrtidae have been founded very often on such trivial characters, many of which are highly variable, that no one now appears to have a thorough, or even medium, knowledge of their validity.

Anusia viridiflava, n. sp.

♀. Dull orange, washed in places lightly with metallic, the scutum and scutellum either concolorous or mostly metallic; abdomen dusky; meso- and metapleurae fuscous; vertex and upper face bright orange; antennae black, the scape suffused with brown; coxae fuscous, the legs yellow-brown, the femora and tibiae lightly dusky.

Head normal; vertex rather long, from dorsal aspect no more than twice as wide as long, the space between the eyes narrow; frons gently convex; viewed from in front the head is subcircular; eyes large, bare, converging above; ocelli small, the lateral pair close to the eyes, and somewhat closer to each other than to the frontal ocellus; surface densely, finely coriaceous, with a very few, fine, white hairs; mandibles not large, feebly bidentate, the inner tooth broadly truncate. Antennae inserted a little above the clypeus, the scrobes subcircular; scape long, compressed and dilated for its entire length, rather more than twice as long as its greatest width; pedicel normal, somewhat longer than its greatest width; ring joint apparently absent; flagellum subcompressed, subclavate, densely pubescent; funicle joints all much wider than long, plainly shorter than the pedicel; club two-thirds as long as the funicle, obliquely sharply truncate on one margin, the divisions oblique, indistinct. Thorax normal, impunctate, finely shagreened or coriaceous, with a few, fine, scattered hairs; pronotum short, transverse; scutum twice as wide as long; axillae triangular, just meeting at base of scutellum; scutellum sub-triangular, as long as its greatest width; propodeum short, transverse. Forewings somewhat abbreviated, just attaining apex of abdomen; deeply embrowned, the base paler; discal cilia coarse and dense, the marginal cilia very short; venation thick and distinct; submarginal vein joining the costa at almost half-wing length, the marginal vein linear, fully as long as the stigmal, which is almost horizontal and close to the wing margin, the postmarginal hardly developed; an incomplete, oblique, hairless line is present. Legs normal; intermediate tibial spur short and stout. Abdomen short, depressed, triangular. Length, 0.90 mm.

Described from one female, labelled "Norfolk Island, A. M. Lea" (type), and "reared from wood, Lord Howe Island, A. M. Lea" (cotype). Type, I. 14551, South Australian Museum, a female on a card.

In the type, the scutellum is wholly metallic, the scutum washed with metallic; in the cotype, the scutellum is orange, the scutum lightly washed with metallic.

Family PERILAMPIDAE.

Austroperilampus, n. gen.

♀. Head, viewed from above, transverse, broad, the occiput declivous and straight; viewed from the side, the outline of the frons is almost straight; viewed from in front, the head is wider than long, quadrangular, the clypeus broadly truncate; eyes moderately large, bare; ocelli large, the lateral pair closer to the median one than to the eyes; antennal scrobes rather deep, distinct; mandibles very large, broad, deeply bidentate. Antennae inserted in the middle of the face, and slightly above a line drawn across ventral ends of eyes; 13-jointed, with one large ring joint, the club 3-jointed; funicle joints very slightly increasing in width, all a little wider than long; club not enlarged. Thorax stout, from lateral aspect its dorsal outline convex; pronotum large, not as long as the scutum and much wider than long; scutum large, the parapsidal furrows very deep, complete, coarsely foveate; posterior line of scutum not foveate; axillae large, meeting at inner angles, separated from the scutellum by a coarsely foveate groove; scutellum large, convex, no longer than its greatest width, its posterior margin foveate; postscutellum short, raised at meson, sulcate for the rest; propodeum broad, conspicuous, but much shorter than the scutellum, coarsely sculptured, at meson with a median carina that branches at half its length; spiracle prominent, the spiracular sulci represented by a line of foveae. Forewings very large and broad; naked beneath the submarginal vein (*i.e.*, for almost half), the apical half with fine, rather sparse discal cilia; submarginal vein distant from the costa which it joins at almost half-wing length, several times as long as the linear marginal vein; stigmal vein long, two-thirds as long as the marginal, its apex foot-shaped; postmarginal vein hardly developed. Hindwings large, with a long costal vein. Femora bearing long fine setae; tibiae and tarsi densely setose or spiny; posterior coxae long, almost as long as their femora, which are rather stout, their tibiae and tarsi slender, the tibiae with two unequal apical spurs. Abdomen short and stout, not more than one-half longer than its greatest width; sessile; rising abruptly from base; segment 2 (first body segment) longest, occupying one-third of surface; 5 next longest; 3 shorter than 4; 7 very short and abruptly truncate, the oviposital valves not exerted. Sculpture of body smooth to finely lineolate, with a few punctures.

This genus belongs in that anomalous group of Perilampine genera, which would appear to have their headquarters in Australia, and which are apparently all true gall-makers. In Girault's table of genera (1915) it runs to *Perilampus*, Latrielle, but is not at all related to that genus. It appears closely related to *Trichilogaster*, Mayr., but differs in the non-development of the postmarginal vein, and in having but one ring joint. Genotype, *A. leai*, described herewith.

Austroperilampus leai, n. sp.

♀. Head orange-yellow, a line across the ocelli, and the occiput more or less dusky, eyes and ocelli black; thorax black, a large patch involving almost all of pronotum laterally, and a narrow line across its posterior margin, tegulae, and meson of postscutellum, yellow; abdomen black, brownish-yellow ventrad, also all of second segment; antennae black, the scape and pedicel yellow; coxae fuscous, femora dusky-brown except at base and apex, the legs otherwise clear yellow; mandibles black.

Vertex of head finely transversely striate or lineolate behind the ocelli, and continued laterally for some distance behind the eyes; in front of ocelli longitudinally lineolate or finely striate on either side of antennal scrobes; lower face and cheeks smooth, except for a few, soft, long hairs above the mouth.

Pronotum finely transversely lineolate, smooth posteriorly, with scattered, long, fine, whitish setae; scutum smooth, against and inside the parapsidal furrows with a row of obscure punctures bearing long setae, the surface with a very few, setigerous, small punctures, and showing very faintly, subobsoletely lineolate, this sculpture more distinct anteriorly on the parapsides and adjacent area of the median lobe; axillae smooth, also the scutellum, except for a few, small, setigerous punctures laterally; propodeum inside the spiracle with numerous irregular carinae, outside the spiracle densely rugo-punctate; mesopleurae strongly longitudinally (anterior-posteriorly) striate or lineolate; metapleurae coarsely rugo-punctate. Wings hyaline, the forewings with an obscure brown cross-stripe beneath the end of the submarginal vein; venation conspicuous, yellow-brown. Abdomen smooth and shining, the apical segments finely transversely striate. Length, 3.5 mm.

Two females, labelled "Lord Howe Island, A. M. Lea." Type, I. 14552, South Australian Museum, a female, card mounted.

Family MISCOGASTERIDAE.

Tribe LELAPINI.

Lelaps truncatipennis, n. sp.

♀. Dull black; prothorax and adjacent margin of the scutum, posterior portion of the scutellum, axillae, neck of propodeum, petiole of abdomen, and a broad obscure band at half length of the abdomen, deep dull red; face showing reddish; antennae fuscous, the scape yellow, the pedicel suffused yellow, the apical two club joints yellow; coxae pale yellow or whitish, the femora brown, the tibiae deep yellow, the tarsi paler.

Head broad, the vertex rather thin, the occiput straight and immargined; viewed from in front as wide as deep, the frons depressed for its entire length; surface with fine scaly sculpture, which is coarser on the vertex; eyes large, bare; ocelli close together; vertex with six long black bristles, of which two are behind the ocelli and two are on either side against the eyes; at least one mandible tridentate. Antennae inserted below middle of face and slightly above a line drawn across ventral end of eyes; with seven funicle joints and a 3-jointed club (a narrow ring joint may be present, but this was not determined); scape long and slender; pedicel slender, twice as long as its greatest width; funicle 1 somewhat shorter than the pedicel and somewhat longer than wide, 7 plainly wider than long; club longer than the two preceding joints united, conical, its joints 1 and 2 of equal length. Thorax normal; pronotum short, with two black bristles at meson, and one at either latero-posterior angle; scutum with a scaly surface sculpture and recumbent pale pubescence, smooth and polished posteriorly (except laterally), the parapsidal furrows four-fifths complete from anterior margin and well separated; a single black bristle is situated against and inside of each parapsidal furrow at half its length; axillae widely separated; scutellum with a finely foveate transverse groove just beyond the middle, in front of the groove with fine surface sculpture and pubescence, smooth for the rest, with a single black bristle on either side of meson just out from base, and one on either side laterally against and proximad of the transverse groove; propodeum rather long, with a short neck, with complete median and lateral carinae, and with a complete cross-carina at about half its length; mesopleurae large, swollen, smooth, and shining. Forewings abnormal, narrow; very short, extending not far beyond base of abdomen; abruptly truncate at apex; suffused brownish, the infuscation not uniform; discal cilia present on less than distal third; with a costal vein, and no others; arising from the vein are twelve or more stiff black setae or bristles. Abdomen with a short, transverse, rugose

petiole; body of abdomen faintly convex above, deeply convex beneath; no longer than the head and thorax united, pointed conic-ovate; segment 2 (first body segment) occupying slightly more than one-half of surface, 3-6 short, transverse, 7 or apical segment as long as 3-6 combined, the oviposital valves slightly exerted; abdomen smooth and shining, with fine scattered setae on segment 7. Legs normal, the posterior tibiae with two very short apical spurs. Length, 3 mm.

