

NEW CHALCID-FLIES FROM EASTERN AUSTRALIA

I

(Hymenoptera, Chalcididae)

By A. A. GIRAULT

The types of the following species are deposited in the Queensland Museum at Brisbane.

Hexanusia, new genus.

Runs to *Zooencyrtus*, but mandible 3 truncate, wide but not very. Dilation of scape distad and not great. Scrobicular cavity large, forming a horseshoe. Frons moderately wide. Marginal two and a half times longer than wide, a bit exceeding stigmal, which somewhat exceeds postmarginal.

Hexanusia nigricornis, new species.

Black, aeneous, and like the as yet manuscript *Australencyrtus* genotype; tips tibiae (widely in ♀), knees except hind, tarsi reddish yellow; wings clear, veins black. Frons finely scaly, and with only two widely separated rows of pin-punctures crossing it. Funicles quadrate, but 1 somewhat longer, not quite equal pedicel; scape black.

One female, Wynnum, Queensland.

Perilampus tassoni, new species.

Green; knees, tibia 1 beneath, tibial tips, tarsi, tegulae and flagellum save pedicel, reddish. Punctate; parapside centrally toward caudal end with a small, finely lined, impunctate area; occiput finely circularly lined; upper face thick, with distinct pin-punctures; vertex same, the ocellar area cross-lined; ocelli in a curved line. Middle face smooth, ventral line upper, also clypeus, but punctures sparser. Lower cheeks finely circularly striate, with scattered pin-punctures, along the eyes smooth. Postmarginal about twice the stigmal, about three-fourths marginal. Propodeum with a pair of median carinae, from thence nearly to spiracle, microscopically longitudinally lined, thence laterad gibbous and punctate. Abdomen ♀ from caudal

aspect, very densely and finely pin-punctate, almost glazed at caudal half.

A female, Inkerman, Queensland, jungle, December 9, 1917.

Lamennaisia, new genus (Encyrtini).

Small. Jaws small, 4-dentate, teeth small, subacute, 4 abruptly much shorter than others, nearly half shorter than 3, 1-2 a bit shorter than 3. Marginal quadrate, stigmal and post-marginal long, equal. Frons moderately wide, scrobes long, deep. Scape simple, flagellum cylindrical, club wider, funicles subquadrate, 1 smaller, cup-shaped, pedicel twice funicle 2. Club somewhat over half funicle. Four lines of cilia proximad hairless line.

Lamennaisia quadridentata, new species.

Black, wings clear; tarsi, knees, tibial tips, distal half tibia 2, yellowish; venation black. Sculpture fine. Abdomen short, depressed, triangular; thorax convex. Scape suffused with pallid at apex.

A female, forest, May, 1919, Ipswich, Queensland.

Neanastatus ariostoni, new species.

The same as *aurivertex*, but laterad ocellus not twice closer to eye than to cephalic ocellus, of prothorax only pronotum lemon and the vertex; pale parts of legs silvery, tibia 3 purple save basal fourth and apex more narrowly. Head entirely orange except the stripe across upper occiput. Abdomen wholly metallic.

Ipswich, Queensland, forest, October 26, 1919.

Quadrastichodella nova, new species.

Peculiar, flattened aspect. Green, coxæ, femur 3 same, wings clear; rest of the legs pale yellow, antennae green. Funicles equal, half wider than long; pedicel large, long, two-thirds scape which equals club; ring joints very distinct, 1 largest. Head rather long, pronotum transverse quadrate. Densely scaly, propodeum apparently with median carina at base. Postmarginal somewhat developed. Femora 1 and 2

green at basal half, more or less. Generic characters very distinct.

Forest, Pentland, November, 1919.

Anagyropsis mercurius, new species.

Like *mazzinini* but only coxa 3 green. Antennæ black, funicle 1 longest, much exceeding pedicel, four times longer than wide, 6 subequal pedicel. Fore wing lightly smoky, clearer at base widely. Vertex, scutellum rather densely pin-punctate. Lateral ocellus against eye. Scape greatly dilated.

Brisbane, from a leaf in a park, May 23, 1921.

Parerotolepsia chauceri, new species.

Like genotype, but 1 of hind tarsi elongate, distinctly exceeding 2 and 3 together and twice the longest tibial spur.

Nelson, forest, April.

Uriolelaps keatsi, new species.

