

IX. *Descriptions of new genera and species of*
Hymenoptera. By P. CAMERON.

[Read April 4th, 1883.]

In this paper I have given descriptions of new species of Hymenoptera from the Sandwich Islands, Brazil, and Britain. For the Sandwich Islands species I am indebted to the Rev. Thomas Blackburn, who has done such good work in investigating the entomological fauna of these Isles. As our esteemed colleague has now left the Sandwich Islands, there is no chance of my receiving any more specimens; so I purpose, in a future paper, giving a complete catalogue of the Hymenoptera known to inhabit the Archipelago.

CHALCIDIDÆ.

Epitranus lacteipennis, n. s.

Dark reddish testaceous; the head behind, more or less of the lobes of the mesonotum, pleura, sternum, metanotum, petiole for the most part, abdomen more or less at the sides and above, coxæ and femora in the middle, blackish. Antennæ not much longer than thorax, becoming very gradually thickened towards the apex, which is sharply conical; the joints of the flagellum blackish at the apex. Head obsoletely punctured, covered with scattered silvery white short hairs; hind ocelli situated on the edge of the head behind. Thorax coarsely punctured: in the centre of the mesopleura is a shining semi-oblique line; in front of this line the pleura is obliquely striated. The scutellum is margined behind, the border shortly projecting. Metanotum reticulated, finely punctured. Petiole carinated at the side, longitudinally striated. The 2nd abdominal segment is longer than the petiole; its basal half is smooth and shining, the apical finely punctured; the posterior coxæ are not much shorter than the femora, which are somewhat alutaceous, and, with the coxæ, are covered

with short pale hairs; the femora have nine short blunt teeth, those at the apex being the shortest. Wings a very little longer than the abdomen, lacteous; nervures pallid; cubitus almost obsolete. Length, $4\frac{1}{2}$ mm.

Hab. Oahu (No. 87).

MORANILA, n. g.

Antennæ inserted immediately over the mouth; 2nd joint thin and very little longer than 3rd; 3rd, 4th, and 5th subequal, produced at the apices above; 6th a little shorter, being broader than long; club long, thick, longer than the three preceding joints together, apparently 2-jointed. Head broader than the thorax, broadest above, concave in front, the opposite behind. Eyes oval, situated at the sides above close to the top, and almost projecting behind; front ocellus placed a little way down, the two lateral on the edge behind; vertex without sutures; face projecting broadly between the antennæ. Pronotum broad, margined, narrower than the mesonotum. Scutellum long, longer than broad, angled in front at the sides, rounded behind, where it is much wider than at the base. Petiole longer than broad, thick; 2nd abdominal segment depressed in the centre above, much longer than all the others together; apex acute. The abdomen, with the petiole, is not much shorter than the thorax. Posterior coxæ and femora large. At the base of the abdomen, at the side, is a tuft of white hair. Wings with the ulna curved; tibiæ with only one spur.

This genus comes near to *Eunotus*, Walk. (*Megapelte*, Först.), but is sufficiently distinguished from it by the longer petiole, curved ulna, and longer prothorax (which is sharply separated from the mesothorax at the sides).

Moranila testaceiceps, n. s.

Head and abdomen smooth, shining, impunctate. Thorax very finely punctured. Scutellum with a transverse line close to its apical third, behind which line it is smooth, shining, impunctate. Metanotum with scattered punctures; petiole finely and closely punctured. Head, thorax, and legs covered with white hairs. Abdomen fulvous. Scape, head, and legs testaceous; tarsi white; flagellum dull fuscous testaceous. Thorax green;

scutellum coppery behind the transverse line. Abdomen violet. Wings hyaline, a large smoky cloud in the apical half; humerus with a few scattered bristles. Length, 2 mm.

Hab. Oahu (No. 55).

SOLINDENIA, n. g.

