# Deseriptions of New Geinera allad Species of Hymenoptera firom lindili. 

By P. Cameron.<br>(Continued.)

lyes bare, incised on the innerside; the malar space three times the leugth of the $2^{\text {nd }}$ antenual joint. Clypeus not separated from the face. Legs short; slender; the calcaria fully half the length of the metatarsus; the claws small, bare; the tibiae and tarsi are spinose. The median segment is short and has an obliqne, straight slope; there is a complete keel on the middle of the metapleurae; there is one large lateral area on the base and one longish lateral area, which extends to the apex of the segment, it becoming gradnally narrowed towards the apex; the petiole is smooth, long and slevder; the post-petiole is ouly very slightly widened; the apex of the clypeus is broadly rounded.

This genus has the form and abdomen of Campoplex. It is readily known by the flattish scutellum, furrowed and keeled laterally and by the keels on the median segment.

## D. cariniscutis sp. nov. Q.

Black, the 3rd to ${ }^{\text {th }}$ th abdominal segments ferruginous, the tibiae more or less and the spurs testaccous; the flagellum of the antenuae brownish beneath; the wings hyaline, the stigma and nervures testaceons, the areolet shortly appendicnlated. - Length 12 mm .

Hab. Darjeeling.
Heal: the face and clypeus closely, distinctly and miformly punctured and covered with white pubescence, which is longer on the clypeus than on the face, which projects slightly in the middle. Mandibles black, their upper edge rufo-testaceous. Palpi black. Pro- aud mesothorax closely punctured. Scutellon irregularly rugose, the inase less strongly than the middle or apex; its sides are distinctly keled; it is rather flat, not much raised above the level of the mesonotum. Median segment broadly depressed in the middle; in the centre is a marrow, smooth furrow; it is irregularly transversely striated. Pro- and mesoplenrae closely punctured, except the lower part of the proplenrae, which is smooth and shining; the part of the metaplenrae below the keel it closely rugose,
the part above it is more coarsely and irregularly obliquely striated. Legs black, the tibiae for the greater part rufotestaceons, darker at the base; they are, as are also the tarsi, spinose. Petiole black, smooth and shining; the 2ud segment black above, rufons laterally; the 3ri, $4^{\text {th }}$ and $5^{\text {th }}$ segments are rufous.

## 18. Bosmima Cam.

## 13. mandihularis sp. nov. $8^{7}$.

Black, the abrlomen from the 2111 segment ferraginons; the mandibles and palpi pallid yellow; the legs testaceons, the anterior paler, more yellowish thau the posterior; all the coxae, the 4 posterior troehanters and base of femora broadly, the apes of the hinder tibiae and the hinder tarsi, black; the wings hyaline, the nervures and stigma black; the tegnlae pallid yellow. - Length 8 mm .

Hab. Darjeeling.
Antcmane as long as the body, black, the scape yellow in the middle beneath. Ifead thickly covered with silvery pubescence; the face and elypens closely and uniformly punctured; the front and vertex are nearly as strongly, but not quite so elosely, punctured. Mandibles yellow, the base narrowly black, the teeth black and rufous: the palpi pallid yellow. Thorax closely and almost uniformly punctured; the propleurae irregularly striated in the middle and at the apex; the meso- finely and closely striated in front of the smooth space. The median segment is thickly covered with loug silvery pubescence. All the coxae, the 4 hinder trochanters, the middle femora on the basal fourth, the hinder for the greater part, the apex of the hinder tibiae and the hinder tarsi are black; the middle tarsi are infuseated towards the apex. Abdomen ferraginons; the petiole and the basal two thirds of the $2^{\text {nd }}$ segment black.

Bosmima was described by me in Manchester Memoirs, 1899 p. 120, from a female. I now supplement the description from this male. The transerse basal nervure is interstitial; there are only 2 closed cellules in the hiuder wings, a longer upper cellule extending to shortly beyond the middle anl a shorter lower one not half its length; the apical nervures are completely obliterated; there is a short basal, somewhat triangular areola on the base of the median segment, the narrowed part being at the apex; next to this is a cellule which extends to the top of the apical slope; it is obliquely narrowed at the base and becomes slightly and gradually barrower towards the apex which is open; the face and clypeus are flat; the apex of the clypens is rom
minal petiole is loug and slender and has a clearly separated postpetiole; the malar space is as long as the scape of the antenuae. The present species differs from the type (B. spinipes Cam.) in the front not being keeled. The tibiae and tarsi are not so thickly spined as in the $\mathcal{Q}$ of $B$. spinipes.

