

The First Record of the Genus *Hercostomoides* (Diptera, Dolichopodidae) from Korea

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ABSTRACT

A genus *Hercostomoides* Meuffels and Grootaert, 1997 is a small group of long-legged fly with only two recorded species, *H. indonesianus* (Hollis, 1964) and *H. bhartii* Grichanov, 2017 in the world. They are mainly distributed in the eastern Oriental region and this is the first record of *H. indonesianus* distributed in Korea. This genus of the subfamily Sympycninae has the following characteristics: wing veins, R2+3 and M1+2, distinctly divergent at distal end in both sexes; propleuron with strong black seta and a few short pale setulae above fore coxa; hind femur without anterior preapical seta. Description and figures about firstly recorded species are provided.

Keywords: taxonomy, Insecta, Dolichopodidae, Sympycninae, *Hercostomoides*

INTRODUCTION

The genus *Hercostomoides* Meuffels and Grootaert, 1997 contains two recorded species, *H. indonesianus* (Hollis, 1964) and *H. bhartii* Grichanov, 2017 in the world. Hollis (1964) reported *Telmaturgus indonesianus* as a new species with a female specimen offered from Zoölogisch Museum, Amsterdam. Later, Meuffels and Grootaert (1997) established the new genus *Hercostomoides* based on *T. indonesianus* with differences in clypeus and antennal scape from the genus *Telmaturgus* Mik, 1874. Recently, Grichanov (2017) recorded *H. bhartii* and discussed about characteristics of the genus.

Herein, the genus *Hercostomoides* newly recorded along with the nominate species, *H. indonesianus* (Hollis, 1964). A redescription and illustration of morphological features of the newly recorded species are provided here.

External features and male genitalia were photographed by using stereo microscope (Olympus SZX 16; Olympus, Tokyo, Japan), compound microscope (Olympus BX50) and Michrome 16 CMOS camera (Tucsen, China). All specimens examined in the present study were deposited in the collection of the School of Applied Biosciences at Kyung-

pook National University, Daegu, Korea. Morphological terms followed Cumming and Wood (2017).

SYSTEMATIC ACCOUNTS

Order Diptera Linnaeus, 1758

Family Dolichopodidae, Latreille, 1809

^{1*}**Genus *Hercostomoides* Meuffels and Grootaert, 1997**
Hercostomoides Meuffels and Grootaert, 1997: 474. Type species: *Telmaturgus indonesianus* Hollis, 1964.

Diagnosis. Veins M1+2 and R2+3 distinctly divergent at distal end in both sexes; antennal pedicel slightly projecting into the first flagellomere on the inside; first flagellomere rounded at the apex in both sexes; propleuron with strong black seta and a few short pale setulae above fore coxa; hind femur without anterior preapical seta (Grichanov, 2017).

^{2*}***Hercostomoides indonesianus* (Hollis, 1964)**
Telmaturgus indonesianus Hollis, 1964: 264. Type locality: Indonesia, Java.

Korean name: ^{1*}황색논장다리파리속 (신칭), ^{2*}황색논장다리파리 (신칭)

