Limnichus densatus Pic. Fort de Kock, 920 m, 1924 à 1926.

Thaumaglossa atricolor Pic et var. Fort de Kock, 920 m, 1926. — Eclos d'une oothèque de Mante.

Trinodes minor Pic; Padang, 2 m, 1926. — Sur feuilles de Hibiscus tiliaceus L.

Orphinus formosanus Pic, var. Padang, 2 m, 1926.

Sitodrepa panicea L. Fort de Kock. Dans du vermicelle. Espèce cosmopolite.

Catorama Jacobsoni (n. sp.). Oblonga, antice et postice attenuata, convexa, nitida, griseo-holosericeo pubescens, nigro metallica, membris rufis. Capite minute sat dense punctato; thorace breve et lato, antice attenuato, minute et parum dense punctato; elytris parum latis, sat brevibus, minute et parum dense punctatis, insulcatis. Long. 2 mm. Fort de Kock, 920 m, 1925. — Type in Museum Paris, co-types in coll. Pic et Jacobson.

Espèce très distincte par sa petite taille, jointe à l'absence complète de sillon latéral. Peut se placer près de C. insulcata Pic, moins robuste que ce dernier avec les épaules moins marquées, la tête foncée.

Caenocara albosetosa (n. sp.). Subrotondata, parum convexa, nitida, sat breve albo setosa, circa densiore, rufa, elytris castaneis. Capite mediocre et sparse punctato; thorace breve et lato, antice valde attenuato, sat fortiter et sparse punctato; elytris latis et brevibus, sat fortiter et irregulariter punctatis, antice externe bistriatis et postice bisulcatis; membris rufis. Long. 1,5 mm. Tandjunggadang. — Dans un Polyporus. A placer près de C. rubriceps Pic. Type in Museum de Paris.

Espèce très distincte par ses soies blanches raides qui dessinent sur le pourtour, par suite de leur condensation, une sorte de bordure très nette, l'insecte étant vu du dessus.

Ptinus niger v. borneensis Pic. Fort de Kock, 920 m, 1925; Tandjunggadang, 1200 m, II 1926.

Bruchus (Callosobruchus) chinensis. Fort de Kock, 920 m, 1925. D'après M. Ed. Jacobson les représentants de la famille des Bruchidae se rencontrent rarement à Sumatra.

Fauna Sumatrensis.

(Beitrag Nr. 49.)
Family *Calliphoridae* (Diptera).
J. B. Malloch, Washington, D. C.
(With 3 Fig.)

In this paper I present descriptions of some species of the sub-family Calliphorinae. The material was collected by Mr E. Jacobson,

and the type specimens will be disposed of in accordance with his desires, paratypes being retained by the author where such are available.

Genus Calliphora Robineau-Desvoidy.

I have before me two species which are referable to this genus in the wide sense, but neither of them is typical in all characters. I propose to erect a new subgenus for the following species as below.

Subgenus Pseudocalliphora nov.

Frons of female as in typical Calliphora species, but narrower than usual, at the vertex not one-fifth of the head width, the orbits with very few hairs in addition to the bristles; parafacials very narrow, almost invisible from the side, and bare except for a few very fine pale hairs opposite base of antenna; cheek not much higher than width of third antennal segment. Thorax as in typical Calliphora species, with two strong bristles in the sublateral series, the sternopleurals 1 - 1, and no hairs on the anterior lower part of pteropleura. Second abdominal tergite with a pair of long bristles on middle of apical margin, the fourth with a discal transverse series. Lower calypter with very few hairs on upper side near middle. Otherwise as Calliphora. — Genotype, the following species.

Calliphora (Pseudocalliphora) semifulva (sp. n.): Female. — Head fulvous yellow, with yellowish grey dust on occiput, most dense on postocular orbits, on face, parafacials, frontal orbits, and raised portions of the cheeks; occiput, and third antennal segment except base, fuscous; palpi fulvous. Thorax fulvous yellow, mesonotum more brownish, with grey dust, and four dark vittae. Abdomen concolorous with thorax, darkened from middle of second tergite to apex, and with changeable greyish dusting. Legs fulvous yellow, tarsi fuscous. Wings and calyptrae yellowish. Halteres yellow.

