more weakly on the middle of the mesopleurae above, where it is also more shining; the metapleurae and the coxae are densely covered with white pubescence. The tibiae are more densely covered with white hair than the rest of the legs.

On some undescribed *Vespidae* from Borneo. (Hym.) By P. Cameron, Whitle, New Mills (England).

Odynerus Brooksii sp. nov.

Black, the clypeus, a small transverse oval spot over the antennae, the underside of the mandibles to near the apex, the eye incision, the mark prolonged downwards on the lower half, a short line behind the top of the head, a line on the pronotum, not reaching to the middle, scutellum except on the basal and apical slopes, 2 spots on postscutellum, a large irregular oval spot on the sides of metanotum, a large conical or oval mark (narrowest below) under the tegulae, a short oblique line below its apex, a line on the apex of the 1st abdominal segment, a broader one on the apex of the 2<sup>nd</sup>, the apices of the 3<sup>rd</sup> to 5<sup>th</sup> in the middle, a large oblique oval mark on the sides of the 2<sup>nd</sup> at the base, and the apex of the 2<sup>nd</sup> ventral, yellow. Legs black, almost the apical half of the 4 fore femora, the fore tibiae except broadly behind at the base, the middle tibiae except behind, the posterior behind except at the apex, yellow; the tarsi for the greater part black. Underside of antennal scape yellow. Wings almost hyaline, the radial cellule fuscous violaceous, the nervures and stigma black; tegulae yellow, with a somewhat semicircular spot near the centre. J. — Total length 8 mm.

Kuching. August. (John Hewitt.)

Clypeus longer than wide, strongly punctured, the apex bidentate, the teeth triangular. Base of thorax transverse, the sides of the apex broadly rounded. Scutellum broadly furrowed down the middle, the post-scutellum with a narrower furrow, its apex striated, broadly, bluntly rounded. Apex of metanotum stoutly, obliquely striated. The puncturation on the head is strong and close. The 1<sup>st</sup> abdominal segment is longish cupshaped, strongly, closely punctured, the apex roundly raised, smooth; the 2<sup>nd</sup> less strongly punctured, clearly longer than it is wide at the apex. Antennal hook, minute, sharp-pointed, black. The mandibular teeth are more distinct than usual; there

are 4 behind the apical, which is long and sharp-pointed, the subapical triangular, the basal 3 are short, bluntly rounded.

This species is dedicated to Miss Alida Brooks of Bidi, Sarawak, who has been a liberal Contributor to the stores of the Sarawak Museum.

#### Odynerus santabongensis sp. nov.

Black, the clypeus, except for a mark, wider than long, transverse above, obliquely narrowed to a point below, in its centre, a longish line down the centre of the front, roundly dilated below, the eye incision, the mark, roundly, broadly incised on the innerside, a short oblique spot behind the outerinner edge of the eyes, a line along the upper two-thirds of the outer orbits, a line on the pronotum, on the sides extending behind to the middle, the basal half of the scutellum, the mark with a shallow incision in the middle, the tegulae except for a large black mark near the base, a large, conical mark, obliquely transverse, below them, the sides of the metanotum broadly, the marks narrowed below, the outer sides above, roundly narrowed, 2 longish oblique lines on the top of the basal slope of the 1st abdominal segment, a line on its apex, narrowed laterally and with a semicircular incision in the centre of the base, a pyriform mark on the base of the 2nd segment at the sides, the narrowed end at the apex, the apex of the segment, the line narrowed on eitherside of the middle, narrower, more regular lines on the sides of the 3<sup>rd</sup>, 4<sup>th</sup>-5<sup>th</sup>, a spot on the sides of the 2<sup>nd</sup> ventral in the centre, and a waved line on its apex, pale yellow. Legs pale yellow, the coxae, trochanters, the 4 anterior femora above, the hinder entirely and the greater part of the tarsi black. Wings almost hyaline, iridescent, the radial cellule and the apical cubital, dark fuscous violaceous, the nervures and stigma black. o. -Total length 8 mm.