Described from one female, labelled "Norfolk Island, A. M. Lea." Type, I. 14553, South Australian Museum.

Neapterolelaps leai, n. sp.

♀. Orange-yellow, the posterior fourth or more of the scutum jet black, the abdomen with two, broad, dusky cross-stripes on its posterior half; legs, including the coxae, pale silvery-yellow, the tibiae and tarsi faintly dusky, the posterior femora dusky, their tibiae pale; antennal scape yellow, the pedicel dusky, the flagellum black (both antennae are incomplete); eyes and ocelli black.

Head normal; vertex moderately long, the occipital margin straight; viewed from in front circular; antennal scrobes extending half-way to median ocellus; surface with fine, close, scaly sculpture and no pubescence; eyes large, reaching to the occiput and extending for two-thirds length of face, bare; ocelli wide apart, in a sub-equilateral triangle, the lateral pair separated from the eyes by somewhat more than their own diameter. Antennae inserted on a level with ventral ends of sides; scape moderately long and slender; pedicel slender, more than twice as long as its greatest width; ring joint small but distinct; funicle 1 somewhat shorter than the pedicel, 4 quadrate (the remaining joints of the antennae are missing). Thorax normal; pronotum rather short, finely alutaceous, and with recumbent pubescence like the scutum; scutum as long as its greatest width, its posterior margin gently convex, the black posterior portion (a fourth or more) without pubescence, finely transversely lineolate and contrasting with the anterior three-fourths; anterior margin of the scutum with a row of fine, erect, black setae; parapsidal furrows forming a Y, three-fourths complete from anteriorly and just attaining the black portion of the scutum, sub-joined and sharply curved for their posterior third; axillae rather small, slightly advanced, almost meeting medially; scutellum semicircular, twice as wide as its greatest length, almost smooth, on either side posteriorly with a short erect bristle; propodeum not very long, without carinae, finely irregularly longitudinally rugose. Wings aborted, reduced to short flaps which terminate in a long black bristle. Abdomen no longer than the head and thorax united; pointed conic-ovate; straight beneath, gently convex above; with a very short, stout, transverse petiole; segment 2 occupying a little more than half of surface, smooth but with sparse recumbent pubescence, 3-6 short and transverse, 7 (apical segment) conical and as long as the three preceding segments united, the oviposital valves hardly exerted. Posterior femora plainly swollen; posterior tibiae with two long apical spurs, one of which is exceedingly long, as long as the basal two tarsal joints. Length, 3.25 mm.

Described from one female, labelled "Lord Howe Island, A. M. Lea." Type, I. 14554, South Australian Museum.

This species appears to agree with *Neapterolelaps*, Girault, of which only the genotype, *N. lodgei*, Girault, from Queensland, was formerly known; however, Girault's description gives the parapsidal furrows absent; the non-carinate propodeum, aborted wings, and long posterior tibial spurs are distinguishing characters for the genus.

Family PTEROMALIDAE.

Tribe ASAPHINI.

Ophelosia leai, n. sp.

♀. Dull metallic-green, the pronotum washed with brown, the propodeum, sides, and venter of thorax very dark reddish-brown lightly washed with metallic (there is no trace of metallic colouring on the propodeum); abdomen washed with brown; legs wholly dusky yellow-brown, the tarsi clear yellow; antennae fuscous, the scape yellow.

Head transverse, somewhat wider than the thorax, the occiput margined; viewed from in front much wider than deep, the lower half of the face circularly depressed; frons broad; vertex and upper frons finely transversely lineolate, and with a few very fine setae; eyes large, bare; ocelli wide apart, the lateral pair twice as far from the median ocellus as from the eyes; mandibles tridentate, the teeth acute. Antennae inserted against the mouth; 8-jointed, the funicle 5-jointed, the club solid; scape slender, moderately short, as long as the next five joints combined; pedicel not much longer than its greatest width; funicle 1 small, transverse, like a ring joint, 2-5 slightly clavate, all distinctly wider than long; club solid, broadly rounded at apex, as long as the three preceding joints united. Pronotum stout, transverse, finely transversely lineolate and with fine scattered pubescence like the scutum; scutum transverse, twice as wide as long, the parapsidal furrows well marked and complete; axillae widely separated, almost smooth; scutellum longer than its greatest width, with fine sub-transverse impressed reticulation, abruptly smooth posteriorly but without a cross-suture, with a long seta at each anterior-lateral and posterior-lateral angles; propodeum long, somewhat produced, finely irregularly rugose, at base with a pair of fine median carinae that diverge in the form of a V. Forewings moderately long and broad; hyaline, but there is a linear fuscous cross-stripe at the bend of the submarginal vein, involving a number of stiff black discal cilia or bristles, and a large quadrangular blotch appended from the stigmal vein and narrowed at its base; proximal fourth of wing (as far as the cross-stripe) naked, and there is also a naked oblique area beneath all of the marginal vein with its base resting on the first cross-stripe, the remainder of the wing densely finely ciliate; venation yellow-brown, bearing stiff bristles; marginal vein rather more than twice as long as the submarginal, more than twice as long as the stigmal vein, which is long and slender, the postmarginal vein hardly as long as the stigmal. Petiole of abdomen short and stout, appended beneath the extremity of the propodeum; abdomen flat above, faintly convex beneath; smooth; on either side of the base is soft whitish pubescence; basal segment occupying three-fourths of surface. Legs normal; anterior and posterior femora gently swollen; posterior tibial spur long and slender, not much shorter than the basal tarsal joint. Length, 1.5 mm.

Described from two females, labelled "Lord Howe Island, A. M. Lea," and one female, labelled "Norfolk Island." Type, I. 14555, South Australian Museum.

Of the various species of the genus, *O. viridithorax*, Girault, is the only one with much metallic on the thorax, but the original description of that species is too short for the necessary comparison to be made.

TOMOCERA CALIFORNICA, Howard.

There are two females, labelled "Norfolk Island, A. M. Lea." This common Coccid parasite is widely distributed, occurring in California, Hawaii, and Australia. Girault has described two species, *T. glabriventris* and *T. flaviceps*, the former from various localities in Queensland and New South Wales, the latter

from the Northern Territory; I doubt if *T. flaviceps* is distinct from *T. glabri-ventris*, which, again, appears identical with *T. californica*. I am not aware what reasons Girault has assigned for transferring the genus to the Cleonymidae; to me it bears a close relationship to *Ophelosia*, and I see no reason for altering its usually recognized position.

Tribe CRATOMINI.

This small tribe, containing only two genera, has not previously been recognised in the Australian fauna, and my knowledge of the group has been obtained from Ashmead's Monograph, where it is treated as a tribe in the Subfamily Sphegigasterinae. In the present collection are two species which, together with four others in my own collection from North Queensland, have caused me great trouble to determine satisfactorily. In general appearance and structure these six species closely resemble the members of the Spalanginae, especially *Spalangia* and *Cerocephala*; the similarity is most marked. In fact, but for the somewhat different shape of the head and the position of insertion of the antennae, one would certainly refer them there; but these two differences prevent that solution to the question of their rightful location. However, I have very little doubt but that I have correctly placed them; assuming this to be so, then it seems that the *Cratomini* is much more nearly related to the Spalanginae than to the Sphegigasterinae, and should be treated as a tribe in the former subfamily.

One anomaly remains to be explained. *These species have two apical spurs on the posterior tibiae*. There can be no doubt on this point. I have examined several sets of tibiae, representing at least three species, and in all, two slender apical spurs were made out. But whether these are single or double is the sole distinguishing factor between the families Pteromalidae and Misco-gasteridae, the former possessing one, the latter two such spurs. However, the group of species discussed here has no affinities with any tribe in the Misco-gasteridae; it is obviously closely related to the Spalanginae, and to remove it thence on account of this trivial character is not warranted. This distinguishing point between the two families is purely artificial, and, in the writer's opinion, untenable.