Antennæ 13-jointed, situated a little below the eyes; 2nd joint one-half of the length of the 3rd; 4th a little longer than 3rd; 5th and 6th subequal; 7th a little shorter; 8th a little longer than 6th; 9th a little shorter than 7th; last joint compressed strongly at the side, becoming gradually thickened. Eyes pilose, oval, converging at top, reaching to the back part of the head, beyond which they project. Ocelli in a triangle; front ridged above the antennæ. Antennal sutures not very deep. Head much broader than thorax, rather flat, longer than broad. Mesonotum margined at the side; scutellum broad at base, in front of it the mesonotum is hollow to near the middle, and the hollow is continued from there as two furrows to the pronotum. Scutellum broad, almost transverse in front; behind it becomes narrow and rounded. Metanotum hollow in the centre. Base of abdomen hollow in the centre, margined at side; 2nd segment incised at side, longer than 3rd; 4th shorter than it; last rounded, oval, much longer than preceding. Anterior femora broad at apex, flattened; middle slender; posterior stouter, narrowed at base. Middle tibiæ longer than tarsi, which are thickened, setose at base; metatarsus not much longer than the apical joint; spurs three-fourths of its length; there is only one spur on the tibia.

The hairy eyes and broad scutellum at base allies this genus to *Calosoter*, but the front ridged at the insertion of the antennæ, setose tarsi, much longer and converging eyes, readily separate it. Its nearest allies are some undescribed neo-tropical forms.

Solindenia picticornis, n. s.

Reddish testaceous, shortly pilose; head black above the insertion of the antennæ; apex of mesonotum bluish; metanotum more or less violaceous; pleura in front fuscous. Abdomen broadly white at base, the apex

testaceous; the rest fuscous-black. Legs pale testaceous; coxæ, trochanters, and tarsi white; apex of anterior tibiæ and tarsi fuscous. Scape of antennæ dull testaceous; three basal joints of flagellum and club black; the rest white. Wings shorter than the abdomen, smoky; the base more or less, an oblique mark at cubitus, and one opposite it, hyaline. Length, between 3 and 4 mm.

Hab. Oahu (No. 84).

Eupelmus flavipes, n. s.

Green; thorax beneath, the sides above more or less, and abdomen, coppery. Antennæ black; scape more or less testaceous beneath. Legs straw-yellow, the femora somewhat darker; posterior and anterior coxæ for the most part coppery green; middle pair coppery at extreme base. The antennæ are inserted a little below the level of the eyes and become but very slightly thinner towards the apex, and are covered with a microscopic pile; the 2nd joint is a little more than one-half of the length of the 3rd, which is nearly of the same length as the 4th; the 5th distinctly shorter; 6th a little shorter than 5th; the 7th, 8th, and 9th become gradually shorter; the apical a little shorter than the three preceding together, sharply pointed at the apex, and apparently composed of only one joint. The antennæ are nearly as long as the abdomen. Head and thorax covered with longish black scattered hairs. Pronotum and metanotum finely punctured. Abdomen shorter than the thorax, depressed in the centre, narrowed at base and apex, the latter rounded. Ovipositor a little longer than the posterior tarsi, testaceous, black at base and apex; apex of middle tibiæ distinctly thickened; middle metatarsus thickened, pilose beneath, shorter than the succeeding joints together; the long spur three-fourths of its length. Wings hyaline; cubitus indistinct, pallid yellow; ulna fuscous; costa scarcely pilose. Eyes large, projecting and converging towards the top. Length, 4—5 mm.

Differs from the ordinary *Eupelmi* in the eyes being more converging above, and in the antennæ not being so thick, especially towards the apex. The structure of the thorax does not differ.

Hab. Oahu (No. 57).

EVANIIDÆ.

Evania sericea, n. s.

Black ; palpi, knees, anterior tibiæ, and tarsi obscurely fuscous. Head and thorax coarsely rugose ; petiole longitudinally rugose, smoother at the base ; mesopleura in front smooth, shining, impunctate, behind coarsely reticulated ; breast covered with large shallow punctures. Coxæ finely rugose, smooth at base. Posterior femora not much longer than thorax ; tibiæ and tarsi armed with short thick bristles ; tarsi not much longer than tibiæ ; claws apparently simple. The head, thorax, and legs at the base are closely covered with a white velvety pubescence, which is longest at the sides. Abdomen smooth, shining, compressed, shortly pilose at the sides. Antennæ longer than the body ; the apex of scape brownish. Wings hyaline ; cubital and discoidal nervures obsolete from the discoidal cellules, the upper of which is not at all so broad in proportion to the lower as it is in *E. lævigata* ; the transverse humeral nervure is interstitial. The mandibles have two short obtuse teeth besides the large apical one. Length, 7 mm.

