AUSTRALIAN HYMENOPTERA CHALCIDOIDEA—III.

SECOND SUPPLEMENT.

By A. A. GIRAULT.

FAMILY ELASMIDÆ.1

THE same magnification. See these Memoirs, II.

GENUS ELASMUS Westwood.

All the Australian species in this genus seen by me hear two ring-joints and a 3-jointed club, the antennæ 10-jointed.

1. ELASMUS HISPIDISCUTUM new species. Female.

Similar to kurandaensis except that the conical prolongation of the green of the scutum does not reach the scutellum. Mandibles 5-dentate in both species. From caudal aspect, the yellow of the vertex invades the metallic upper half of the occiput, appearing like a spot on each side. The fore wings are infuscated in both species but no distinct pattern is formed; however, the infuscation is longitudinal and under distal half or more of the marginal vein in kurandaensis (and broader), in this species along distal third or less of the same vein. In this species the lateral extremity of the green of seutum is obtuse or flat, in kurandaensis acute or subacute. Pronotum metallic at cephalic margin in both species. Flagellum brown black; funicle 1 longest, somewhat over twice longer than wide, twice the length of the pedicel; joints 2 and 3 subequal, somewhat shorter than 1; club 1 much the longest, slightly shorter than funicle 3. Scutum hispid.

Habitat: Gordonvale (Cairns), Queensland. Forest. July.

Type: No. Hy 2720, Queensland Museum, Brisbane. Tag and slide.

2. ELASMUS PUNCTATICAPUT new species. Female.

Length, 2.50 mm. Dark ancous green, the head tinged with purplish, the postscutellum lemon yellow, the legs pale except last two pairs of coxe and middle of intermediate and caudal femora broadly which are dark metallic. Abdomen orange yellow, with a rather broad metallic green stripe across base, the distal fifth darker metallic (dorsad) and this portion immediately preceded by two transverse metallic stripes which are preceded by two marginal spots (a total of four spots), the stripes and spots nearly filling the orange portion of the abdomen. Fore wings distinctly infuscated but no pattern or distinct stripes, the infumation longitudinally under the distal half of the venation. Scutellum finely scaly, naked or only with several large setæ, the scutum the same but densely hairy. Head with rather dense thimble punctures above (vertex and dorsal face). Autennæ brown, the second ring-joint large; funicle joints all much longer than wide, 1 slightly the longest, twice longer than wide, distinctly longer than the pedicel. Mandibles 8-dentate. A yellow marking cephalad of the tegula as in divinus.

Habitat: Gordonvale (Cairns), Queensland. Jungle along forest streamlet. June.

Type: No. Hy 2721, Queensland Museum, Brisbane. Tag and slide.

¹ For additions, see Part XIV.

3. ELASMUS AURATISCUTELLUM new species. Female.

Length, 2.60 mm. Dark purplish green, the scutellum, mesopleurum and abdomen except a rather broad stripe across base, a little over distal fifth and a distinct round spot at lateral margin dorsad near middle, deep orange yellow. Postscutellum lemon yellow. Legs pale yellow except dorsal aspect of hind coxe which are, as the abdominal markings, concolorous with the body. Antennæ black, the scape orange yellow except above, the pedicel elongate, nearly as long as the third funicle joint which is twice longer than wide and somewhat shorter than funicle 1; club missing; first ring-joint very short, the second large, approaching to quadrate. Mandibles 7-dentate. Fore wings distinctly embrowned but subhyaline caudo-distad, the distal margin of the brown leaving the end of the venation and running obliquely proximad to caudal margin. Scutum hispid, scutellum bare but with the usual four long setæ disposed at the corners of a square, together with the postscutellum and propodeum shining yet distinctly polygonally reticulated, the areas small, the lines not raised. Propodeum plane, noncarinate.

Habitat: Gordonvale (Cairns), Queensland. Forest. November 28, 1913.Type: No. Hy 2722, Queensland Museum, Brisbane. Tag and slide.