CRATOMUS. Dalman.

So that the genus, in the sense understood here, can readily be recognised, the characters of this group of species are given below.

♀. Head subglobose; frons convex, produced more or less between the eyes, and divided by two, deep, sharply-defined, antennal furrows, so as to appear tricornute; vertex broad, long; temples broad; eyes not large; ocelli close together, the lateral pair much nearer the median ocellus than to the eye margins. Antennae inserted on a level with ventral ends of eyes and about in middle of face; 9-jointed (counting the club as solid); scape long, somewhat curved for its entire length; pedicel short; no ring joint; flagellum subclavate; club conical, the divisions subobsolete. Thorax long; pronotum prominent, long, as long as wide, somewhat narrower than the scutum; scutum no longer than the pronotum, wider than long, the parapsidal furrows deep, complete, foveate, the lobes convex; scutellum large, somewhat longer than its greatest width, simple; axillae meeting inwardly, separated from the scutellum by a coarsely foveate groove; propodeum rather long, narrowed apically, not declivous, with complete lateral carinae, inside these with a network of interlacing carinae, sometimes showing an obscure median carina. Forewings normal, ample, maculate; discal ciliae absent beneath submarginal vein, the distal three-fifths of wing with scattered cilia; marginal cilia absent on anterior margin and posterior margin for two-thirds its length, the rest with a dense short or long fringe of hairs;

submarginal vein distinct from the costa; the marginal vein long but never as long as the submarginal, several times as long as either the postmarginal or stigmal, which are about subequal, the latter curved; venation with stiff setae for its entire length. Abdominal petiole variable, transverse or slender, but never much longer than the posterior coxae; body of abdomen almost straight above, convex below, blunt posteriorly, the oviposital valves exerted for a length never more than that of the abdomen; segment 2 (first body segment) as long as 4, longest, the others rather short; apical segment and the oviposital valves bear a few fine setae of great length, besides ordinary setae. Legs normal; posterior coxae rather long; anterior and posterior femora usually somewhat swollen; posterior tibiae with two slender, unequal, apical spurs; tarsi 5-jointed.

♂. At once differing from the female in having the petiole of the abdomen very long, much longer than the hind coxae, and nearly as long as the short body of the abdomen; segment 2 longest but not greatly longer than 3, the rest gradually decreasing in length. Antennae 11-jointed, scape, pedicel, one large ring joint, seven funicle joints, and an apparently solid club.

All the species have been collected on wood, and are probably parasitic on coleopterous larvae.

Cratomus insularis, n. sp.

♀. Black, the abdominal petiole and the pronotum anteriorly reddish; abdomen faintly suffused brownish; oviposital valves pale yellow for basal third; legs fuscous, the tarsi yellow, the posterior coxae silvery-white except at base above; antennal scape and pedicel black, the flagellum deep red.

Head distinctly produced between the eyes; vertex and upper frons smooth, except for scattered minute punctures bearing short fine setae; finely longitudinally striate on either side of frontal prominence; lower face, with coarser denser striae converging around mouth, and also with larger punctures bearing longer setae; cheeks with moderate-sized punctures. Funicle 1 one-half longer than its greatest width, slightly longer and narrower than the pedicel, the flagellum clavate, funicle 6 thus much wider than long; club as long as preceding three joints combined. Thorax smooth and shining, except for a very few minute punctures, the pronotum somewhat longer than the scutum. Forewings subhyaline, with two fuscous bands, the first and narrower one at the junction of the submarginal and marginal veins, the second and broader (but longer than wide) one with its apical margin touching the apex of the stigmal vein; marginal cilia not long; venation fuscous; marginal vein almost as long as the submarginal. Abdomen smooth, except for faint wrinkles on basal half of segments 5-7; segment 2 with its posterior margin rather sharply incised; exerted portion of oviposital valves equal to two-thirds length of body of abdomen. Legs rather densely pubescent; posterior and anterior femora a little swollen. Length, 2.75 mm. (excluding ovipositor).

Described from four females, labelled "Rotten wood, Lord Howe Island, A. M. Lea." Type, I. 14557. South Australian Museum. a female on a card. One of the undescribed North Queensland species is very similar to the above.

Cratomus viridinetum, n. sp.

♀. Head yellow-brown, the vertex lightly washed with metallic; thorax laterally and ventrally fuscous, above metallic-green, the pronotum almost wholly yellow, the propodeum fuscous, its apex pale-yellow; abdomen brown-black, its petiole pale yellowish; oviposital valves fuscous; legs, including the coxae, bright yellow, the posterior coxae whitish; antennae yellow, the apical funicle joint and the club fuscous.

Head viewed from in front subcircular; frons gently convex from eye to eye, the antennal scrobes well defined and separated by a thin sharp carina; vertex and frons smooth, except for scattered minute punctures, the face below the eyes finely longitudinally striate; eyes not large; ocelli close together and not very widely separated from the eyes. Antennae inserted on a level with ventral end of eyes; scape as long as next four joints combined; pedicel not much longer than its greatest width; flagellum subclavate; funicle 1 hardly as long as pedicel, 6 somewhat wider than long; club almost as long as preceding three joints combined, its divisions subobsolete. Thorax normal, smooth and shining, with a few minute punctures, the parapsidal furrows and the groove between the axillae and scutellum finely foveate; pronotum subquadrate, as long as the scutum; propodeum finely, transversely, rugose-carinate, the lateral and median carinae obscure. Forewings hyaline, with a broad pale-fuscos band from apical half of marginal and all of stigmal vein; scattered discal cilia of apical three-fifths of wing very fine; marginal cilia moderately short; submarginal and marginal veins about subequal, the stigmal vein short and curved, the postmarginal somewhat shorter than the stigmal; venation yellowish. Abdominal petiole short and transverse; body of abdomen flat above, convex beneath, the oviposital valves exerted for a length equal to one-third that of abdomen; segment 2 occupying one-third of surface, somewhat longer than 4, 3 short. Legs normal, the anterior and posterior femora not noticeably swollen. Length, 1.60 mm.

Described from one female, labelled "Lord Howe Island, A. M. Lea." Type, I. 14558, South Australian Museum, a female on a card, appendages on a slide.

A rather slender, delicate species, very different from *C. insularis* in appearance, but very similar in structure. The wings bear a marked resemblance to those of the Spalangine genus *Cerocephala*, Westwood.

Tribe SPHEGIGASTERINI.

POLYCYSTOMYIA BENEFICA, Dodd.

The collection contains three females, labelled "Norfolk Island, A. M. Lea," which should probably be referred to this species, which has been recorded as a parasite of the bean-fly, *Agromyza phaseoli*, Coq.; one specimen has the posterior coxae metallic, the first two pairs of coxae brown, the legs deep yellow; the other two have all the coxae yellow, the legs lighter yellow.

The genus *Polycystomyia*, Dodd, appears identical with *Pseudosphegigasterus*, Girault, the only distinction being that the antennal club is stated to be solid in the latter, 3-jointed in the former; this hardly seems a valid generic character.

Tribe SPALANGINI.

CEROCEPHALA, Westwood.

Three females, labelled "Lord Howe Island, A. M. Lea." are dull brown and fuscous. The species of the genus are parasitic on *Calandra* and other grain weevils, and are cosmopolitan. There is little doubt but that *Spalangiomorpha*, Girault, is identical with *Cerocephala*, and the type species, *S. fasciatipennis*, Girault, is possibly a well-known, widely-spread insect.

Tribe ROPTROCERINI.

PSEUDANOGMUS FASCIIPENNIS, Dodd.

Several females of this or a very closely-allied species, labelled "Lord Howe Island, A. M. Lea," and "Norfolk Island, A. M. Lea," are much smaller than the typical form, measuring 1.25 mm., and the sooty blotches on the wing are much less pronounced. The type specimen was collected in North Queensland.

Family EULOPHIDAE.

Tribe OPHELININI.

Sympiesomorpha norfolcensis, n. sp.

♀. Bright metallic-green; legs wholly golden-yellow, but the posterior coxae are almost wholly metallic; antennae black, the basal half of the scape yellow.

