

AUSTRALIAN HYMENOPTERA CHALCIDOIDEA—VIII.*

The Family Miscogasteridæ with Descriptions of New Genera and Species.

BY A. A. GIRAULT.

THE forms do not seem numerous in the Australian fauna.

FAMILY MISCOGASTERIDÆ.

SUBFAMILY TRIDYMINÆ.

TRIBE TRIDYMINI.

GENUS GASTRANCISTRUS Westwood.

1. **GASTRANCISTRUS MENÆTES** (Walker).

Miscogaster menætes Walker; male, 1839, pp. 20-21.

2. **GASTRANCISTRUS ROBERTSONI** new species.

Female.:—Length, 1 mm. excluding the ovipositor, the latter extruded for a sixth the length of the abdomen.

Metallic purple, the wings hyaline; middle tibiæ pallid dusky; tarsi white. Thorax scaly, the propodeum more delicately so. Funicle joints all a little wider than long, 2 quadrate, shorter than the pedicel. Hind wing with about eight lines of discal cilia. Much like *Tetracampoides* of A. P. Dodd of the Eulophidæ. Antennæ 12-jointed, the funicle 5-jointed, two short ring-joints; they are inserted nearly at the mouth border, ventrad of the ends of the eyes; head oblong as in *Spalangia*, the abdomen short yet conic-ovate and produced beneath at apex, the ovipositor distinctly extruded a short distance. Marginal vein a little shorter than the submarginal and only two and a half times the length of the rather long stigmal, the postmarginal slightly longer than the stigmal. Submarginal vein distinctly broken. Mandibles 4-dentate, the teeth long, the outer distinctly the longest, slender. Parapsidal furrows distinct, curving off laterad before reaching the transverse pronotum. Propodeum with a median carina only. Abdomen sessile. Scutellum simple. Propodeal spiracle minute, round, at cephalic margin.

Described from one female captured by sweeping on forest sand-ridges near coast, Tweed River, May 9, 1914 (A. P. Dodd).

Habitat: Chindera, New South Wales.

Type: No. *Hy 3163*, Queensland Museum, Brisbane, the specimen on a tag; head, pair of wings and a hind tibia on a slide.

Respectfully dedicated to F. W. Robertson.

* Contribution No. 31, from the Entomological Laboratory, Bureau of Sugar Experiment Stations, Bundaberg, Queensland.

GENUS SEMIOTELLUS Westwood.

1. SEMIOTELLUS DICE (Walker).

Miscogaster dice Walker, male, 1839, p. 24.

2. SEMIOTELLUS THEOPE (Walker). Male; female.

Miscogaster theope Walker, 1839, p. 25.

GENUS ASEMANTUS Foerster.

1. ASEMANTUS CECIDOMYLÆ Ashmead. Female; male.

Length, 2.4 mm. Metallic bronzed green, finely, closely punctate; head with some thimble-like punctures along anterior orbits and on vertex; mesopleura blue, almost smooth; scrobes distinct, semicircular; antennæ brown-black, scape æneous black, flagellum subclavate, sparsely pubescent, funicle joints longer than thick. Parapsidal furrows distinct, entire; thorax abruptly truncate anteriorly, the pronotum not visible from above except slightly at lateral angles; scutellum large, axillæ widely separated. Legs yellow, coxæ except at tips, metallic; trochanters, tarsi and tibiæ yellowish white. Wings hyaline; marginal, postmarginal and stigmal veins light brown, the marginal being very long, fully four fifths the length of submarginal vein; postmarginal half the length of marginal; stigmal a little shorter than the marginal and ending in a rounded knob. Abdomen conically elongate and about one third longer than head and thorax united.

Male measures 1.8 mm. Blue to bluish green; flagellum long, filiform, the joints more than twice as long as thick, the first and second fully thrice as long as thick; legs, except middle and hind coxæ, wholly yellow; abdomen oblong, depressed and scarcely as long as thorax.

Habitat: Sydney, New South Wales. On *Cecidomyia frauenfeldti*.

Type: No. 4888, United States National Museum, Washington, D.C., U.S.A.

GENUS SYSTASIS Walker.

This genus is similar to *Paruriella* of the Pteromalidæ.

1. SYSTASIS VARIPES new species.

Female:—Length, 2 mm.

Æneous green, the wings hyaline, the coxæ, first two pairs of femora at middle ventrad and hind femur except at apex, concolorous, also the antennæ. Legs otherwise reddish brown including the trochanters, the tips of tibiæ and tarsi white. Vertex with shallow thimble-punctures, rest of head scaly. Abdomen darker. Funicle joints subequal, 5 quadrate, barely shorter than 1, the latter a little shorter than the pedicel, slightly longer than wide. Mandibles tridentate, maxillary palpi white. Club 1 quadrate. Postmarginal vein a little longer than the stigmal. Thorax densely, rather finely punctate, the scutum and scutellum with traces of obscure larger punctures. Propodeum moderate in length, distinctly tricarinate, the lateral carina at apex running strongly mesad along caudal margin and also laterad and so up lateral margin but more weakly. Abdomen longer than the thorax, scaly.

From one female from the Queensland Museum collections, October 11, H. Hacker, collector.

Habitat: Brisbane, Queensland.

Type: No. Hy 3164, Queensland Museum, Brisbane, the specimen on a tag; hind tibiæ and head on a slide.

2. SYSTASIS HENRICI Girault. Female.

Length, 2.10 mm.

Dark metallic æneous green, reticulately punctate, the thorax also with obscure thimble punctures. Wings hyaline. Legs brownish yellow, the cephalic femora washed with metallic green, the posterior femora darker at the middle and submetallic; antennæ dusky black, 12-jointed, with two ring-joints, the club 3-jointed, the funicle joints subquadrate, the first longest, slightly shorter than the pedicel; postmarginal vein somewhat longer than the stigmal. Mandibles 5-dentate, the three inner teeth minute. Propodeum tricarinate, the scutellum without a cross-furrow. Ovipositor not exerted.

Habitat: King Island, Tasmania.

Type: No. I. 1344, South Australian Museum.

3. SYSTASIS GROTIUSI new species. Female.

Length, 1.75 mm.

Like *henrici* but the mandibles without two small inner teeth and all femora and tibiæ are concolorous, the knees and tips of tibiæ broadly yellow. Propodeum short at the meson. Robust and with the habitus of *Ormyrus*. A few punctures on upper face and vertex and the fore tibiæ are mostly yellowish.

Habitat: Gordonvale (Cairns), Queensland. Forest, May and December 2, 1912.

Type: No. Hy 3165, Queensland Museum, Brisbane, a female on a tag, the head and hind legs on a slide.

4. SYSTASIS SEPOSITUS new species. Female.

Length, 1.40 mm.

Bright metallic blue-green, the funicle joints except the first wider than long, the first quadrate and twice or less the length of the second which is shortest. Otherwise like *grotiusi*. Club enlarged, ovate. Pedicel longer than any of the funicle joints. In *grotiusi*, the three distal funicle joints are wider than long and the scape is longer. In *sepositus* the complete median carina is very short, the propodeum short. Thus very similar to *grotiusi* but the antennæ are shorter, the flagellum brown (black in *grotiusi*) and the second funicle joint distinctly shorter than the first. Abdomen slender, conic, longer than the thorax.