Frons about 2,5 as long as its width at vertex; interfrontalia bare; eyes bare, about twice as high as long; arista long haired almost to apex; third antennal segment fully three times as long as second, extending almost to vibrissae, the latter but little above mouth margin, quite long, and incurved. Thorax sparsely haired; acrostichals 2 + 3. Fore tibia with one posterior and about six anterodorsal bristles; mid tibia with a ventral bristle; apical one of the posterodorsal bristles on hind tibia quite long. Wing venation normal, two or three bristles at base of the third vein both above and below. — Length, 5.5 mm. — Type, Fort de Kock, Sumatra, 1925.

I know of no species referable to Calliphora in the wide sense which has the colours as in this one, some of those occurring in Australia though partly fulvous have the apical dark portion of the abdomen blue

or violet colored, and the head in those species is not the same structurally as in the above species.

Subgenus Polleniopsis Townsend.

This subgenus is very similar to Calliphora in the strict sense, but there are no fine hairs at the anterior extremity of the suprasquamal ridge close to base of wing. In the genotype, pilosa Townsend, there is no facial carina but in the species described below there is a very distinct central vertical carina on the face which extends almost its whole height, and is widened, usually slightly sulcate, near upper extremity. In both species the posterior sublateral bristle is present, and the lower calypter is haired only on a small portion of upper disc.

The two species now known to me may be distinguished as follows:

A. Face not carinate; second wing vein in normal position, not very close to costa; thorax with two pairs of presutural acrostichals

pilosa Townsend

It appears probable that *Pollenia pilisquama* Senior-White belongs here also, but it is impossible to determine if this is so without an examination of specimens. In the paper in which the above named species was described Senior-White has placed *pilosa* in *Pollenia*, but the latter has the lower calypter without hairs on disc above, and the propleura bare. I suspect that *pilisquama* S.-W. is a synonym of *pilosa*, but I do not know what species that author identified as *pilosa*.

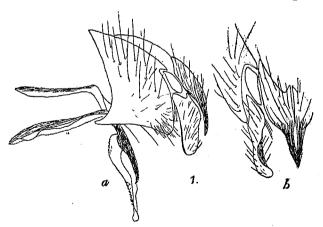


Fig. 1. Hypopygium of Calliphora (Polleniopsis) carinata.

a side view; b rear view, one half.

Polleniopsis carinata (sp. n.).

Male and female. — Black, subopaque, rather densely grey dusted, the abdomen usually with a slight brassy or bronzy tinge. Antennae and palpi rufous yellow, third segment of former largely infuscated. Thorax with four rather distinct dark vittae, the outer one on each side broad, and three rudimentary dark lines, the outer pair along the lines of dorso-centrals. Abdomen checkered as in Calliphora erythrocephala Meigen. Legs black. Wings clear, yellowish basally. Calyptrae and halteres yellow.

Frons of male narrow above, triangularly widened below, somewhat protuberant in front; parafacial fully twice as wide as the rather narrow third antennal segment; from of female less than one-third of the head width at vertex, widened anteriorly; each orbit with two strong forwardly directed upper bristles and the interfrontalia bare in female; vibrissae separated by a distance about equal to width of parafacial at middle, the latter rather sparsely fine haired; facial carina quite sharp and extending almost the entire height of face, widened near upper extremity and sometimes with a slight sulcus on the widened part; cheek fully one-third of the eye-height; arista plumose. Thorax with 1+3acrostichals and 2 + 3 dorsocentrals. Abdomen narrowly ovate, lateral edges of tergites and sternites with conspicuous bristly hairs; second tergite at apex and third on disc and at apex sometimes with a pair of bristles. Legs as in Calliphora species. A remarkable feature of the wing venation is that the second vein gradually and rapidly approaches the costa, joining it on about the same line so that the cell between them is much narrowed apically. - Length, 6-10 mm. - Type and 10 paratype males, Tjibodas, Java, 1400-1500 m, 1923 (Karny); allotype, and 16 paratypes, males and females, Fort de Kock, 920 m, 1925, and 16 paratypes, one being a female, Gunung Singgalang, Sumatra's west coast, 1800 m., July 1925 (E. Jacobson). — Type specimen in author's collection.

