

A NEW *CARNUS* FROM MALAYA (Diptera : Milichiidae)¹

By T. C. Maa²

Abstract: A new carnivorous fly, *Carnus orientalis*, is described from a juvenile fish owl, in Malaya.

Carnus orientalis Maa, new species

MALAYA. 8♂♂, 11♀♀ incl. holotype ♀, all de-alate, Selangor, Rantau Panjang, 8 km N of Klang, ex juvenile fish owl (*Bubo ketupu* Horsfield) (#1015402), 11.XI.1961. Holotype (BISHOP 7604); paratypes in Bishop Mus. and U. S. Nat. Mus.

Habitat. At present known only from Malaya ex juvenile fish owl. By implication of its probable parallelism to the known host and distributional ranges of *C. hemapterus*, the new species is expected to be found in nests and juveniles of different birds and to be widely spread in the Oriental Region.

Affinities. This is the second species of the genus which is heretofore known only from Europe and N. America and solely represented by *C. hemapterus* Nitzsch 1818 (= *Cenchrinobia eggeri* Schiner 1862, = *Carnus setosus* Stobbe 1913). Comparisons with 2♂♂, 4♀♀ of *C. hemapterus* from Leiden, Netherlands ex juvenile *Ardea cinerea* Linn. revealed that the new species differs in being slightly smaller and darker in average and in having interocular face narrower, eyes more bulging, epistoma with parallel inner lateral margins, labial theca shorter and wider in proportion, labella longer, cheeks strongly narrowed forward, abdomen with fewer setae and smaller median plates (of tergites and sternites) etc. As shown in the accompanying figures, details of terminalia of both sexes in the 2 species are also not quite identical. No American specimens are available for comparison but it is beyond the scope of this paper to go into the problem whether or not they are really inseparable from European ones.

Description. Body (in alcohol) of ♂ 1.4-1.6 mm, ♀ 1.9-2.4 mm long, slightly darker than in average specimens of *C. hemapterus*. Head in dorsal view (fig. 1a) ca 2/3 as long as wide; interocular face ca as long as wide, ca 2× as wide as eye, hardly narrowed forward; eye well bulging; inner orbit (parafrofrontalia) poorly definable, much widened forward. Antenna in front view 8×5.5, anterolaterally subangulate; arista bare, stouter than any cephalic bristle, ca 1.5× as long as orbital bristle. Outer and inner lateral margins of epistoma (fig. 2a) subparallel and parallel respectively. Labial theca (fig. 3a) slightly longer than wide, less than 2× as long as labella; palpus (fig. 4a) narrowly rounded at apex. Cheek (fig. 5a) strongly narrowed forward.

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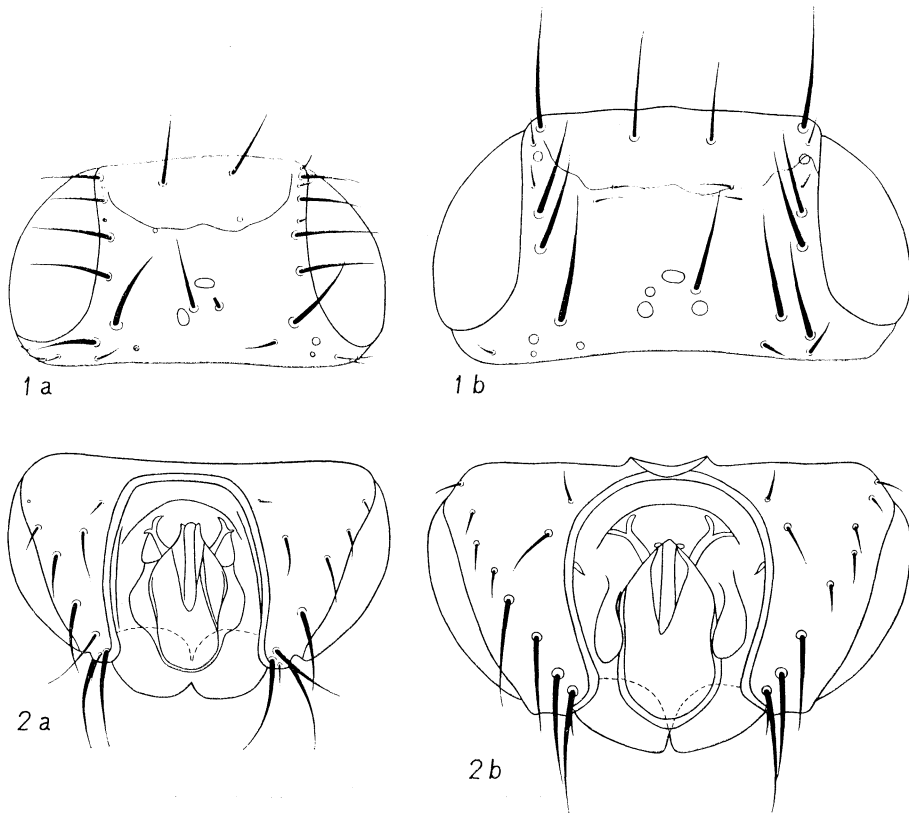