The propodeum is short and with a median carina in both species and the sculpture is identical; but the hind wings in *grotiusi* are broader.

Habitat: Capeville (Pentland), Queensland. Forest, January 8, 1913.

Type: No. Hy 3166, Queensland Museum, Brisbane, a female on a tag, the head and hind legs on a slide.

5. SYSTASIS INSULARIS new species of A. P. Dodd and Girault. Female.

Length, 1.90 mm.

Brilliant metallic green, the coxæ and femora concolorous; knees, tibiæ and tarsi white, the tibiæ yellowish centrally, the antennæ black, the scape brownish. Thorax densely finely reticulate-punctate. Propodeum somewhat finer, short, broad, with a median carina, the lateral carina present, abbreviated anteriorly, the spiracle rounded, the spiracular sulci faintly indicated. Abdomen somewhat longer than the thorax, wholly finely scaly and with whitish scattered pubescence; second segment occupying over a third of the surface. Wings hyaline; marginal vein over twice as long as stigmal, the postmarginal a half longer than stigmal. Pedicel a little shorter than first funicle joint which is a half longer than wide, the others subequal, slightly longer than wide; club joints a little wider than long.

Habitat: Thursday Island, Torres Strait. Forest, March 11, 1912.

Type: No. Hy 3167, Queensland Museum, Brisbane, a female on a tag; head and hind legs on a slide.

6. SYSTASIS PUNCTATIVERTEX new species.

Female:—Length, 2 mm.

Like *insularis* but the tibiæ concolorous also except the cephalic tibiæ which are washed with metallic green dorsad; antennæ wholly black æneous, the funicle joints all a little longer than wide, somewhat shorter than the pedicel and subequal to each other. Vertex and upper face with numerous thimble punctures. Propodeum not seen. Second and third teeth of mandibles not very well differentiated, short, obtuse, the division between them rather shallow. Postmarginal vein distinctly longer than the stigmal. Tips of tibiæ whitish.

Described from one female taken from a window, March 18, 1914.

Habitat: Gordonvale (Cairns), Queensland.

Type: No. *Hy* 3168, Queensland Museum, Brisbane, the fore wings, head and hind tibia on a slide.

TRYDYMIFORMIS new genus.

A genus differing from *Trydymus* Ratzeburg in the structure of the clypeus and from other genera of its tribe in the normal venation, 12-jointed antennæ and their insertion and so on.

1. TRYDYMIFORMIS AUSTRALIENSIS new species. Female. Genotype.

Length, 1.75 mm. Steel blue, metallic, the wings hyaline, the legs concolorous except all of tibiæ and the four proximal tarsal joints which are white. Reticulated and with scattered minute setigerous punctures, the abdomen densely reticulated, except the second segment which is glabrous and occupies about half of the surface. Abdomen depressed, ovate, as long as the thorax, segment 7 longer than segments 3-6 united, the latter transverse. Abdomen pilose. Propodeum with a strong median carina. Mandibles small, bidentate. Antennæ 12-jointed, concolorous to black, inserted below the middle of the face, one ring-joint, the club 3-jointed, the distal one terminating in a distinct spinelike seta. Funicle joints transverse, all shorter than the pedicel, the first longest and narrowest, the last three subequal. Propodeum glabrous. Marginal vein subequal to the submarginal, the stigmal shorter than the postmarginal. Clypeus not produced at meson, there gently concaved.

Habitat: Gordonvale (Cairns), Queensland. Jungle, June 14, 1913.

Type: No. *Hy* 3169, Queensland Museum, Brisbane, a female on a tag, the head and hind legs on a slide.

NEOSYSTASIS new genus.

Female:—Runs to *Systasis* Walker, the antennæ inserted *above* the middle of the face but the first funicle joint is elongate, the postmarginal vein elongate, over twice the length of the stigmal, the abdomen long and conical, longer than the rest of the body, the thorax is finely polygonally lined and with scattered umbilicate punctures. Mandibles with two acute teeth. Antennæ 12-jointed.

1. NEOSYSTASIS UMBILICATUS new species. Genotype.

Female:—Length, 1.85 mm.

Dark metallic blue, the head, scutellum and abdomen purple, the legs straw yellow (hind coxa metallic at base); also the scape, the club suffused with whitish. Fore wings distinctly infuscated, the infuscation taking the shape of an obscure midlongitudinal line which diffuses over the blade from each side. Marginal fringes very short. Hind wings knife-shaped, rather narrow, the margin subparallel, the apex blunt. Funicle 5 a little longer than wide, 4 distinctly longer than wide, a little longer than the pedicel, 3 and 2 each longer in succession proximad, 1 a fourth longer than 2, subequal to proximal two club joints combined. Scape moderately long, slender. Face with scattered thimble punctures, rather numerous; punctures numerous on whole of mesonotum but a median path down scutellum, slightly broadening distad, narrow proximad, free of punctures. Axillæ not advanced, with only one or two punctures; punctures

of moderate size, setigerous, the setæ very short. Propodeum rather short, with a distinct median carina which is short and broad, forking strongly at apex, running along the caudal margin. Spiracle at the cephalic margin, round, small, in a more or less obscure impression whose caudal margin is subcarinated. Propodeum finely scaly, impunctate. Abdomen also finely scaly, none of the segments greatly lengthened. Parapsidal furrows deep, complete. Legs slender.

From one female captured in jungle, May, 1913 (A. P. Dodd).

Habitat: Gordonvale (Cairns), Queensland.

Type: No. *Hy 3170*, Queensland Museum, Brisbane, one female on a tag; hind legs and antennæ on a slide.

2. NEOSYSTASIS ORMYROIDES new species.

Female:—Length, 1.80 mm. With the habits of *Ormyrus*.

Brilliant coppery, the wings slightly uniformly infuscated throughout. Legs white except the sides of cephalic coxæ and the hind coxæ which are concolorous; cephalic femora and tibiæ and caudal femur above, pinkish orange. Mandibles with three well-developed, acute teeth. Scape and pedicel yellowish brown; rest of antenna black but the club a little whitish. Venation brown. Head with numerous, scattered punctures; also the dorsal thorax except the propodeum. Scutellum rather broadly at meson from a little cephalad of middle, without punctures. Scutum and scutellum with a short greyish pubescence. Thorax finely scaly reticulated, the abdomen a little more coarsely so. Propodeum similarly sculptured, very short at the meson, nearly hidden from above by the scutellum, widening laterad, the median carina not distinct. Funicles 4 and 5 subequal, each a little wider than long, 2 and 3 subequal, each a little longer than wide; funicle 1 somewhat longer than wide, subequal to the pedicel, distinctly shorter than with the genotype.

Described from a single female captured in the jungle, July 31, 1914 (A. P. Dodd).

Habitat: Gordonvale (Cairns), Queensland.

