

RECORDS AND DESCRIPTIONS OF NEOTROPICAL CRANE-FLIES (TIPULIDÆ, DIPTERA), XVII

BY CHARLES P. ALEXANDER
AMHERST, MASSACHUSETTS

The previous instalment under this general title was published in September, 1943 (JOURNAL OF THE NEW YORK ENTOMOLOGICAL SOCIETY, 51(3): 199-212). The materials here considered are all from Ecuador where they were taken by Mr. William Clarke-Macintyre, Mr. David B. Laddey, and Professor F. Martin Brown. Some of the most interesting of the new species were taken at the station "Zumbi," in the Province of Santiago-Zamora, southern Oriente, by Mr. Laddey. For a brief discussion of this station, the preceding instalment should be consulted. I am greatly indebted to the collectors for the privilege of retaining the types of the novelties in my collection of these flies.

Genus *Gnophomyia* Osten Sacken

***Gnophomyia* (*Gnophomyia*) *argutula* new species.**

General coloration of mesonotal præscutum gray with three dark brown stripes, the lateral portions orange-yellow; thoracic pleura variegated dark brown and obscure yellow; knobs of halteres dark brown; femora yellow, the tips conspicuously blackened; wings yellowish gray, with three darker clouds or bands, the second at the level of cord; cell *1st M*₂ widened outwardly, nearly four times as wide at outer end as at base; cell *2nd A* broad; abdominal segments bicolored, the basal portions reddish yellow, the remainder dark brown; male hypopygium with the outer dististyle acute at tip; phallosome unusually broad and obtuse.

MALE.—Length about 7 mm.; wing 7.5 mm.

Rostrum brown; palpi black. Antennæ brownish black; flagellar segments nearly cylindrical; verticils of outer segments much longer and more conspicuous than those of the basal segments. Anterior vertex dull orange, relatively narrow, the eyes correspondingly large and protuberant; posterior portion of head brownish gray, the anterior orbits obscure orange.

Pronotum obscure brownish yellow above, dark brown on sides; pretergites obscure yellow. Mesonotal præscutum with the ground color of interspaces gray, with three entire dark brown stripes, the median one more reddened at cephalic end; humeral and lateral portions of sclerite obscure orange yellow; posterior sclerites of notum dark brown, sparsely pruinose; scutellum paler,

with a central, dark brown spot; dorsal pleurotergite obscure yellow. Pleura chiefly dark brown, sparsely pruinose, restrictedly but conspicuously variegated with obscure yellow, distributed as follows: Dorsal portion of sternopleurite; posterior border of pteropleurite, and meral region. Halteres short, stem yellow at base, the remainder dark brown. Legs with the coxæ brown, sparsely pruinose; trochanters obscure yellow; femora yellow, the tips rather broadly and conspicuously blackened; tibiæ and tarsi yellow, only the terminal segment weakly darkened. Wings with the ground color yellowish gray, the color greatly restricted by three more or less distinct, slightly darker clouds or bands, the most conspicuous at the cord and over outer end of cell 1st M_2 ; slightly less distinct bands at proximal fourth of wing and as a nearly apical darkening in the cells beyond cord; stigma very long and narrow, dark brown; veins yellow in the ground areas, brown in the darkened fields. Venation: Sc_1 ending about opposite the short transverse R_2 ; R_s in longitudinal alignment with R_5 , $r-m$ at its fork; cell 1st M_2 strongly widened outwardly, nearly four times as wide at outer end as at base; cell 1st M_2 approximately as long as vein M_4 beyond it; cell 2nd A noticeably shorter and broader than in *duplex*.

Basal abdominal segments bicolored, dark brown, the basal rings conspicuously reddish or reddish yellow, the subterminal segments more uniform dark brown; hypopygium and preceding segment more yellowish; sternal pattern generally like the tergal. Male hypopygium with the outer dististyle much less conspicuously flattened than in *laticincta*, its apex acute; base of style with only two elongate setæ. Inner dististyle about one-half as long as the outer style, provided with numerous setæ, including about three of unusual length. Phallosome unusually broad and obtuse.

Holotype, ♂, Zumbi, Rio Zamora, Santiago-Zamora, altitude 700 meters, November 1, 1941 (Laddey).