Fig. 1-2. *Carnus orientalis* n. sp. (a) and *C. hemapterus* Nitzsch (b), ♂ heads in dorsal view and faces in front view. Drawn to same scale.

Eye in its full view as long as wide (in front view of head, ca $2\times$ as long as wide), anteroventrally more produced than posteroventrally, so that diagonal axis from anteroventral margin to its opposite side longer than transverse width (11 : 10). Head and thorax chaetotaxy similar to that in *hemapterus* in number and arrangement but bristles and setae slightly stouter. Wing (?). Legs more slender than in *hemapterus*. Abdomen (figs. 6a, 7a, 8a, 9a) less setose than in *hemapterus*; median plates of tergites (♂ ♀) and sternites (♂) smaller and narrower, median plates of ♂ sternites 2-4 more or less longer than wide, that of sternite 5 hardly shorter than wide; genitalia as in figs. 10a, 11a; ♀ epi- and hypopygia both shorter than wide; median setal patch of

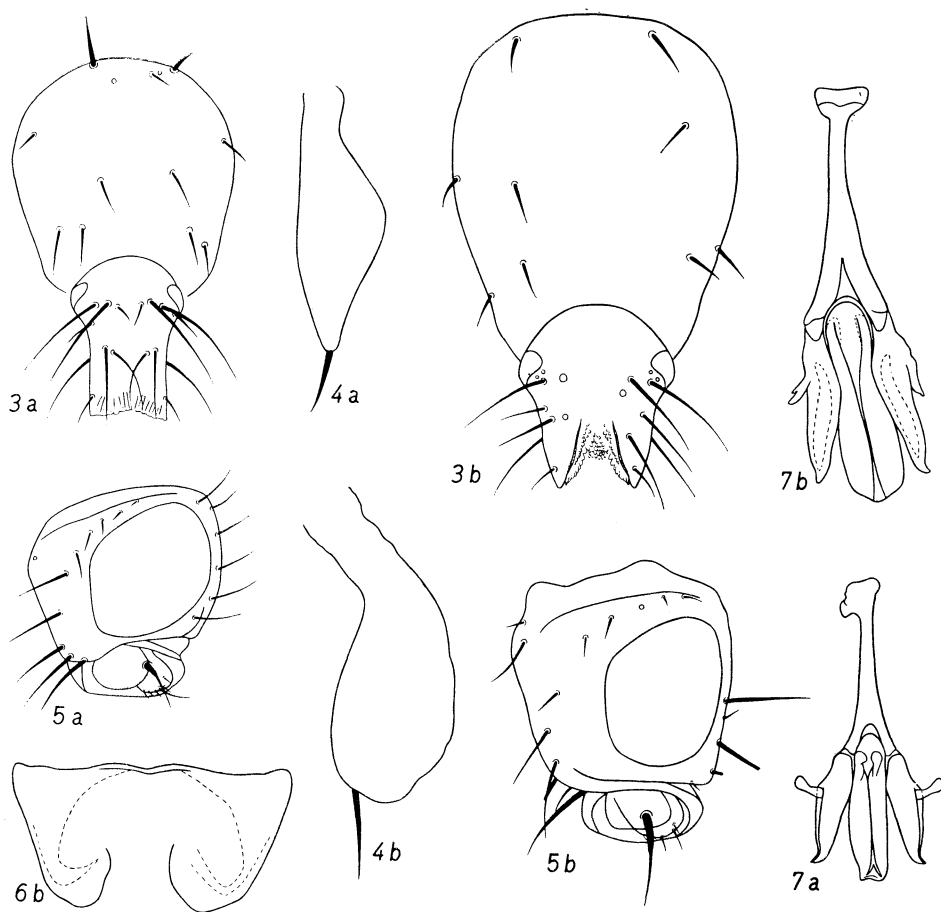


Fig. 3-7. *Carnus orientalis* n. sp. (a) and *C. hemapterus* Nitzsch (b), ♀ labial thecae and labellae (3), palpi (microsetae omitted, 4), heads in lateral view (5), ♂ inner genital frame (6) and ♂ inner genitalia (7). Scales varied but same organ of the 2 species in same scale.

