A decade of new Hymenoptera. By P. Cameron., F.E.S. Communicated by John Boyd, Esq.

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PROCTOTRUPIDÆ.

EPYRIS BREVIPENNIS, sp. nov.

Niger, fere apterus, mandibulis, thorace, geniculis tarsisque, rufis. Long.: 6 mm.

Hab. Gibraltar (J. J. Walker, R.N.)

Basal joint of the antennæ, curved, longer than the second and third joints united; the second joint more than threefourths the length of the third and longer than the fourth. The scape piceous and thickened towards the middle, tapering towards the apex. Head sparsely haired, strongly punctured; the eyes rather small, oblong, and situated a little behind the middle of the head; the antennal tubercles and mandibles rufous. Prothorax rather broad, longer than broad, obscurely punctured, the sides slightly excavated; the furrow in the centre deep, complete. Mesonotum finely punctured; scutellum shining, impunctate; parapsidal furrows broad and deep, sharply converging posteriorly. Metanotum finely rugose, with a very stout central and two lateral keels in the centre; the sides keeled; the apical tubercles blunt, short; metapleuræ shining, longitudinally striolated. Apical segments of abdomen sparsely covered with longish white hair. Legs covered rather closely with stiff, white hair; the femora incline to dull rufous on the underside.

A rather closely allied species to *E. hispanicus*, Cam. (*Mem. & Proc. Manch. Lit. & Phil. Soc.*, 1888, p. 169), but that differs from it in having the metathorax black, the apex convex, with the sides projecting into stout teeth; the

vertical part rugosely punctured; while in *Walkeri* the apex is concave, with indistinct lateral tubercles, the perpendicular part not rugosely punctured. The wings hardly reach to the end of the metathorax, and seem to be infuscated in the middle.

BETYLA, gen. nov.

Eyes hairy. Antennæ 15-jointed; the basal joint as long as the six following united; joints 2-7 longer than broad; joint 8 thicker than 7th, nearly longer than broad; the 9th still thicker; 9-14 much broader than long; the 15th twice longer than broad; sharply conical. forming a broad snout before the antennæ; narrowed before and behind the eyes. Thorax narrow, ant-like, narrowed between the meso- and metathorax; the former bearing in front a stout tooth on either side, the scutellum not defined; parapsidal furrows absent; metanotum without keels or Apterous. Abdomen much broader than the thorax, the petiole longer than broad, stout; the second segment very large, occupying dorsally the greater part of the entire abdomen, and with a distinct margin at its junction with the ventre. The third and fourth segments together the length of the petiole. There are apparently five ventral segments. Petiole on lower side projecting into a large, stout, tooth-like process. Femora clavate.

This genus belongs to the *Belytidæ*. The only genus with which it could be confounded is *Miota*, which has an abdomen with three dorsal segments, of which the second is very much lengthened, and reaches near to the tip. *Miota* is winged, has only three dorsal segments, and no mention is made of any peculiarity in the form of the thorax; nor of the absence of ocelli. In fact, Foerster's analytical tables are hardly capable of being used for the identification of the extra European genera; and so far as I know the type of *Miota* has never been described.

BETYLA FULVA, sp. nov.

Fulva; nitida, impunctata, capite abdomineque longe albo hirtis; thorace sparse fusco hirto. Long.: fere 4 mm.

Hab. Greymouth, New Zealand (Helms).

The mesothorax is almost glabrous, and much more shining than the rest of the body. The abdomen is haired all over, but not very thickly, and the hair is longish, and whiter towards the apex. The tibiæ and tarsi are covered with short, stiff white hairs, the femora more sparsely with longer, soft hair. At the apex the metanotum is convex, projecting into sharp teeth at the sides, and is very closely united to the petiole, which is longer and a little narrower than it.

MALVINA, gen. nov.

Metanotum with a spine; parapsidal furrows obsolete; scutellum bifoveate at base; third, fourth, and fifth abdominal segments subequal. Antennæ 13-jointed, the club 6-jointed; the second joint not much shorter than the third, and longer than the fourth. Petiole as long as the hind coxæ. Wings reaching to the apex of the petiole, fringed with long hair.

The only genus of *Belytidæ* with a spine on the metanotum is *Oxylabis*, Foerster. It differs, however, from the genus here described in having the antennæ 15-jointed, and in the parapsidal furrows being distinct.

MALVINA PUNCTATA, sp. nov.

Nigra; fortiter punctata, sparse pallida hirta; antennarum articulis 1—7 pedibusque, rufis. Q. Long. 3½ mm.

Hab. Greymouth, New Zealand (Helins).

The front is shining, impunctate, and broadly keeled; the occiput clearly margined. Pro- and mesopleuræ shining, impunctate, slightly convex and narrowed towards the sternum, metapleuræ rugose. Apex of metanotum ending in a spine on either side. Petiole shining, keeled, and

densely haired. Abdomen shining, impunctate, the apical segments pilose. Legs covered sparsely with pale hair; the coxæ usually black; sometimes the femora are more or less fuscous; these are clavate. The joints of the club are broader than long and become gradually broader to the penultimate; the last narrower than preceding and broadly rounded at the apex.