Type: No. *Hy 3171*, Queensland Museum, Brisbane, the specimen on a tag; head, hind legs and a fore wing on a slide.

In this genus, the submarginal vein is broken. In the genotype, the median carina of the propodeum is short yet distinctly longer than wide and a lateral carina is indicated from caudad.

GENUS EPITEROBIA Girault.

Female:—Agreeing with *Terobia* Foerster but the scutellum with a distinct cross-suture before apex and the marginal vein is fully twice the length of the stigmal, which is distinctly shorter than the postmarginal. Both mandibles flattened, distinctly 4-dentate. Abdomen conic-ovate, keeled beneath, the second segment longest, occupying about a fifth of the surface, its caudal margin with a slight notch at the meson; abdomen somewhat longer than the rest of the body. Antennæ inserted below the middle of the face but somewhat above the ventral ends of the eyes, the first ring-joint very short. Lateral margins of propodeum carinated, but true lateral carinæ absent, the median carina distinct, not very long, complete. Spiracle small, round, *central* (i.e. midway between cephalic and caudal margins, far from cephalic margin). Parapsidal furrows deep.

1. EPITEROBIA RETICULATTHORAX Girault. Genotype.

Female:—Length, 1.15 mm. Dark coppery green, the wings hyaline, the thorax finely reticulated, the lines not raised, smooth on scutellum caudad of cross-suture; propodeum glabrous. Coxæ concolorous, the femora also, the knees, tibiæ and tarsi pale. Mandibles somewhat like an outspread hand with the last finger-joints turned down and the thumb hidden. Antennæ pale yellowish, the pedicel above at base and the club dusky. Club somewhat enlarged; funicle joints subglobular, wider than long, increasing somewhat in size distad but always

shorter than the pedicel, which is a little longer than wide. Club apparently with a minute apical fourth joint (excluding this, antennæ 13-jointed with two ring-joints).

Described from one female captured by sweeping in forest, December 2, 1912 (A. P. Dodd).

Habitat: Gordonvale (Cairns), Queensland.

Type: No. *Hy 3172*, Queensland Museum, Brisbane, the above specimen on a tag, the head and a hind leg on a slide.

A second female, type habitat, May 27, 1914.

TRIBE METASTENINI.

METASTENOIDES new genus.

Form short, robust, the head large, from cephalic aspect rounded, the antennæ inserted in the middle of the face, 13-jointed, three ring and club joints. Clypeus emarginate at meson. Mandibles 3- and 4-dentate. Postmarginal and stigmal veins long, the former longer than the latter, nearly as long as the rather short marginal. Scutellum simple. Pronotum distinct, transverse. Propodeum conical, without a median carina, the lateral carinæ present and a foveate, irregular, short spiracular sulcus, the spiracle narrow, long-reniform. A large transverse fovea at cephalic margin of propodeum just mesad of lateral carina. Abdomen short, depressed ovate, the second segment longest, occupying a little less than a fourth of the surface, the others shorter but not transverse-linear.

1. METASTENOIDES SIMUS new species. Female. Genotype.

Length, 2.70 mm.

Bronze, the wings hyaline, the abdomen dark green, legs (except the concolorous hind coxa, others not noted) reddish; the knees, tips of tibiæ and tarsi white. Antennæ reddish, the first funicle joint longer than the pedicel, longest of the funicle, the others shortening, joint 1 nearly twice longer than wide; funicle 5 slightly longer than wide. Scape long and slender. Head and thorax densely punctate. Distal half of hind tibiæ white.

Habitat: Kuranda, Queensland. Jungle, September 15, 1913.

Type: No. *Hy 3173*, Queensland Museum, Brisbane, a female on a tag, the hind tibiæ and antennæ on a slide.

GENUS ARTHROLYSIS Foerster.

1. ARTHROLYSIS FLAVIVENTRIS new species of Girault and A. P. Dodd. Female.

Length, 3.25 mm.

Head and thorax dark metallic blue, the cephalic coxæ concolorous; anterior femora black-brown; rest of legs golden yellow; abdomen with a longitudinal stripe running down each lateral margin from base to two thirds length and a median stripe from one sixth length to two thirds length, brown; apex of abdomen black, rest golden yellow; antennæ wholly brownish yellow. Wings hyaline, long and broad, the venation yellow; marginal vein one third longer than postmarginal, the latter twice as long as the rather long stigmal vein. Abdomen conic-ovate, depressed above, convex beneath, as long as the head and thorax combined, its second segment occupying one fourth of the surface, 3 and 4 subequal, together equal to 2, 4-6 gradually lengthening, 6 as long as 2. Pronotum distinctly separated; parapsidal furrows only indicated anteriorly; scutellum as long as wide, simple; propodeum moderate in length, punctate, without carinæ or sulci. Thorax densely umbilicately punctate and with a few scattered hairs. Mandibles 4-dentate. Antennæ inserted about on the middle of the face, 13-jointed with two ring-, three club joints; pedicel distinctly longer than wide,

the funicle joints long and slender, 1 nearly twice as long as the pedicel, 2-6 gradually shortening, 6 a little longer than the pedicel; club no longer than funicle 1, without a terminal spine.

Habitat: Kuranda, Queensland. Forest (1,500 feet), September 16, 1913 (A. P. Dodd).

Type: No. *Hy 3174*, Queensland Museum, Brisbane, a female on a tag, the head and hind legs on a slide.

2. ARTHROLYSIS TRILONGIFASCIATA new species.

Female:—Length, 3 mm.

Very similar indeed to *flaviventris* Girault and Dodd but somewhat more slender and all of each leg is golden yellow; the median stripe of abdomen extends distinctly distad of the distal ends of the marginal stripes (the distal ends of the three stripes even in the first species) and each end of it is about equally distant from base and apex (in the first species, the distal end is farther from apex than the proximal is from base). Also, the club is distinctly longer than funicle 1; funicles 1-4 subequal, about twice the length of the pedicel; funicle 6 somewhat longer than wide. Scape and pedicel golden yellow; rest of antenna black. Mandibles 4- and 5-dentate. Sculpture coarse, uniform scaly punctation over the entire thorax (closer, denser, the punctures small, roundish in *flaviventris*). Both species blue-black with a saddlelike neck on propodeum and with the parapsidal furrows obsolete or nearly.

Described from one female captured by sweeping in the forest, May 8, 1914.

Habitat: Gordonvale (Cairns), Queensland.

Type: No. *Hy 3176*, Queensland Museum, Brisbane, the female on a tag with type *flaviventris*; an antenna and a hind leg on a slide.

3. ARTHROLYSIS MIRIFICUS new species.

Female:—Similar to *flaviventris* G. and D. but the marginal stripes of abdomen extend from base nearly to apex, the median stripe is correspondingly longer, its apex even with the apex of the marginal stripes and a little nearer to apex of abdomen than the proximal end is to its base (distinctly the other way round in *flaviventris*). Also, the three stripes are more distinctly broken at each segmental incision. Otherwise similar to the named species. Antennal club not seen.

Described from one female captured by sweeping in the forest, August 14, 1914.