The nearest relatives are *Gnophomyia* (*Gnophomyia*) *duplex* Alexander and *G. (G.) laticincta* Alexander, which have the legs and wings somewhat similarly patterned. The former species is still known only from the female sex, differing from the present fly in the venation and in the details of coloration of body and wings. The latter species, *laticincta*, differs conspicuously in the structure of the male hypopygium, especially of the outer dististyle.

***Gnophomyia* (*Gnophomyia*) *bulbibasis* new species.**

General coloration of mesonotum dark brown, very sparsely pruinose, on præscutum forming a discal shield; thoracic pleura striped longitudinally with dark brown and reddish; halteres darkened; legs pale brown; wings grayish subhyaline, stigma scarcely differentiated; male hypopygium with the outer dististyle conspicuously bulbous just beyond base; gonapophyses appearing as blackened spines.

MALE.—Length about 4.5–5.5 mm.; wing 5–6.2 mm.

FEMALE.—Length about 5 mm.; wing 5.5 mm.

Rostrum and palpi dark brown. Antennæ dark brown; basal flagellar segments subcylindrical, the outer ones shorter; verticils subequal in length to the segments. Head dark gray; eyes large; anterior vertex only a little wider than the diameter of scape.

Pronotum above yellow, darker on sides. Mesonotum almost uniformly dark brown, very sparsely pruinose, on præscutum forming a discal shield that leaves the humeral and lateral portions yellowish, in cases more obscure than in others. Pleura reddish, with a conspicuous dark brown dorsal stripe extending from the propleura to the postnotum, passing above the halteres; dorsopleural region yellow, confluent with the similarly colored lateral præscutal borders; immediately ventrad of the dark pleural stripe a more or less distinct paler longitudinal line extending from behind the fore coxæ to the base of abdomen. Halteres dusky, the knob still darker. Legs with coxæ obscure yellow to testaceous yellow; trochanters yellow; remainder of legs pale brown, the femoral bases clearer yellow; outer tarsal segments passing into darker brown. Wings grayish subhyaline, the extreme base yellow; stigmal area very restricted and pale, scarcely differentiated; veins pale brown, yellow in the prearcular field. Venation: Sc long, Sc_1 ending just before level of R_2 , Sc_2 some distance from its tip, lying opposite or before the fork of Rs ; $r-m$ before or close to fork of Rs ; $m-cu$ about three-fourths its own length beyond the fork of M .

Abdominal tergites brownish black, the sternites a trifle more piceous; hypopygium yellowish brown. Ovipositor with cerci relatively short and stout, with setæ to the tips of the valves. Male hypopygium with the outer dististyle conspicuously expanded or bulbous just beyond base, thence narrowed to a long straight rod that terminates in an acute point. Inner dististyle much shorter, obtuse at tip; at base with about four powerful setæ, with other shorter setæ on distal half, chiefly near apex. Gonapophyses appearing as blackened spines.

Holotype, ♂, Zumbi, Rio Zamora, Santiago-Zamora, altitude 700 meters, November 4, 1941 (Laddey). Allotopotype, ♀, with the type. Paratopotypes, 2 ♂♂, 1 ♀, October 31–November 2, 1941 (Laddey).

Gnophomyia (*Gnophomyia*) *bulbibasis* has the structure of the male hypopygium, especially of the gonapophyses, somewhat as in *G.* (*G.*) *oxymera* Alexander, from which it differs in other hypopygial characters, as the bulbous basal enlargement of the outer dististyle.

***Gnophomyia* (*Gnophomyia*) *fessa* new species.**

General coloration of mesonotum and the dorsal pleurites dark brown, ventral pleurites reddish brown; rostrum, antennæ and halteres black; femora

obscure yellow, with a narrow subterminal darker ring; wings subhyaline, stigma reduced to a narrow seam; male hypopygium with the inner dististyle bulbous, the apex conspicuously wider than the base; gonapophyses incurved, appearing as separate blades, blackened and microscopically serrulate at bases.

MALE.—Length about 5 mm.; wing 5 mm.; antenna about 1.5 mm.

FEMALE.—Length about 6.5 mm.; wing 6 mm.

Rostrum and palpi brownish black. Antennæ black throughout; basal flagellar segments subcylindrical, the outer ones more elongate-oval, with verticils that exceed the segments in length. Head dark gray; eyes (male) relatively large, the anterior vertex correspondingly narrowed.