♀ sternite 3 quite isolated from lateral patches; ♀ pygidium usually flanked at each side by single seta near last spiracle.

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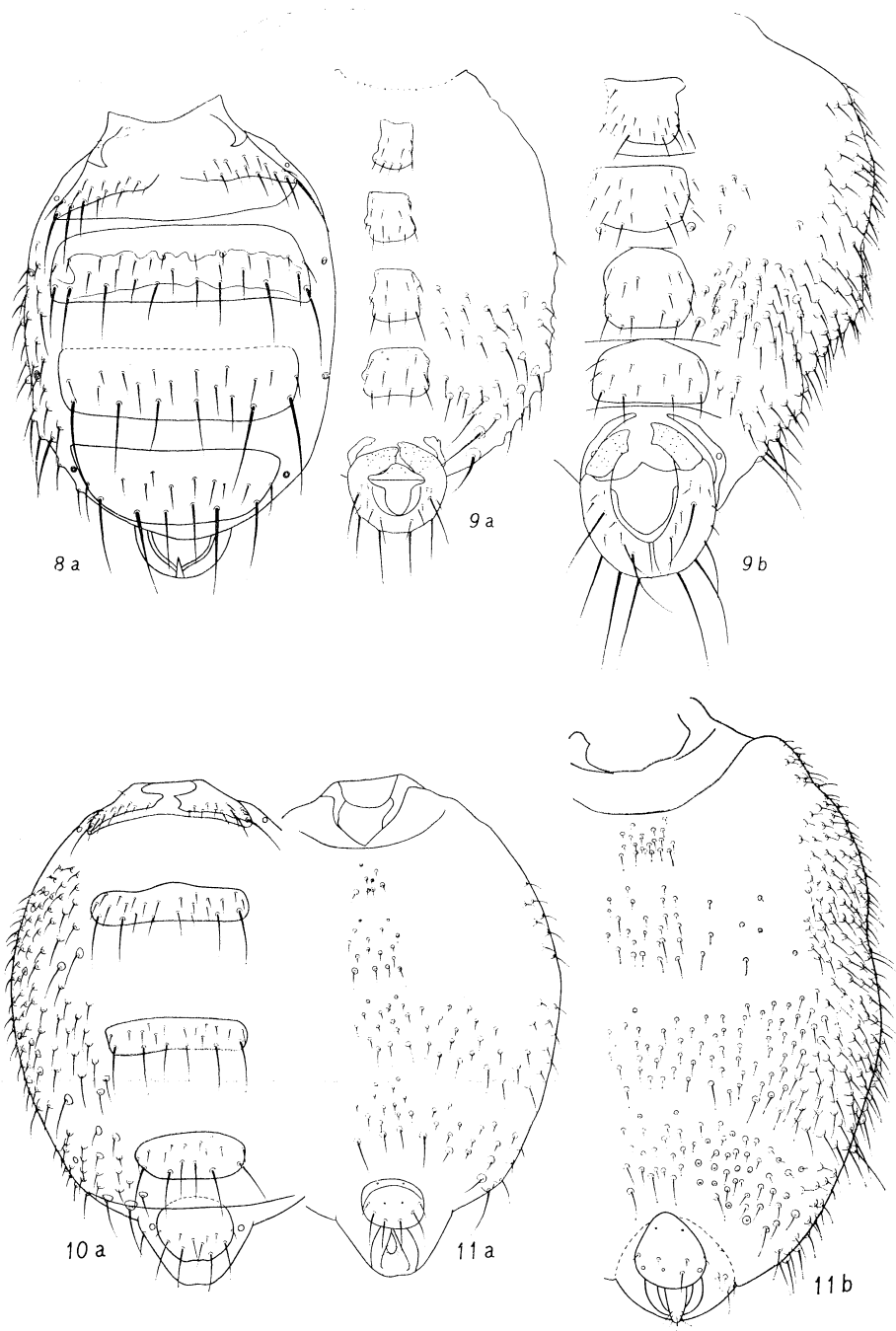


Fig. 8-11. *Carnus orientalis* n. sp. (a) and *C. hemapterus* Nitzsch (b), ♂ abdomens, dorsal (8) and ventral views (9); ♀ abdomens, dorsal (10) and ventral views (11).