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Some Conopidae and Chamaemyiidae (Diptera) from the Philippines and Bismarck Archipelago.

By

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This short paper, prepared at the request of Dr. Leif Lyneborg, Zoological Museum, Copenhagen, deals with the Conopidae and Chamaemyiidae collected during the Noona Dan Expedition to the Philippines and Bismarck Archiepelago, 1961—2, (Petersen 1966). I should like to thank Dr. Hugo Andersson and Dr. Günter Morge for supplying information on the type of Acrometopia wahlbergi Zetterstedt.

CONOPIDAE.

Stylogaster bakeri Bezzi, 1917.

Philippines. — PALAWAN: Mantalingajan, Pinigisan, 600 m, 4 \circlearrowleft , 17. Sept. 1961. Caught in Malaise trap inside forest. Two males retained in British Museum (Nat. Hist.), London.

Known only from the Philippines.

Conops bakeri Kröber, 1937.

Philippines. — BALABAC: Dalawan Bay, ♂♀, 10, 11 Oct. 1961. Caught in Malaise traps.

Known only from the Philippines.

Conops (Asiconops) valoka sp. nov.

H e a d: blackish on frons above antennae, but posterior half of frons brownish and with transverse grooves characteristic of the subgenus *Asiconops* (Chen 1949). Occiput completely and heavily golden dusted. A velvety black spot against each eye margin at level of antennal insertion. Upper part of face yellow, but very heavily golden dusted below. Facial keel darkened above mouth. Antennae (fig. 1) clear orange-yellow. Proboscis pale brownish, as long as front femur and trochanter together. Thorax: (viewed from above, illuminated from in front) black, but with heavy dusting of golden tomentum as follows: on a short thick stripe either side of black midline from front of thorax to level of hind margin of humeri; rather heavily on disc on broad midstripe from humeri tapering posteriorly to transverse suture; broadly behind suture and widening to include posterior calli. Humeri and disc of thorax with very short sparse black hairs, notopleuron with about 7 black hairs and bristles, none strong; posterior calli with some short hairs and about 3 bristles. Scutellum heavily dusted with golden tomentum, with few short hairs on disc and a pair of weak incurved preapical bristles. Pleurae blackish dusted, rather dull silvery-grey on mesopleurae, sternopleurae and metapleurae, dusting not forming a distinct 'shimmer stripe', sternopleuron with a weak bristle and one or two weak hairs on upper margin.

A b d o m e n: dark brown to black with greyish-yellow tomentum of variable intensity, the shimmer pattern shifting with differing light incidence. Almost bare except for genital segments which have distinct black hairs. Genitalia rather more reddishbrown with a thin silvery dusting; theca rather large and broad and with only sparse short hairs.

L e g s: pale brownish with tarsi, except for hind basitarsus, blackish; front coxae and all tibiae clothed with shimmering golden to silvery dust. Pulvilli yellow and claws yellow with black tips.

W i n g s: greyish, darker tinged anteriorly between costal margin and vein r_{4+5} to tip and over cell R_5 back to vena spuria. Halteres with yellow stem and darker knob.

L e n g t h: body 13 mm. (excluding antennae), wing 11 mm.

Holotype \bigcirc , Bismarck Islands. — NEW BRITAIN: Cape Hoskins, Valoka, 8. July 1962, in Universitetets Zoologiske Museum, Copenhagen.

Belonging to the *C. metaxanthus* Walker group of Camras (1957:111) where the absence of any metallic blue abdominal colouration and the possession of a partly rufous head place it near *C. pactyas* Walker and *C. frontosus* Kröber. From *C. pactyas* it may be distinguished at once by the paler wings and the longer Q theca, and *C. frontosus* has the femora mainly black.

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Figs. 1—6. 1: Conops (Asiconops) valoka sp. nov., antenna. 2—4: Acrometopia annulitibia sp. nov.; 2, ventral aspect of male genitalia; 3, lateral aspect of male genitalia with ninth tergite removed; 4, wing. 5—6: Acrometopia wahlbergi Zetterstedt; 5, ventral aspect of male genitalia; 6, lateral aspect of male genitalia with ninth tergite removed.

Physocephala limbipennis de Meijere, 1910.

Philippines. — MINDANAO: Curuan district, Sapamoro, ♂♀, 20 Dec. 1961.

Previously recorded from Ceylon, India, Formosa, Philippines, Malaya, Java and Bali.

Physocephala bipartita (Doleschall, 1858).

Philippines. — PALAWAN: Brooke's Point, Uring Uring, $1 \Leftrightarrow$, 16 Sept. 1961. Caught in Malaise trap.

Previously recorded from Philippines, Sumatra, Java and the Moluccas.

CHAMAEMYIIDAE.

Acrometopia annulitibia sp. nov.

A pale grey species with black bristles.

H e a d: pale grey, acutely pointed and eyes attenuated anteriorly. Bristles black. Frontal lunule bare, but frons between frontal lunule and anterior orbital bristle with numerous proclinate setulae. Two pairs of strong orbital bristles; a pair of convergent inner and divergent outer vertical bristles; a weaker pair of convergent postvertical bristles; a pair of proclinate divergent ocellar bristles with a pair of tiny hairs behind. Occiput with a postocular fringe of short black hairs, becoming longer below, with a few short sparse hairs behind and some longer hairs behind mouth. First and second antennal segments brown, dusted greyish above; third segment yellowish on basal half, brownish distally and angulate above at tip. Arista yellow at base, remainder white, pubescent. Palpi short, slender and yellow.