Head normal; vertex not thin, with fine scaly sculpture; frons depressed, the antennae inserted wide apart and on a level with the ventral ends of the eyes; eyes normal, feebly pubescent; frons smooth. Antennae 10-jointed, with one ring, four funicle, and three club joints; scape long and slender; pedicel not much longer than its greatest width; funicle loosely jointed, with long scattered hairs; funicle 1 much larger than the pedicel and two-thirds longer than its greatest width, 2-4 subquadrate; club not enlarged, not much longer than its greatest width, joint 1 longer than 2 and 3 combined, 3 minute, with a terminal nipple or short spur. Thorax normal; pronotum transverse but distinct, with raised scaly sculpture and a few long setae, its posterior margin almost smooth; scutum with rather coarse raised reticulation, the parapsides finely scaly, the parapsidal furrows well marked and complete; the median lobe of the scutum bears two long fine setae on either side at posterior half against the parapsidal furrows; there is one such setae on each parapside; axillae well advanced, with faint sculpture; scutellum rather long, with rather coarse scaly sculpture, on either side with a well-marked lateral groove that curves round but does not join at the posterior margin; postscutellum prominent, finely scaly; propodeum moderately long, without a neck, almost smooth, with a fine paired median carina, and distinct spiracular sulci. Forewings long; broad; hyaline; discal ciliation normal, the proximal third of the wing (as far as the marginal vein) naked, but there is a short cross-line of cilia at the bend of the submarginal vein that joins a median line of cilia which is continued to reach the posterior margin at half its length; venation well marked; submarginal vein not distinctly broken, as long as the marginal, which is a little longer than the postmarginal; stigmal vein long, slender, about one-third as long as the marginal. Abdomen normal; pointed conic-ovate. Legs slender; posterior tibiae with two short apical spurs; tarsi 4-jointed. Length, 1.8 mm.

Described from one female, labelled "Norfolk Island. A. M. Lea." Type, I. 14563, South Australian Museum.

This species agrees very well with the generic characters, even to sculpture, of *Alaphomorpha*, Girault, which Girault originally described in the Ophelinini, and subsequently transferred to the Eulophini, in which tribe the parapsidal furrows are incomplete. Of the other Australian genera of the Ophelinini, it might fall in *Alaphomorphella*, Girault, but at least the species is distinct from mainland forms.

Tribe TETRASTICHINI.

TETRASTICHUS, Haliday.

The collection contains a series of a dark-green species of this genus, *sensulatu*, labelled "Lord Howe Island, A. M. Lea."

Tribe HETREULOPHINI.

Hetreulophus clavicornis, n. sp.

♀. Bright metallic-green and blue, the abdomen darker; coxae colorous, the femora fuscous, the anterior and intermediate tibiae yellow lightly washed with fuscous, the posterior tibiae fuscous with a white band at half their length, which is as long as the apical fuscous portion, tarsi yellow; antennae wholly dark.

Head normal, transverse, no wider than the thorax, with fine impressed reticulation; viewed from in front plainly wider than deep, the frons broad; mandibles tridentate, the teeth acute. Antennae inserted a little above the mouth, 11-jointed, the club solid; scape broad and compressed, hardly more than twice as long as its greatest width, but as long as the next seven joints combined; pedicel stout, not much longer than its greatest width; funicle 8-jointed, the first four joints minute and transverse, like ring joints, 1-6 clavate, 6-8 subequal, each fully twice as wide as long; club bluntly rounded, as long as the three preceding joints united, and more than one-half as long as the scape; antennal joints bearing stiff hairs. Thorax normal; pronotum short; scutum with raised polygonal reticulation, the parapsidal furrows indicated anteriorly; axillae smooth, well advanced; scutellum shining, but showing faint subobsolete reticulation, with a concave line of fine foveae on either side, and a line of similar foveae just before the apex; postscutellum separated from the scutellum by a fine line, smooth, semicircular, and very conspicuous for the family; propodeum shining, moderately long but without a neck, with a median carina and no others. Forewings long and broad; beneath the submarginal vein hyaline and without discal cilia, except for a narrow, brown, median, longitudinal line following a similar line of discal cilia, and terminating at a narrow brown cross-stripe from the bend of the submarginal vein (these two stripes represent the median and basal veins); remainder of the wing uniformly densely ciliated; lightly embrowned, except for two narrow hyaline splashes forming an interrupted line across the wing from the base of the stigmal vein, and an irregular, convex, narrow stripe across the wing from the apex of the stigmal vein; venation normal; submarginal vein not distinctly broken; marginal vein as long as the submarginal; stigmal vein long and curved, the postmarginal twice as long as the stigmal and fully one-half as long as the marginal. Abdomen slender, upturned at apex, the oviposital valves exerted for a length equal to one-fifth that of the abdomen. Legs normal, the tarsi 5-jointed. Length, 1.45 mm.

Described from two females, labelled "Lord Howe Island, A. M. Lea." Type, I. 14565. South Australian Museum.

This species agrees very well with Girault's diagnosis of the genus, except for the thickened antennal scape and shorter flagellar joints. Girault described the antennae with one ring and seven funicle joints, but in the species before me, as all the joints bear stiff pubescence, it would hardly be correct to consider any of the minute funicle joints as ring joints. The postscutellum is unusually prominent, and the suture between it and the scutellum very delicate; but there is a distinct groove across the scutellum just before this suture. The genus appears to me to be typically Eulophine, despite the 5-jointed tarsi.

Family MYMARIDAE.

GONATOCERUS, Nees.

A single specimen of a small, obscure species, black, the legs and antennae wholly dusky, is labelled "Lord Howe Island, A. M. Lea."

Superfamily PROCTOTRUPOIDEA.

Family CERAPHRONIDAE.

CERAPHRON, Jurine.

The collection contains a male, labelled "Norfolk Island, A. M. Lea." and also a female labelled "Mt. Gower, Lord Howe Island, A. M. Lea"; the latter is closely related to *C. flavicoxa*, Dodd, and other Australian species.

Pseudoceraphron, n. sp.

♀. Head, viewed from above, large, transverse, much wider than the thorax, which it encircles as far as the posterior margin of the scutum; vertex moderately long, the occiput margined and concave; viewed from in front, the head is triangular, somewhat wider than deep; eyes large, bare, extending to the occipital margin and half-way to the mouth; ocelli minute, wide apart, the lateral pair closer to the median ocellus than to the eyes; mandibles either bi- or tridentate. Antennae inserted somewhat above the mouth but well below a line drawn across the base of the eyes; 11-jointed; scape moderately short, but more than twice as long as the pedicel, which is about twice as long as its greatest width; flagellar joints 1-7 minute, transverse, gradually enlarging, 8 much larger but twice as wide as long, the large club as long as the preceding eight joints combined, conical, twice as long as its greatest width. Thorax, from lateral aspect, almost hidden by the head; viewed from above, twice as wide as long; pronotum not visible from above; scutum very transverse, several times as wide as long, with complete parapsidal furrows, and a complete median groove; scutellum transverse; median segment very short and transverse. Wings entirely wanting. Abdomen somewhat wider than the thorax; twice as long as the head and thorax united, but hardly more than twice as long as its greatest width; from lateral aspect, gently convex above, so deeply convex beneath as to be nearly as high as long; rounded on the sides and non-carinate; broadly sessile at base; basal segment occupying almost all of surface, but the subapical apex is composed of several transverse segments. Legs normal; femora and tibiae normally slender, those of anterior pair of legs somewhat swollen; apical spur of anterior tibiae long, curved, simple. tarsi short; posterior tarsi two-thirds as long as their tibiae, their basal joint not twice as long as the second and shorter than the enlarged apical joint.

This is a quite distinct and most interesting genus; it falls near *Conostigmoides*, Dodd (*Eumegaspilus*, Ashmead, 1893, nec 1888), but the much shortened thorax with its transverse sclerites, the broadly sessile abdomen, and the very small flagellar joints of the antennae, readily distinguish it. In general appearance the genotype bears a striking resemblance to members of the Scelionid genus *Bacus*, Haliday, which is heightened by the short compact flagellum and the much enlarged apical joint of the antennae. Type, the following species.

Pseudoceraphron pulex, n. sp.

♀. Yellow-brown, the abdomen somewhat dusky; legs wholly yellow; antennal scape, less than apical half of pedicel, and the distal funicle joint silvery-white; rest of pedicel, and the first seven funicle joints, black, the club fuscous; eyes and ocelli black.

Body without pubescence. Head smooth and polished; scutum and scutellum finely, irregularly, transversely lineolate; abdomen smooth but showing fine transverse lineolation. Length, .9 mm.

Described from one female, labelled "Fallen leaves, Lord Howe Island, A. M. Lea." Type, I. 14569. South Australian Museum.

Family SCELIONIDAE.

TRIMORUS, Foerster.