This species is apparently most nearly allied to *E. tasmanica*, Westw., but the present species has not the face longitudinally striated.

Hab. Oahu and Hawaii (No. 131).

ICHNEUMONIDÆ.

Limneria polynesiensis, n. s.

Black ; tegulæ, trochanters at apex, and middle of four posterior tibiæ, yellowish white ; base and apex of four posterior tibiæ and femora reddish ; anterior legs pale testaceous, the tibiæ with a more yellowish tinge ; posterior tarsi infuscated. Abdomen on the under side at the sides, and more or less above, reddish ; segmental divisions yellowish white at the sides, and more or less above on the three apical. Head and thorax semi-opaque, finely punctured, covered (especially the face) with a white pubescence. Super-median areola distinct, semicircular ; the others are somewhat compressed ; posterior median triangular at base, and extending to the apex. Antennæ as long as the thorax and abdomen, black, obscure fuscous beneath. Terebra curved, a little

longer than the petiole, which is alutaceous. The abdomen is covered (especially the apex) with a pale pubescence. Wings hyaline; nervures and stigma pallid testaceous; areolet complete, scarcely petiolated. Length, 5 mm., with terebra.

Hab. Haleakala, Maui, at an elevation of about 4000 feet (No. 101).

Limneria blackburni, n. s.

Black; the mandibles, palpi, trochanters, knees and tibiae (except at base and apex), and spurs, yellowish white; femora and base and apex of anterior tibiae reddish; base of four posterior femora, base and apex of posterior tibiae, blackish; coxae and base of trochanters black; anterior tarsi fuscous; the base of the tarsal joints pale. Abdominal segments at junction white; ventral surface at base yellowish. Head, thorax, and coxae almost opaque, faintly punctured, covered with a white pubescence, which is especially long on the face. Abdomen semiopaque, very finely punctured; terebra as long as the four last segments together; base of petiole smooth, almost shining. The three basal areolae of metanotum are less strongly punctured than the rest; the superior median areola small, distinct, semicircular, broader than long; posterior median triangular at base; from that it contracts slightly, and ends about the middle of the metanotum, where there is another field longer and somewhat oval in form, which occupies the rest of the middle space; the posterior intermedian area is semiobsolete, small; spiracular, large, wider at base than at apex; at the base it becomes rounded and enlarged. Wings hyaline; areolet shortly stalked; stigma fuscous. Length, 6 mm.

Hab. Mauna Kea, Hawaii, at an elevation of at least 13,000 feet, on the snow near the summit.

The metathoracic fields are much more clearly defined in this species than usual.

Ophion lineatus.

Luteous. Eyes, claws, and sheath of ovipositor black. Wings hyaline; stigma pallid ferruginous, darker round the edges; nervures fuscous; covered with a short white pubescence. Mandibles deeply bidentate, the apex blackish; foveae above face not very deep,

longer than broad; covered with a white pubescence. Antennæ a little longer than the body. Mesonotum almost shining, very finely punctured; mesonotum distinctly bordered all round; from the tegulæ the carina curves round to the scutellum, along the side of which it goes to the end, the two keels converging as they do so, but not joining; the apex of the mesonotum is also bordered, and there is a lateral keel at the side of the scutellum in front behind the fore wings. The metanotum is more pilose than the mesonotum; it is finely rugose all over; at the base is a waved indistinct furrow. Abdomen covered with long, depressed, white hairs, especially at the apex; the ventral surface is darker than the rest. The long spur of the posterior tibiæ is longer than the 2nd tarsal joint. Female and male. Length, 13 mm.

Hab. Hawaii, Lanai (Nos. 71 and 114).

Ophion nigricans, n. s.

Obscure black, covered all over with a close pale pubescence, the orbits of the eyes before and behind yellow; the face, more or less of mesonotum, metanotum at base, pleuræ and sternum, brownish. Mesonotum margined along the side to the end of the scutellum, which is rugose. Metanotum finely rugose; at the base is a striated furrow. Pleuræ finely punctured. Coxæ finely punctured; spurs thick, setose on under side. Antennæ somewhat shorter than the abdomen, obscure brownish fuscous. Wings hyaline; nervures fuscous; stigma livid. Length, 19 mm.