Santabong (Hewitt).

Antennal hook, short, thick, reddish brown. Clypeus longer than wide, the apex broad, transverse. Base of thorax transverse, the sides not projecting, the sides of the apex broadly rounded. Puncturation on thorax strong, moderately close; the post-scutellum closely roundly, reticulated, its apex bluntly roundly dilated. First abdominal segment cup-shaped, the 2<sup>nd</sup> wider at the apex than it is long.

This species, except that the yellow markings are much paler, resembles very closely *Ancistrocerus megaspilus* Cam. of which I only know the  $\mathfrak{P}$ ; the latter is not quite a typical *Ancistrocerus*, but the base of the  $1^{\mathrm{st}}$  abdominal segment is more distinctly separated

from the rest than it is in Santabongensis, in which the sculpture of the segment is more uniform; in the latter the 2<sup>nd</sup> abdominal segment is wider at the apex than it is long, while in megaspilus it is longer than it is wide at the apex; there is a difference, too, in the form of the post-scutellum; in the present species its apex is bluntly rounded; in megaspilus, it becomes gradually obliquely narrowed to a blunt point, its pleural markings, also, are larger, the upper being broader, especially below, where it is broadly rounded; the base of the thorax, too, is not so transverse, the sides being more broadly rounded.

### Icaria erythrospila sp. nov.

Black, a broad line on the base of the clypeus, on the sides and extending to shortly beyond the middle; it being slightly, gradually narrowed towards the apex, a short line at the eyes opposite to and below the antennae, and a spot on the base of the mandibles, pale yellow, the prothorax and a large spot, longer than wide, rounded at the base, in the centre of the mesonotum at the apex rufous; the scutellums yellow tinged with rufous, the scutellum with a more rufous tinge than the post-scutellum; there is a small rufo-yellow spot on eitherside of the metanotum near the apex; there is a narrow, but distinct obscure yellow line, with an irregular basal edge at the base on the apex of the 2<sup>nd</sup> abdominal segment all round, there is a small yellow spot on the apex of the 1<sup>st</sup> on the sides, and a smaller one in the centre of the apex. Tibiae yellow, the hinder broadly, irregularly black at the apex. Underside of antennal scape yellow. Wings hyaline, the radial cellule, except at the base behind, blackish. ♀. — Length to end of 2<sup>nd</sup> abdominal segment 6—7 mm.

Kuching. September. (John Hewitt.)

Head and thorax covered with short, white pubescence, closely, but not strongly punctured, the clypeus is shining, almost smooth. Post-scutellum with distinct, clearly separated punctures at the base and sides, the punctured part wider on the sides than at the centre of the base; the rest smooth and shining. Sides of metanotum above with some irregularly oblique striae, the sides below more finely, transversely striated; the centre deeply, widely excavated, smooth, shining. Abdominal petiole distinctly narrowed at the base, the apex cup-shaped, narrowed roundly at the base, as long as it is wide at the apex; the  $2^{nd}$  segment is longer than it is wide at the apex.

Comes nearest to I. malayana Cam.; in that species the lower half of the prothorax is black, the sides of the clypeus

are yellow all round and the sides of the metanotum and the apex of the 1st abdominal segment are yellow.

## Icaria ornatipes sp. nov.

Black, densely covered with white pubescence, the prothorax, the greater part of the mesonotum, scutellums, the mesopleurae at the base and petiole above, rufous, the sides of clypeus broadly, its apex more narrowly (the black central mark narrowed above, its apex somewhat sharply rounded), a semicircular mark on the lower inner orbits, base of mandibles broadly, a line in front of tubercles, the underside of the 4 front coxae and a broad line on the inner and outer side of the posterior, yellow, almost white; the apex of petiole yellow, obscured with rufous, a broad, irregular line on the apex of the 2<sup>nd</sup> reddish yellow, the other segments obscure rufous. Femora black, the rest of the legs reddish testaceous, the fore tibiae narrowly, the 4 hinder on the outer side more broadly, whitish yellow. Wings hyaline, the apex of costal cellule narrowly, the radial and the 2 apical cubitals, dark smoky, the stigma fulvo-testaceous, the costa and stigma black.  $\mathfrak Q$ . — Length 8 mm.

