

A NEW SPECIES OF HORSEFLY (DIPTERA : TABANIDAE) FROM BHUTAN

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ABSTRACT

*Hybomitra bhutanensis*, sp. nov. from Bhutan is described and illustrated.

INTRODUCTION

A collection of horseflies made in 1969 by Dr. B. Biswas, Deputy Director, Zoological Survey of India, Calcutta constitutes a new species described below, belonging to the genus *Hybomitra* Enderlein. This genus has, however, been recorded from the neighbouring India, Nepal, Burma and China and hence the study has obvious impact from the zoogeographical point of view.

Subfamily TABANINAE

Tribe TABANINI

Genus *Hybomitra* Enderlein

*Hybomitra* Enderlein, 1922, *Mitt. zool. Mus. Berl.*, 10 : 347. Type-species : *Tabanus solox* Enderlein, 1922 (= *Tabanus rhombica* Osten Sacken, 1876), by original designation.

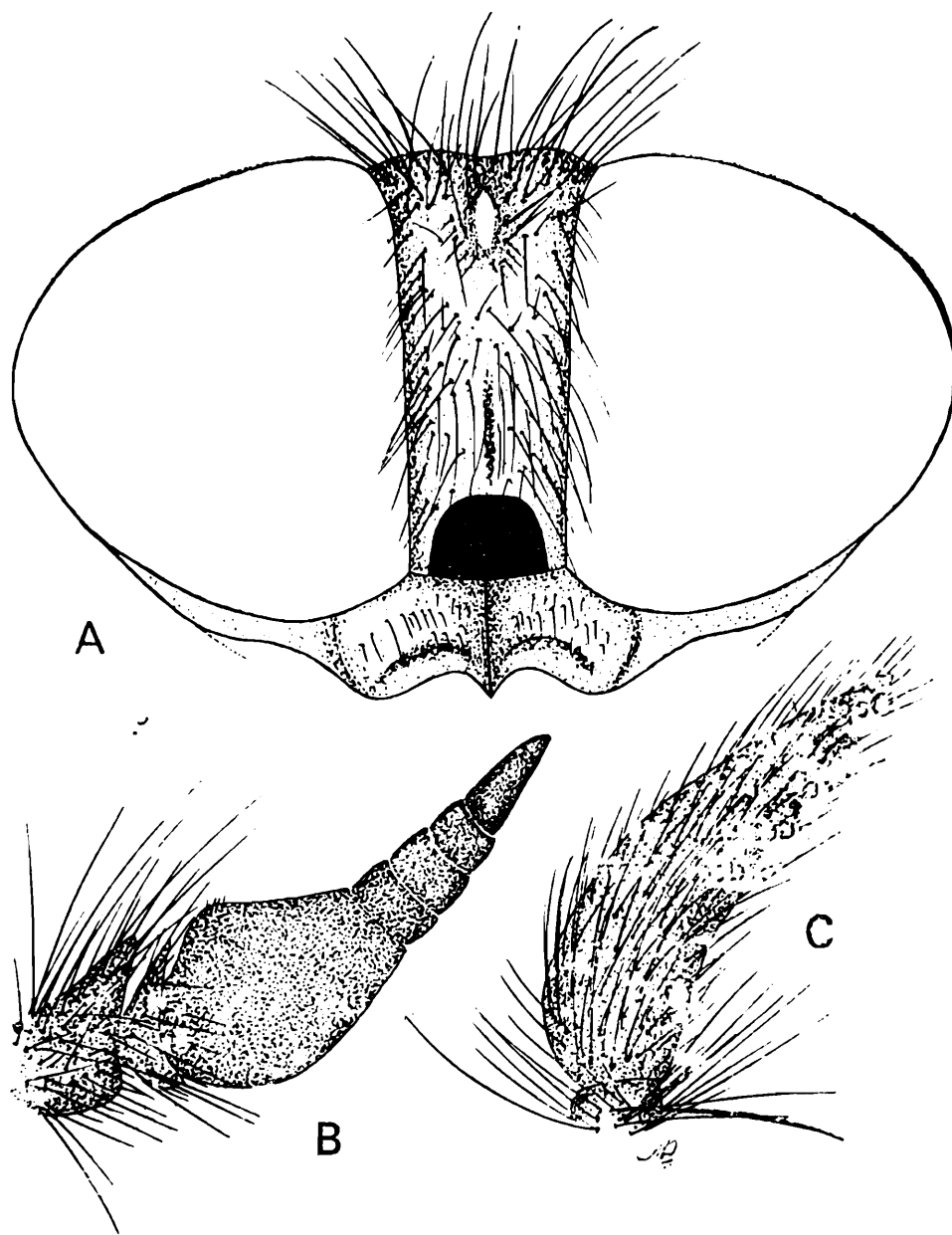
*Hybomitra bhutanensis*, sp. nov.