Two species are represented in the collection; one is of especial interest, in that it is the first wingless form of the genus to be discovered in the Australian region; the second is closely allied to mainland species.

Trimorus norfolcensis, n. sp.

♀. Dull black; legs, including the coxae, golden-yellow; antennal scape and pedicel yellow, the rest black.

Head normal; viewed from above, twice as wide as long, the vertex not thin; viewed from in front, plainly wider than deep; eyes large, with a few short setae; ocelli very small, wide apart, the lateral pair separated from the eyes by twice their own diameter; vertex and frons smooth and polished, with a few scattered fine setae; toward occiput with dense surface sculpture; around mouth with converging striae; frons not depressed, but there is a faint median carina running from antennal insertion for some distance. Antennae normal, 12-jointed; scape moderately long and slender; pedicel one-half longer than its greatest width; funicle 1 slightly longer than pedicel, 2 a little shorter than 1, 3 as wide as long, 4 short; club compact, 6-jointed, the joints transverse. Thorax not much longer than its greatest width; scutum much wider than long, broadly rounded anteriorly, with dense fine surface sculpture and numerous pin-punctures bearing fine setae; parapsidal furrows complete, wide apart; scutellum semicircular, smooth except for scattered, setigerous pin-punctures; postscutellum produced at meson in the form of a stout acute tooth; median segment hidden at meson, its caudo-lateral angles subacute. Wings aborted; short narrow flaps that do not reach beyond the posterior margin of the thorax. Abdomen much wider than the thorax, somewhat narrowed at base, blunt posteriorly; segment 1 very short, transverse; 3 almost as long as wide, somewhat longer than 1 and 2 or 4-6 united; 1 and 2 striate, 3-6 with fine, polygonal, surface sculpture and fine pubescence. Legs slender; posterior tarsi no longer than their tibiae, their basal joint as long as 2-4 united. Length, 1.3 mm.

Described from eleven females, labelled "Rotting leaves, Norfolk Island, A. M. Lea." Type, I. 14570, South Australian Museum.

Trimorus leai, n. sp.

♀. Head and thorax black, the abdomen dark brown, its basal segment bright yellow; antennae black, the scape and pedicel yellow, lightly washed with dusky; legs, including the coxae, yellow, lightly washed with dusky.

Head normal; no wider than the thorax, the vertex thin, the frons broad; viewed from in front, somewhat wider than deep; surface smooth and polished; eyes moderately large, bare; ocelli small, the lateral pair somewhat closer to the median ocellus than to the eyes. Antennae 12-jointed; scape long and slender, as long as next seven joints combined; pedicel one-half longer than its greatest width; funicle 1 as long and as wide as pedicel; 2 a little shorter, 3 as wide as long, 4 wider than long; club compact, 6-jointed, the joints much wider than long. Thorax slightly longer than its greatest width; scutum with numerous fine punctures, the parapsidal furrows wide apart, distinct and complete; scutellum semicircular, smooth except for the foveate posterior margin; postscutellum with a short tooth at meson; median segment short, its caudo-lateral angles toothed. Forewings extending well beyond apex of abdomen; moderately narrow (three and a half times as long as the greatest width), the apex rounded; longest marginal cilia equal to one-fourth greatest wing width; discal cilia coarse and dense; venation fuscous, terminating at half-wing length; marginal vein shorter than the submarginal; stigmal vein short, oblique, knobbed at apex; forewings faintly tinted. Abdomen broadly oval, narrowed at base, rounded posteriorly; wider than the thorax; no longer than its greatest width; segment 1 very short and transverse, 2 short, 3 longer than 1 and 2 or 4-6 united; 1 and most of 2 striate, 3 smooth and polished, 4-6 with

a few fine setae. Legs slender; posterior tarsi no longer than their tibiae, their basal joint equal to 2-4 united. Length, 1.1 mm.

Described from one female, labelled "Norfolk Island, A. M. Lea." Type, I. 14571, South Australian Museum.

Of the Australian species, closest to *T. nigripes*, Dodd, but that species has the antennae wholly concolorous, the legs darker, the scutum closely punctured.

HOPLOGRYON, Ashmead.

A well-represented genus in the Australian fauna. The species described herewith has the abdomen much broader at its base than usual; moreover, no mainland species with aborted wings has yet been discovered.

Hoplogryon howensis, n. sp.

♀. Dark brown or fuscous, the first abdominal segment reddish, the scutum dull red; legs fuscous, suffused somewhat with yellow, the tarsi pallid; antennae fuscous, the scape yellowish, the pedicel less so.

Head normal, slightly wider than the thorax, the vertex thin, the frons broad; viewed from in front, rather wider than deep; with dense, polygonal, surface sculpture, and a few, short, fine setae; around mouth with converging striae; eyes moderately large, bare; ocelli very small, the lateral pair somewhat nearer to the median ocellus than to the eyes. Antennae 12-jointed; scape moderately slender, as long as next four joints combined; pedicel short, a little longer than its greatest width; funicle 1 as wide and almost as long as the pedicel, 2 a little shorter than 1, 3 a little shorter than 2, 4 a little shorter than 3 and somewhat longer than wide; club rather slender, 6-jointed; joint 1 quadrate, 2-5 wider than long. Thorax stout, hardly longer than its greatest width; scutum and scutellum with dense, polygonal, surface sculpture, and very fine pubescence; parapsidal furrows absent; scutellum semicircular; post-scutellum at meson with a very small tooth; median segment very short, its caudo-lateral angles toothed. Forewings represented by mere flaps that hardly reach to base of abdomen. Abdomen broadly oval, not much narrowed at base, broadly rounded posteriorly, somewhat wider than the thorax, rather less than twice as long as its greatest width; segment 1 very short, transverse; 2 much longer than 1; 3 as long as wide, more than twice as long as 2; 4-6 short; 1 and extreme base of 2 striate, the rest with dense, polygonal, surface sculpture and very fine scattered pubescence. Legs slender; posterior tarsi no longer than their tibiae, their basal joint as long as 2-5 united. Length, 1.3 mm.

Described from one female, labelled "Lord Howe Island, A. M. Lea." Type, I. 14572, South Australian Museum.

BARYCONUS, Foerster.

Three species are included in this genus, in its present Australian sense; two are closely related to each other, but differ widely from any of the mainland forms; the third is apparently a modified member of one of the Australian groups.

Baryconus discolor, n. sp.

♀. Head pallid yellow, the frontal depression fuscous, the eyes and ocelli black; scutum pale yellow, dusky around the tegulae, and with an oblong brown patch at meson of anterior half; pronotum and scutellum deeper yellow; tegulae pale; sides and venter of thorax (except the pale mesosternum) dusky black; first abdominal segment yellow, 2 and 3 blackish, the former yellowish at base, the latter with an irregular yellow band across base, 4 and 5 brown, each with

a yellow band across base, 6 yellow; venter of abdomen pallid; legs, including the coxae, pale yellow, the tarsi brownish; antennae yellow-brown, the scape paler; mandibles pale yellow, the teeth black.

Head normal; vertex broad, not twice as wide as long, the occiput concave; from frontal aspect the head is subcircular, as wide as deep; lower half of frons at meson depressed, and with a median carina running from antennal insertion for some distance; surface densely punctured, the punctures of moderate size, and with short fine pubescence; frontal depression smooth; mouth with converging striae; mandibles tridentate, the teeth acute; eyes not large, scarcely longer than their distance from the occiput; ocelli small, wide apart, the lateral pair separated from the eyes by their own diameter. Antennae 12-jointed; scape normal, no longer than next two joints combined; pedicel more than twice as long as its greatest width; funicle 1 a little longer than pedicel, three times as long as its greatest width; 2 three-fifths as long as 1; 3 quadrate; 4 wider than long; club compact, 6-jointed, joints 1-5 much wider than long. Thorax scarcely as wide as the head, about twice as long as its greatest width; pronotum visible from its neck to the tegulae; scutum a little wider than long, narrowed anteriorly where it is sharply rounded; parapsidal furrows wanting; scutum and scutellum densely punctate and with fine pubescence like the head; scutellum short, its posterior margin straight; postscutellum and median segment excavated and hidden by the abdominal projection; propleurae depressed; mesopleurae punctate, with an elongate smooth meso-posterior path; metapleurae rugo-punctate. Wings vestigial, very narrow; forewings reaching nearly to apex of second abdominal segment, the discal cilia dense and somewhat coarse, the marginal cilia short; a little tinted; venation fuscous; submarginal vein attaining the costa somewhat beyond half-wing length, the marginal as long as the short, very oblique, stigmal vein, the postmarginal not developed. Abdomen almost twice as long as head and thorax united, spatulate, pointed at apex; segment 1 petioliform, twice as long as wide, 2 and 3 each as long as their greatest width and a little longer than 1, 4 and 5 wider than long and plainly shorter than 2 or 3. 6 somewhat longer than 5 and longer than its basal width; segment 1 with a blunt basal horn that projects into the thorax as far as the scutellum, strongly longitudinally rugo-striate, the apex of the horn smooth; 2 longitudinally striate; 3-6 with dense punctures and fine silvery pubescence, 3 with a smooth mesal path. Legs slender; posterior coxae long, not much shorter than their femora; posterior tibiae slender; basal joint of posterior tarsi very long, a little longer than 2-5 united and three-fifths as long as their tibiae. Length, 4 mm.