4. ELASMUS DODDI Girault.

A female of this species was captured in the forest, December 10, 1913 and May 4, 1914 at Gordonvale. The mandibles are 6-dentate. Funicle 1 is longest, distinctly longer than wide, a little longer than the pedicel. The apical margin of scutellum is also narrowly yellow, the pronotum black.

5. ELASMUS QUEENSLANDICUS Girault.

The mandibles are 6-dentate, the fore wings indefinitely stained, the abdomen at apex not colored. One female, Gordonvale, edge of jungle, April, 1913 and one female from forest, May 23, 1914. Type re-examined.

A female captured August 20 in open jungle bore a distinct dot on mesopleurum a little above the middle coxa. Type locality.

6. ELASMUS MUSCOIDES new species.

Female:—Length, 2 mm.

Very similar to *ignorabilis* Girault but there are not two distinct cross-stripes of orange across dorsum of abdomen, the latter wholly black with faintly indicated (three) narrow orange yellow stripes on *proximal* half. The legs are wholly pale yellow except dorsal edge of hind femur. Postscutellum lemon yellow in both species. In this species only the proximal three fourths of venter of abdomen is orange yellow. Head punctate in both species. Abdomen somewhat as in *divinus* but that species differs in color. Antenne missing. Mandibles 7-dentate (in *ignorabilis* about 12-dentate the teeth very fine). Caudal coxa laterad all metallic except distal end. Type of *ignorabilis* re-examined.

Described from one female labelled "Brisbane 10.8.13. II. Hacker."

Habitat: Brisbane, Queensland.

Type: No. Hy 2723, Queensland Museum, Brisbane, the specimen on a tag.

7. ELASMUS PAPILIO new species.

Female:-Length, 1.90 mm.

Similar to maculatipennis but the portion of the face just above antennæ is also yellow (ventral half of face yellow), the scutellum is margined all around with lemon yellow while the posterior coxa is like that of maculatipennis biguttatus. Also the marking on the fore wing involves only the base of the postmarginal vein, is thus farther proximad

and does not form an oblique stripe but is an indefinite blotch. Funicle 2 longer than 3, slightly shorter than 1. Mandibles 5-dentate. None of the four marginal dots on abdomen are joined transversely, the first a dot, the others wider than long. Tegulæ yellowish.

Described from one female captured in forest, August 9, 1913.

Habitat: Gordonvale (Cairns), Queensland.

Type: No. Hy 2724, Queensland Museum, Brisbane, the specimen on a tag. A second female same place a year later; the propleurum was wholly yellow.

8. ELASMUS TRIFASCIATIVENTRIS new species.

Very similar to punctaticaput Girault, the head punctate but the two marginal spots on abdomen are absent, the first cross-stripe of the distal two is half or less the length of the second (subequal in the other species), the mandibles are 12-dentate. The hind and middle femora are black in both species. Funicle 1 somewhat longer than 2 or 3, one and a half times longer than wide, much longer than the pedicel, the club joints 1 and 2 quadrate. Scape pallid. Fore wings obscurely infuscated distad of venation. Scutum entirely green.

Described from one female caught January 5, 1913 (A. P. Dodd).

Habitat: Kuranda, Queensland.

Type: No. Hy 2725, Queensland Museum, Brisbane, the specimen on a tag.

9. ELASMUS MARGISCUTELLUM Girault.

One female, forest, Gordonvale, August 13, 1913.

The tibiæ are pale yellow; the yellow distal margin of scutellum was interrupted at meson in this specimen, distal fourth (or nearly) of abdomen dark metallic green, preceded by three pairs of marginal spots. Distal half of cephalic femur pale. Head punctate.

10. ELASMUS DUBIUS new species.

Same as cyaneus but dark metallic green, the legs very dark brown, the postscutellum lemon yellow; cephalic knees and tibiæ pale yellow; mandibles 6-dentate. Antennæ not seen. Scutellum with the usual several bristles. Fore wings lightly dusky throughout.

From one female caught in forest, January 8, 1914.

Habitat: Capeville (Pentland), Queensland.

Type: No. Hy 2726, Queensland Museum, Brisbane, the specimen on a tag.

