

2. ELASMUS DUBIUS Girault.

Two females on *Atriplex*, South Australia.

3. ELASMUS NAKOMARA Girault.

A female, Samsonvale, Queensland. Sweeping grass in forest, September 18, 1927 (A. A. Girault).

Genus EURYISCHIA Koebele.

1. EURYISCHIA UNMACHIA

A male

Girault, A.A.

whi
seve
edge
4-lal

1929.

Quee

Notes on + descriptions of Chalcid wasps -
the South Australia Museum.

Tinda
1
fore v
varies

Trans Roy Soc S. Aust. 53: 309-346
Q 73 R6

Hi

narrow

off the pronotum, cephalic axilla, pronotum at meson, cephalic parapside, basal and apical margins of the scutellum, orange; scutellum with 3 setae along each lateral margin; about cephalic half of the scutum setose, this setose area bounded, caudad by a cross-row of 6 bristles, 3 on each side of which the lateral two are gross; naked thence except for a bristle on the caudo-lateral corner. Two gross setae upon the backward spur of the submarginal vein, base and apex. Discal ciliation terminating at the base of the marginal vein, its basal margin sinuate.

A female, Melrose, South Australia, October (A. M. Lea).

Subfamily EUCHARITINAE.

Genus EUCHAROMORPHA Girault.

1. EUCHAROMORPHA VIRIDIS Girault.

Two females, Launceston, Tasmania (F. M. Littler), February 6 and January 26, 1916.

There was a median groove on the scutum in one specimen. The fringes of the fore wing are present. The whole abdomen is densely, minutely pilose. The mouth-plate is at least 4-digitate and the jaws 2- and 3-dentate.

Genus STILBULA Spinola.

1. *Stilbula quadri-digitata*, n. sp.

Aeneous, the wings clear, venation pale yellow, so the scape, pedicel, legs except coxae and femora (except apices) and the tegulae. Striate in the usual way, scutellum with a median groove, strongly bidentate at apex but not produced,

the teeth short. Petiole coriaceous, $2\frac{1}{2}$ times longer than wide, with a lateral carina. Propodeum glabrous to the spiracular sulcus, with a thin median carina. Segment 2 the whole surface, glabrous but with a few pin-punctures ventro-laterad. Club and distal joints of the funicle yellowish.

Scape equal to joint 1 of the funicle, which, with the others is produced somewhat on one side of apex, twice longer than wide at apex; scape thrice longer than wide, equal club; joint 2 of the funicle a bit longer than wide at apex, 5-6 quadrate, 7 wider than long; antennae 12-jointed but the joints of the club are merely indicated by constrictions, no sutures. Dorsal thorax naked.

Discal ciliation dot-like, no fringe; stigmal vein perpendicular, not a quarter the length of the postmarginal vein. Costal cell with a more or less paired central line of cilia.

Mouth-plate 4-digitate, digits short, about twice longer than wide.

A female, Ardrossan, South Australia (J. G. O. Tepper).

2. *Stilbula albipennis*, n. sp.

From *S. quadri-digitata*: The mouth-plate though longer than wide is blunt at apex and bears six elongate, pale spines (therefore, it is not branched into four short fingers each bearing a spine at apex and it does not widen distad). The scape is dark aeneous, funicles 1-3 equal, thorax densely punctate, venation and discal ciliation indistinct; and so forth. The antennae taper distad, 12 distinct joints.

Aeneous-black, wings transparent and nearly naked; discal ciliation very sparse, pale; pedicel more or less, flagellum after funicle 3, knees, tibiae except 3, apex of tibia 3, tarsi yellowish.

Head except clypeus, circularly striate. Thorax entirely closely but not coarsely punctate, finely so in middle of mesopleurum, the metathorax foveate, the projection forming an erect, blunt, strong tooth on each side. Femoral furrow deep, so the lateral sulcus of propodeum, former glabrous. Petiole punctulate, foveate proximad, $3\frac{1}{2}$ times longer than wide, lateral margin narrowly carinated. Meson propodeum widely concave, no median sulcus. Abdomen below finely pitted. Scape twice longer than wide, subequal funicle 1, scaly. Funicles globular, smaller than the pedicel.

A female, Groote Eylandt, North Australia (N. B. Tindale).

3. *Stilbula albipetiole*, n. sp.