Pronotum brown, the pretergites conspicuously light yellow. Mesonotum almost uniform dark brown, the surface very sparsely pruinose, the central portion of præscutum and the scutal lobes slightly darker. Pleurotergite and dorsal pleura dark brown, contrasting abruptly with the reddish brown ventral pleurites, the surface sparsely pruinose. Halteres brownish black throughout. Legs with coxæ reddish; trochanters yellow; femora obscure yellow, more infuscated immediately before their tips to form a narrow, nearly terminal ring; tibiæ and basitarsi obscure yellow, the tips narrowly infuscated; outer tarsal segments passing into brownish black. Wings subhyaline, with a very faint darker tinge; stigma darker brown but reduced to a linear area adjoining veins R_1 and R_{1+2} , scarcely involving the surrounding membrane; prearcular and costal fields a trifle more yellowish; veins brown, somewhat more brightened in the basal areas. Venation: Sc_1 ending opposite R_2 ; Rs straight, oblique; basal section of R_5 lacking, $r-m$ at fork of Rs ; R_2 variable in position, before the fork of R_{2+3+4} or nearly its own length beyond this fork; cell 1st M_2 narrow, subequal in length to vein M_4 beyond it; $m-cu$ from one-third to two-thirds its length beyond the fork of M .

Abdominal tergites and hypopygium brownish black; sternites yellow. Ovipositor with cerci relatively small, only weakly sclerotized, with setæ virtually to their tips. Male hypopygium with the outer dististyle a simple, curved, relatively narrow, blackened rod, the tip subacute. Inner dististyle relatively short, bulbous, the apex almost twice as wide as the base, with several setæ, chiefly on the distal third. Phallosome with the gonapophyses incurved, appearing as separate blades, at apex blackened and microscopically roughened to serrulate; apex of phallosome narrow.

Holotype, ♂, Palmar, Rio Maizito, Manabi, altitude 200 meters, May 20, 1941 (Laddey). Allotopotype, ♀, pinned with type.

Gnophomyia (*Gnophomyia*) *fessa* is most similar to species such as *G.* (*G.*) *oxymera* Alexander and *G.* (*G.*) *nectarea* new species, differing in the details of coloration and, especially, the structure of the male hypopygium, as the inner dististyle and the phallosome.

Gnophomyia (Gnophomyia) nectarea new species.

Size small (wing, male, about 5 mm.); mesonotum and dorsal pleura opaque black, the ventral pleurites abruptly reddish; halteres dusky; legs brownish yellow; wings subhyaline, the stigma and an extensive cloud on proximal third of wing infuscated; vein R_2 very faint to nearly atrophied; cell $1st M_2$ long and narrow; cell $2nd A$ relatively narrow; male hypopygium with the outer dististyle slender; inner dististyle with a conspicuous basal lobe that is microscopically corrugated or wrinkled.

MALE.—Length about 4–4.8 mm.; wing 4.5–5.5 mm.; antenna about 1.3–1.6 mm.

FEMALE.—Length about 5 mm.; wing 5 mm.

Rostrum dark brown; palpi black. Antennæ of moderate length, dark brown; flagellar segments subcylindrical; longest verticils subequal in length to the segments. Head brown, the orbits and posterior vertex light gray; anterior vertex relatively narrow, about one-third the diameter of scape; eyes (male) correspondingly large.

Pronotum dark brown; pretergites light yellow. Mesonotum chiefly blackened, the surface opaque by a sparse pruinosity; central portion of scutum and posterior border of scutellum slightly more reddened. Dorsal pleurites covered by a broad black longitudinal stripe, this area also involving the pleurotergite and surrounding the root of halteres; ventral pleurites reddish, very sparsely pruinose. Halteres dusky, base of stem restrictedly brightened. Legs with coxæ and trochanters yellow; remainder of legs brownish yellow, the outer tarsal segments more infuscated. Wings subhyaline, the extreme base restrictedly yellow; stigma oval, darker brown; a conspicuous dusky cloud or wash on basal third of wing in general vicinity of vein Cu , involving the bases of cells Cu , $1st A$ and $2nd A$, together with much of M ; veins brown, yellow in the flavous basal region. Venation: Vein R_2 very faint to nearly atrophied; R_s in direct longitudinal alignment with R_5 ; branches of R_s all extending generally parallel to one another; cell $1st M_2$ relatively long and narrow, its inner end pointed or strongly narrowed, the outer end more widened, the cell subequal in length to vein M_4 ; $m-cu$ less than its own length beyond fork of M , at near one-fourth to one-fifth the length of the cell; cell $2nd A$ relatively narrow.