11. ELASMUS PICTURATUS new species.

Similar to uniguttatus Girault but there is a rather broad stripe across the base of the abdomen, the metallic coloration on the pronotum continues back to the seutum, the propodeum is wholly dark metallic green (not merely broadly down the meson) and most of the upper edge of hind coxa distad similarly colored and with a metallic spot cephalad near base (dorsal aspect; only a basal dot present in the other species). The fore wings are slightly, suffusedly infuscated. Both species bear a metallic rather broad cross-stripe at upper half of occiput this joining centrally the black area on the vertex. Antennæ and mandibles similar. Funicle joints decreasing slightly in length distad, 1 being one and a half times longer than its width, distinctly longer than the short pedicel. Large metallic area of mesopleurum narrowly joined to the tegula (isolated in the other species). Types compared.

From one female caught by sweeping along forest streamlet bordered with jungle, May 6, 1913.

Habitat: Gordonvale (Cairns), Queensland.

Type: No. Hy 2727, Queensland Museum, Brisbane, the specimen on a tag.

12. ELASMUS PICTUS new species.

Female:-Length, 2 mm.

Similar to nigriscutellum Girault but the black spot on vertex is isolated from the eyes, the ochreous yellow uniform and the tip of the abdomen broadly dark metallic green (distal third or not quite). Otherwise similar. Mandibles 5-dentate. Meson of propodeum, the area around the spiracle and center of dorsal edge of hind coxa dark metallic. Occiput yellow dorso-laterad. Cephalic margin of pronotum at meson metallic green.

From one female caught with picturatus.

Habitat: Gordonvale (Cairns), Queensland.

Type: No. Hy 2728, Queensland Museum, Brisbane, the specimen on a tag.

13. ELASMUS HAECKELI new species.

Female:-Length, 2 mm.

Lemon yellow, the abdomen orange yellow, the legs pale yellow except dorsal edge (but not at base) of hind coxa which is metallic green. Upper half of occiput except extreme dorso-lateral corner; center of vertex; pronotum except caudo-lateral corner; seutum except two yellow eye-like spots caudo-laterad each just cephalad of the axillæ; each parapside except caudad, the caudal yellow portion forming a large suboval yellow spot just laterad of the one on the scutum and narrowly separated from it (thus four spots in pairs, transversely, cephalad of scutcllum); propodeum, a tolerably broad stripe across base of abdomen, extreme tip of abdomen and a narrower stripe just cephalad; and a large, non-isolated rounded area in center of mesopleurum, metallic dark green tinged with purplish. The yellow base of dorsal edge of hind coxa appears to be a lateral yellow part of the propodeum from dorsal aspect. Fore wing with a stain under the distal third of marginal vein, the area rectangular, not very distinct. Scape yellow, metallic along much of dorsal edge; rest of antenna brown; second ring-joint large; funicle joints long, 1 longest, twice longer than wide, the other two shortening somewhat in succession, club 1 distinctly longer than club 2, longer than the pedicel, subequal to funicle 3. Mandibles 5-dentate.

From one female caught in forest pocket, September 12, 1913 (A. P. Dodd).

Habitat: Kuranda, Queensland.

 $\mathit{Type}\colon$ No. Hy 2729, Queensland Museum, Brisbane, the specimen on a tag, the head on a slide.

14. ELASMUS UNGUTTATIVENTRIS new species.

Female:—Length, 2.40 mm.

Very dark metallic green, the head punctate, the postscutellum lemon yellow, the legs white or nearly, the dorsal edge of hind coxa concolorous. Abdomen orange yellow, with a rather broad metallic green stripe across immediate base and a rounded spot just before tip as in uniguttata. Wings subhyaline. Tip of abdomen concolorous with rest of abdomen, tip of valves of ovipositor black. Scutum hispid. Scutellam finely scaly, with only the few long seta. Scape pale, rest of antenna brown; funicle joints 2 and 3 subequal, a little shorter than 1 which is longer than the pedicel and about one and three fourths times longer than wide. Mandibles apparently 4 or 5-dentate, not very plainly seen.