Genus Neomelinda nov.

This genus is most closely related to Anthracomyza Malloch, an Australian genus, but it has the parafacials almost obsoletely haired, the arista shorter and with shorter hairs, and three instead of two bristles on the presutural area, the additional one being an outer posthumeral, the posterior sublateral one being absent here also. The wing venation in both genera is similar, the apex of first posterior cell being close to the wing tip. — Genotype, the following species.

Neomelinda sumatrana (sp. n.): Male. — A deep black, slightly shining, species, with distinct dusting present only on frontal orbits and para-

facials, the thoracic dorsum almost entirely devoid of traces of vittae, and the abdomen with faint traces of brownish dust. Wings smoky. Calyptrae and knobs of halteres fuscous.

Frons linear above, expanded into a broad triangle on anterior half, bristles confined to the orbits on sides of the wide portion; parafacials about as wide as third antennal segment, narrowly visible from the side, and with sparse microscopic pale hairs above; cheek about twice as high as width of third antennal segment, all the hairs black; third antennal segment about three times as long as second. Thorax with 1+2acrostichals, and 2 + 3 dorsocentrals, inner posthumeral bristle slightly behind and well mesad of outer; surface hairs on mesonotum sparse and fine. Tergal hairs erect and fine, bristles on sides, and on third tergite at apex long, the discal and apical bristles on fourth shorter and weaker. Fore tibia with one posterior and one anterodarsal bristle, and basad of the latter some much shorter setulae; mid tibia with a ventral bristle; hind tibia with two anterodorsal, two anteroventral, and two posterodorsal bristles. Bend of fourth vein not so broadly rounded as in Anthracomyza. - Length, 5 mm. - Type and one paratype, Gunung Singgalang, Sumatra's west coast, 1800 m., July 1925.

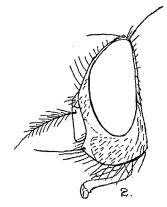
Calliphora fulviceps van der Wulp; This species was originally described from Sumatra, but I have seen it only from Tjibodas, Java. It is peculiar in having only one pair of presutural acrostichals, no posterior sublateral bristle, and the face and cheeks bright orange or fulvous, with most of the hairs on same concolorous, only a few of those on the upper anterior part of the raised area black. The calyptrae are fuscous, and the covering of the prothoracic spiracle is orange. — The species is referable to the segregate containing the genotype.

I am including descriptions of two species which I refer to the genus Melinda Robineau-Desvoidy, but neither is typical of the genus. The first one has the head of entirely different type from that of normal species of the genus, while the second has no hairs at base of the suprasquamal ridge. The latter may be merely an individual variation, but having only the type specimen on hand I can not venture a definite opinion. Both species have the usual hairs on centre of propleura and on prosternum, and the lower calypter bare above.

Melinda kooki (sp. n.): Fig. 2. Male. — Black, slightly shining, without distinct metallic lustre. Frontal orbits and parafacials silvery grey dusted; antennae black; palpi brownish; cephalic hairs all black. Thoracic dorsum slightly grey dusted, with three broad dark vittae, and between these narrow vittae, when seen from behind; anterior spiracular covering black. Abdomen quite densely blue-grey dusted, with a

narrow dark dorsocentral vitta, and slight checkerings apically. Legs black. Wings slightly brown tinged basally. Calyptrae and halteres yellow.

Frons at narrowest point about as wide as third antennal segment, setulose to anterior ocellus; parafacial not as wide as third antennal segment in profile (Fig. 2); cheek as high as length of third antennal segment, the latter fully 2.5 as long as second: arista plumose on basal two-thirds, bare apically. Thorax with 2+3 acrostichals, and five bristles on the sublateral area; sternopleurals 1 + 1. Abdomen narrowly evate, bristles on apices of tergites 2 to 4 inclusive long. Legs and wings as in Calliphora erythrocephala Meigen. Lower calypter bare, with a few setulae on ridge at its base. - Length, 6 mm. - Type, Fort de Kock, 1925.