(Fig. 1)

A hairy, medium-sized greyish black species with wide frons, mainly greyish black legs, cloudy wings and golden haired abdomen having tergum 2 dark red laterally and fringes of yellow hairs on all segments posteriorly.

Holotype ♀, 15.0 mm. Eyes greyish black with long erect hairs. Frons (Fig. 1A) wide, nearly parallel-sided, index 1 : 2.6, buff-grey pollinose, with dense black hairs nearly double-length of hairs on eyes ; vertex with longest black hairs. Ocellar tubercle prominent, ovoid, greyish black, shiny ; basal callosity greyish black, shiny, subquadrate with rounded apical corners, touching subcallus but separated from eye-margins laterally, very inconspicuous median callosity separated from basal callosity. Subcallus greyish black, thickly buff-yellow pollinose and thinly pilose. Face and para-facials buff-yellow pollinose and with dense long yellow and dark hairs. Antenna (Fig. 1B) black, pilose ; scape heavy ; pedicel small ; plate of flagellum flat, dorsal angle of plate almost rounded, with a few small black hairs ; excision very shallow. Palpus (Fig. 1C) black, with long black hairs, second segment stout basally, gradually tapered apically.

Thorax including antalar tubercles and scutellum greyish black, with dark hairs intermixed with some yellow hairs. Legs mainly greyish black ; mid and hind tibiae only somewhat dark grey. Wings light brown, darkened in costal cell, on cross-veins and



Figs. 1, *Hybomitra bhutanensis*, sp. nov. A—head ; B—antenna ; C—palpus.

behind stigma ; spur vein longer than stem, Halteres greyish, tip of knob light.

Abdomen with first two terga greyish black and rest black ; tergum 2 dark red laterally ; terga and sterna yellowish posteriorly with fringes of yellow hairs, more congregated medially more or less in triangular form ; terga 1 and 2 with long recumbent golden hairs and rest of abdomen with black hairs.

*Holotype* ♀, Z.S.I. Reg. No. 5544/H6, Western BHUTAN : Paro, 16.ii. 1969, coll. *B. Biswas* ; *Paratypes* : 2 ♀♀, Z. S. I. Reg. Nos. 5545/H6 and 5546/H6, same data as holotype ; 6 ♀♀, Z. S. I. Reg. Nos. 5547/H6—5552/H6, Susuna, 11-12. ii. 1969, coll. *B. Biswas*.

Variations observed are in the shape of basal callosity and prominence of median callosity, depth of excision on the plate of

antenna, length of spur vein in wings and in the tinctorial intensity of the second tergum laterally to certain extent from the holotype specimen.

This new species is more closely related to *Hybomitra lyneborgi* Chvála, 1969, described from Nepal than to *H. himalayana* (Enderlein, 1925) and *H. wyveillei* (Ricardo, 1911) described from Northern India; *H. hirta* (Walker, 1850) from East India and *H. nola* Philip, 1961, from China. *Hybomitra himalayana* is a smaller species (12.0 mm.) having its rusty brown antenna and legs. Although *lyneborgi* is only slightly smaller (14.0 mm.) than or in other words almost of the same size as *bhutanensis*, the former species differs in having brownish black palpi and clear wings with small brown spot on vein R<sub>4</sub>. *Hybomitra wyveilli* is distinguishable by the presence of reddish yellow palpi and by the absence of spur vein on wings. There is, however, considerable resemblance of this species with *nola* but the latter is distinct with reddish brown antenna and palpus, and with bell-shaped callosity but without spur vein among certain other characters. And *Hybomitra hirta* possessing dull reddish palpi and reddish yellow abdominal terga 1 and 2, occasionally 3 also, differs from this new species.

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