From one female caught by sweeping along forest streamlet, June 14, 1913 (A. P. Dodd).

Habitat: Gordonvale (Cairns), Queensland.

Type: No. Hy 2730, Queensland Museum, Brisbane, the specimen on a tag.

15. ELASMUS FLAVINOTUS new species.

Female:—Length, 2.65 mm.

Exactly similar to punctaticaput Girault but the color is darker; base of cephalic coxa metallic, fore wings hyaline, base of abdomen somewhat less broadly green, the two

marginal spots wider than long not round; also the mandibles are only 6-dentate. Differing notably in the distinctly shorter funicle joints of which 1 is somewhat longer than wide, subequal to the pedicel, longest, 3 being a little longer than wide. Scape white. Both species bear a transverse yellow marking just across, and cephalad of, the tegula as in divinus.

From one female captured in forest, April 3, 1914.

Habitat: Gordonvale (Cairns), Queensland.

Type: No. Hy 3731, Queensland Museum. Brisbane, the specimen on a tag, head on a slide.

16. ELASMUS STELLATUS Girault.

Lemon yellow, the abdomen orange yellow; marked with black as in nigriscutellum except that the short lateral extension of the central black of vertex does not reach the eyes, the scutellum is margined (except at base) with yellow, very narrowly around apex; distal half of dorsal edge of hind coxa and a dot at base of dorsal edge black. Abdomen the same but near tip with a small round black spot at meson as in uniguttatus. Occiput with a rather narrow black looped stripe across at dorsal third, eye to eye. Extreme cephalic apex of neck of pronotum black. Tip of valves of ovipositor black but not of abdomen.

Allied with unigutatius but may be distinguished at once by having the scutellum mostly black and the apex of pronotum more narrowly so. The minute black dot on each margin of scutum absent, only visible on one side in the type. Funicles 2 and 3 subequal, a little shorter than 1 which is over twice longer than wide.

In the type, the scutum was ochreous and quite as described for nigriscutchum.

A female captured in forest, April 12, 1914, Gordonvale. Compared with type.

17. ELASMUS MURWILLUMBAHENSIS new species.

Dark metallic green, the postscutchum lemon yellow, the legs white except dorsal Female:-Length, 2 mm. third of caudal coxa, the abdomen orange yellow except rather broadly at tip (dorsad and ventrad), dorsad a cross-stripe preceding the apical metallic coloration; also a rather broad metallic green stripe across base of abdomen followed by a triangular marginal spot. Tegulæ lemon yellow. The pair of marginal spots on abdomen are closer to the proximal green than to the cross-stripe. The distal green dorsad of abdomen occupies about distal fourth. Caudal wings very broad. Fore wings distinctly infuscated indefinitely from the minute stigmal vein. Pedicel subequal to funicle 3 which is shortest, a little longer than wide, 1 longest, one and two thirds times longer than wide. Mandibles about 15-dentate. Scape white, dusky above at tip, rest of antenna black. Head punctate. Thorax clothed usually.

Described from one female caught by miscellaneous sweeping, May 11, 1914 (A. P. Dodd).

Habitat: Murwillumbah, New South Wales.

Type: No. Hy 2732, Queensland Museum, Brisbane, the specimen on a tag.

18. ELASMUS CONSUMMATUS new species.

Female:-Length, 2.20 mm.

Orange yellow, the following parts very dark metallic green or black: Head, middle coxa above at base, neck of pronotum, axillæ, a small marginal spot on each side of abdomen at base, a larger one at apex of proximal third, not quite distal fourth of abdomen (somewhat less ventrad), prepectus, mesopleurum, proximal, dorsal half of caudal coxa, and dorsal edge of caudal femur. Mandibles 6-dentate. Funicle 1 distinctly longer than the pedicel which is rather long; scape yellow, flagellum black; funicle 1 two and a half times longer than wide, 2 a little shorter. Head punctate. Scutellum nearly naked, scutum hispid, postscutellum lemon yellow. Propodeum black. Wings wholly, lightly infuscated, clear distad of postmarginal vein. Hind wings hyaline. Hind tibiæ with the usual pattern.