Purplish, fore wing lightly infuscated from about bend of the submarginal vein. Legs except coxae, petiole, tegulae, scape except beneath at base and pedicel, white, venation yellow-brown. Head circularly striate. Thorax foveate-punctate, this sculpture coarser and more or less longitudinally striate on metapleura; prongs of the scutellum moderately slender, exceeding the basal part. Abdomen above, from apex of 2 (about middle), and nearly all below, densely punctate (punctulate), the petiole stout, about twice longer than wide, finely, longitudinally grained, narrower at base. Propodeum with a median ruga, the lateral sulcus wide and deep, the "hump" forming a large, obtuse "tooth," erect. Postmarginal vein elongate, the stigmal perpendicular, thick, narrowing to apex; bend of the submarginal vein abrupt.

Discal ciliation distinct, not very dense, no fringes. Fore wing widest through the stigmal vein. Mouth-plate with 8 digits, the central pair shorter, each with an elongate, pale, stout spine, the whole much as in *S. octodigitata*. Scape (excluding bulla) twice longer than wide, a bit shorter than funicle 1, latter distinctly longest, equalling 2 plus 3, 12 hemispherical, next smallest after pedicel; joint 8 quadrate, rest decreasing distad.

From *S. octodigitata*: Petiole all white and much shorter, scape pale and longer, funicle 1 shorter; prongs of scutellum are not shorter than the basal part, the median groove of the scutellum is obscure, abdomen with distinct sculpture and so forth.

A female, Caramby, Victoria, on *Bursaria spinosa*, January 14, 1887 (J. G. O. Tepper).

Also a male in the Macleay Museum from South Australia. In this sex the petiole is nearly as long as the rest of the abdomen (about six times longer than wide) and with lateral margins carinated. The antennae are 12-jointed, each of the 9 funicles with a long ramus from the same side, of 1 and 9 these a bit shorter, joint 1 wider than long, equal the pedicel, 9 over twice longer than wide; scape over twice the length of the pedicel, thrice longer than wide, half the length of the club, the latter is long as ramus 9 and with a distinct tooth-like projection between middle and apex on the side opposite the rami.

The propodeum bears a narrow median sulcus instead of a ruga, the stigmal vein is pale and shorter, the discal ciliation fainter. The mouth-plate is 10-digitate but similar in size and shape to that of the female. Jaws 2- and 3-dentate. Otherwise the male is the same. Process of the scutellum about half the length of the scutellum. Basal part distinctly wider than long and shorter than the "teeth" in the female, the "teeth" in the male quadrate, equal.

4. *Stilbula octo-digitata*, n. sp.

Purple, rugoso-punctate, the wings clear, veins pale, abruptly black from near the apex of the marginal vein; legs except the coxae yellow-brown; femora darker, scape nearly concolorous. Petiole white with an aeneous cinctus at middle, smooth, five times longer than wide, swollen at middle; scape a fourth longer than wide, not quite half the length of joint 1 of the funicle, exceeding the subglobular pedicel; funicle 1 thrice, 2 twice, 3 one and a half times longer than wide; 8-10 subglobular, 7 quadrate and larger than 8; club or 10 not well defined, rounded at apex. Scutellum with a distinct foveate median groove, the furrows joining around the apex; bifids shorter than the basal part of the projection. Scutum with a less distinct median groove, the furrows joining around the apex. Lateral sulcus of the propodeum wide, more coarsely foveate than the convex mesal part, this latter coarser than the punctuations of scutum and scutellum. Tegulae yellow.

Plate of mouth 8-digitate, the digits rather long, tubular, the middle shorter, at apex each with a long, pale bristle which appears to be truncate at apex (except on middle ones) as in some Thysanoptera. They are stout. Abdomen ovate, a bit compressed, not upturned, exceeding petiole.

A female, King George Sound. The type is in the Macleay Museum.

Genus PSILOGASTER Blanchard.

1. *PSILOGASTER PULCHER* Girault.

A female, Tasmania, No. 2936 (A. Simson).

Belongs to *Epimetaea* Girault. This sex agrees with the description of the male except that the club is somewhat longer than funicle 7. The lower face bears scattered pin-punctures. The mouth-plate is 8-digitate, digits long with elongate apical spines, the lateral longest but not projecting farther. On one side there was a short ninth digit. The glabrous area on the caudal parapside is rather large. Pubescence on the scutum very sparse.

Genus *EPIMETAGEA* Girault.1. *EPIMETAGEA MAGNIFICA* Girault.

A female, Mount Lofty, South Australia (J. G. O. Tepper).

Funicle 1 a bit over half the length of the scape, a third longer than 2, nearly twice the length of the pedicel, a fourth shorter than the club, 7 exceeding the pedicel. Basal joint of the maxillary palpus very elongate, subequal to the 3-jointed labial palpus whose distal joint is longest. Mouth-plate 8-digitate, the digits long, exceeding the palmlike basal part. In the lateral aspect, segment 2 is a third (or more) of the surface, in the dorsal, all of the surface. Abdomen glistening.