Dark aeneus, wings lightly infuscated, base clear nearly to end submarginal vein; scape, club, trochanters, base of femora and tarsal joint 1, white. Legs yellow save coxæ and femur 3. Mandibles tridentate. Clypeus glabrous, quadrate. Funicle 1 twice its width, a bit shorter than pedicel. Head scaly, finely rugulose beneath antennæ, latter 13-jointed, one right joint, three club joints. Upper thorax finely scaly, with depressed hairs; a large seta on scutum each side distad of middle. Scutellum with cross-suture a bit distad middle, longitudinally striate distad of this and naked. A large fovea caudad the small round spiracle on propodeum, no sulcus, median carina forked at base, a semicircular carina crossing it, looping around to apex of neck, enclosing a square. Abdomen 2 half surface, petiole substrate. Venation as genotype, paraspidal furrows nearly as widely separated at apex as the axillæ.

Fishery Creek, Queensland, jungle, June.

Epistenia miripes, new species.

Aeneus, densely punctate; basal two-thirds scape, funicles 6-7 (counting ring-joint as 1), coxæ 1 and 2 and apex of 3, femora 2 and 3 save over distal third laterad (in 2, distal

fourth mesad also, the dark continuous), knees 1 and 2, tibiæ 1 and 2 save dorsad (and middle of 2, which is black at base dorsad), femur 3 save distal half save apex, tibia 3 save basal and distal fourth and tarsi 3, white; tarsi 1 and 2 brown. Antennæ at eye-ends, scrobes deep, ocelli in about equilateral triangle. Funicle 1 narrower, somewhat longer than wide, 2 twice longer than wide, shorter than pedicel, others gradually shortening; club long, solid. Propodeum foveate along cephalic edge, a median carina forked from base (rather a flat, triangular one, declivus and near base coming to a somewhat elevated cone), a curved lateral carina with a lateral branch about its middle. Abdomen acuminate, longer than rest of body, last two segments stylate, all except at base, finely cross-wrinkled. Fore wing with apex brown, a cross-stripe apex stigmal, widening centrally, there with a long proximal arm like a shaft in the form of half an arrow-head. Postmarginal elongate.

National Park, Queensland, February, 1921 (G. H. Hardy through the kindness of the Queensland Museum).

Echthrobacca luciani, new species.

Like genotype, but legs except tibial tips, tarsi, knees, distal two-thirds tibia 2, concolorous, other parts yellowish. Ovipositor a bit extruded, white at apex. Mandible 3 truncate, but not very wide; funicles 1 and 4 equal, quadrate, 2 and 3 shorter, 5 and 6 quadrate, largest. Pedicel exceeding funicles. Marginal one-third longer than stigmal, about twice postmarginal. Scutellum convex, reaching base of abdomen, dorsal thorax hispid. Marginal over two-and-a-half times longer than wide.

Forest, Tumoulin, Queensland, March 12, 1919.

Eusemionella rara, new species.

As *hemiptera* but pale yellow, abdomen with moderately wide sub-metallic cross-stripe at middle, tibia 3 purple near base, funicle 6, club 1 black, also apex of shortly extruded ovipositor valves; clothing of caudal scutum sparser. Funicles 1-3 quadrate, 5-6 somewhat longer than wide, club five-sixths the funicle. Fore wing twice longer than wide, obliquely truncate at apex, submarginal extending nearly to apex, a single large

seta near its end; basal third fore wing dusky; a few scattered discal cilia. Head inflexed.

Tumoulin, forest, March 12, 1919.

Omphalomorphella tassoni, new species.

Robust, like a rather large *Rhichnopeltella*. Shining black, wings clear, veins black; tarsi except last joint and tibial tips, yellowish white, latter more widely in legs 2. Sculpture fine, scutum with evident setigerous pin-punctures, scutellum naked, three large setæ along each side. Abdomen stout, ovate, pilose. Postmarginal about half longer than stigmal, somewhat shorter than marginal, latter somewhat longer than postmarginal. Funicles a bit wider than long, 3 and 4 shorter; ring-joint 2 twice 1. Club with apical spine. Many not gross setæ on submarginal.

Ipswich, Queensland, forest, May, 1919.

Procheiloneurus perbellus, new species.