Habitat: Gordonvale (Cairns), Queensland.

Type: No. *Hy 3177*, Queensland Museum, Brisbane, the female on a tag.

A second female was captured September 20, 1914 by sweeping grass in forest, at Capeville (Pentland), Queensland.

The three species greatly resemble *Apirene longifasciata* Girault with which they have been compared.

IIABRITELLA new genus of Girault and A. P. Dodd.

Female:—Antennæ inserted above the middle of face, 13-jointed, with three ring, three club joints; funicle joints not lengthened, club without a terminal spine. Mandibles 4-dentate. Antennal scrobes not defined. Head no wider than the thorax, not much wider than long. Pronotum short, distinctly separated. Scutum much wider than long, parapsidal furrows half complete. Scutellum simple. Axillæ widely separated. Propodeum not long, with a short neck; median carina absent; lateral carinæ distinct, branching in two, one branch running to caudal margin mesad, the other to caudal margin laterad. Spiracle small, round; no spiracular sulcus. Marginal vein twice as long as the stigmal; postmarginal a little longer than the stigmal, the latter with a large knob. Abdomen conic-ovate, nearly straight above, convex beneath; sessile; second segment narrowed; third deeply incised at meson of caudal margin, the incision reaching back to caudal margin of second segment; 4 longer than 2 and 3 united, occupying over one half of the surface; remaining segments short. Hind tibiæ with two short apical spurs.

1. HABRITELLA GRACILIVENTRIS new species of Girault and A. P. Dodd.

Female:—Length, 1.70 mm.

Dark metallic blue, the coxæ and femora concolorous; second and third segments of abdomen brilliant blue-green; knees, tibiæ, tarsi and antennal scape golden yellow; rest of antennæ black. Wings hyaline, the venation fuscous. Thorax, including propodeum, densely punctate; the abdomen smooth. Pedicel slightly longer than first funicle joint which is a little longer than wide; 5 quadrate; club no longer than two preceding joints united, the first two joints subequal, the third shorter. Abdomen slender, narrower than the thorax.

Described from one female caught by sweeping in forest, summit of second coast range, 1,500 feet, May 29, 1913 (A. A. Girault).

Habitat: Northern Queensland (Gordonvale near Cairns).

Type: No. *Hy 3175*, Queensland Museum, Brisbane, a female on a tag, the head and hind legs on a slide.

GENUS AMICROMELUS Girault.

This genus belongs here, not where formerly placed.

Similar to *Micromelus* Walker but funicle 1 is a little longer than the pedicel, segment 2 of abdomen not more than a fifth the length of the abdomen, the antennæ only 12-jointed, the club but 2-jointed the second joint terminating in a distinct spur. Marginal vein longer than the stigmal, the abdomen longer than the thorax, the ovipositor not exerted. Propodeum with a fovea on each side at cephalic margin midway between the meson and the oval spiracle.

1. AMICROMELUS CYANEUS Girault. Genotype.

Female:—Length, 2.20 mm.

Dark metallic blue, the abdomen above dark coppery, the wings hyaline, the venation pale; coxæ and femora concolorous, the knees, tibiæ and tarsi pale, nearly white; thorax with a white pubescence somewhat as in *Aplastomorpha*. Head and thorax densely punctate, including the propodeum; abdomen microscopically sculptured. Antennæ capitate, the distal funicle joint just a little longer than wide, the whole dusky brownish, the club brown. Corrected description.

Described from three females captured by sweeping in a forest, May 5, 1913.

Habitat: Gordonvale (Cairns), Queensland.

Type: No. *Hy 3178*, Queensland Museum, Brisbane, one of the above on a tag and a slide with parts of the others and the appendages.

There are two ring-joints and no carinæ on the propodeum. Mandibles 3- and 4-dentate, the 3-dentate one with its third tooth broad, incised at middle. Antennæ inserted slightly below the middle of the face, the scape very long, slender. Types re-examined. Compare *Neocaudonia* Dodd of the Cleonyminae.

SUBFAMILY PIRENINÆ.

GENUS APIRENE Girault.

Head somewhat wider than long (cephalic aspect), the antennæ inserted high up, above the middle of the face, the scape extending above the vertex—11-jointed with two ring-joints, the club solid and terminating in a nipple-like projection, the funicle joints long, the first plainly more than twice the length of the short pedicel and twice the length of the distal funicle joint. Maxillary palpi with at least three joints. Postmarginal and stigmal veins well developed, the former a third longer. Parapsidal furrows obscure, only about half complete (from cephalad). Abdomen sessile, ovate, depressed above, produced ventrad beneath, the ovipositor not exerted. Propodeum with neither spiracular sulci nor carinæ, the spiracle not large, oblong. Second abdominal segment longest. Posterior tibiæ with two spurs.

Non-metallic. Eyes naked. Pronotum as seen from above, transverse-linear, widening laterad, normal. Segment 2 of abdomen occupying about a fifth of the surface, notched at meson caudad; no petiole. Pronotum well separated.

1. APIRENE LONGIFASCIATA Girault. Female. Genotype.

Length, 2.60 mm.

Black, the abdomen honey yellow and with a long broad black stripe down each side from base to apex; coxæ black, the legs fuscous, tips of tibiæ and most of the tarsi paler, the cephalic femora darker, washed with more or less blackish. Wings hyaline. Head and thorax densely but not deeply punctate, the propodeum less rough, polygonally reticulated, the abdomen all similarly reticulated but more delicately. Face with converging striæ above the clypeus. Second and third funicle joints subequal, the third, fourth and fifth each shortening. Scape and pedicel fuscous; ring-joints yellowish, the funicle yellow, suffused with dusky.

Habitat: Gordonvale (Cairns), Queensland. Forest, December, 1912.

Not uncommon.

Types: No. *Hy 3179*, Queensland Museum, Brisbane, two females on tags (two pins); head on a slide.

EROTOLEPSIELLA new genus.

Running to *Erotolepsia* Howard but the stigmal and postmarginal veins extremely long, subequal, each over three fourths the length of the marginal, the antennal pedicel somewhat shorter than the solid club, the eyes naked or nearly so. There is a single ring-joint and the first funicle joint is subquadrate and narrower than the others, the second and third joints longest. Fore wings banded. Cephalic femur somewhat swollen but simple. Mandibles tridentate. Parapsidal furrows complete, delicate. Abdomen pointed conic-ovate, segment 2 longest but occupying only about a third of the surface, its caudal margin entire. Propodeum with a neck but no carinæ, rugose, the scutellum with a not very distinct cross-furrow before apex. Abdomen with a short stout petiole. Antennæ 11-jointed. With the habitus of the Pteromalidæ.

1. EROTOLEPSIELLA BIFASCIATA new species. Female. Genotype.

Length, 1.80 mm.

Purplish brown, the tip of abdomen ringed narrowly with white, the distal part of metathorax and the short abdominal petiole also white. Legs concolorous, the tarsi yellowish white, the antennæ concolorous. Fore wings with two conspicuous black-brown bands across them, the first narrow and from the bend of the submarginal vein, the second very broad and from the stigmal vein. Thorax punctate.