Kuching. September. (He witt.)

Clypeus smooth, except for a few scattered punctures; wider than long, the apex ending in a sharp point. Pro- and mesothorax covered closely with round punctures, except on the base of mesopleurae which is impunctate. Post-scutellum with a steep rounded slope, its apex bluntly rounded, almost transverse; the apical slope shining, bare, smooth. Metanotum with an oblique slope, the centre widely hollowed, the sides of the depression oblique; the metapleurae almost smooth. Petiole more than half the length of the 2<sup>nd</sup> segment; it is narrow at the base, becomes gradually, obliquely widened to near the apex, this part forming an elongate triangle; the apex has the sides straight, slightly rounded: the 2<sup>nd</sup> segment is about as long as it is wide at the apex, its base roundly narrowed.

Comes near to *I. malayana* Cam.; the latter may be known by the clypeal black mark extending to the apex, by the propleurae being black, by the sides of metanotum being yellow, and by the petiole being distinctly narrowed at the base.

# Icaria curvilineata sp. nov.

Black, a broad curved line on the apex of the clypeus, a mark, roundly narrowed on the inner side, opposite the antennae, a mark on the base of the antennae, a narrow line on the apex of pronotum, a line on the base of post-scutellum, its base trans-

verse, its apex rounded, contracted in the middle, a line on the sides of metanotum, roundly narrowed on outer side, and a narrow line on the apex of  $1^{st}$  abdominal segment, bright yellow; the line on the  $1^{st}$  abdominal segment bordered with testaceous; there is a testaceous line on the apex of the  $2^{nd}$  segment; the apices of the other segments are narrowly obscure testaceous. Legs black; the apices of the tarsi dark testaceous, the fore coxae bright yellow below. Wings hyaline, the radial cellule smoky, the stigma and nervures black.  $\mathcal{P}$  or  $\mathcal{P}$ . — Total length 10 mm.

Inop. Borneo. October. (John Hewitt.)

Clypeus smooth, the front and vertex with close round shallow punctures; the space between the antennae broadly, roundly convex. Mesothorax and scutellum distinctly punctured, the punctures round, clearly separated; there is a distinct, raised, smooth line down the middle of mesonotum. Apical half of post-scutellum smooth. Metanotum depressed in the middle, the sides broadly rounded, the spiracles raised, prominent. The narrrowed basal part of the abdominal petiole is a little shorter than the dilated apical, which is longer than it is wide at the apex; the bell-shaped 2<sup>nd</sup> segment is as long as it is wide at the apex; it is not much longer than the 1<sup>st</sup>.

The apex of the post-scutellum is not quite transverse; the metanotum is more widely depressed in the middle than usual, seen from the sides its slope is straight, oblique.

# Description of two undescribed Bees from Borneo. (Hym.)

By P. Cameron, Whitle, New Mills (England).

Prosopis Hewittii sp. nov.

Black, a large mark on the centre of the face and clypeus, extending from the antennae to the apex of the latter, the top and bottom transverse, a rounded incision on the sides below the middle, the upper part of the mark larger than the lower, a line round the apex of pronotum, the tubercles and the tegulae, lemon-yellow; the apical 4 joints of the tarsi rufo-testaceous; wings hyaline, the stigma fuscous in the centre, darker round the edges, the nervures fuscous, the 1st recurrent nervure interstitial, the 2nd received close to the base of the apical fourth

# **ZOBODAT - www.zobodat.at**

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: <u>Deutsche Entomologische Zeitschrift (Berliner Entomologische Zeitschrift und Deutsche Entomologische Zeitschrift in Vereinigung)</u>

Jahr/Year: 1908

Band/Volume: 1908

Autor(en)/Author(s): Cameron Peter

Artikel/Article: On some undescribed Vespidae from Borneo.

(Hym.) 561-565