Hab. Hawaii (Nos. 129 and 130).

Nematus bridgmanii, n. s.

Black, shining, shortly pilose; labrum, clypeus, tegulæ, apex of coxæ, trochanters in part, more or less of femora, tibiæ, and tarsi, white; basal three-fourths of femora broadly lined with black, posterior almost wholly black; apex of posterior tibiæ and the tarsi faintly fuscous. Wings hyaline; costa and stigma pallid fuscous; extreme base of latter white. Antennæ a little longer than abdomen, moderately stout, tapering slightly towards apex, covered with a microscopic pile.

Vertex finely punctured, semiopaque, sutures distinct; antennal fovea large; clypeus incised at the apex. Ovipositor short, not half the length of the abdomen; sheath almost glabrous; apex acute, projecting more on upper than on lower side; tarsi shorter than tibiae; spurs almost straight, more than one-third of the length of metatarsus.

The male has the antennae longer and thinner, being a little shorter than the thorax and abdomen: it is almost glabrous. The stigma is fuscous, white at the base. Length, nearly $1\frac{2}{3}$ lines.

In most of the specimens the 3rd joint of the antennae is longer than the 4th, but in one it is shorter. The 3rd cubital cellule is irregular in shape; in some specimens it is broader than long, in others slightly longer than broad. The species has the greatest resemblance to *herbacea*, but the darker-coloured stigma, much shorter ovipositor, more acutely-pointed sheath (which is also less hairy), and the femora more strongly marked with black at the apex, readily enables it to be distinguished from the alpine species. From *N. crassispina* it may be known by the white mouth, longer tarsi and spurs (which are almost straight), longer antennae, and by the stigma not being unicolorous.

Mr. J. B. Bridgman bred this species from oval green galls found on willows at Brundall, but unfortunately he did not take a description of them nor of the larvæ. No doubt this omission will be rectified during the approaching summer.

Nematus latus, n. s.

Black; mouth and legs dirty white; the coxæ at base, posterior and middle femora almost wholly above and beneath, the anterior in the middle, the apex of posterior tibiae and the tarsi, black; tegulae black, the pronotum close to them dull white. Wings hyaline; nervures and stigma dark fuscous, the costa paler. The body is broad, and is covered closely with a short close pile; the head and thorax almost opaque, very finely punctured all over. The vertex is thick, and has the sutures very indistinct; the frontal area is not indicated. Clypeus almost transverse at the apex. Antennae nearly as long as the body, covered with a microscopic pile; the 3rd joint is longer than the 4th; cenchri small. Abdomen not much longer than the head and thorax together; sheath

of saw large, projecting, covered with a dense pubescence; the extreme apex of abdomen above dirty white; cerci small; the 3rd cubital cellule is a little longer than broad; the transverse median nervure is received nearly in the middle of the cellule; the wings are large, being longer than the body. Length, $1\frac{1}{4}$ lines.

Agrees closest with *N. scoticus*, but is smaller, has the antennæ quite black, longer and thinner, the sutures on vertex less deep, the mesonotum much more strongly punctured. From the species of the *mollis* group, with punctured mesonotum (see Trans. Ent. Soc. Lond., 1882, p. 531), it may easily be known by its smaller size, fuscous black stigma, longer and thinner antennæ, shorter and blacker cerci.

Hab. Mickleham, in May (Mr. T. R. Billups).

Acropiesta ? *nigriceps*, n. s.

Testaceous; head black; thorax darker than abdomen, covered sparingly with longish white hairs. The antennæ are as long as the thorax and abdomen; the 2nd joint is half the length of the 3rd, which is thinner than it; the 4th, 5th, and 6th are shorter and thicker than the 2nd, but thinner than the succeeding, which are broader than long, truncated at the apex, and rounded at the base; the last conical, truncated at base, and longer than the preceding. Sutures of mesonotum moderately deep, issuing from a roundish wide fovea at base of scutellum. Metathorax ending in a stout blunt spine at each side: there is a ridge in the centre which bifurcates immediately before the apex, each fork proceeding along to the side. Petiole longer than broad, of uniform thickness, as long as the metathorax: there is a slight ridge at each side. Abdomen wider and longer than the thorax; the apical half is sharply contracted to a sharp point; the 7th segment is as long as the 3rd, 4th, 5th, and 6th together. Wings narrow, not longer than the abdomen. Length, 3 mm.