♂. Colorationally like the female; differs only in sexual characters, no basal horn of abdomen, the apical abdominal segment short. Antennae yellow-brown, paler at base than toward apex; scape moderately short and stout; pedicel twice as long as its greatest width; flagellar joints cylindrical, 1 longest, two-thirds longer than the pedicel, 9 one-half as long as 1. Forewings perfect, attaining apex of abdomen; broad; stained brownish; venation fuscous; submarginal vein attaining the costa at about half-wing length; marginal vein nearly one-half as long as the stigmal, which is long, oblique, a little convexly curved; postmarginal a little longer than the stigmal; basal vein distinct, somewhat oblique; median vein as an ill-defined thick line beyond the basal vein. Length, 3.5 mm.

Three females, one male, labelled "Lord Howe Island, A. M. Lea." Type, I. 14573, South Australian Museum.

Colorationally and structurally this species differs markedly from any of the known Australian forms.

Baryconus vestigialis, n. sp.

♀. Extremely like *B. discolor*, but differs in colour as follows: Head uniformly yellow-brown (not pale yellow), the frontal depression not black, the mandibles concolorous; thorax of a darker tint; abdomen dark brown or fuscous, the first segment concolorous, the yellow bands of *B. discolor* almost obliterated here. Structurally differs from *B. discolor* as follows: The median segment is not hidden by the abdominal projection and is moderately long, covered with very fine pubescence; the horn on the basal abdominal segment does not project forward into the thorax; the abdomen is shorter, one-half longer than the head and thorax united, segment 1 less than twice as long as wide, 6 no longer than its width at base; pubescence denser on segments 3-6, 2 also with some pubescence; wings still narrower and shorter, scarcely reaching beyond base of second abdominal segment, the venation obscure, the stigmal vein seemingly not developed. Length, 3 mm.

Four females, labelled "Mt. Gower and Lord Howe Island, A. M. Lea." Type, I. 14574, South Australian Museum.

The colour varies slightly; in three specimens the posterior coxae and femora are somewhat dusky. A smaller, duller species than *B. discolor*; the strikingly similar colour pattern led me at first to regard it as a variety of that species, but the several slight structural differences would seem to denote specific rank; the distinctions are negative rather than positive.

Baryconus vestitus, n. sp.

♀. Head black; thorax bright orange or yellow-brown; abdomen fuscous, the third segment yellow for its basal half; legs, including the coxae, bright yellow; antennae fuscous, the scape yellow.

Head normal; vertex rather long, twice as wide as long; from frontal aspect, the head is somewhat wider than deep; vertex and upper frons densely finely punctate and coriaceous, and with scattered short pubescence; lower half, or less, of face, feebly depressed, with a median carina running from antennal insertion, the depression finely transversely alutaceous; cheeks narrow, finely longitudinally alutaceous; mouth with very fine converging striae; eyes large, extending to the occiput, and as far as a line drawn across antennal insertion, bare; ocelli very small, wide apart, the lateral pair against the eyes. Antennae 12-jointed; scape normal, as long as the next four joints combined; pedicel one-third longer than its greatest width; funicle 1 plainly longer than pedicel, fully twice as long as its greatest width, 2 shorter than 1, 3 quadrate, 4 wider than long; club compact, 6-jointed, joints 1-5 transverse, 1 smaller than the others. Thorax not much longer than its greatest width; pronotum hardly visible from above; scutum large, broadly rounded anteriorly, the parapsidal furrows absent; scutellum semicircular; scutum and scutellum finely, very densely coriaceous and punctate, and with rather dense, short, black pubescence; postscutellum hidden; median segment concave, not visible medially, its latero-posterior angles acute; propleurae with fine surface sculpture; meso- and metapleurae punctate, the former with a smooth, elongate, meso-posterior depression. Wings vestigial; short, narrow flaps. Abdomen fusiform; narrowed at base, pointed at apex; one-half longer than the head and thorax united; segment 1 short, fully twice as wide as long, with a rounded prominence or bosse at base; 2 more than twice as long as 1, somewhat shorter than its width at posterior margin; 3 a little longer than 2, scarcely as long as wide; 4 one-half as long as 3, as long as 5 and 6 combined; 1 striate, its prominence reticulate; base of 2 striate; the rest with a very dense, fine, surface sculpture, and very dense clothing of short black setae. Legs normal; posterior tarsi

not as long as their slender tibiae, their basal joint as long as 2.5 united. Length, 2.3 mm.

Described from one female, labelled "Lord Howe Island, A. M. Lea." Type, I. 14575, South Australian Museum.

Although the basal abdominal segment is shorter, its prominence not conspicuous, and the abdomen more fusiform, the affinities of this species are probably with the group of Australian species that contains *B. splendidus*, Dodd, *B. magnificus*, Dodd, *B. superbus*, Dodd, and others.

HADRONOTUS, Foerster.

There is a single male belonging to this genus, and closely related to *H. parvipennis*, Dodd, labelled "Rotting leaves, Norfolk Island, A. M. Lea." The species described herewith is not a true member of the genus, and is placed there for lack of a suitable position.

Hadronotus terrestris, n. sp.

♀. Head black; thorax bright orange or yellow-brown, the meso- and metapleurae darker; abdomen fuscous, with two irregular yellow bands at bases of segments 2 and 3; legs wholly yellow; antennae fuscous, the scape yellow.

Head slightly wider than the thorax, the vertex of normal length; from lateral aspect, vertex and frons gently, regularly convex; occiput not margined; viewed from in front, the head is plainly wider than deep; lower half, or less, of face a little depressed, with a blunt median carina, very finely, circularly striate; mouth with fine converging striae; vertex and upper frons finely, very densely coriaceous; eyes moderately large, extending almost to occipital margin; ocelli minute, very wide apart, the lateral pair against the eyes. Antennae normal, 12-jointed; scape moderately long and slender; pedicel scarcely longer than its greatest width; funicle 1 a little longer than pedicel, 2 quadrate, 3 wider than long, 4 very small, transverse; club compact, 6-jointed, joints 1-5 transverse. Thorax stout, no longer than its greatest width; pronotum not visible from above; scutum large, very broadly rounded anteriorly, the parapsidal furrows absent; scutellum semicircular; scutum and scutellum with fine surface sculpture and fine, dense, black pubescence; postscutellum and median segment not visible, except the latero-posterior angles of the latter, the thorax at meson abruptly terminating at apex of scutellum. Wings vestigial; very short and narrow flaps. Abdomen a little longer than the thorax, and more than twice as long as its greatest width; hardly narrowed at base, pointed at apex; segment 1 broadly sessile, very short and transverse; 2 large; 3 slightly longer than 2, somewhat wider than long, as long as 4-6 united; abdomen wholly clothed with a very dense, fine pubescence, and with microscopic sculpture. Legs slender; posterior tarsi hardly as long as their slender tibiae, their basal joint about as long as 2.5 united. Length, 1.6 mm.

♂. Agreeing in all particulars with the female. Antennae 12-jointed; pedicel small, no longer than wide; funicle 1 twice as long as wide, 2-9 gradually shortening, 9 slightly longer than wide, 10 as long as 1.

Described from nine females, three males, labelled "Fallen leaves, Lord Howe Island, A. M. Lea." Type, I. 14577, South Australian Museum.

The yellow bands on the abdomen vary somewhat in length. One male has the thorax deep chestnut, the abdomen wholly fuscous. This species may well be a wingless form of *Hadronotus*, but the abdomen is longer than is usual in that genus.

TELENOMUS, Haliday.

One male, labelled "Lord Howe Island, A. M. Lea."

Family DIAPRIIDAE.

TETRAMOPRIA, Wasmann. Dodd, Trans. Roy. Soc. S. Austr., 1916.