Habitat: Babinda, Queensland. Jungle. October 28, 1911.

Type: No. *Hy 3180*, Queensland Museum, Brisbane, a female on a tag, the head and caudal tibiæ on a slide.

EROTOLEPSIOPUS new genus.

Female:—Form short. Head wider than long, the antennæ inserted on a level with the ventral ends of the eyes, capitate, the club short, obliquely truncate, 3-jointed; eleven joints with one ring-joint, the funicle joints after the subquadrate first, wider than long and subpedunculate. Mandibles slender, with three long teeth. Parapsidal furrows complete, deep. Pronotum transverse. Scutellum with a punctate cross-groove just before apex. Propodeum polished, with a median carina only, the spiracle small, round. Axillæ large, widely separated. Second abdominal segment occupying a little over a third of the surface, the others much shorter than it. Marginal vein short, less than half the length of the submarginal, the stigmal not long, two thirds the length of the marginal, the postmarginal somewhat longer than the stigmal.

1. EROTOLEPSIOPUS SUBSOLANUS new species. Genotype.

Female:—Length, 1.35 mm.

Metallic purple, the base of abdomen dorsad and the propodeum dark bluish green, the wings hyaline. Legs and antennæ straw yellow, the coxæ metallic, concolorous. Propodeum with foveæ along cephalic margin. Thorax reticulately scaly, the lines not raised. Scape cylindrical, moderate in length; joints 2-5 of funicle gradually widening. Third club joint very flat, the first forming nearly half the enlarged club. Pedicel oval. Hind tibial spurs normal. Legs simple. First femora subfuscous, a little compressed. Funicle 1 shorter than pedicel, a little wider than long, longest and narrowest of the funicle.

Described from one female captured by sweeping in jungle, July 24, 1913.

Habitat: Gordonvale (Cairns), Queensland.

Type: No. *Hy 3181*, Queensland Museum, Brisbane, the specimen on a tag.

PAREROTOLEPSIA new genus.

With the habitus and structure of *Pteromalus* but the antennæ are inserted on a level with the ventral ends of the eyes or nearly and are 11-jointed with one rather short ring-joint, the club 3-jointed; the postmarginal vein is only slightly longer than the stigmal, of average length, the marginal somewhat less than twice the length of the stigmal; the propodeum is short, with a distinct median carina and no others; parapsidal furrows complete, no spiracular sulci. Segment 2 of abdomen occupying a little over a fourth of the surface. Scutellum with a punctate cross-suture before apex. Mandibles 4-dentate. Maxillary palpi 4-jointed. Second division of club not very distinct. Differs from *Erotolepsiopus* Girault in the shorter, 4-dentate mandibles, the cylindrical funicle and the rounded head. Propodeal spiracle round, cephalad.

1. PAREROTOLEPSIA AURIPES new species.

Female:—Length, 1.50 mm. Habitus of a species of *Pteromalus*.

Dark metallic prussian blue, the legs golden yellow except coxæ, the wings hyaline, the venation golden yellow. Thorax densely, finely scaly punctate, the propodeum shining, showing no trace of coarser polygonal scaliness, æneous green except along the median carina. Abdomen scaly. Pubescence not conspicuous. Scape golden yellow, rest of antenna dark brown, the club lighter. Funicle 1 somewhat longer than wide, subequal to the pedicel, 5 a little wider than long. Club about two thirds the length of the funicle. Third tooth of mandible smallest.

From one female caught in forest (swamp), May 14, 1914 (A. P. Dodd).

Habitat: Chindera (Tweed River), New South Wales.

Type: No. *Hy 3183*, Queensland Museum, Brisbane, the specimen on a tag.

SUBFAMILY MISCOGASTERINÆ.

TRIBE MISCOGASTERINI.

GENUS TOXEUMA Walker.

1. TOXEUMA PAX new species. Female.

Length, 0.70 mm.

Like species of *Toxeuma* but the antennæ apparently only 12-jointed with one ring-joint, club 3-jointed, the distal joint terminating in a nipple-like seta. Mandibles weak, with two teeth. Scutellum with a cross-furrow before apex. Abdomen depressed above, conic-ovate, not as long as the thorax, the petiole distinct, moderate in length. Propodeum with a median carina (lateral carinæ not observed, may be present). Marginal vein nearly as long as the submarginal, the postmarginal well developed, a little more than thrice the length of the

rather short stigmal. Abdominal segment 2 longest, together with 3 occupying two thirds of the surface. Parapsidal furrows complete. The ring-joint in one antenna appeared to be divided.

Dark metallic green, the wings hyaline, the legs except hind coxæ which are more or less concolorous, straw yellow; scape straw yellow, the flagellum black. Pedicel wider than the filiform funicle, the club still wider; joints 2 and 3 of funicle subequal, each nearly as long as the pedicel, all the funicle joints longer than wide, the sixth or last shortest, the first subequal to the pedicel. Thorax reticulated.

Habitat: Gordonvale (Cairns), Queensland. Jungle, June 16, 1913 (A. P. Dodd).

Type: No. *Hy 3182*, Queensland Museum, Brisbane, the female on a tag, the head and caudal tibiæ on a slide.

TOXEUMORPIA new genus.

Like *Toxuma* Walker but the scutellum without a cross-furrow, the mandibles strongly 4-dentate. The three carinæ of the rather long, punctate propodeum are obtuse and much as in *Pachycrepoides*. Antennæ 13-jointed with two ring-joints. Pronotum transverse. Segments 2 and 3 of abdomen occupying four fifths of the surface, long, subequal.

1. **TOXEUMORPHA NIGRA** new species. Female. Genotype.

Length, 1.65 mm.

Black with a faint suffusion of green, the wings hyaline; legs and venation yellow-brown, the coxæ jet black; postmarginal vein a little longer than the stigmal, shorter than the marginal. Thorax finely punctate. Antennæ black, the scape, pedicel and two ring-joints yellow-brown, the funicle joints all much shorter than the pedicel, the distal three a little wider than long, 2 and 3 quadrate, 1 a little longer than wide and narrower than the others.

Habitat: Brisbane, Queensland. From a window in a wool-house, October 3, 1911.

Type: No. *Hy 3184*, Queensland Museum, Brisbane, a female on a tag, the hind legs and head on a slide.

GENUS TOXEUMELLA Girault.

1. **TOXEUMELLA PULCHRIPES** new species of Girault and A. P. Dodd.

Length, 2.60 mm. Short and stout.

Agreeing with the generic description except that the propodeum lacks the median carina.