From genotype: Ovipositor not extruded, scape stout, marginal only two-and-one-half times longer than wide, equal stigmal, postmarginal third shorter. Fore wing deep brown, crossed by a flat-triangular (obtuse apex proximad) clear stripe, half way to apex from venation; also a wide stripe between base and marginal vein. Purple; frons along eyes, mouth, pronotum except lateral margin, center propleurum, scutellum, distal half plus scutum, orange; coxae white; first two pairs legs missing; trochanters, base and apex femora, apex tibiæ and tarsi of hind legs, also funicle white. Funicles 2-4 shortest, twice wider than long, 6 largest, 1 quadrate, smaller than 6; club long, not much wider. Frons moderately narrow. Vertex nearly flat. Caudal margin narrowly and caudo-lateral corners more widely of scutum, metallic.

Kamma, Queensland, forest, January, 1918.

Systasis quadridentatus, new species.

Rather slender. Aeneus, wings clear, legs save coxae, femora 3 and femora 2 ventro-laterad widely at middle, white. Scaly; finely punctulate, the short propodeum with an obscure median carina. Ovipositor extruded one-fifth abdomen. Stig-

mal half of marginal a bit shorter than postmarginal. Wings wide. Tooth 3 of 4-dentate mandible abruptly shorter than the others. Funicle 1 quadrate, equal pedicel. Resembles species referred to *Schizonotus*.

Wynnum, Queensland, forest, May 24, 1921.

***Neanastatus rabalaisi*, new species.**

Like *punctaticeps*, but coxae metallic, leg 1 reddish brown except femur at base, 2 the same except most of the femur except at tip; scape black, red at extreme base. Middle tibial spur black, also entire tarsus.

Forest, Ipswich, May, 1919.

***Kakaoburra*, new genus.**

Runs to *Echthrobacca* Perkins, but stigmal and postmarginal equal, half the rather long marginal; jaw teeth subacute, subequal, funicles longer than wide. Maxillary palpi apparently 3-jointed.

***Kakaoburra fera*, new species.**

Aeneus, wings clear, legs except tibia 2, tibial tips and tarsi, which are brownish, concolorous; also antennae. Funicles 1-4 equal pedicel, twice longer than wide, rest shortening. Club conic-ovate, not quite half of funicle and not much wider. Abdomen and scutellum pointed.

Watsonville, Queensland, forest, mid-March, 1919.

***Anagyropsis irvingi*, new species.**

Robust, ovipositor extruded for length of abdomen nearly. Green, legs and antennae (save scape and pedicel except at apex), straw yellow, wings clear. Tegulae and lunula before them yellow. Marginal punctiform, postmarginal and stigmal equal, long. Funicles 1-2 equal, half longer than wide, exceeding pedicel. Scutum with rather dense, fine thimble-punctures, less distinct on scutellum and vertex. Scape's dilation moderate. Discal cilia fine and dense to hairless line, proximal sparse. Hairless line widening distad, not very clearly defined. Scutellum large, peltato-triangular.

Capeville, Queensland, forest, November, 1917.

Gonatocerus bifasciiventris Girault.

Types from Java. Two females compared with them, taken by sweeping grass in secondary forest growths, boggy land, Cannon Hill, Queensland, April 18, 1921.

Elasmus longifasciiventris, new species.

Runs to *muscoides*, but abdomen metallic as follows: 2 at basal third, 6 and following, meson widely of 2-5, same narrowly of venter and 6-8 ventrad except narrowly 6 ventro-laterad. Lemon as follows: Postscutellum except base, base of tegula, legs except basal two-thirds coxa 3. Mandibles 6- and 7-dentate, scape pale beneath. Funicles equal, over twice longer than wide.

Cannon Hill, Queensland, forest, July 7, 1921.

Elasmus taurus, new species.

Like *minor*, but abdomen 5-8 green above, a crescent meson of 3, base of 4 green except laterad, coxa 2 so at base; post-scutellum lemon; mandible 7-dentate. Funicle 1 twice longer than wide. Less than basal half of coxa 3 green.

Goondi, Queensland, jungle, September.

Elasmus firdonsini, new species.

Like *nakomara*, but marginal dots base abdomens 3-6, mesal spot middle 3 and 4, dot meson 6; femora metallic dorsad. Flagellum dark, funicle 1 longest; upper half green save dot at eye. Jaw 6-dentate.