The species described below agrees with the characters of the two Australian species; the three ought possibly to form a new genus. In Kieffer's table of genera (1911), they run to *Tetramopria*, Wasmann, and *Geodiapria*, Kieffer, but differ from both in lacking a basal fovea to the scutellum.

Tetramopria plana, n. sp.

♀. Dull black; legs, including the coxae, bright yellow; petiole of abdomen reddish; tegulae yellowish; antennae yellow, the three apical joints fuscous.

Head depressed; from dorsal aspect somewhat longer than wide, truncate anteriorly, and irregularly pentagonal in outline, the antennae inserted against anterior margin; eyes small, situated rather far forward, distinctly shorter than their distance from the occiput; ocelli close together, plainly nearer the occiput than the anterior margin; surface smooth and shining. Antennae 12-jointed; scape moderately long and slender; pedicel narrowed at base, three times as long as its greatest width; funicle joints narrower than the pedicel and much shorter; funicle 1 narrowed at base, twice as long as its greatest width, 2-7 gradually shortening, 7 a little longer than wide; club abruptly 3-jointed, the joints longer than wide. Thorax depressed; pronotum very short; scutum and scutellum flat, smooth and shining; parapsidal furrows wanting; scutellum as long as wide, without a median carina or basal foveae; median segment long, as long as the scutellum, finely rugose, with a distinct median and lateral carinae. Forewings extending well beyond apex of abdomen; subhyaline; moderately narrow, the margins equally inclined; marginal cilia very long, the longest equal to more than one-half greatest wing width; discal cilia not very dense; venation yellowish, terminating in a short, thickened, marginal vein at basal third of wing; basal vein absent. Petiole of abdomen slender, more than twice as long as wide, densely pubescent; body of abdomen depressed, twice as long as its greatest width, its base distinctly separated from the petiole, its basal segment fully twice as long as the following united, smooth and shining. Length, 1.75 mm.

♂. Body less depressed than in the female, the head no longer than wide. Antennae 14-jointed; scape and pedicel yellow, the flagellar joints fuscous, their basal stalks yellowish; scape normal; pedicel short and stout; flagellar joints nodiform, long, about subequal, with a pubescence of scattered long hairs.

Described from one female, labelled "Lord Howe Island, A. M. Lea," and one male, labelled "Norfolk Island, A. M. Lea." Type, I. 14579, South Australian Museum.

Differs from the other Australian species in having the female antennal club 3-jointed.

Phaenopria norfolcensis, n. sp.

♀. Head and abdomen black; thorax chestnut-red; legs bright golden-yellow; antennae golden-yellow, the club fuscous.

Head normal, from dorsal aspect as wide as long, from lateral aspect not as long as its height; smooth and polished, with a very few scattered setae; ocelli absent; eyes small, situated anteriorly and somewhat laterally, not as long by much as their distance from the occipital margin. Antennae 12-jointed; scape long and slender; pedicel fully twice as long as its greatest width; funicle joints shorter and somewhat narrower than the pedicel, 1 one-half longer than

wide, 7 wider than long; club abrupt, 3-jointed, joints 1 and 2 somewhat wider than long, 2 wider than 1, 3 conical and one-half longer than wide. Thorax compressed, much narrower than the head or abdomen, over three times as long as its greatest width; scutum and scutellum smooth and shining; scutum longer than its greatest width, without furrows; scutellum somewhat longer than wide, without a trace of basal foveae, its rim pubescent; median segment long, rather longer than the scutellum, with a clothing of long silvery pubescence. Wings entirely wanting. Petiole of abdomen short, no longer than wide, densely pubescent; body of abdomen smooth and shining, two and a half times as long as its greatest width, the basal segment occupying almost all of surface. Length, 1.5-1.75 mm.

♂. Ocelli present, small; thorax rather less compressed; wings present as narrow flaps that reach the posterior margin of the petiole; basal abdominal segment occupying less than three-fourths of surface. Antennae 14-jointed; pedicel twice as long as its greatest width; funicle 1 a little longer than the pedicel; 2 one-half longer than 1, curved and dilated on one margin at apex; 3 as long as 1; 3-12 moniliform, each bearing a few, long, fine setae.

Described from three females, one male, labelled "Rotting leaves, Norfolk Island, A. M. Lea." Type, I. 14580, South Australian Museum, one female.

An allied wingless form, *Loxotropa grandiceps*, Dodd, has been described from New South Wales, which differs at once in having a basal fovea to the scutellum.

SPILOMICRUS, Westwood.

The collection contains one female, labelled "Rotting leaves, Norfolk Island, A. M. Lea"; this is very closely allied to *S. gracilis*, Dodd, and may not be distinct. A second species is represented, which belongs to the group of species described by me under the genus *Bothriopria*, and subsequently referred to *Spilomicrus*.

Spilomicrus howensis, n. sp.

♀. Black, the antennae wholly concolorous; legs dull yellow, the coxae and femora brown; tegulae reddish.

Head from dorsal aspect subquadrate, not much wider than long; viewed from the side, higher than long, the frons perpendicular to antennal insertion, which is not conspicuous; surface smooth and shining, with numerous, scattered, long, fine setae; eyes small, not as long as their distance from the occiput. Antennae 13-jointed; scape slender, terminating acutely on either side of base of pedicel; pedicel twice as long as its greatest width; funicle joints plainly narrower and shorter than pedicel, 1 twice as long as wide, 2 slightly longer than wide, 6 slightly widened and as wide as long; club 5-jointed, joint 1 not as wide as 2, 1-4 a little wider than long, the apical joint a little longer than the preceding. Thorax fully twice as long as its greatest width; pronotum with long dense pubescence; scutum rather flat, with a few scattered setae, the parapsidal furrows as distant grooves posteriorly and about one-half complete; scutellum at base with two circular foveae a little separated, the lateral foveae shallow and long, the posterior margin finely foveate; median segment fully as long as the scutellum, feebly pubescent and obscurely rugose, with distinct lateral carinae and an obscure raised tooth at base. Forewings reaching apex of abdomen; moderately broad, the apex sharply rounded; stained brownish; venation terminating at almost half-wing length in a short, thickened, marginal vein, the stigmal vein very short; basal vein well marked. Petiole of abdomen twice as long as wide, tricarinate, its basal half pubescent; body of abdomen well raised from petiole, oval, rounded posteriorly, rather more than twice as long

as its greatest width; smooth and shining; segment 2 occupying three-fourths of surface, the following segments with a few long setae. Length, 2 mm.

Described from two females, labelled respectively "Summit of Mt. Gower, Lord Howe Island, A. M. Lea," and "On *Kentia*, Lord Howe Island, A. M. Lea." Type, I. 14582, South Australian Museum.

Of the Australian species, quite close to *S. aureipes*, Dodd, *S. ater*, Dodd, and *S. infuscipes*, Dodd, but the more quadrate head and small eyes will serve to distinguish it.

Family PLATYGASTERIDAE.

No systematic work has yet been done on this group in Australia; the species must be very numerous, and a few have been described. Ashmead's classification of 1893 has been used as a basis, when referring species to genera.

Trichacis howensis, n. sp.

♀. Black, shining; legs, including the coxae, bright golden-yellow; antennal scape yellow, also the first funicle joint, the pedicel fuscous, the antennae otherwise black; mandibles reddish-yellow.

Head normal; vertex thin, transverse, and showing very faint, fine, impressed sculpture; viewed from in front as wide as deep, the frons smooth and shining; antennae inserted just above the mouth, in a circular depression, and separated by a small tubercle; a few, fine, weak hairs are around antennal depression, and there is a scattered row of these same fine hairs against the eyes; mandibles long, slender, bidentate, the teeth acute; eyes moderately large, bare; ocelli wide apart, the lateral ones separated from the eyes by about their own diameter. Antennae 10-jointed; scape long and slender, as long as next five joints combined; pedicel small, hardly longer than its greatest width; funicle 1 minute, cupuliform, no longer than its greatest width, 2 twice as long as wide, and almost twice as long as pedicel, 3 plainly shorter than 2, 4 very small and no longer than wide; club 4-jointed, no wider than the funicle, loosely jointed, the joints much longer than wide, 1 subequal to 4 and slightly longer than 2 or 3, as long as funicle 2. Thorax normal, not twice as long as its greatest width; pronotum smooth and shining, with a very few, fine, weak hairs, the sclerite distinct laterally and dorsally; scutum somewhat narrowed anteriorly, one-half longer than its greatest width, its meson at posterior margin produced into the scutellum for some distance, smooth and shining, a scattered line of white, fine hairs follows the anterior and lateral margins; parapsidal furrows not evident, but a line of fine white hairs marks their course; scutellum small, not distinctly separated from the scutum, raised medially, rather abruptly declivous laterally and posteriorly, covered with a dense, fine, whitish pubescence except at extreme meson; median segment very short; pleurae smooth and shining, the metapleurae with rather dense pubescence. Forewings extending somewhat beyond apex of abdomen; broad, hardly more than twice as long as the greatest width; faintly tinted, except at base; marginal cilia fine, short, and dense; discal cilia almost absent on basal two-thirds of wing, the apical third with about 24 rows of cilia, which are much more dense toward anterior than toward posterior margin; a short submarginal vein is indicated. Petiole of abdomen very short, transverse; body of abdomen no longer than head and thorax combined, two and a half times as long as its greatest width; composed of four segments; segment 2 (first body segment) as long as 3-5 combined, at base with a pubescent fovea on either side of meson, and posterior of each fovea finely striate for some distance, the rest smooth and shining; 3 and 4 subequal, 3 at base with a transverse row of close punctures, 4 with its basai

half punctate; 5 as a conical projection, hardly longer than 4, and almost twice as long as its greatest width. Legs slender, the tarsi 5-jointed. Length, 1 mm.