CYNIPIDÆ.

EUCOILA CLARIPENNIS, sp. nov.

Nigra, flagello antennarum pedibusque, rufis; alis clare hyalinis, nervis pallide fuscis. 8. Long.: 3.5 mm.

Hab. Mexico, Vera Cruz: in January. (H. H. Smith), Antennæ one half longer than the body, the third and fourth joints nearly equal in length, straight. Pronotum raised into a sharp margin, projecting in the middle above. Scutellar foveæ large, wide, and deep; sides of scutellum rugosely punctured; the cup horse-shoe shaped, shallow, depressed at the apex. Apex of metanotum semi-perpendicular, bicarinate, hardly pilose. Abdomen shorter than the thorax; compressed, the hair fringe narrow, griseous.

EUCOILA MEXICANA, sp. nov.

Nigra, nitida; pedibus testaceis, alis griseo hyalinis, nervis fuscis. 8. Long.: 1 1/2 mm.

Hab. Mexico, Orizaba, in December (H. H. Smith and F. D. Godman).

Antennæ about one-fourth longer than the body; rather stout; the third joint thickened and curved, and about one-fourth longer than the fourth. Cup of scutellum distinctly raised; the centre excavated rather deeply; the apex projecting; sides of scutellum finely rugose. Edge of pronotum margined. Abdominal hair fringe slight, dull griseous. Radial cellule twice longer than broad; the second abscissa straight, three-fourths of the length of the

third, which becomes curved towards the apex; the costal nervure thick. Cubitus complete. The femora are lined with black towards the middle; the hind tibiæ are tinged with fuscous.

EUCOILA MARGINICOLLIS, sp. nov.

Nigra, nitida, pedibus rufis; alis clare hyalinis, nervis pallide fuscis. & Long.: 1.5 mm.

Hab. MEXICO, Orizaba, in December (H. H. Smith and F. D. Godman).

Antennæ longer than the body; the four basal joints dull rufous; the joints becoming gradually but slightly thicker towards the apex; the third and fourth joints the longest and thickest; the third a little longer than the fourth. Pronotum distinctly raised above the mesonotum having a clear broad margin; the centre slightly depressed. Scutellar cup shallow, oval, the apex flat, not projecting; sides of scutellum rugose. Abdominal hair fringe slight, fuscous. Radial cellule wide; the second abscissa of radius about one-fourth shorter than the third, which is roundly curved towards the apex; cubitus completely obsolete.

GRONOTOMA GRACILICORNIS, sp. nov.

Nigra, nitida; pedibus rufis; alis hyalinis, nervis fuscis. Long. 1½ mm.

Hab. MEXICO, Orizaba, in December (H. H. Smith and F. D. Godman).

Antennæ slender, longer than the body, becoming but very slightly thickened towards the apex; the apical three joints shorter than the preceding, but not forming a club; the third joint slightly curved, and a little longer than the fourth. Pronotum not distinctly margined. Scutellar foveæ large, deep; the cup without a very distinctly raised margin,

oval, moderately deep. Metapleuræ densely covered with long white hair; metanotum oblique. Abdomen compressed, somewhat lenticular. Wings pilose; the radial cellule twice longer than broad, the third abscissa of the radius about three-fourths longer than the second; cubitus completely obsolete.

In having converging parapsidal furrows, a closed radial cellule and no abdominal hair fringe, this species agrees with *Gronatoma*, but the pleuræ are finely aciculated and the metapleuræ glabrous.

LARRIDÆ.

PIAGETIA FASCIATIIPENNIS, sp. nov.

Nigra; ore, antennis (basi et apice flagelli nigris), prothorace, tegulis, metapleuris, petiolo, pedibusque, rufotestaceis; clypeo bidentato; alis hyalinis, fascia substigmatili fusca. 8. Long. 7 mm.

Hab. Ceylon (George Lewis).

Head opaque, granular, covered with a short microscopic pile. Eyes at the top separated by about the length of the second and third antennal joints united. Vertex broadly depressed, a wide, but not deep, furrow leading down from the centre of the depression. Front and clypcus covered with short silvery pubescence; three broad furrows on the former. Clypeus projecting, broadly carinate in the middle; the apex ending in two large projecting, somewhat triangular, teeth. Tips of mandibles black. Scape of the antennæ as long as the following two joints united; the third three times the length of the second, and a little longer than the fourth. Thorax opaque, almost granular, covered with a microscopic pile, the apex of metathorax with longish white hair; the metanotum finely transversely rugose; the apex irregularly striolated, and with a wide furrow (narrowed at the base and apex in the centre). Abdomen shining, the

apex whitish pubescent; pygidial area rufescent; margined distinctly at base and apex; the latter transverse. The apical ventral segment is also margined laterally, and is for the greater part rufescent. Tibiæ and tarsi covered with a silvery pile. The base of the four hind coxæ, a line on the femora beneath, the greater part of the four hind tibiæ behind, the calcaria and the basal two tarsal joints, more or less black. The tibial spines are few in number and pale in colour; the metatarsal brush is short and whitish; the apices of the tarsal joints end in stiff white stout, sharply pointed bristles. The longer spur of the hind tibiæ is more than three-fourths of the length of the metatarsus. Femoral spine at the base nearly as broad as the total length; the apex ending in a blunt tooth.