From one female caught by sweeping jungle (?), June 3, 1914 (A. P. Dodd).

Habitat: Grafton, New South Wales.

Type: No. Hy 2733, Queensland Museum, Brisbane, the specimen on a tag.

19. ELASMUS FICTUS new species.

Female:-Length, 1.75 mm.

Like uniguttatus but at once differing in lacking the large black spot on mesopleurum, the black on propodeum and the proximal (dorsal) fourth of caudal coxa is black except caudad; from picturatus differs markedly in lacking the basal stripe across dorsal abdomen, the black on pronotum and the large area on mesopleurum. Tip of abdomen, axilla, tegulæ, the round spot on abdomen near tip, ocellar area and a black area on occiput from the eyes on each side (not forming a cross-stripe) are black or dark metallic green. These are all the markings except the caudal coxa as noted. In uniguttatus the tip of the abdomen is not black. Head with scattered rather small punctures. Hind tibiæ with the usuat pattern. Wings subhyaline. Scape yellow, flagellum black. Funicle joints subequal to each other and the pedicel, about a third longer than wide. Mandibles 5-dentate. Scutellum scaly, naked (except for the few large isolated setw).

From one female caught sweeping forest uplands, May 3, 1914 (A. P. Dodd).

Habitat: Maclean, Clarence River, New South Wales.

 $\it Type:$ No. $\it Hy\,2734$, Queensland Museum, Brisbane, the specimen on a tag with type $\it uniguttatus.$

20. ELASMUS FLAVIOS new species.

Female:—Length, 1.80 mm.

Similar to *ignorabilis* but at least two thirds of the caudal coxw are metallic (only about the dorsal third in that species), the two stripes across the abdomen are not so distinct, darker orange and closer together, about across the middle, the metallic coloration of dersum of abdomen between the stripes does not invade the lateral aspect as distinctly so in *ignorabilis*; there is a yellow dot just mesad of tegula and the oral area up to antennal insertion is lemon yellow. Otherwise colored the same or nearly. Scatchlum finely reticulated. Scutum hispid, head punctate as usual. Scape white, dusky dorsad; flagellum black. Pedicel shorter than any funicle joint. Funicle joints subequal, each somewhat longer than wide, 1 slightly longer than the other two; all are stout. Mandibles 7-dentate. Wings hyaline in both species. Compared with type of *ignorabilis*.

From one female caught in forest, May 2, 1914 (A. P. Dodd).

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

Type: No. $Hy\ 2755$, Queensland Museum, Brisbane, the specimen on a tag with type of ignorabilis.

Differs most notably from muscoides in having the yellow oral area and the yellow dot just mesad of tegula.

21. ELASMUS FASCIATIPES new species.

Female:—Length, 2.10 mm.

Dark metallic green, the abdomen orange yellow, a little over distal third of abdomen, a broad stripe across base and three cross-stripes between them, equally distributed, very dark metallic. Postseutellum lemon yellow. Coxe dark metallic except distal third of last two pairs. Legs otherwise white except dorsal edge of last two pairs of femora and a

narrow black stripe across at distal two thirds of each, that of the hind femur interrupted very broadly centrally. Funicle 1 somewhat longer than wide, 3 a little longer than wide, longer than the pedicel. Sculpture and clothing as usual. Wings hyaline. Mandibles 7-dentate.

From one female caught in forest, August 2, 1914 (A. P. Dodd).

Habitat: Gordonvale, Queensland.

Type: No. Hy 2736, Queensland Museum, Brisbane, the specimen on a tag.

22. ELASMUS BIGUTTATUS Girault.

Raised to specific rank from maculatipennis. The seutellum is as in splendidus and the hind coxa is metallic only in middle of dorsal edge thinly. In this species and maculatipennis, there is an occipital yellow spot on vertex as in splendidus and the propleurum is more or less (sometimes wholly) lemon yellow joined to the yellow spot of pronotum. In biguttatus, there are two marginal dots out from the proximal stripe on abdomen. In a variety captured in the type locality, December 18, 1912, there was only the first and this very small. This variety is united with the type of biguttatus and is named binotatus new variety. It differs also from the typical form in having the entire dorsal margin of hind coxa broadly metallic green and the vertex wholly concolorous.