Bright metallic coppery green, the abdomen polished; coxæ concolorous, femora and tibiæ bright yellowish reddish; the knees, distal half of posterior tibiæ and the tarsi pale straw yellow; antennal scape bright reddish; rest of antennæ yellow suffused with dusky. Wings hyaline; venation golden yellow, the marginal vein a half longer than the long stigmal, the postmarginal nearly as long as the marginal. Head and thorax densely punctate, the propodeum slightly more finely so. Propodeum short and broad, with lateral carinæ. Parapsidal furrows complete. Head large, a little wider than the thorax. Abdomen compressed above, convex beneath, no longer than the thorax, the petiole short and stout; second abdominal segment occupying almost half the surface, remaining segments subequal. Mandibles 3- and 4-dentate. Antennæ 13-jointed with three ring- and three club joints; funicle 1 distinctly longer than pedicel, almost twice as long as wide, 2 subequal, 3-5 shortening, 5 almost quadrate; club scarcely longer than funicle 1, its first joint as long as the other two combined.

Habitat: Kuranda, Queensland. Jungle (1,100 feet), September 16, 1913 (A. P. Dodd).

Type: No. *Hy 3185*, Queensland Museum, Brisbane, the female on a tag, the head and hind legs on a slide.

2. TOXEUMELLA DISSIMILIS new species of A. P. Dodd and Girault.

Female:—Length, 2.75 mm.

Very dark metallic green, the coxæ concolorous, the femora brown, the tibiæ, tarsi, antennal scape, pedicel, first two ring-joints, golden yellow; rest of antennæ black. Head not large, no wider than thorax. Thorax (including propodeum) densely punctate; parapsidal furrows faint but complete. Propodeum with an abbreviated median carina at base only and with two pairs of lateral carinæ. Abdominal petiole stout, short, the abdomen conic-ovate, depressed above, convex beneath; segment 3 as long as 2, the two together occupying over half the surface; segments 2-4 smooth, the others finely scaly. Tegulæ yellow. Wings hyaline, the marginal vein no longer than the long stigmal, the postmarginal a half longer. Pedicel somewhat longer than funicle 1 which is somewhat longer than wide, 5 quadrate; club joints distinctly wider than long; third ring-joint larger than the other two. Mandibles not seen.

Described from a female taken from a window, June, 1912 (A. A. Girault).

Habitat: Gordonvale (Cairns), Queensland.

Type: No. Hy 3186, Queensland Museum, Brisbane, the specimen on a tag, an antenna and hind legs on a slide.

TOXEUMOPSIS new genus.

Like *Toxumella* Girault but the marginal vein short and thickened as in the Pachyneurini, no longer than the long stigmal which is somewhat shorter than the postmarginal. Distal club joint not ending in a nipple. Propodeum distinctly tricarinate, the median carina rather obscure but visible from lateral aspect, the lateral carinæ complete, rather obtuse. Second and third abdominal segments subequal, combined occupying nearly two thirds of the surface; segments 4 and 5 transverse-linear. Petiole of abdomen short and stout. Mandibles 3- and 4-dentate. Hind tibial spurs double.

1. TOXEUMOPSIS NIGRA new species. Female. Genotype.

Black, the abdomen shining, the wings hyaline; legs yellowish brown, the coxæ concolorous; venation dark. Scape and pedicel colored like the legs, the rest of the antennæ black; cephalic femur suffused with black. Finely reticulate-punctate, the propodeum somewhat more coarsely so. Abdomen glabrous. Pedicel blackish above, the first two ring-joints yellow. Pedicel much longer than any of the funicle joints, the first of the latter only slightly wider than long, the second and third subquadrate, the fifth wider than long. Length, 1.60 mm.

Described from one female from a window.

Habitat: Gordonvale (Cairns), Queensland.

Type: No. Hy 3187, Queensland Museum, Brisbane, a female on a tag; head and caudal legs on a slide.

A second female was taken from a window at Ingham, Queensland, February 17, 1913.

MISCOGASTERIELLA new genus.

Head from cephalic aspect rounded, large, wider than the thorax, the mandibles strong, 3- and 4-dentate, the antennæ long and filiform, inserted *above* the middle, the scape short, the pedicel of usual length, the following joints all long and slender, shortening distad, the first funicle joint about thrice the length of the pedicel; thirteen joints in all, including two ring-joints, the club solid. Parapsidal furrows distinct, complete. Pronotum distinctly separated, large but wider than long. Abdomen with a short stout petiole, much elongate, twice the length of the thorax, cylindrical, the second and third segments long, subequal, together occupying nearly half. Mesoscutum short. Scutellum with a distinct transverse

grooved line before tip. Propodeum with a distinct median groove and with two half complete lateral grooves followed by a distinct, spiracular sulcus which is foveate; the spiracle is large, reniform. Propodeum longer than scutum. Postmarginal vein extending nearly to apex, much longer than the marginal, the stigmal short, a third or less the length of the marginal. Clypeus barely wider than long. Hind tibial spurs double, the legs slender but normal in length. Habitus of the Pteromalidæ.

1. MISCOGASTERIELLA LONGIVENTRIS new species. Male. Genotype.

Length, 6.30 mm.

Dark metallic green, the wings slightly embrowned throughout, the scutum and scutellum (cephalad of the suture) coppery; abdomen coppery black; venation very dark; coxæ concolorous, the legs reddish brown, the hind femur washed more or less with metallic greenish. Antennæ black. Clypeus blue-black, glabrous, the face and head finely reticulated, the scutum and scutellum more coarsely so, scaly, but distad of the cross-furrow, the scutellum much smoother and of a different color. Vertex back of and upon each side of the ocelli apparently smooth, but in reality extraordinarily finely alutaceous; however, smooth as compared with the reticulation of the rest of the head. First two pairs of coxæ sometimes brownish.

Habitat: Little Mulgrave River (Gordonvale), Queensland. Jungle, June 10, 1913 (A. P. Dodd).

Type: No. *Hy 3188*, Queensland Museum, Brisbane, two females on separate tags; and a slide with a head and cephalic legs.

TOXEUMOIDES new genus.

Similar to *Toxomorpha* Girault but both mandibles are long and narrow, equally bidentate at apex, the stigmal and postmarginal veins are subequal, short, the stigmal subsessile, the parapsidal furrows are deep, the median carina of propodeum sharp and long, the lateral carina represented by a curved, foveate groove leading directly from the spiracle. Segment 2 of abdomen occupying somewhat over a third of the surface, 3 still longer, extending nearly to tip where 4 shows as a small cone. Petiole about as long as the hind coxa. Antennæ inserted a little above the ventral ends of the eyes, short, clavate, one ring, three club joints, 13-jointed. Abdomen flat beneath, not triangularly produced as in *Toxomorpha nigra*.

1. TOXEUMOIDES ÆNEICORPUS new species. Female. Genotype.

Length, 2 mm. Brassy green, the wings hyaline, the tibiæ reddish brown washed with metallic, the tarsi pale. Antennæ dark metallic green, all funicle joints wider than long, 1 shortest and narrowest, thrice the length of the ring-joint, 7 widest, 3 a little the longest. Pedicel longer than any funicle joint (in one antenna, funicles 2 and 3 were fused into a joint somewhat longer than wide). Abdomen glabrous, the petiole with a median carina and carinated lateral edges, scaly. Propodeum glabrous, with short cross-stitching-like effects along the median carina; rest of thorax transversely lined except distal third of scutellum, the head, axillæ and pronotum scaly.

Described from one female captured October 11 (H. Hacker).