2. *Epimetegea sanguiventris*, n. sp.

As the description of *E. bicoloriventris* but the entire abdomen (except the petiole) except basal $\frac{1}{2}$ above crimson, legs except coxae and hind femora more or less laterad, venation, tegulae, scape, straw colour; rest of the antenna red-brown. The glabrous area on the mesopleurum is cephalad. The scape distinctly exceeds funicle 1 (almost twice longer); funicle 1 is subequal to the club, nearly twice longer than 2 or 3, all thicker at apex. Petiole over twice longer than wide, punctate, lateral margin carinate. Dorsal thorax pilose. The propodeum not rugose but rugulose and the mesal edge of the deep spiracular sulcus is carinate. Antennae 10-jointed, club solid. Scutellum terminating in a small, submarginate plate.

Mouth-plate 13-digitate, the digits elongate and with long, stout apical spines, which are usually shorter than the part bearing them and blunt at apex. At least one palpus 3-jointed, 1 and 3 elongate, 2 short. Discal ciliation minute, not very dense, fringes absent around distal margin, minute elsewhere and inset from margin.

A female, Mount Lofty, South Australia (J. G. O. Tepper).

3. *Epimetegea flavifemora*, n. sp.

Purple, legs except coxae, scape, pedicel yellow-brown, wings lightly embrowned, veins dark; abdomen black, dark red in a wide crescent from near meson of near apical end of 2 to and along upper distal half of the side of 2 at distal half (leaving apical margin of 2 black); and the short 3 (making a concave cross-stripe nearly as thick as the crescent, latter best seen from the dorso-lateral aspect). This second red is not at apex in the dorsal aspect.

As identified specimens of *E. rufiventris* Ashmead otherwise, but lower half of face glabrous with scattered pin-punctures, cheeks and upper head circularly striate; funicles 2 and 3 are longer in relation to 1, thrice longer than wide; area of the propodeum between the lateral sulci more finely rugulose and there is a weak, narrow median sulcus. There is also a median groove on the scutellum (not marked in either species).

Joint 1 of the funicle exceeds the scape, and 7 and 8 are nearly twice longer than wide (thus joints a bit longer than with the other species). Joints 7 and 8 are the distal two joints of the funicle.

A female, Camden, New South Wales; also Monaro. Types in Macleay Museum. The second specimen bore fuscous femora.

4. *Epimetegea aeneobrunnea*, n. sp.

Brown, the head and upper thorax (except propodeum) aeneous-brown, the flagellum except pedicel, dark; wings subhyaline. Head circularly striate, the striae not dense; scutum cross-striate at cephalic half, the striae curving concentrically caudo-laterad to the furrows, from centre longitudinally striate.

Parapside glabrous, lateral half and distal margin punctate rather coarsely. Axilla, scutellum rather coarsely long-striate, scutellum with distinct median groove.

Propodeum glabrous but a bit crinkled on the mesal part, with distinct median and lateral carinae, the lateral strongly curved off laterad as it goes toward cephalic margin and between its cephalic end and the margin, the spiracle is lost in a network of rugae, no groove. The lateral carina originates dorso-laterad, runs nearly straight caudad (and a bit mesad), then makes wide bend nearly straight mesad, thence by a long gradual bow-bend reaches apex; the first two curves are about equal, 3 longer.

Segment 2 of the abdomen is about half the surface, 3 short, darker, forming a dark bow across the abdomen its ends curving up into segment 2. Petiole thrice longer than wide, glabrous but with a stout carina down each side (lateral aspect).

Jaws 2- and 3-dentate. Mouth-plate 8-digitate, digits short and blunt, each bearing an elongate, stout spine; there is also a similar spine laterad of digit 2 of either side (as if from a third digit).

Scape over twice longer than wide, over half joint 1 of the funicle, latter nearly twice the length of 2, widening distad; 2-3 equal, longer than wide, rest short but the oval club nearly as long as 2.

Discal ciliation dense, dot-like to about the base of the marginal vein. Scutellum obtusely pointed, sans distinct plate or tooth.

A female, King George Sound. The type is in the Macleay Museum, Sydney.

Genus CHALCUROIDELLA Girault.

1. *Chalcuroidella bispinosa*, n. sp.

As the revised description of *C. orientalis* but scape distinctly exceeding joint 1 of the funicle, general colour aeneous, mouth-plate 11-digitate (digits long, outer pair more divergent); stigmal vein yellow; legs except coxae, tegulae, scape yellow brown; rest of the antenna and femur 3 dark brown or fuscous. Abdomen red except basal $\frac{1}{4}$ above and a spot above just before apex. There is a small glabrous area near the centre of the parapside. Petiole wider at base, where it bears a long lateral spine on each side. Abdomen smooth but with many scattered pin-punctures. Face very pilose. A deep, wide fovea at the base of the scutellum between the axillae. Legs pilose.