23. ELASMUS PULEXOIDES new species.

Female: -Exactly similar to trifasciativentris but the mandibles 6-dentate, the cephalic femora black along proximal half and the abdomen has three stripes between the proximal and distal metallic portions, the third stripe not as broad as the corresponding one in the other species yet broader than the other two. The first and second stripes are farther from each other than the second and third are from each other; the third is concaved at meson of its proximal margin. The metallic distal part is longer here and very faintly divided by orange at its proximal fourth forming an indistinct fourth stripe. Funicle joints a little longer than the pedicel, each somewhat longer than wide. Wings hyaline in both species or practically so.

From one female caught in jungle, August 20, 1914.

Habitat: Gordonvale, Queensland.

Type: No. Hy 2737, Queensland Museum, Brisbane, the specimen on a tag.

24. ELASMUS DIVINUS Girault.

In the original description, antea, p. 134, line 10, proximal read distal; line 11, after and insert proximal half of hind.

25. ELASMUS ACUMINATUS new species.

Female: -Length, 2.60 mm. Abdomen pointed conical, two thirds longer than the thorax Very dark metallic green, the abdomen black, metallic blue at base. Legs and scape white; proximal (dorsal) fourth of hind coxa, dorsal edge of hind femur and ventral edge of same at distal third, black. Abdomen reddish yellow along meson of venter for proximal two thirds. Distal edge of mesopostscutellum lemon yellow. Fore wings indefinitely, lightly infuscated along apex of venation. Mandibles 6-dentate. Otherwise as in lividus (in lividus, the cephalic coxe are white except at base). Funicle joints long and subequal, about twice longer than wide or nearly, each longer than the pedicel. Club joints each a little shorter in succession, the first somewhat shorter than any funicle joint.

From one female caught in jungle, June 3, 1914.

Habitat: Gordonvale (Cairns), Queensland.

Type: No. Hy 2738, Queensland Museum, Brisbane, the specimen on a tag.

GENUS EURYISCHIA Koebele.

This genus is accredited to Riley by de Dalla Torre (1898) and others with the remark that it was not described. Later, Koebele figured the type species (*lestophoni*) which was apparently named by Howard. Hence Euryischia lestophoni Howard a nomen nudum becomes Euryischia lestophoni Koebele. The genus not becoming valid until its genotype was described must be accredited to Koebele (1890). There are two ring-joints in the antennæ.

1. EURYISCHIA SHAKESPEAREI Girault.

This species differs from melancholica Girault in the bearing of a longitudinal patch of discal cilia under the distal half and base of the submarginal vein separated from the rest of the cilia by an oblique hairless line; in having but three long bristles from the break of the same vein (in melancholica there are two in a row longitudinally, two on the spur of the submarginal vein besides three small setæ of which two are on the vein spur, one isolated on the blade); and in the characteristic infuscation of the fore wing. It is also less robust, the pedicel longer. There are two ring-joints. Head sculptured like the thorax. Types of both species re-examined. Mr. G. F. Hill has sent me several females from Port Darwin, Northern Territory, labelled "No. 30. Oct. 10, 1913" and one male, five females, same data and "No. 24. From same species of coccid as No. 15." The male is like the female.

The species was reared with Aneristus fumosipennis G. and D.

2. EURYISCHIA UNFASCIATIPENNIS new species.

Female:-Length, 1.30 mm.