## 19. Campoplex Gr:

## 1. C. cytaeis sp. nov. $\uparrow$.

Black; the 2nd abdominal segment, except above, and the whole of the 3 rd rufous; the apex of the 4 front femora and their tibiae dark testaceons; the front keeled in the middle; the wings hyaline, highly iridescent; the stigma and nervures dark fuscous. - Leugth 14 mm .

Hab. Darjeeling.
Head black, closely punctured, the face and clypens thickly covered with white pubescence; the front with shallow, scattered punctures; the middle distinctly keeled. Mandibles black, broadly rufous in the middle; the palpi dark fuscous. Scutellum roundly convex; its sides obscurely striated. The median segment more strongly punctured than the mesonotum; at its base, in the middle, is a small square area, from the apex of which, on the sides, issues, obliquely, a short keel. On the apex of the metapleurae, above the keel, are some stout oblique keels. The hinder legs are entirely black, except that the tibiae are dark testaceous at the apex; the apex of the 4 frout femora, their tibiae and their tarsi are dark testaceous. The wings have a steely iridescence; the areolet is shortly appendiculated; the recurrent nervure is received behind its middle. The $2^{\text {nd }}$ abdominal segment is rufons on the lower half; the 3rd is almost entirely rufous.

The metanotmm is broadly, but not deeply, depressed in the middle aud is closely transversely striated, the striae being stronger and more distinctly separated on the apical half; the lower part of the propleurae is shining and is irregularly striated; the keel on the middle of the metaplenrae is stouter than usnal; the depression at the sides of the scutellum is stontly striated; the hair on the scutellnm is sparse and pale; and the keel bordering the metasternum is stont and distinct. The spucies comes wear to C. orasus Cam. (olim carinifrons Cam. non Holmgr.)

## 2. C. prytanes sp. nor. $Q$.

Black; the abdomen from the post-petiole rufous; the mandibles, palpi and front legs yellowish-testaceous; the apex of the middle femma, the tibiae and tarsi terstaceons, the
hinder tibiae rufo-testaceons; the wings hyaline, the nervures and stigma black, the areolet shortly appendiculated. Length 10 mm .

Hab. Darjeeling.
Antemnae entirely black, longer than the body. Face and elypens closely punctured, the elypens less elosely than the face. Maudibles black at the base, the rest and the palpi yellowish-testaceous. Prc- and mesothorax elosely punctured; the proplemrae shiniug, finely striated in the middle. Median segment more closely mgosely punctured than the meso- and more thiekly covered with white pnbescence; on the sides, at the apex, is an oblique lieel which reaches to the keel ou the middle of the plemrae. The linder tibiae are darker towards the apex, the hinder tarsi black; the tibiae and tarsi are weakly spinose.

## Vili. Tryphouini.

## 20. Icyona gen. nor.

Face elongate, the malar space large, as long as the seape of the antemae; the face roundly projects in the middle. Clypens not separated from the face, its apex romded; above, at the sides, is a deep depression. Mandibles with two large teeth, the upper longer and more sharply pointed than the lower. Head obliquely narrowed behind the eyes; the oceiput widely incised, margined. Sentellum roundly convex. Merian segment elongate withont keels; the spiracles elongate. Legs elongate; the apex of the hinder femora reaching near to the apex of the abdomen; there are two spurs on the 4 linder tibiae; the tarsi are spinose; the elaws bear thiek, elearly separated teeth. Radial cellnle narow, elongate; the areolet moderately large, four-augled; the nervures unite at the top; the reeurrent nervmre is received in its middle; it is straight and is largely bullated above the middle; the trausverse median nervure is received in its middle; there is a distinet stump of a nervire on the cubito-diseo nervire; the nervures in the hind wings are traced to the apex; the lower longitudinal one originates near the top. The basal four abdominal segments are distinetly longer thau broad; the petiole is long and is not mueh widened towards the apex; its spiracles are almost in the middle; the sheath of the ovipositor largely projects; it is stout and straight. The eyes are large and parallel; the hinder coxae are elongate, fully four times longer than broad.

Belongs to the Ctenopelmini and comes near to Ctenopelma.

## I. rufipes, sp. nor. Q.

Nigra, pedibus abdomineque rufis; coxis trochanterilusque. migris; tarsis posticis flutis; "his liyalinis, stigmate testuseo. Long.: 14 mm .

