NEW AND LITLLE-KNOWN NEMATOCEROUS DIPTERA FROM JAVA

by

F. W. EDWARDS.

(British Museum, London).

The material dealt with in this paper formed part of a small collection of Javanese Nematocera which was sent to the British Museum for determination by Dr. H. KARNY. The writer wishes to express his indebtedness to Dr. KARNY and to the Buitenzorg Museum for the privilege of examining the collection, and of retaining the types of the new species for the British Museum.

Family Tipulidae. Subfamily Tipulinae.

Pselliophora rubella, sp. n.

Head mostly yellow, a diffuse brown cloud on the vertex, not reaching the eyemargins. First antennal segment black above, yellow beneath. Flagellum black, all but the last few segments narrowly yellow at the tip. Palpi with the first two segments yellowish (remainder missing). Thorax uniformly orange-yellow, Abdomen orange-yellow, the apical margin of tergite 5 and the whole of tergites 6—8 blackish brown. Hypopygium orange yellow, the tips of the ninth tergite and side-pieces, and the whole claspers black. Ninth tergite with a deep but rather broad apical V-shaped emargination, the lobes black and densely covered with long black hair. Ninth sternite trilobed apically, the lateral lobes white, the median lobe orange, truncate apically and about as large as one of the lateral lobes. Legs with the coxae and trochanters orange-yellow; femora black, indistinctly lighter towards the base; tibiae black, each with a narrow white ring close to the base; tarsi black. Hind femora not much thicker than the others, and with short pubescence only. Wings clear, with a slight brownish tinge, most marked at the base and in the costal cell, stigma small, dark brown, veins dark brown. No fine hair-brush at base of wing. Halteres brownish, knobs lighter.

Length of body, 12 mm., wing 10 mm. Buitenzorg, 15. iv. 1921 (SIEBERS). Type & in the British Museum.

This is doubtless the species which has been recorded from Buitenzorg by Alexander (Proc. U. S. Nat. Mus. 49, p. 180, 1915) as *P. rubra*, O.-S., to which it is evidently closely allied. *P. rubra* however differs in the entirely black hypopygium and in the structure of the ninth sternite, the median apical portion of which has two short, divergent homs.

Subfamily Limnobiinae.

Orimarga karnyi sp. n.

Head dark brown, somewhat shining, with very little grey dusting, Front distinctly broader than in O. similis, at its narrowest part quite two-thirds the width of one eye, scarcely any trace of a tubercle above the antennae. Proboscis brown, a little shorter than the head. Scape of antennae dark brown; flagellum and palpi missing. Thorax shining dark brown, with scarcely a trace of grey dusting, middle area of scutum and a smaller patch on each side in front of the scutellum vellowish. Pleurae uniformly dark brown. Abdomen light brown, the last segment and the ovipositor rather conspicyously darker. Ovipositor normal, short. Legs with the coxae ochreous-brown, trochanters dark brown, femora dark brown, with the extreme tips pale, tibiae and tarsi dark brown. Wings with a faint but quite uniform brownish tinge, the extreme base white, veins dark brown. Subcostal cross vein placed beyond the tip of Sc in cell Sc. Sc ending above mid-length of Rs and above Cu_{1a} . Tip of R_1 straight, more than twice as long as r. Rs and R_{4+5} both gently curved at, the base. Cell M3 rather more widened apically than in O. similis, its petiole about two-thirds as long as M3 Halteres stouter than in O. similis, brownish, base of stem and tip of knob lighter.

Length of body 4.5 mm., wing 4 mm. Buitenzorg, 22. ii. 1921 (Dr. H. H. Karny). Type ♀ in the British Museum.

This resembles O. borneensis, Brun., in many respects, differing in the longer tip of R_1 , position of subcostal cross-vein, darker and more shining thorax, etc. From the Indian O. peregrina, Brun., it also differs in being much darker. The two species described by me (O. scotti from the Seychelles and O. fryeri from Aldabra I.) both differ from the Javan species in having the subcostal cross-vein placed well before the tip of Sc, and in having much more numerous macrotrichia on vein R_{2+3} (about 30-40 instead of 10-15).

Orimarga similis, sp. n.

Head blackish, rather strongly dusted with grey. Front rather narrow, at its narrowest part scarcely two-thirds the width of one eye, produced into a small tubercle just above the base of the antennae, Proboscis yellowish-brown, rather over half as long as the head. Scape of antennae blackish; flagellum and palpi missing. Thorax brown dorsally, some-what shining and with very little grey dusting, margin of mesonotum obscurely lighter. Pleurae brownish ochreous, an ill-defined but rather broad slightly darker stripe across the middle, lower part of mesosternum also slightly darker. Abdomen rather light brown, posterior margins of sternites lighter. Ovipositor short, normal in structure, Legs with the coxae and trochanters light ochrequs-brown (remainder missing). Wings whitish-hyaline, veins pale brown, no trace of dark clouds on the cross-veins. Subcostal cross-vein exactly at the tip of Sc, and about half-way between Cu_{1a} and the base of R4+5. Tip of R₁ rather indistinct, bent up towards costa, shorter than r. R_s gently curved, R4+5 obtusely angled at the base. Cell M₃ rather long, very little widened posteriorly, its petiole hardly more than half as long as M₃. Cu_{1a} placed at about mid-length of R_s. Halteres slender, whitish yellow.

Length of body, 5 mm., wing 5 mm.

Tjitjoeroek Salak, 1000 m., 23. i. 1921 (Dr. H. H. Karny).

Type Q in the British Museum.