Melinda kocki, head from side.

This species has the head more flattened antero-posteriorly than the typical species of Melinda, and the general colour, and presence of the posterior sublateral bristle, as well as the open first posterior cell, and black prothoracic spiracular covering should readily distinguish it from its allies.

Melinda grisea (sp. n.): Fig. 3. Female. — Head black, with dense grey dust, that on parafacial slightly yellowish, antennae fuscous, apex

of second segment, base of third, an its inner and lower sides, testaceous yellow: palpi testaceous yellow; all cephalic hairs black. Thorax black, not distinctly shining, with quite dense grey dust, mesonotum with four dark vittae which are most evident when thorax is viewed from behind, and behind suture there is a rather less distinct broad central vitta between the submedians; prothoracic spiracular covering fuscous; all hairs black. Abdomen concolorous with thorax, the dusting more vellowish, and changeable in accordance with the angle from which it is viewed.

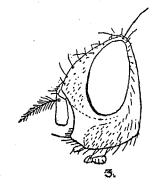


Fig. 3. Melinda grisea, head from side.

Legs black. Wings greyish hyaline. Calyptrae white, with a yellowish tinge. Halteres yellow.

Head rather large; from at vertex a little less than one-third of the head width, widened to anterior margin; each orbit with two upper forwardly directed bristles and about six incurved inner marginal bristles; inner verticals much longer than outer pair, the latter about as long as the ocellars; orbits with few hairs; profile as Figure 3; parafacials with short hairs; vibrissae comparatively weak and short. Thorax with sparse short hairs on dorsum; one short and one long presutural and two long postsutural pairs of acrostichals; the usual dorsocentrals, and only two bristles on the presutural area, the posterior sublateral and outer posthumeral lacking, prealar very short; posterior postalar twice as long as anterior one; no hairs at anterior extremity of the suprasquamal ridge; sternopleurals 1-1. Second tergite with a pair of short central apical bristles, third with an apical series of bristles. Legs as in preceding species, the anterodorsal setulae on fore tibia not distinct. Bend of fourth vein rather broad, but not evenly rounded, the apical section almost straight; first posterior cell ending close to wing tip, narrowly open. - Length, 4.5 mm. - Type, Fort de Kock, 1925.

Fauna sumatrensis.

(Beitrag Nr. 50).

Diptera Muscoidea III.

By Charles H. T. Townsend Ph. D.

Hemipyrellia orientalis (n. sp.) — Bl, $7^{1}/_{2}$ mm; wl, 6 mm. 1 \circ . Fort de Kock, 1922.

H silvery, frl & an blackish; plp blackish, fulvous on tip; less than posterior $^1/_2$ pfrl & whole b metallic dull olive-green with flecks of bright green in places & with thin coat of silvery bloom; 4 faintly defined bright green thv, iv narrow; 1 blackish; w clear; sq white with yellowish edges.

Calirrhoe fulvipes (n. sp.) — Bl, 10 mm; wl, $8^{1/2}$ mm. $3 \circ Q$, Fort de Kock.

This is the Q described under the name malayana in Part II, pp. 25—26. It is a heavier species, I fulvous except t, pfrl with black micro-hairs, vrw rather $\frac{1}{3}$ hw, hs hardly over $1\frac{1}{2}$ x hh, ab ferruginous except broad mv blackish & isgs slightly blackish on sides at hind margin, w faintly yellowish along veins, sq sordip-tawny.

Calirrhoe malayana TT — Bl, 8 mm; wl, 7 mm. 1 Q, Fort de Kock, 1925.

Agrees with the σ' in length of p, col of l, micro-hairs of pfrl yellowish & smaller size. Vrw considerably less than $^1/_3$ hw; ab dull fulvous beneath the silvery pollen, no distinct mv; w clear; sq glassy-white.