Wynnum, Queensland, forest, November 7, 1920.

Elasmus aeschlyi, new species.

Like *helena*, but small spot on mesopleurum above coxa, propodeum yellow laterad at cephalic margin, a transverse mark laterad apex scutellum, dorsal edge femur 3 green.

Wynnum, Queensland, forest, March 13, 1921.

Elasmus richteri, new species.

Like *ero*, but wings infuscated at distal third or more, this darkness with oblique proximal margin from near end of marginal, caudo-proximad to hind margin. Abdomen green:

Basal third of 2, spot base of 6, lateral margin, 7-8. Scape beneath and at base, pale. Jaws 5-dentate. Coxa 1 at base, other coxæ, femur 2 above and beneath and irregularly across at about center, femur 3 save each end (base widely), green. Funicle 1 over twice longer than wide.

Manly, Queensland, forest, September 21, 1920.

Elasmus virgillii, new species.

Like *grimmi*, but femur 3 all green, so abdomen above save distal half of 2, 3 and middle of 6. Jaws 10-dentate.

Forest, Wynnum, Queensland, April 8, 1920.

Elasmus froudei, new species.

Like *mandibularis*, but first legs save extreme base coxa, each end rather widely of femora 2 and 3, also pallid; scape all green, so postscutellum save distal edge. Jaws 10-dentate.

Forest, Ipswich, Queensland, June.

Stomatoceras dipterophagus, new species.

Black, wings as in *carlylei*, following parts red: Legs except coxa 1 laterad, distal half pedicel, funicle 1, tegulæ, dorsal abdomen—distal half 2, 3, 4 (except distal margin, except laterad); ventral abdomen—all except last three segments; lateral—2-6. Funicle 1 quadrate, 2 subequal pedicel and 3. Postmarginal somewhat exceeding marginal, over twice stigmal. Apex scutellum as in *livii*, seen from above, but teeth not so strong, obtuse. Hind femoral teeth as in *livii*. Lateral ocellus nearly twice closer to eye than to cephalic (in *livii* about half between the two). Prominence over hind coxa not truncate, rectangular but conical, mound-like. Abdomen as in *livii*, as to sculpture. Male-wings clear, antennæ black, filiform, funicle 1 elongate, 2-3 equal, shorter, rest quadrate, pedicel very small; abdomen ventrad, ventro-lateral red, above so only middle across of distal half of 2, basal half of 3.

A pair reared from *Passeromyia* larvæ infesting birds' nests, Mackay, Queensland, May 27, 1920 (E. W. Ferguson). Received through the kindness of Dr. T. Harvey Johnson.

Fulgoridicida babindae, new species.

First four funicles equal, twice wider than long, each half of 5, latter still wider than long, 6 large, quadrate. Dark aeneus, wings clear, venation dark, knees, tarsi, tibial tips yellowish. Frons moderate. Pedicel a bit exceeding funicle 6, which is wider than rest; club nearly equal funicle and wider. Marginal a bit longer than wide, not thickened, equal postmarginal, stigmal twice or more longer. Jaw teeth minute, 2 thicker than 1. Hypopygium covering ovipositor to tip. Sculpture fine. About eight lines coarse cilia proximad hairless line, hind wings about seven lines discal cilia. Setae from submarginal long and slender.

Babinda, Queensland, jungle, September, 1918.

Australanusia, new genus.

Runs to *Paracalocerinus*, but mandible 2 widely truncate, 1 subacute and shorter, marginal shorter, only about twice the stigmal; ovipositor one-third abdomen. Scape compressed, but not foliceously. Maxillary palpi four-jointed. Marginal twice stigmal, latter somewhat exceeding postmarginal.

Australanusia pilosithorax, new species.

Aeneus, wings lightly dusky, veins blacker; legs, antennae concolorous except reddish knees and tarsi; abdomen depressed, produced beneath, pointed. Thorax with whitish pubescence which is prostrate. Scrobes forming a long triangle. Funicles subequal, twice wider than long, club not much enlarged, exceeding funicle. An infuscation against marginal vein. Hairless line open caudad, closed cephalad, many lines of dense, somewhat coarser cilia proximad of it. Pedicel not long.

Wynnum, Queensland, forest, June 8, 1921.

Paratoximopsis, new genus.