A male, Mount Lofty, South Australia (J. G. O. Tepper).

The scutellum appears to be folded up at apex and the rolled-up part pressed into the other; from lateral aspect, there is a short tooth just caudad of the emarginate apical plate.

Genus METAGEA Kirby.

1. *Metagea punctuliventris*, n. sp.

Reminds of *Tricoryna subsalcbrosa*, but hind metatarsus is not thick and the scape is over half of funicle 1, latter equal to 2 plus 3, these $\frac{1}{4}$ longer than wide; the club, joint 10, constricted at middle, a bit longer than 9, 8 and 9 subquadrate.

As description of *M. kirbyi* Ashmead but abdomen densely pin-punctulate (except the long segment 2 above), its petiole only $2\frac{1}{4}$ times longer than wide and very finely long-lineolated. Legs except articulations and the tarsi dark, general colour dark blue. A median groove on the scutellum and between the large axillae. Rugosity of the thorax not coarse, only medium, the smooth part of the parapside is the mesal half of middle part. Venation beyond the submarginal vein, pale. Pedicel wider than long. Propodeum with a median carina, transverse striae from it.

Jaws 2- and 3-dentate. The hemispherical mouth-plate bears a middle spineless digit and 4 or 5 on each side of it, all wide and obtuse, each bearing a long, colourless spine. Lateral ocellus twice closer to the median than to the eye, latter sparsely hairy. Discal ciliation distinct, very fine and rather dense, to about the base of the marginal vein (a bit beyond).

Three females, South Australia. Types in Macleay Museum.

Subfamily EURYTOMINAE.

Genus EURYTOMA Illiger.

1. *Eurytoma murrayi*, n. sp.

The same as *E. brevipetiolata* but abdomen yellow on venter and lower half of the sides, femora 1-2 above, 3 (all) black (except ends), so hind tibiae above centrally; scape black on dorsal edge. Stigmal and postmarginal veins subequal, half the length of the marginal. Median channel unifoventate. The yellow triangles on the face of the male nearly coalesce except at meson just beneath antenna. Resembles *E. tasmanica* in everything except channel of propodeum, punctate parapside, its longer marginal vein and the colour of the legs. Funicles exceeding pedicel. Petiole in female a bit longer than wide.

Two pairs, Tasmania.

The distal part of the disc of the scutellum bears sparse punctures, the interspaces finely reticulated. The outer orbits in the male are yellow.

2. *Eurytoma cecili*, n. sp.

Characterised by the pointed, conic-ovate abdomen with 2 exceeding any other segment, then 6 and 7 which are equal, finely reticulate and each with several rows of thimble-punctures; segments 4 and 8 shortest, 3 equal 5 and less than half of 2 and a fourth shorter than 6. Base of scape, knees, tibiae, tarsi, apex of the ovipositor valves, apex of the pedicel, red-brown. Funicles 1-2 somewhat longer than wide, somewhat exceeding the pedicel. Venation black, the postmarginal vein somewhat exceeding the stigmal, three-quarters the marginal. Petiole quadrate, surface coriaceous, with ridged lateral margins. Segment 5 finely reticulate. Median channel very distinct, coarse, bifoveate. Femoral furrow cross-rugulose-punctate. Densely punctate, pubescent. Lower propleurum reticulate. Wing 2 broad. Body robust, long. Punctures on lower half of the cheek sparse, the area reticulate. Runs with *E. secunda* and allies.

A female, Vivonne Bay, Kangaroo Island (Museum Expedition), February, 1926.

3. EURYTOMA ARETHEAS Walker.

A female, Tasmania.

This species, in my revised table, runs in near *E. spes* and allies but differs in bearing no median basin on the propodeum. It also runs to *E. nigroculex* but aside from its normal abdomen, funicle 1 is shorter, as is also the petiole.

4. *Eurytoma nigroculex*, n. sp.

As *E. helena* but abdomen with a distinct petiole which is twice longer than wide, no propleural spot, funicle 1 is somewhat over twice longer than wide, twice the length of the black pedicel, lateral ocelli equidistant, venation brown, marginal vein twice the stigmal, latter a bit shorter than the postmarginal. Punctuation dense and uniform, the median channel bifoveate at basal $\frac{1}{2}$ only. Femoral furrow cross-striate and punctulate. Segment 6 of the abdomen is half the length of 5, latter a bit shorter than 2-4 united. Segment 6 is naked and subglabrous. Tegulae red, fore tibia red-yellow only at apex and along each side.