Dark metallic blue, the wings clear but with a distinct sooty cross-stripe nearly as in inopinata Masi except that the stripe is broader being from all of the marginal and stigmal veins (and slightly distad of the latter, its proximal margin straight but oblique and coterminous with the discal ciliation, the distal margin convex); bristles as in inopinata. Thorax and abdomen finely scaly, the abdomen conic-ovate, somewhat longer than the rest of the body. Scutum with sparse bristles, the scutellum with only about four of them. Propodeum sculptured like the rest of the thorax (finely lined). Mandibles bidentate, the second tooth truncate. Club whitish; pedicel much longer than any of the funicle joints, twice the length of 3 which is quadrate, 1 shortest, a little wider than long, 2 longest, somewhat longer than wide, 3 widest, next longest; proximal club joint longest. Second ring-joint partly hidden. Antennæ inserted just below the ventral ends of the eyes. Head finely reticulated like the thorax. Knees, tibiæ and proximal three tarsal joints white. Hind tibial spur single; hind cexa long and conical, not flat and circular as in sumneri, nigra and melancholica.

Male:-Not known.

Described from one female captured by sweeping in forest, December 10, 1913.

Habitat: Gordonvale (Cairns), Queensland.

Type: No. Hy 2740, Queensland Museum, Brisbane, the specimen on a tag, the head and hind leg on a slide.

3. EURYISCHIA UNMACULATA new species. Female.

Length, 1.40 mm. Like unmaculatipennis Girault but the round fuscous spot against the stigmal vein is somewhat larger, the fore wings are narrower, the first funicle joint is a little longer than wide and the mandibles are bidentate, the second tooth truncate, not with three distinct teeth as in the other species. The coxe in both species are as in Elasmus. Head finely circularly striate. Wing bristles as in inopinata Masi. Fore wings somewhat infuscated distad of venation to apex. Scutum densely hairy, the scutellum nearly naked. Distal two funicle joints wider than long.

Habitat: Gordonvale (Cairns), Queensland. Forest. November 1, 1913.

Type: No. Hy 2741, Queensland Museum, Brisbane. Tag and slide.

GENUS EURYISCHOMYIA Girault.

Like Euryischia but the parapsidal furrows are complete; the hind coxe are enlarged but cylindrical ovate as in some species of Euryischia. Tarsi 5-jointed. The male is similar but with an obtuse abdomen.

1. EURYISCHOMYIA WASHINGTONI Girault. Female, male. Genotype.

Length, 1 mm. Slender, the abdomen conic-ovate.

Very dark metallic green; legs (except caudal coxe and femora) and tegulæ pale lemon yellow. Fore wings with a clearly delimited, broad, jet black band across them under the marginal and most of postmarginal veins, its distal margin just reaching apex of stigmal vein, its proximal margin nearly straight. Wings hyaline. Scutum with hardly more sets than the scutellum which is nearly naked, the sparse setæ whitish. Thorax finely scaly. Mandibles bidentate, the second tooth broadly truncate. Two ring-joints, the three funicle joints subquadrate. Not more than two bristles under submarginal vein. Hind femur compressed. The male is similar. Outer angle of second tooth of mandible acute.

One female was captured by sweeping in forest, Townsville, January 19, 1913. The type locality is Pentland (January 8, 1913).

Habitat: Capeville (Pentland) and Townsville, Queensland. Forest.

Type: No. Hy 2742, Queensland Museum, Brisbane.

2. EURYISCHOMYIA FLAVITHORAX new species of Girault and A. P. Dodd.

Female:-Length, 1.40 mm.

Abdomen jet black; thorax deep orange yellow except most of the short black pronotum which is lemon yellow at lateral angles and the postscutellum and propodeum which are transverse and lemon yellow, the suture between them black. Head lemon yellow as are also the legs and antennæ and thoracic pleura. Hind coxæ blackish. Thorax finely reticulated. Wings hyaline. Mandibles tridentate, the third tooth really a truncation from the second which forms the acute inner angle of the apex. Postmarginal vein somewhat longer than the stigmal. Somewhat similar to saintpierrei Girault. Funicle 3 largest, all wider than long. Obscure white marginal spots on base of abdomen.

Described from three females taken by sweeping forest, December 1 and 3, 1913 (A.A.G.).

Habitat: Gordonvale (Cairns), Queensland.

Types: No. Hy 2744, Queensland Museum, Brisbane, one female on a tag, the head, a hind tibia and another female on a slide.

On March 2, 1914 a female was captured at Cooktown in forest (A. P. Dodd).