Habitat: Brisbane, Queensland.

Type: No. *Hy 3189*, Queensland Museum, Brisbane, a female on a tag; hind leg and an antenna on a slide.

GENUS SELADERMA Walker.

1. **SELADERMA ATHANIS** (Walker). Female ; male.
Miscogaster athanis Walker, 1839, pp. 26-27.
2. **SELADERMA CERNUS** (Walker). Female.
Miscogaster cernus Walker, 1839, p. 22.

GENUS LAMPROTATUS Westwood.

1. **LAMPROTATUS BATO** (Walker). Female ; male.
Miscogaster bato Walker, 1839, pp. 22-23.
2. **LAMPROTATUS CIRON** (Walker). Female.
Miscogaster ciron Walker, 1839, pp. 16-17.
3. **LAMPROTATUS DAMIA** (Walker). Male ; female.
Miscogaster damia Walker, 1839, p. 21.
4. **LAMPROTATUS HECATÆUS** (Walker). Male.
Miscogaster hecatæus Walker, 1839, p. 19.
5. **LAMPROTATUS MYCON** (Walker). Male.
Miscogaster mycon Walker, 1839, pp. 19-20.
6. **LAMPROTATUS NELO** (Walker). Female.
Miscogaster nelo Walker, 1839, p. 17.
7. **LAMPROTATUS NICON** (Walker). Female ; male.
Miscogaster nicon Walker, 1839, pp. 17-18.
8. **LAMPROTATUS THERA** (Walker). Male.
Miscogaster thera Walker, 1839, pp. 18-19.
9. **LAMPROTATUS UMBRO** (Walker). Male.
Miscogaster umbro Walker, 1839, p. 24.

GENUS MISCOGASTER Walker.

1. **MISCOGASTER DAICLES** Walker. Male, 1839, p. 20.
2. **MISCOGASTER LETUS** Walker. Female, 1839, p. 26.
3. **MISCOGASTER SAMBUS** Walker. Female, 1839, pp. 21-22.

TRIBE HALTICOPTERINI.

HALTICOPTERELLA new genus of Girault and A. P. Dodd.

Female:—Head (cephalic aspect) a little wider than long, the antennæ inserted above the middle of the face, 13-jointed with three ring- and club joints. Pronotum distinctly separated, transverse, the parapsidal furrows three fourths complete from cephalad. Propodeum with spiracular sulci and lateral carinæ, the median carina absent. Abdominal petiole

short, the second segment occupying less than a fifth of the surface, the next three or four short, the abdomen pointed conic ovate, as long as the rest of the body. Postmarginal vein long, nearly as long as the marginal, the stigmal well developed but much shorter, somewhat less than half the length of the marginal. Propodeum with a short neck. Mandibles strong, 3- and 4-dentate. Scutellum simple. Head wider than the thorax (as seen from above). Cephalic ocellus not within the scrobes.

1. HALTICOPTERELLA NIGRIFLAGELLUM new species. Female. Genotype.

Length, 2.50 mm.

Dark metallic green, the wings hyaline; tibiæ, tarsi, knees, trochanters and much of ends of first two pairs of femora, pale straw yellow, the scape reddish yellow. Funicle 1 about twice longer than wide, distinctly longer than the pedicel which is subequal to the first funicle joint. Head and thorax uniformly, densely reticulate-punctate, the propodeum and head somewhat smoother. Coxæ concolorous, femora washed with metallic. Occipital impression immargined. Legs not noticeably swollen.

Habitat: Gordonvale (Cairns), Queensland. Jungle, November 10, 1913 (A. P. Dodd).

Type: No. *Hy 3190*, Queensland Museum, Brisbane, the female on a tag.

PARADICYLUS new genus of A. P. Dodd.

Head no wider than thorax, from cephalic aspect not distinctly wider than long; cephalic ocellus not within the scrobes. Antennæ inserted above the middle of face, 13-jointed with three ring- and club joints, the funicle joints elongate. At least one mandible 4-dentate. Pronotum distinctly separated. Parapsidal furrows three-fourths complete. Scutellum simple. Propodeum not long, without a distinct neck, with a distinct median carina and a cross-carina, the lateral ends of which curve cephalad and join the cephalic margin of the propodeum mesad of the spiracle. Spiracle rather large, in a depression, bounded caudad by a ridge which is a continuation of the cross-carina. No spiracular sulcus. Abdominal petiole short. Abdomen conic-ovate, somewhat longer than the rest of the body, somewhat produced at apex; segment 2 of abdomen occupying about a fifth of the surface, 3-5 each a little shorter than 2, subequal, 6 as long as or a little longer than 2; caudal margin of segment 2 at meson incised. Marginal vein not much longer than postmarginal, over thrice longer than stigmal.

Related to the foregoing genus but that genus lacks the median and the cross-carina on propodeum, and has complete lateral carinæ and spiracular sulci; also the second abdominal segment is not incised.

1. PARADICYLUS VARICORNIS new species of A. P. Dodd. Female. Genotype.

Length, 3.45 mm.

Dark metallic blue-green, the coxæ concolorous; femora dark brown, also basal third of tibiæ; knees, apical two thirds of tibiæ and the tarsi (except apical joint) white; antennal scape yellow; pedicel, first two ring-joints and funicles 2-4 dusky yellow; last ring-joint, funicle 1 and club black. Wings hyaline. Funicle 1 four times longer than wide, twice as long as pedicel, 2 two thirds the length of 1, the others gradually shortening, 5 slightly longer than pedicel; club no wider than funicle, scarcely longer than funicle 1; first club joint as long as the other two combined. Thorax densely punctate, the propodeum reticulated. Abdomen (except the smooth second segment) with very fine scaly sculpture.

Habitat: Gordonvale (Cairns), Queensland. Jungle, January 9, 1914 (A.P. Dodd).

Type: No. *Hy 3191*, Queensland Museum, Brisbane, the female on a tag; head and caudal legs on a slide.

SUBFAMILY LELAPINÆ.

GENUS LELAPS Haliday.

1. **LELAPS FUSCA** new species. Male.

Length, 1.35 mm.

Reddish brown, the abdomen and proximal halves of each parapside black, the petiole of abdomen reddish toward base, the posterior coxæ blackish toward tip; legs yellowish brown, the posterior coxæ which are large and cylindrical, nearly as long as the femur of the same legs and nearly as long as the long abdominal petiole, reddish. Wings subhyaline, the marginal vein distinctly longer than the submarginal, the postmarginal a half longer than the stigmal. Scutellum with a cross-furrow. Parapsidal furrows complete, curved off rather shortly. Axillæ just about meeting inwardly. Pronotum long, nearly subquadrate, distinctly separated. Propodeum produced into a distinct neck, with median and lateral carinæ. Abdomen small, the second and third segments subequal, together occupying over three fourths of the surface. Thorax scaly, the abdominal petiole rough; also the hind coxæ. Antennæ inserted slightly below the middle of the face, 13-jointed, with one ring-joint, the club 3-jointed, the funicle pilose, the joints all a little wider than long. Mandibles tridentate. Two posterior tibial spurs.