Three species of *Piagetia* have been described, namely:

- P. Ritsemæ, Ritzema, Ent. M. Mag. IX., p. 120. Java.
- P. odontostoma, Kohl, Verh. z.-b. Ges., Wien, 1883, p. 31. Arabia.
- P. Woerdeni, Ritzema, l.c., p. 121. Congo, South West Africa.

P. Ritsemæ differs from it in the wings having a cloud which extends from the second cubital cellule to the apex; the flagellum of the antennæ is entirely black, this being also the case with the metathorax, and the base of the abdomen is not fulvous; there is also a central longitudinal line on the metanotum, which is absent in fasciatiipennis. The form of the clypeus and spine in hind femora is quite different, but as this may be a sexual character (the & of Ritsemæ is unknown) no great reliance can be placed on these points. P. odontostoma differs in the clypeus having four teeth, and no central keel; the body is almost entirely black, and the wings are clear hyaline. The African Woerdeni has not the clypeus ending in two large teeth, and differs in the colour of the body, &c.

CRABRONIDÆ.

RHOPALUM BUDDHA, sp. nov.

Nigrum, opacum, flavo-maculatum; metathorace rugoso; alis hyalinis. Long. 9 mm.

Hab. Poona, India. (R. C. Wroughton.)

Scape clear yellow, flagellum closely covered with a silvery pubescence. Head opaque, alutaceous, the vertex sparsely pilose; the antennal depression and clypeus densely covered with silvery hair. Ocelli in a curve; the clypeus carinate in the middle; mandibles clear yellow, the tips blackish. Eyes with very course facets. Thorax opaque, alutaceous; the excavated side of the pronotum coarsely obliquely striolated; the metathorax obliquely rugosely punctured, sparsely covered with a silvery pile, especially thick and close on the pleuræ; two broad lines on the pronotum, two below the tegulæ, and two on the scutellum, clear yellow; tegulæ piceous. Basal part of the petiole shining, covered with long white hair, the apial part opaque. The rest of abdomen almost opaque, with a plumbeous hue; the sides and apex covered with a white pubescence; an interrupted band on the base of the third segment, and a short lateral band on the succeeding segments, clear yellow. Legs covered with long white soft hair; the apex of coxæ, the trochanters beneath, a broad band on the lower side of the four anterior femora, and the tibiæ and tarsi, yellow; there is a black line behind on the tibiæ, and the tarsi are reddish towards the apex.

The North Indian Rhapalum flavopictinum, Smith, differs from the present species in having "an impressed oblique channel running down from each of the posterior ocelli," the first scutellum and the petiole are yellow; there is "an enclosed shining subcordate space at the base of the metathorax, which has a longitudinal impressed line from the base to the apex," &c.

ANTHOPHILA.

STELIS JAPONICA, sp. nov.

Niger, abdomine rufo, basi niger; alis violaceis, basi fere hyalinis; apice scutelli excisa. Long. fere 12 mm.

Hab. Japan. (George Lewis).

Scape sparsely covered with pale hair, the flagellum microscopically pilose; the tip obscure rufous. rugoscly punctured; the sides of the face thickly covered with long white hair; the vertex and mandibles more sparsely haired; mandibles rugosely punctured, but not so coarsely as the head, the apex shining, impunctate. Thorax rugosely punctured; the scutellum with larger punctures than the mesonotum; shortly pilose; the metanotum covered with long white hair. Mesonotum with a distinct furrow down the centre. Scutellum with the apex projecting over the metathorax, margined, with a slight but distinct waved incision; at the base there is a deep curved furrow in the middle. Abdomen shining; punctured, rugosely punctured towards the apex; the segments impunctate at their junction, and depressed at base and apex; the apial dorsal segment with a distinct raised margin and slightly incised in the middle. The femora coarsely punctured, closely covered with pale to blackish hair; the tarsi thickly covered with fulvous hair on the lower side; and sparsely with pale hair above; calcaria brownish.

The late Mr. F. Smith records (Trans. Ent. Soc., 1873, p. 204) Stelis abdominalis, a species described by himself from Celebes (Proc. Lim. Soc., 1858, p. 7), from Japan. It is of course possible that he may have had the true Stelis abdominalis from Japan, but it appears to me that the species I have just described cannot be abdominalis, in as much as the latter differs from it in several respects; namely, in being nearly two lines smaller; in the abdomen being entirely ferrugineous, in the "posterior margin of the scutellum being rounded," and the wings are uniformly coloured.