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# New or little-known species of the Genus Gnophomyia Osten Saken from Ecuador and Perú

(Fam. Tipulidae; Order Diptera)

BY

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The crane-flies of the genus Gnophomyia Osten Sacken are abundantly represented in the American Tropics. In the present report, I wish to describe as new three species, two of which were taken in Ecuador by Mr. G. H. H. Tate, the third in Peru and included in material sent to me many years ago by the late Dr. Coloman Kertész. At this time, I wish to discuss in greater detail Gnophomyia maestitia Alexander, the holotype of which is preserved in the Hungarian National Museum. The types of the novelties described at this time are preserved in my collection.

#### Gnophomyia (Gnophomyia) molinae, sp.n.

General coloration reddish brown; thoracic pleura with a brown dorso-longitudinal stripe; knobs of halteres infuscated; wings with a faint brown tinge;  $r \cdot m$  on Rs before the fork of the latter; male hypopygium with the outer dististyle pale yellow, conspicuously dilated at near midlength.

Male.—Length about 4 mm; wing 5 mm.

Rostrum dark brown, the palpi paler basally. Antennae dark brown, the scapal segments paler beneath; antennae relatively long, if bent backward extending about to the wing-root; flagellar segments elogante, the verticils exceeding the segments. Head dark gray.

Pronotum pale; anterior lateral pretergites pale yellow. Mesonotum light reddish brown, without distinct

markings; pseudo sutural foveae pale reddish, broadly triangular in outline. Pleura obscure yellow, with a broad brown longitudinal stripe on the dorsal sclerites. Halteres pale, the knobs infuscated. Legs with the coxae and trochanters yellow; femora brownish yellow, the tips vaguely darkened; tibiae and tarsi yellow, the outer segments of the latter darkened. Wings with a faint brown tinge; veins dark brown. Venation:  $r \cdot m$  on Rs some distance before the fork of the latter; veins  $R_3$  and  $R_4$  long and parallel; cell  $^1st M_2$  elogante, widened distally;  $m \cdot cu$  about two-thirds its length deyond the fork of M.

Abdominal tergites dark brown; sternites obscure yellow; hypopygium obscure yellow. Male hypopygium (Fig. 1) with the tergite (9 t) produced into a broad median lobe, the apex narrowed and blackened. Outer dististyle (od) a pale yellow glabrous blade, narrowed at base, broadly dilated at near midlength, thence narrowed to the obtuse apex. Inner dististyle (id) dilated at base, the inner arm short and nearly straight.

Hab.—Ecuador.

Holotype, &, Ventura, altitude 1400 feet, April 8, 1922 (G. H. H. Tate).

I dedicate this species to the memory of Juan Ignacio Molina, great pioneer student of the Natural History of Chile.

Gnophomyia molinae is readily distinguished from all similar regional species by the structure of the male hypopygium.

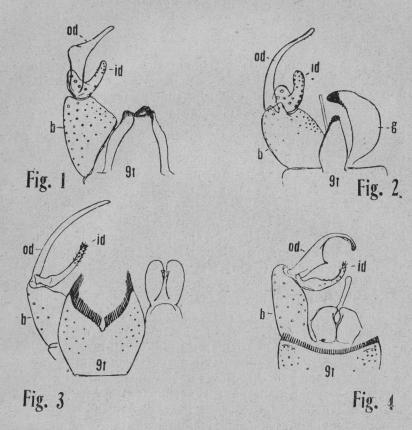
### Gnophomyia (Gnophomyia) porteri, sp.n.

General coloration black, pruinose; pleura striped longitudinally with yellow; halteres dusky; wings tinged with dusky; veins dark brown; male hypopygium with the outer dististyle a glabrous slender rod.

Male.—Length about 4.2 mm.; wing 5.1 mm.

Rostrum and palpi dark brown. Antennae with the scape dark brown; flagellum broken. Head uniformly dark gray.

Pronotum dark browm; anterior lateral pretergites light sulphur yellow. Mesonotal praescutum dark gray, more blackish medially in front; pseudosutural foveae



## **Explanation of Plate**

(Symbols: b=basistyle; g=gonapophysis; id=inner dististyle; od=outer dististyle; t=9th tergite).