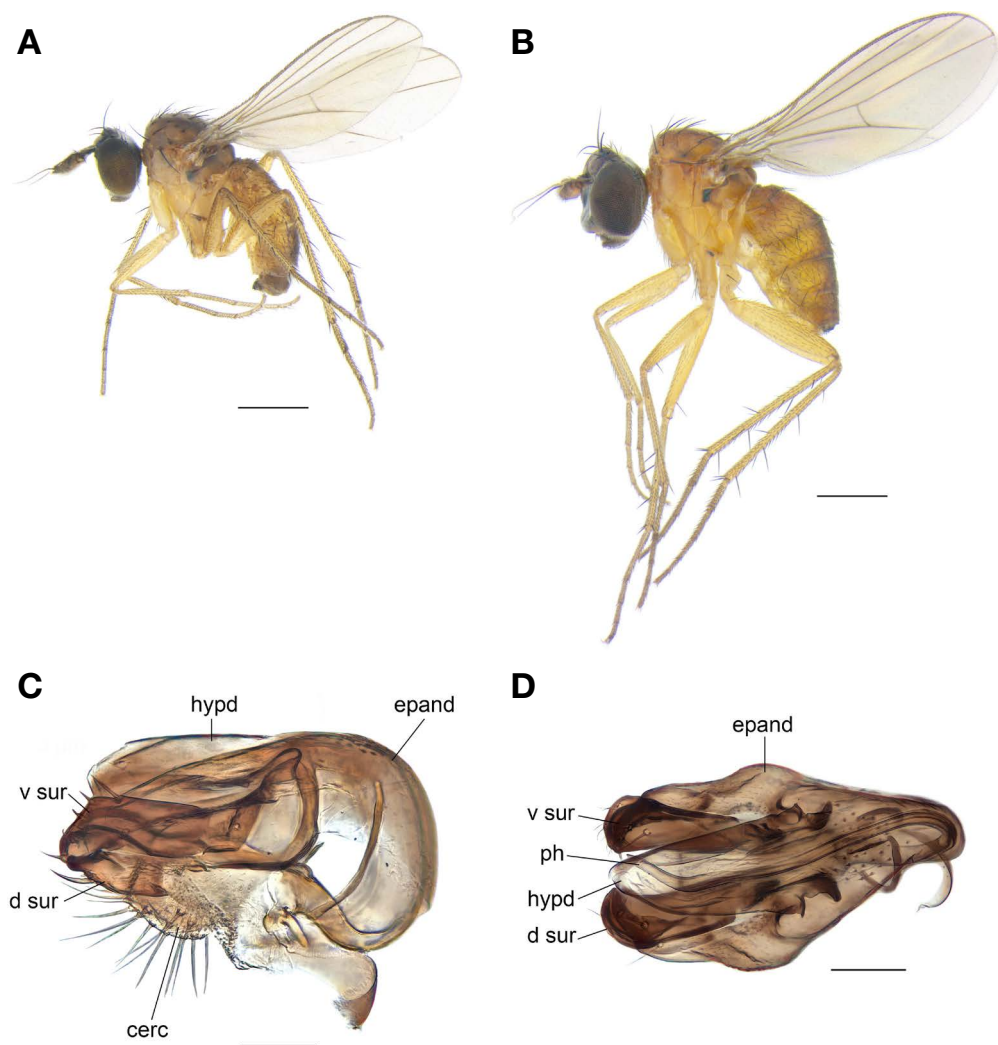


Fig. 1. *Hercostomoides indonesianus* (Hollis, 1964). A, Male; B, Female; C, Male genitalia, left lateral view; D, Same, ventral view. cerc, cercus; d sur, dorsal surstylus; epand, epandrium; hypd, hypandrium; ph, phallus; v sur, ventral surstylus. Scale bars: A, B=500 μ m, C, D=50 μ m.

Material examined. Korea: 1 σ^7 , Chungcheongbuk-do: Yeongdong-gun, Haksan-myeon, Bakgye-ri, 20 Aug 2019, Suh SJ coll.; 1 σ^7 , Gyeongsangbuk-do: Yecheon-gun, Eunpung-myeon, Eunsan-ri, 1 Jul 2020, Suh SJ coll.; 1 σ^7 1 ϕ , Gangwon-do: Gangneung-si, Wangsan-myeon, Doma-ri, 11 Aug 2021, Suh SJ coll.

Distribution. Palearctic: Korea (new record), Japan (Honshu); Oriental: China (Guangdong, Guangxi, Hainan, Zhejiang), Indonesia, India, Malaysia, Philippines, Singapore, Thailand, Vietnam (Yang et al., 2011; Tago, 2012).

Redescription. Male (Fig. 1A, C): Head. Dark brown with metallic blue-violet frons and vertex; mainly black setae; ocellar seta long, approximately 3/4 times shorter than arista-like stylus; vertical seta approximately 3/4 times shorter than ocellar seta; postocular setae black in a single row; ver-

tex slightly convex; upper occiput flat; compound eye with tiny setulae between facets; palpus yellowish brown, with dark brown setulae; proboscis brown; antenna dark brown, except a yellowish brown ventral portion; scape with dorsal setulae; pedicel setulose; first flagellomere pubescent, long and broad, about twice as long as the width; arista-like stylus pubescent.

Thorax. Yellowish brown with mainly black setae; mesonotum round and brown with dim metallic blue-violet; acrostichal setae uniseriate; five dorsocentral, two intra-alar, one postpronotal, three supra-alar, two notopleural, one postalar, and one scutellar setae present; dark brown maculation between anepimeron and anatergite; several setulae in front of the posterior spiracle.

Legs. Yellowish brown with mainly black setae and dark

brownish black setulae; mid coxa with dark brown macula at the upper part; mid femur apically with one anteroventral and one posteroventral setae; mid tibia with three anterodorsals, one anteroventral, two posterodorsals and four apical ring of setae; hind tibia with three anterodorsals, one anteroventral, three posterodorsals and three of apical ring of setae; dorsal setulae of fore tarsomeres 3 and 4 as long as or slightly shorter than tarsomere 5.

Wing. Simple and hyaline with dark brown veins; costal vein reaching M1+2; R2+3, R4+5, and M1+2 diverging to the wing tip; m-cu straight; anal vein fold-like; anal lobe present; alula absent; lower calypter yellowish brown with black setae; halter yellowish brown.

Abdomen. Yellowish brown with black dorsal and brown ventral setulae; epandrium yellowish brown, small, oval; hypandrium fused to epandrium; dorsal surstylus dark brown, broad; ventral surstylus dark brown, hockey stick shaped at lateral view; cercus yellowish brown, short, circular shaped with slightly pointy tip.

Length. Body, 1.7–1.8 mm; antenna, 0.5–0.6 mm; wing, 1.7–1.8 mm.

Female (Fig. 1B): Almost identical to male, except for the following characteristics: clypeus broad and bulged; first flagellomere short, as long as wide; fore tarsomeres without long dorsal setulae.

Length. Body, 2.1 mm; antenna, 0.6 mm; wing, 2.2 mm.

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CONFLICTS OF INTEREST

No potential conflict of interest relevant to this article was reported.

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