This seems to be most nearly allied to O. borneensis., Brun. which differs in having the proboscis blackish, R_{4+5} not angled at the base, cell M_3 shorter, etc. O. javana, de Meij., the only other species previously known from the Malayan region, differs obviously in having dark clouds on the cross veins.

Family Chironomidae. Subfamily Tanypodinae.

Procladius vitripennis, sp. 11.

Head white. Front broad, the eyes separated by fully the breadth of one, but with a narrow dorsal portion, two facets wide, extending towards the middle line, this narrow portion longer in the or than in the Q. Palpi of or all whitish, of Q with the, first three segments somewhat darkened; first segment less than twice as long as broad, second twice as long as first, third equal to second, fourth equal to second and third together. Antennae of or 15-segmented; torus large, darls brown; segments 2-13 broader than long, segment 14 about one-fourth longer than 2-13 together; plumes whitish, except on the apical third of the long segment, where they are dark. Antennae of Q 14-segmented; torus small, white; flagellum rather dark brown; segments nearly globular, except the last, which is nearly 4 times as long as broad, its apical third slender. Thorax with the ground-colour white. Pronotum much reduced, narrow, with deep median emargination. Mesonotum bright ochreous stripes, the middle pair just touching and extending half-way from the front margin, ending posteriorly in two divergent points, the lateral pair touching the middle pair in front and reaching back to the scutellum; a narrow, continuous blackish external margin to all four stripes. Postnotum dark brown, with a v-shaped whitish mark in the middle at the base. Meso sternum and lower part of sternopleura dark brown, also a few small dark brown spots on the pleurae. Abdomen white; tergites 3-8 each with a narrow blackish basal line, broadening laterally; tergite 3 with a median basal black area, enlarged posteriorly in the middle of the segment; tergite 4 with a similar but rather larger black area; tergites 6 and 7 each with similar dark brown areas. Male claspers darkened, swollen at the base, ending in a rather sharp curved point. Legs whitish, the tip of the second tarsal segment and the whole of the last three tarsal segments on all the legs black. Hind tibiae with one longish comb, and one long and one short black spur. Front tibial spur about as long as the diameter of the tibiae. Front tarsus of or without beard, the first segment about one-third shorter than the tibiae. Wings hyaline, colourless, except for a small but conspicuous black spot over the r-m cross-vein. No trace either of macro- or microtrichia. Veins all pale. Costa extending nearly half-way from the tip of R₄₊₅ to the tip of M; r distinct, but R₂₊₃ faint, m-cu pale, placed below or a little before r-m; Cu forking well beyond the base of Rs. Halteres white,

Length of body, 3 2.7 mm., 9 2 mm.; wing, 1.7 mm. Buitenzorg, 21. i. and 1. iii. 1921 (Dr. H. H. Karny). Co-types, 3 3 1 9 in the British Museum, 4 3 in the Buitenzorg Museum.

I can find no species described which resembles this at all closely, unless it can be *Tanypus nigrocinctus*, Dol., the diagnosis of which is wholly inadequate and partly incompatible with the specimens before me. The species agrees with Kieffer's interpretation of the geuns *Procladius*, though since Skuse does not mention the fourth tarsal segment,

and since the type species has hairs at the tip of the wing, it seems questionable whether the name *Procladius* might not have been applied to *Trichotanypus* or *Clinotanypus*.

Clinotanypus obscuripes (de Meij.).

Buitenzorg, 27. III. 1921, 1 ♀ (SIEBERS).

This species has the cordiform fourth tarsal segment characteristic of the genus *Clinotanypus*. The same may be said of Wiedemann's *Tanypus crux*, which is also represented in the collection.

Subfamily Ceratopogoninae.

Forcipomyia karnyi, sp. n.

Head dark brown above and behind, face yellowish. Eyes almost touching. Palpi rather dark brown, the second segment not much swollen, about half as long again as the first and about equal in length to the last two together, these only indistinctly separated. Antennae with the torus dark brown, flagellum rather lighter. First eight flagellar segments together nearly twice as long as the last five; the first two nearly globular, the next six gradually more elongate, segments 7 and 8 with rather stout necks which are almost as long as the slightly more swollen basal portion. Verticil hairs about twice as long as the segments, less numerous on the last five segments. Thorax uniformly dark brown on the chitinised parts, the membranous areas of the pleurae whitish. Mesonotum with moderately long and rather scanty goldenbrown hair. Abdomen with the tergites and sternites brown, rather lighter than the thorax, membrane whitish, both plates and membrane clothed with rather short brown hair. Lamellae of ovipositor nearly circular, white, with whitish hair about twice as long as the lamella. Legs with the ground colour pale ochreous; all the femora with a broad but ill-defined dark brown ring near the base, occupying rather less than half the femur; tibiae with the apical half more or less darkened, especially on the middle legs; tarsi somewhat darkened. Hind tibiae with long hairs on the dorsal surface nearly 4 times as long as the diameter. First segment of front and mid tarsi about one-half longer than the second, of hind tarsi scarcely one-tenth longer than the second. Wings rather densely clothed with close-lying hair, uniformly dark brown in colour except towards the base of the costa, where it is pale. Costa extending just to the middle of the wing. Radial cells both very narrow, the second slightly broader and slightly longer than the first. Cubitus forking below the base of the second radial cell. Halteres white.

Length of body, 2 mm., wing 1.6 mm.

Tjibodas, 1500 m., viii. 1921.

Type ? in the British Museum.

This is nearly related to, and just possibly identical with, *F. vexans* (de Meij.) described from Sumatra. De Meijere's species however is smaller, and he says nothing about dark rings on the femora. I cannot trace the present species among the very numerous descriptions of species of this genus from other parts of the Oriental region published by Kieffer.