#### MALE HIPOPYGIUM

- Fig. 1. (inophomyia (Gnophomyia) molinæ, sp. n.
- Fig. 2. Gnophomyia (Gnophomyia) porteri, sp. n.
- Fig. 3. Gnophomyia (Gnophomyia) kertésziana, sp. n.
- Fig. 4. Gnophomyia (Gnophomyia) mæstitia, Alexander.

black, conspicuous; humeral region of praescutum restrictedly obscure yellow; remainder of mesonotum black, sparsely pruinose, the posterior lateral callosities of the scutal lobes obscure yellow. Pleura chiefly blackish gray, with a longitudinal yellow stripe on the ventral portion, extending from behind the fore coxae where it is poorly defined, becoming clearer and broader posteriorly on the meron and metapleura; dorso-pleural membrane infuscated in front clear light yellow behind. Halteres dusky. Legs with the coxae dark brown, pruinose, the apices of the middle and hind coxae paler; trochanters obscure yellow; remainder of legs brown, the outer segments somewhat darker brown; tarsi short. Wings with a slight dusky tinge; stigma lacking; a vague dark cloud along vein Cu; veins dark brown. Venation: Sc, ending shortly before  $R_2$ ,  $Sc_2$  far from its tip, about opposite midlength of the oblique Rs;  $R_2$  at fork of  $R_{3x4}$ ; cell 1st  $M_2$  long and narrow, widened outwardly; m-cu about two-thirds its length beyond the fork of M.

Abdomen dark brown. Male hypopygium (Fig. 2) with the median area of the tergite (9t) produced caudad into an elongate-oval lobe, the narrow apex blackened and microscopically denticulate. Basistyle (b) relatively short and stout. Outer dististyle (od) glabrous, appearing as a slender blackened rod that narrows gradually to the obtuse tip. Inner dististyle (id) a short, strongly arcuated, blackened structure that bears conspicuous erect setae. Gonapophyses (g) asymmetrical, there being a single compressed structure, the apex blackened, the margin microscopically denticulate.

Hab. Ecuador.

Holotype, 3, Pallatanga, altitude 4400 feet, March 26, 1922 (G. H. H. Tate).

I take great pleasure in naming this species in honor of Dr. Carlos E. Porter, who has done much to make known the interesting fauna of Chile.

By my key to the American species of Gnophomyia (Journ. N. Y. Ent. Soc., 27: 145-146; 1919), G. porteri runs to G. lachrymosa Alexander (Panama), which differs in the coloration, venation and structure of the male hypopygium, especially the shape of the dististyles.

Gnophomyia (Gnophomyia) kertésziana, sp. n.

Male.—Lengt about 5 mm.; wing 5.2 mm. Female.—Length about 6 mm.; wing 5.8 mm.

Generally similar to G. (G). mæstitia Alexander, likewise from Peru, differing especially in the structure

of the male hypopygium.

Wings more uniformly infumed, without a distinct dark crossband at the cord, as in mæstitia. Male hypopygium (Fig. 3) with the tergal plate (9t) large and broad, the caudal margin with a very broad emargination that is fringed with long slender comb-like teeth, this fringe interrupted by a small oval median notch; lateral angles of tergits produced into narrow lobes, each bearing a tuft or pencil long spinous setae. Outer dististyle (od) a long narrow rod, entirely glabrous, the apex obtusely rounded. Inner dististyle (id) much shorter, less than one-half the length of the outer, appearing as a darker gently arcuated rod, the apex subtruncate, weakly bispinous, the style with long, outspreading setae.

Hab. Peru.

Holotype, &, Callanga.

Allotopotype,  $\mathfrak{P}$ .

Gnophomyia kertésziana is named in honor of the late Dr. Coloman Kertész. The species was confused with G. (G.) mæstitia Alexander (Ent. News, 25: 208, plate 9, fig. 8; 1914). In general appearance the two flies are quite similar but the hypopygial structure is very distinct.

Gnophomyia mæstitia (Fig. 4) has the ninth tergite (9t) similarly large but transverse, the caudal margin being very gently emarginate, with an unbroken series of comb-like spines. Outer dististyle (od) entirely glabrous, broadly dilated at base, the mesal edge at end of the dilated portion produced into a blackened spine, the style beyond this point narrowed into a curved rod that is concave on lower face. Inner dististyle (id) a small arcuated rod, the basal portion wider, the distal half narrower, before apex with a small obtuse tooth.