Like *Toxeumoides* genotype, but stigmal long, with distinct neck and only half postmarginal, paraspidal furrows not deep; abdomen 2 the whole surface, petiole exceeding coxa 3; two ring-joints. Abdomen as in *Perilampus* as to shape of body. Scutellum peltate, narrow, from lateral aspect, terminating in an acute point, oblong, axillae nearly wholly laterad of it.

Paratoximopsis oblongiscutellum, new species.

Like type of named genus, but tibiae and tarsi yellowish white, femur 2 above reddish brown, knees reddish. Propodeum punctate-scaly along median carina; scutellum less sculptured than scutum. Head finely circularly lined; antennae on middle of face. Clypeus with convex distal margin. Scrobes long, deep.

Ravenshoe, jungle, March 13, 1919.

Mesanusomyia, new genus.

As *Anusomyia*, but scape slender, marginal thrice longer than wide, a bit shorter than stigmal, postmarginal somewhat longer than stigmal; minute 2 of curved acute jaw at center of inner side of 1. Ovipositor not free. Species like *Phaenodiscoides*, *Hexencyrtus*, *Australencyrtus*.

Mesanusomyia fera, new species.

Green, wings faintly dusky. Legs yellow-brown except coxa 1 and femur 1 at proximal two-thirds or nearly; scape save at apex, yellowish red, club white. Funicles twice longer than wide, 6 shorter, 1 a bit shorter than pedicel. Antennae at clypeus. Scutum hairy, scutellum glabrous. Costal cell with three lines discal cilia.

Ravenshoe, jungle, March 13, 1919.

Ceraptrocerus subapterus, new species.

As *emersoni*, but wings abbreviated, fore thrice longer than wide, truncate at apex, costal cell wide, marginal linear, stigmal short; fore wing dusky, no marginal cilia, several lines coarse discal, hyaline as follows: Along submarginal base at apex basal three-fourths, thence across to caudal margin, where dividing it runs near this margin to base and to apex, the distal branch widely interrupted before apex; an oblique mark disto-caudad from base of marginal. Ovipositor free.

Perhaps a form of *emersoni*. Nelson, forest, August. Also at Cairns in January.

Parexoclaenus bomboides, new species.

Length, 6 mm. Black, lemon as follows: Large, oblique

stripe on upper face, its dorsal half against the scrobe, ending at eye nearly opposite antennae; a narrow, concaved line across pronotum near cephalic margin, hind margin of same save laterad (the yellow cephalic margin to a dark red caudal margin of pronotum); lateral margin scutum at caudal half; hind margin scutellum; a dot on cephalo-lateral angle propodeum; an ovate spot base coxa 3 dorsad; an oblique, elliptical mark each side meson, base dorsal abdomen, a wide stripe across whole dorsum and nearly all pleurum, abdomen 5 (save cephalic and caudal margins); basal (more widely) and dorsal margin thinly of lateral aspect femur 3. Following parts reddish: Antennae save scape above and sides near base, funicles more or less; a dot center scutum, each side of meson; tegulae; coxal apices narrowly, tibiae, tarsi, knees (including apices of all femora, in hind the red invading the black along ventral margin to tooth 4. Hind femora laterad as widely yellow at base as red at tip; mesal aspect black, distal fourth red. Stigmal much exceeding marginal, which is barely longer than wide. Scape yellow ventrad. Middle femoral furrow smooth. Mesal aspect femur 3, punctulate. Coxa 3 acute distal half dorsal edge. Lateral margin propodeum obtusely ridged; a curved lateral carina. Like *vespoides* otherwise and resembles a common, small, paper-nest wasp of the forest, *Isaria gregaria*, maybe, but more closely a non-petiolate, 2-banded wasp of about the same stature and of the jungle.

Nelson, window, December 16, 1918.

Thaumasura nonstylata, new species.

Length, 7 mm. Aeneous save long 1 of tarsus 2, which is white; abdomen normal, non-stylate, ovipositor not extruded, plate of scutellum projecting from apex like a blunt cone and bears a carina on each side of meson. Fore wing with thick but rather light crescentic cloud from stigmal knob, curving nearly to apex submarginal. Postmarginal twice stigmal. Funicle 1 a ring-joint, 2 thrice longer than wide, exceeding the long pedicel, 8 exceeding 7, equal club. Sparsely punctate; propodeum with a thin median carina and no others.

Wynnum, Queensland.