Thorax: grey, darker than head. Bristles black. A humeral; three notopleurals, two anterior, one posterior. Two presutural dorsocentrals, the anterior bristle weak and 4 pairs of postsutural bristles. A pair of strong prescutellar acrostichals and the acrostichal hairs anterior to these in about 4 rows; numerous similar hairs are present outside the dorsocentral bristles. A supra-alar and 2 postalar bristles present. Scutellum pale grey with a pair of strong basal bristles and a stronger pair of convergent apical bristles which just cross at tip. Pleurae pale grey; sternopleuron with a strong upper bristle with several hairs in front.

A b d o m e n : pale grey with black spots at the base of all hairs and bristles. Bristles and hairs black. Tergites two to five

with a row of slender hind marginal bristles with numerous hairs in front up to anterior margin. Male genitalia as illustrated (figs. 2 and 3).

L e g s : coxae grey, trochanters yellow, femora grey with yellow tips, tibiae yellow with dark rings at basal 1/4, distal 3/4 and tip, these more distinct on hind tibiae. Tarsi yellow. The only strong leg bristles are the posterodorsal and posteroventral series on the front femora.

W i n g s : clear, venation as illustrated (fig. 4). Halteres yellow with a dark patch at the base of the knob above.

L e n g t h : body (excluding antennae) 3 mm., wing 2.5 mm.

H o l o t y p e \bigcirc , Bismarck Islands. — NEW IRELAND: Lelet Plateau, Lemkamin, 900 m, 23 April 1962. Paratypes 1 \bigcirc 2 \bigcirc same data as Holotype, 6, 11, 13 April 1962. Paratype \bigcirc , Indonesia. — N. BORNEO: Mt. Kinabalu, Mesilau Cave 23—24. March 1964, 6,175 ft., (S. Kueh). Royal Society Expedition (B.M. 1964—250). Holotype and Paratype \bigcirc in Universitetets Zoologiske Museum, Copenhagen; Paratypes 2 \bigcirc 1 \bigcirc in British Museum (Nat. Hist.), London.

Resembling *A. wahlbergi* Zetterstedt in possessing clear wings, but that species has the posterior face of the hind femora shining black; the aristal pubescence shorter and differences in male genitalia as illustrated (figs. 5 and 6). The other described species all have patterned wings. The present species is the first recorded from the Oriental region and considerably extends the range of the genus, which has been previously recorded as follows.

Acrometopia wahlbergi (Zetterstedt 1846:1954) [Oxyrhina]

A. carbonaria (Loew 1873:290)	[Coniceps] S.	Russia
A. punctata Coquillett 1902:185	Georgia	, U.S.A.
A. maculata Coquillett 1902:185	5	Cuba
A. australis Malloch 1933:382		Chile
A. reticulata Hendel 1936:88		Brazil

Europe

Literature.

Bezzi, M., 1917: Studies in Philippine Diptera, II. — Philip. Journ. Sci. 12:107—159.

Camras, S., 1957: On Some Conopidae from the East Indies (Diptera). — Treubia 24:107—117.

- Chen, S. H., 1939: Étude sur les Diptères Conopides de la Chine. Notes Ent. Chinoise 6:161—231.
- Coquillett, D. W., 1902: New Acalyptrate Diptera from North America. — J. New York Ent. Soc. 10:177—191.
- —, 1910: The type-species of the North American genera of Diptera.
 Proc. U. S. Nat. Mus. 37:499—647.
- Czerny, L., 1936: Chamaemyiidae *in* Lindner, Die Fliegen der Palaearktischen Region.
- Doleschall, C. L., 1858: Derde Bijdrage tot de Kennis der Dipteren Fauna van Nederlandsch Indië. — Nat. Tischr. Ned. Ind. 17: 73—128.
- Hendel, F., 1936: Ergebnisse einer zoologischen Sammelreise nach Brasilien, insbesondere in das Amazonasgebiet, ausgeführt von Dr. H. Zerny. X. Teil. Diptera: Muscidae Acalyptratae (excl. Chloropidae). — Ann. naturh. Mus. Wien, 47:61—106.
- Hennig, W., 1938: Beiträge zur Kenntnis des Kopulationsapparates und der Systematik der Acalyptraten. I. Chamaemyiidae und Odiniidae. (Diptera). — Arb. morph. taxon. Ent. 5: 201—213.

Kröber, O., 1927: Die Conopiden der Philippinen. — Philip. Journ. Sci. 34:331—346.

- , 1933: Beschreibung eines von S. K. H. dem Prinzen Leopold von Belgien in den Philippinen gesammelten Conopiden-Weibchens (Diptera). — Bull. Mus. N. H. Belg. 9:1.
- L o e w, H., 1873: Beschreibungen europäischer Dipteren, 3. Halle.
- Malloch, J. R., 1933: Chamaemyiidae *in* Diptera of Patagonia and South Chile. British Museum (Nat. Hist.), London: 379—386.
- M c A l p i n e, J. F., 1960: A new species of Leucopis (Leucopella) from Chile and a key to the World genera and subgenera of Chamaemyiidae (Diptera). — Canad. Ent. 42:51—58.
- Meijere, J. C. H. de, 1910: Studien über Südostasiatische Dipteren IV. Die neue Dipterenfauna von Krakatau. — Tijdsch. v. Ent. 53: 58—194.
- Petersen, Børge, 1966: The Noona Dan Expedition 1961-62. Insects and other land arthropods. — Ent. Meddr. 34:283-304.
- S c h i n e r, J. R., 1862: Vorläufiger Commentar zum Dipterologischen Theile der »Fauna Austriaca«. — Wien Ent. Monatsch. 6: 428—436.

Walker, F., 1852: Insecta Saundersiana. 1, Diptera.

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