Described from ten females, labelled "Lord Howe Island, A. M. Lea." Type, I. 14583, South Australian Museum.

Amblyaspis flavibrunneus, n. sp.

♀. Bright brownish-yellow or castaneous, the head, prothorax, and metathorax yellow; eyes and ocelli black; legs golden-yellow, the femora and clavate portion of tibiae suffused with brown; antennae brownish-yellow, the club fuscous.

Head normal; vertex transverse, with very fine impressed reticulation; viewed from in front the head is slightly wider than deep, the frons smooth and not depressed; eyes rather long, extending for almost the length of the frons; ocelli wide apart, the lateral pair a little separated from the eyes. Antennae separated by a small tubercle; 10-jointed; scape almost as long as next five joints combined, very slender, swollen at half its length; pedicel slender, three times as long as its greatest width; funicle joints very slender, narrower than pedicel, 1 two-thirds as long as pedicel; 2 slightly longer than 1, 3 one-half as long as 2, 4 a little shorter than 3; club slender, 4-jointed, joint 1 cupuliform and twice as long as its greatest width, as long as funicle 2, 2 and 3 subequal, barely as long as 1 and not much longer than wide, 4 one-half longer than 3. Thorax normal, twice as long as its greatest width; pronotum prominent anteriorly and laterally, opaque; scutum narrowed anteriorly, somewhat longer than its greatest width, with very fine, dense, impressed reticulation or scaly sculpture, the parapsidal furrows replaced by a complete line (composed of several rows) of fine, dense, pallid pubescence; scutellum raised, covered with fine, dense, pale pubescence, produced posteriorly in a long slender spine high above the median segment for almost its entire length; median segment long, with rather long fine pubescence, rimmed laterally, and with a thick, high, median carina. Forewings very long, extending far beyond apex of abdomen; moderately broad, about four times as long as their greatest width; hyaline for less than basal third, the rest somewhat tinted; longest marginal cilia equal to one-fourth wing width; discal cilia excessively dense right up to base of wing; submarginal vein faintly indicated; hindwings very narrow and pointed, hyaline for basal third, their longest marginal cilia equal to the greatest width, the discal cilia exceedingly dense. Petiole of abdomen no longer than wide, pubescent; body of abdomen ovoid, hardly twice as long as its greatest width, broadly rounded posteriorly; smooth; basal segment occupying three-fourths of surface, the others very short. Legs slender; all trochanters very long, as long or longer than their coxae, and half as long as their femora; femora a little swollen in centre; tibiae with a long basal stalk, which in the long posterior pair is almost twice as long as the apical swollen portion; tarsi slender, 5-jointed; posterior tarsi somewhat longer than their tibiae, their basal joint as long as 2-5 combined. Length, 1.3 mm.

Described from two females, labelled "On *Kentia canterburyana*, Mt. Ledgbird, Lord Howe Island, A. M. Lea." Type, I. 14584, South Australian Museum.

Family BETHYLIDAE.

Sclerodermus norfolcensis, n. sp.

♀. Dull black, the abdomen piceous; legs piceous, the tibiae and tarsi testaceous; antennal scape brownish-yellow, also the next two or three joints, the rest of the antennae piceous.

Body completely flattened, from lateral aspect appearing strongly compressed. Head, viewed from above, plainly longer than wide, with dense, polygonal, scaly sculpture; hind margins rounded, the lateral margins parallel, the clypeus truncate; eyes normal, situated far forward, not as long as their distance from the posterior margin of the head; ocelli close together near the posterior margin, the lateral parts separated from each other by less than their own diameter, separated from the frontal ocellus by their own diameter; a fine groove runs from just inside of each antennal insertion, joining medially and continued as an obscure groove for half the length of the head; mandibles dusky, long, straight, tridentate, the teeth acute, the outer longest, the inner one small; maxillary palpi at least 3-jointed. Antennae short, 13-jointed; scape stout, somewhat clavate, as long as the next four joints combined; pedicel one-third longer than its greatest width; funicle 1 plainly shorter than the pedicel, no longer than its greatest width, 3 longest (not including the apical joint), but hardly as long as the pedicel, 4-10 gradually shortening, 10 a little longer than wide, the last joint twice as long as the penultimate. Thorax a little narrower than the head or abdomen, three times as long as its greatest width; with similar polygonal sculpture to that of the head, but on the median segment this is coarser and inclines towards reticulation; pronotum as long as its greatest width, as long as the scutum and scutellum combined, rounded anteriorly; scutum without a trace of furrows, more than twice as wide as long; scutellum without a transverse groove at base, its posterior margin gently convex; median segment distinctly longer than its greatest width, without grooves or carinae, not retracted at base, its posterior angles rounded; tegulae present in both winged and apterous forms. Wings wanting, or fully developed; in the winged form, forewings long, faintly tinted, with no venation except a short submarginal vein that thickens at the apex and touches the costa, forming a closed costal cell. Abdomen not twice as long as its greatest width; pointed ovate; with fine, scaly, surface sculpture. Legs short; all femora very much swollen; tibiae not spined; posterior tibiae with two apical spurs, one short, the other long and slightly curved; tarsal claws simple. Length, 3 mm.

Described from four females, labelled "Rotting leaves, Norfolk Island, A. M. Lea." Type, 14585, South Australian Museum.

Of the four specimens, three are apterous; there appear to be no structural differences between the two forms. The species does not agree with the characters of *Sclerodermus* as given by Kieffer (1908); the wing venation resembles *Cephalonomia*, but that genus has 12-jointed antennae.

Arysepyris citripes, n. sp.

♀. Dull black, the abdomen somewhat piceous; legs, including the coxae, wholly intense lemon-yellow; antennae dull yellow, the basal three or four joints intense yellow.

Head shaped as in *Goniozus* and its allies, its greatest length rather more than its greatest width, narrowed and produced in front of the eyes, the mandibles thus not prominent; surface with fine, impressed, scaly reticulation and a few, scattered, fine setae; eyes about as long as their distance from the occipital margin; ocelli almost equidistant from one another, the lateral (and posterior) pair much closer to the occipital margin than to the median ocellus. Antennae 13-jointed; scape stout, rather less than twice as long as its greatest width; pedicel longer than any of the funicle joints, about twice as long as its greatest width; funicle 1 narrowed at base, one-third longer than its greatest width, slightly the longest joint of the funicle, 2 the shortest and quadrate, 3-10 subequal, moniliform, slightly longer than wide, the apical joint a little longer than

the preceding. Thorax long, rather more than twice as long as its greatest width; pronotum as long as the scutum and scutellum combined, somewhat wider than long; scutum transverse, without furrows; scutellum without a groove or fovea at base; median segment as long as the pronotum, without grooves or carinae, immargined laterally, abruptly declivious posteriorly; thorax with similar sculpture to the head. Wings represented by flaps which attain the base of the median segment. Abdomen pointed conic-ovate. Legs normal; anterior femora much swollen, more so than the posterior pair; all tarsi simple. Length, 1.5 mm.

Described from seven females, labelled "Lord Howe Island. A. M. Lea." Type, I. 14586, South Australian Museum.

SIEROLA, Cameron.

Although very few species have been described, this genus would appear to be particularly well represented in the Australian region. This collection contains a series of specimens, probably representing more than one species, from both Lord Howe and Norfolk Islands.

Family DRYINIDAE.

GONATOPUS, Ljungh.

One female, labelled "Lord Howe Island. A. M. Lea," is referable to this genus, in its wider sense. No attempt was made to dissect out the mouth parts.