Hab. Simla (Nurse).
Antemnae black. Head black; the lower half of the inuer orbits broadly yellow; the lower part of the face rufuns; the lower two thirds of the clypens yellow. Vertex aud frout closely punctured; the clypeus sparsely punctured ahove. The basal third of the mandibles lemon-yellow, the middle rufons, the apex black. Palpi testaceous. Pro- and mesothorax closely and uniformly punctured, as is also the scutellum, except at the apex, where it is smooth, shiming and testaceous. The median segment is much more strongly, more rugasely, punetured and is thickly covered with short. white pubescence. Wings hyaline, highly iridescent; the stigma is testaceons, the nervures blackish. Legs rufous; the cozae, the basal joint of the trochanters above and a line on the four frout femora behind, black; the apical 4 joints of the hiuder tarsi yellow. Abdomen rufous, shining; the basal half of the petiole has a yellowish tinge.

The $\sigma^{\pi}$ is similarly coloured; the seape of the antennae is yellowish; the flagelhm brownish beneath; the malar space is marked with yellow.

## II. Mesoleptini.

## 21. Fovaya, gen. nov.

Areolet small, obliqne and shortly stalked. Head transverse, the temples broader than the width of the eyes. Mandibles nuerqually toothed. The long spur of the hinder tibine shorter than the 2 nd joint of the hinder tarsi. Antemae long and slender; the first joint of the flagellum longer than the second; the flagellum broadly riuged with white. Median segment completely areolated; the hasal central area is long, marrow and contraeted before the mildle; the apical is much wiler and semicircular. Legs of moderate length; the tibiae and hinder tarsi thickly spinose; the claws simple. Metathoracie spiracles small, oval; the spiracular area is bommed by distinct lieels, the spiracles being placed near the apical one; at the base of the apical third of the spiracular area is a transverse curvel keel. Ablonien flat; becoming broader towards the apex of the $5^{\text {th }}$ segment; the apical is bluntly pointed. The stigma is longish and is moderately broad; the
radius originates behiud its middle; the first recurreut and the disco-cubital nervares are not angularly broken. The eyes are large and reach to the base of the clypeus; they are parallel and do not converge below. The abdominal petiole is twice the length of the $2^{\text {nd }}$ segment; the spiracles are placed shortly behind the middle; from them the petiole becomes gradually wider towards the apex.

## F. anmulicornis sp. nov. $\delta^{7}$.

Nigra, ftuvo-macnlata; abdominis medio late rufo; pedilus nigris; tiluis femoribnsque anterioribus lasique tibiarum posticarım rufo-testaceis; tarsis posticis late albo-annulatis; alis Injalinis; nervis stigmateque nigris. - Long.: 10 mm .

Hab. Simla. (Nurse).
Antennae longer than the body, sleuder ; the $14^{\text {th }}$ to 24 th joints white; the scape on the under side thickly covered with silvery hair. Head black; the clypeus, two short, oblique liues above its middle; the imer orbits, the mandibles, except at the apex, and the palpi, yellow, Face alutaceous; the clypeus sparsely and distinctly punctured; the front aud vertex alntaceous; as is also the thoras. There is a small, somewhat pyriform, mark on eitherside of the mesonotum near the base. Scutellum roundly convex, the post-scutellum is furrowed at the base; the lateral depressions are striated. The median segment is depressed in the middle at the base; iii the centre are two longitudinal keels, which approach eaeh other before the middle, thus becoming obliquely dilated. Legs rufotestaceous; all the coxae, trochanters and the hinder femora are black; the rest rufo-testaceous, the hinder pair with the colour darker and the apex of the hiuder tibiae black, the metatarsus infuscated and the other joints of the hinder tarsi yellow. Wings clear hyaline; the stigma and nervures black. Abdomen black; the apex of the 2 nd segmest and the whole of the $3{ }^{10}$ and $4^{\text {th }}$ segments, rufous.

## X. Metopiini.

## 22. Cultrarius Davies.

## C. flavo-balteatus, sp. nov. $\delta^{7}$.

Black, the antenuae brownish beneath; the elypeus bordered with yellow, the abulomen with a purplish tint aud banded with yellow; the wings fuscous-violaceous. - Length $12-13 \mathrm{~mm}$.