This may not be an *Acropiesta*, as that genus is said to have the last antennal joint "etwas keulformig verdickt," the first eight longer than broad, the four following broader than long, and the last is as long as the two preceding, which is not the case with the species I have described. I should have placed it in *Belyta*, as defined by Förster, if that genus had not the keel cleft

in the middle instead of towards the apical third, as in *A. nigriceps*. I do not think, for my own part, that the distinction between the latter and *Belyta* is of generic value, being a mere question as to the place where the keel on the metanotum commences to bifurcate.

Hab. Gloucester, in June.

Torymus pruni, n. s.

Brilliant green; the pleuræ and coxæ with a golden iridescence; the scape beneath and mandibles reddish yellow; antennæ and ovipositor black; coxæ, four anterior femora behind, and posterior, except at extreme base and apex, green; four anterior femora in front and to some extent behind, and tibiæ, yellowish testaceous; the tarsi white, black at the apex; posterior tibiæ testaceous at extreme base and apex, the rest black; spurs white; posterior tarsi white, the three apical joints black. The head, thorax, and apex of abdomen on lower side are covered with a longish white pubescence; the legs and antennæ have a shorter and closer pubescence. The head, thorax, and coxæ are closely punctured; the abdomen is smooth and shining. The antennæ are thick; the 2nd joint is more globular than the other, but still longer than broad; the 3rd joint is longer than the 4th, which is a little longer than broad; the other joints are as broad as long, those near the apex are broader than long; the apex is slightly thickened. The head is longer than broad; the front is grooved on each side for the reception of the scape of the antennæ. The wings are clear hyaline. The ovipositor is a little shorter than the hinder tibiæ and tarsi.

The male has the scape green, the anterior femora have more green behind than the female has, the antennæ are thicker, and the apical half of the abdomen is coppery. Length, $3\frac{1}{2}$ — $4\frac{1}{2}$ mm.

This species is closely allied to *T. viridis*, but the antennæ are somewhat thicker, and in the male are shorter, the hollow on the head in front is much deeper, the head and thorax are much more hairy, the hair being also longer, the ovipositor is longer, and the spurs shorter. *T. campanulæ*, Cam., agrees with it closely, but may be easily known by the ovipositor being longer than the tibiæ and tarsi.

Bred from the galls of "*Cecidomyia pruni*," Kalt.,* found in Mugdock Wood, near Milngavie, the insects emerging in August.

PARASIEROLA, n. g.

This genus agrees with *Sierola* in the structure of the humeral cellules, and especially in having a small oval cellule at their end and close to the prostigma; but it differs from it in having the radial cellule quite open, as in *Goniozus*. From the latter it may be readily known by the presence of the above-mentioned oval cellule, which is completely open on the lower side in the latter. Compared with *Sierola*, the head is more produced and narrowed in front of the antennæ, and there is a distinct carina, which is absent in the other, the keel on the metanotum being also more distinct. The wings, too, are shorter, being not much longer than the thorax.

Parasierola testaceicornis, n. s.

Black; the antennæ, knees, tibiæ, and tarsi, testaceous; the posterior tibiæ darker, almost fuscous; the apex of the antennæ blackish. Head and thorax finely shagreened, and bearing minute roundish punctures, especially on the head and mesonotum. Abdomen smooth, shining, impunctate: there is a blunt keel on the centre of the metanotum, which ends where the metathorax commences to slope; the slope is rather abrupt. Prothorax more than two-thirds of the length of the thorax; its sides are perpendicular and somewhat hollowed. The head projects beyond the antennæ into a sort of snout, and a distinct keel runs between them, this keel originating close to where the eyes end. The femora are thickened, the anterior especially; the anterior tibiæ are thicker than the others. Antennæ shorter than the thorax, stout, tapering towards the apex; the basal joint is much longer and thicker than the others; the middle joints subequal; the last is longer, a little longer than the 12th. Wings fuscous; nervures testaceous; stigma and prostigma fuscous. Length, nearly 5 mm.

Hab. Brazil.

* Die Pflanzen-feinde, p. 175; F. Loew, Verh. z.-b. G. Wien, xxv., pl. ii., fig. 8.