3. EURYISCHOMYIA SAINTPIERREI new species.

Running to Anysis Howard in the Eunotinæ but the antennæ clavate and 10-jointed with two ring joints, the club 3-jointed; scutellum flat and hardly differentiated from the propodeum, not as long as the seutum which bears complete parapsidal furrows. Wings as in Euryischia of the Elasmida but the large bristles absent; hind coxa enlarged but cylindrical. Second abdominal segment (dorsad) hardly as long as the others, not a fifth of the surface, the abdomen short and stout. Hind tibiæ with stiff bristles dorsad, the femora stout. Wings hyaline. Propodeum apparently without carinæ. Pedicel subelongate.

Abdomen black, thorax and head yellowish brown, the propodeum black; legs brownish black, the knees, tibiæ and tarsi lemon yellow; antennæ brownish yellow, the three funicle joints much wider than long, the first shorter and narrower but much larger than the ring-joint. Mandibles tridentate, weak.

Male:--Unknown.

From one specimen from the Queensland Museum, unlabelled.

Habitat: Brisbane, Queensland.

Type: No. Hy 2743, Queensland Museum, Brisbane, the above specimen on a tag, the head and hind legs on a slide.

All yellow species of *Elasmus* have the peculiar arrangement of black spines on the caudal tibiæ; the arrangement does not seem to differ specifically. The variation in the mandibles is a good specific character and species may differ only in this. Species of *Elasmus* and *Euryischia* do not shrivel upon drying but the head (which is punctate in all of my species of *Elasmus*) must be removed and crushed in balsam in order to see the mandibles.

The following species of the family appear to be common in their respective habitats: Elasmus splendidus, formosus, queenslandicus and margiscutellum; Euryischia shakespearei and Euryischomyia washingtoni.

ADDITIONAL STATEMENT ON MYMARIDAE.

The following new species was described just too late to be included within the second supplement to this family:

GENUS PARANAPHOIDEA Girault.

1. PARANAPHOIDEA NIGRICLAVA new species.

Female:-Length, 0.92 mm. Ovipositor only slightly extruded.

Jet, the antennæ except the club and the legs, except hind coxæ and femora, pale whitish yellow; postscutellum contrasting brilliant golden. Fore wings hyaline but distinctly infuscated from base out about to end of marginal vein, the stigmal vein as in Stethynium. Seutum with a distinct median groove, the postscutellum with three, one median. Thorax not rudely sculptured, smooth or nearly. Fore wings with about eighteen lines of cilia where widest, rather slender, rounded at apex, the discal ciliation disappearing some distance distad of venation (over length of marginal vein distad), the longest marginal cilia only a third the greatest wing width. Club of antenna contrasting in color with the funicle (much more so than with caudata). Funicles 1-3 and 5 narrower than the other two, 2 and 3 subequal, each a little longer than wide, 1 subquadrate, 5 slightly longer and wider than 2; funicle 4 subequal to 6, longest, somewhat longer than wide, subequal in length to the pedicel. Venation dusky black. Club divided about the middle. Hind wings with only a paired line of discal cilia along each margin, their caudal marginal cilia somewhat longer than the greatest width of the blade and a little longer than the longest marginal cilia of the fore wing. Club rather large. Hind tibial spur single, not especially long.

From one female caught in forest, June, 1914 (A. P. Dodd).

Habitat: Burnett Heads, Southern Queensland.

Type: No. Hy 2739, Queensland Museum, Brisbane, the specimen on a slide.

In this genus, the axillæ are normal, scutellum wider than long, shorter than the postscutellum.

These observations should be added:

Enasius Enock differs from Erythmelus Enock in having all the funicle joints much longer than wide and the scape longer and more slender. The groups must be considered valid until shown to the contrary. They differ in thoracic structures from allied genera, a fact overlooked in their original descriptions.

Of the Australian species of Anaphes, as a consequence of the recognition of the Enockian genera, wallacei, lapacei and spinozai are Enasius; kantii, mazzinii and painei are Erythmelus. The sole species of Anaphes is thus saintpierrei.