Hab. Darjeeliug.
Antennae black, brownish beneath. Clypeus closely
punctured, its apex broadly rounded, depressed; its sides are broadly margined, yellow, as is also the upper edge; the lower inner orbits are lined with yellow, the line being narrowed above. The front and vertex are smooth and shining. Thorax black, a small mark below the tegnlae, the curved keels on the sides of the scutellum at the base, the apex of the scutellum and the base and apex of the tegnlae broadly, yellow. Mesonotum closely and uniformly punctured; the scntellum is more rugosely punctured; its basal depression is romuded at the base, trausverse at the apex and bearing 6 stout longitudinal keels. The sides of the sentellmm are raised and eud at the apex in a short stout tooth; its apex has a long, perpendicular slope and is keeled down the middle. Ou the sides of the median segment is a large area, depressed, smooth and shining, rounded at the apex and longer on the onter than on the inner side; the space between them is sontly transversely striated; the rest of the segment is irreoularly, coarsely reticulated. The upper part and apex of the propleurae are closely rmgose, the rest shining and irregularly striated. Mesopleurae closely rugosely punctured, the oblique apical slope is smooth and shining; the lower furrow is wide and deep; it is smooth and shining and widest at the base. Legs hack, covered with a white pubescence; the apical half of the fore femora, the tibiae and the tarsi rufo-testaceous: the fore spurs are testaceons, the middle white. the hinder black. The basal segment of the abdomen is raised in the centre, bears there 2 yellow, stont kecls, which converge at the base; the apex of the segment is broadly yellow, the band bring broadest at the keels; the 2 ud segment has a yellow mark on the apex at the sides; the 3rd has a yellow hand on the apex; the $4^{\text {th }}$ a narrower one and the 5th a still narrower one; the 6 th segment is raised and projects slightly at the apex; the 7 th is small, obliquely narrowed towards the apex.

The antennae are broken off before the middle in $m y$ specimen. The genus Cultravins Davies differs from Metopins in having the head small, narrower than the thorax, the 2 nd joint of palpi normal, not abnormally swollen and the transverse median nervure iu hind wiugs augularly broken above the middle.

## Braconidae.

## 1. Celiestiella, gen. nor.

Fore wings with 3 cubital cellnles. Radiale cellule elongate, reaching to the apex of the wings. Recurrent nervnre interstitial with the first transverse enbital; the transverse
mediau nervare is received in front of the transverse basal. The radius in the hiad wiugs is almost obliterated; the cnbitus does not reach to the apex of the wings; the pobrachial nervure is received iu the middle of the praebrachial areolet; the stigma is thickened linear, longish. Head eubital, largely developed behind the eyes, which are widely separated from the base of the maudibles. Apex of elypeus broadly rounded; separated laterally by an oblique furrow from the face but not ou the top. Ocelli in a triangle; the anterior placed in the centre of a deep curved furrow. Mandibles large, broad at the apex, where there are two short blunt teeth, the mper of which is more distinct, larger and more ronuded than the lower. Antemae slender, longer than the body. Prothorax large. Parapsidal furrows absent. Scutellum large, roundly conves. Post-scntellum distinct. Median segment not areolated, furrowed at the base. Legs longish; the hinder trochanters long, the basal joint fully 3 times longer than the apical, which is thicker. Abdominal petiole large, twice longer than broad; the base of the petiole is depressed; its sides at the base are broadly raised; the last segment is bluntly romded. The abdomen is not much longer than the thorax. The occiput, especially at the sides, is sharply margined; the spiracles of the first segment are placed near the middle; the 2 ud cubital cellule is twice longer on the lower than on the upper side; the first transverse cubital nervure, th:e recurrent and the cubitus are bullated near their juction; the 2 nd transverse culital nervure is faint: the basal two abscissae of the radius are straight and oblique; the apical is slightly enrved upwards; the tibial spurs are short; the radins issues from shortly behind the mildle of the large stigma.

This genns does not fit very well into any of the families of Braconidue; but may, for the present, be referred to the Meteorinae.

## C. testaceipes, sp. nov. $\sigma^{7}$.

Nigra; mandibulis scapoque antemarum oufis; pedilnus pallide testaceis ; alis hyalinis, stigmate fusco. - Long: 4 mm . Hab. Simla (Nurse).
Antenuae black; the scape and second joint rufons; the flagellum is thickly covered with short stiff hair. Head smooth and shining; the base of the elypeus with a row of punctures; the face and clypeus are thickly covered with short white pubescence; the elge of the elypeus is piceuns. Mandibles rufons; their teeth black; the long palpi are pale yellow.
('To be continued.)

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