Habitat: Gordonvale (Cairns), Queensland. Jungle, May 8, 1913 (A. P. Dodd.)

Type: No. *Hy 3192*, Queensland Museum, Brisbane, the male on a tag; head, a caudal leg and the abdomen on a slide.

GENUS NEAPTEROLELAPS Girault.

Agreeing with the description of *Apterolelaps* Ashmead but the antennæ only 12-jointed, one ring-joint, the parapsidal furrows absent, posterior tibiæ armed with two very long spurs, one of which is comparatively enormous, much larger than the other. Wings entirely absent. Abdomen with a very short, transverse petiole but the propodeum prolonged into a hood-like neck to meet it; no median carina on propodeum. Mandibles bi- and tridentate, in the latter the middle tooth shortest.

1. **NEAPTEROLELAPS LODGEI** Girault. Female. Genotype.

Length, 2.15 mm.

Ferruginous, the pronotum darker, the mesoscutum, a stripe across the abdomen before tip and the coxæ (nearly) black; tibiæ nearly black except at tip; funicle black, the club yellowish white, the pedicel and ring-joint dark fuscous. Second abdominal segment somewhat over half the length of the body of the abdomen; one spur of posterior tibiæ as long as the first two tarsal joints united, the other a half shorter; posterior coxa with a tooth above just before apex. Pedicel longer than funicle 1, which is longest of the funicle, the distal joint wider than long. Scape somewhat dilated toward tip. Funicle joints 2 and 3 subquadrate. Thorax coriaceous, clothed with recumbent hairs, which are not dense; posteriorly mesoscutum bevelled off and smooth to the scutellum. Proximal tarsal joint of caudal leg black or dark.

Habitat: Mount Tambourine, Queensland.

Type: No. *I. 1269*, South Australian Museum.

GENUS LELAPSOMORPHA Girault.

Agreeing with the foregoing but the antennæ only 11-jointed with one ring-joint, the club solid, the posterior tibial spurs stout and unequal but normal in length, the wings fully developed and infuscated and the propodeum with a median and a lateral carina. Otherwise

the same, there being no parapsidal furrows. Stigmal and postmarginal veins long and subequal. Mandibles tridentate, at least on one side. Second abdominal segment only a fourth the length of the body of the abdomen. Funicle joints transverse, all much shorter than the pedicel. Maxillary palpi 3-jointed, the labial 2-jointed.

1. LELAPSOMORPHA MYERSI Girault. Female. Genotype.

Length, 2 mm.

Ferrugineous, the proximal half of the abdomen yellowish with one or two cross stripes of fuscous, the other half blackish, the lateral carinæ of the propodeum darkened. Legs yellowish brown, the caudal coxa dark with a distinct purplish tinge proximad exteriorly, the caudal tibia fuscous. Antennæ dusky yellowish, the club and distal two funicle joints yellowish white. Fore wings with a straight-margined brown stripe across it at the submarginal vein just out from apex where the stripe itself is accented in the form of a deeper colored round spot by a roundish cluster of hooklet-like black spines; distad a very large subspherical brownish spot across the wing from the postmarginal vein, the middle of its proximal margin narrowly joining the middle of the proximal stripe so that when looking up the wing (apicad) the large spot looks not unlike the bag of a gas balloon attached to the basket below it. Thorax with polygonal reticulation (scaliness), the scutum with obscure thimble punctures. First funicle joint only about twice the length of the ring-joint, the funicle widening distad.

Habitat: Port Lincoln, South Australia.

Type: No. I. 1270, South Australian Museum, Adelaide.

URIOLELAPS new genus.

Female:—Differs from *Lelaps* Haliday in that the antennæ are 13-jointed with two very short ring-joints, the club only 2-jointed. Scutellum with a punctate cross-suture at distal two thirds. Petiole of abdomen distinct, plainly longer than wide, segment 2 occupying about half the surface. Parapsidal furrows curved, converging caudad, not quite complete caudad and tending to join there obtusely, barely missing caudal margin; the short, semi-circular parapsides are thus narrowly connate caudad, the scutum obtusely conical distad. Distal segment of abdomen long-conical, over half the length of segment 2, the ovipositor slightly exserted. Mandibles tridentate. Antennæ inserted on a line with the ventral ends of the eyes. Marginal cilia of fore wing short. Maxillary palpi 4-jointed, the last joint much the longest; labials 3-jointed.

1. URIOLELAPS ARGENTICOXÆ new species. Genotype.

Female:—Length, 2.84 mm.

Dark reddish brown, the cephalic and caudal coxæ silvery white; funicles 3-7, the short parapsides, distal end of scutum and the very short projecting ovipositor valves black; fore wings trifasciate, the third stripe at apex, the second largest, from the postmarginal vein, the first next longest, suberescens, from about distal two thirds of marginal vein; base of wing also infuscated. Venation with many stiff black bristles; postmarginal and stigmal veins long, the first longer. Abdomen, scutellum distad of cross-suture and propodeum glabrous. Petiole rather coarsely, longitudinally striate. Propodeum with a median carina to the neck and with a cross-carina distad of middle whose arms are obliqued latero-caudad and then abruptly change angle to caudad running to the short neck; several other irregular carinæ laterad; spiracle round. Rest of thorax densely scaly reticulate, bearing scattered, long black setæ and also many more short black ones (all cephalad of transverse suture of scutellum, the same

bearing a large black seta at each lateral end). Pronotum transverse. Tibial spurs normal, leg slender. Pedicel not especially long but longer than any of the funicle joints of which 1 is longest, not much shorter than the pedicel, somewhat longer than wide; 2 subquadrate, the others gradually shortening, 7 being distinctly wider than long. Vertex also with several long black setæ, the head scaly reticulate.

From one female captured in jungle, February 5, 1914 (A. P. Dodd).

Habitat: Babinda, Queensland.

Type: No. Hy 3193, Queensland Museum, Brisbane, the specimen on a tag; head, front and hind legs on a slide.

2. URIOLELAPS POEI new species.

Female:—Length, 2 mm.

Similar to the genotype but shorter and besides the black parapsides, the proximal third dorsad of segment 2 of abdomen is purplish black, there is a round spot of the same color on each side of meson of the same segment at apex and the rest of the abdomen dorsad is of the same color except a short, intervening space caudad of the two spots. Also, the propodeum is black centrally on each side of meson. The antennæ differ in that the funicle is entirely black and the joints are a little shorter. Otherwise about the same. In both species, the scutellum caudad of the transverse suture is glabrous and the whole surface of the abdomen except slightly distad. The propodeum in both bears several irregular carinæ blocking out large, sunken areas. Compared with type of *argenticoxa*.

Described from one female captured in the jungle on the Tweed River, May 2, 1914 (A. P. Dodd).

Habitat: Tweed Heads, New South Wales.

Type: No. Hy 3194, Queensland Museum, Brisbane, the female on a tag.

Respectfully dedicated to Edgar Allan Poe.

This family shows most interesting parallelisms with the Pteromalidæ. The species do not shrivel very much.