Abdominal tergites and the hypopygium brownish black; basal sternites a trifle paler. Male hypopygium with the outer dististyle unusually slender throughout, narrowed at apex to a subacute point. Inner style with a conspicuous basal lobe or shoulder, its surface and adjoining margin of style microscopically wrinkled. Phallosome of moderate width, its tip blackened and slightly narrowed to an obtuse point, the surface microscopically wrinkled.

Holotype, ♂, Zumbi, Rio Zamora, Santiago-Zamora, altitude 700 meters, November 2, 1941 (Laddey). Allotopotype, ♀. Paratopotypes, 2 ♂♂, October 30–November 5, 1941 (Laddey).

Gnophomyia (Gnophomyia) nectarea is entirely distinct from other small-sized regional members of the genus. From all such, it differs conspicuously in the peculiar wing pattern and in the structure of the male hypopygium.

***Gnophomyia (Gnophomyia) tuber* new species.**

General coloration of mesonotum medium brown, with poorly defined pattern; pleura with a broad, medium brown, longitudinal stripe over the dorsal sclerites; halteres yellow; wings with a buffy tinge, brighter in the basal portions; abdominal tergites reddish brown, weakly darkened laterally; male hypopygium with the basistyles short, on mesal face near base with a conspicuous darkened tubercle, this provided with about three conspicuous setæ; outer dististyle compressed-flattened, its apex obtuse; inner dististyle with the apex very obtuse to subtruncate.

MALE.—Length about 6–6.3 mm.; wing 6.8–7 mm.; antenna about 1.5–1.6 mm.

Rostrum testaceous brown; palpi brownish black. Antennæ with the scape and pedicel brownish yellow, flagellum brownish black; flagellar segments long-cylindrical, the terminal segments shorter; verticils considerably exceeding the segments in length. Head brownish gray; anterior vertex relatively narrow, eyes large.

Pronotum light yellow above, darker on sides; pretergites light yellow. Mesonotal præscutum medium brown, sparsely pruinose, the median area more darkened, behind forming more or less distinct stripes; scutal lobes similarly darkened, the posterior border obscure yellow; scutellum brown, with a yellow spot on either side of base; postnotum medium brown, more yellowish on suture between mediotergite and pleurotergite. Pleura with a broad but relatively inconspicuous, medium brown stripe, more intense in front, becoming diffuse behind; dorsopleural region yellow; ventral pleurites obscure yellow, paler yellow behind. Halteres yellow. Legs with the coxæ and trochanters yellow; femora obscure yellow, weakly darkened at or near tips; tibiæ and basitarsi yellow, the tips narrowly and inconspicuously infuscated; outer tarsal segments brownish black. Wings relatively broad, with a sandy or buffy tinge, the prearcular and costal fields clearer yellow; stigma very restricted in area, pale brown; veins brown, more brownish yellow in the brightened portions. Venation: Sc_1 ending about opposite the fork of R_{2+3+4} , Sc_2 nearly opposite the fork of Rs ; R_{2+3} more than one-third R_{2+3+4} ; Rs in direct longitudinal alignment with R_5 ; $r-m$ beyond fork of Rs ; cell $1st M_2$ relatively long, subequal to vein M_4 beyond it; $m-cu$ about two-thirds its length beyond fork of M .

Abdominal tergites reddish brown, weakly darkened laterally; sternites clearer yellow; hypopygium yellowish brown. Male hypopygium with the basistyles short, on mesal face near base with a conspicuous darkened tubercle, this provided with about three conspicuous setæ. Outer dististyle darkened, conspicuously compressed-flattened, widest at near midlength, its apex

obtuse. Inner dististyle extending about to midlength of the outer style, dark-colored, its apex very obtuse to subtruncate; rather numerous setæ, including a row of four or five larger ones along the lower or cephalic margin. Phallosome relatively broad, the apex obtuse.

Holotype, ♂, Playas de Montalvo, Los Rios, altitude 15 meters, March 5, 1938 (Macintyre). Paratopotypes, 1 ♂, 1 sex?, pinned with type.

In its general appearance and wing coloration, the present fly is most like *Gnophomyia* (*Gnophomyia*) *acricula* Alexander and *G. (G.) digitiformis* Alexander, but has a very different hypopygium. The tubercle on the basistyle is not found in any other species known to me.

Genus *Neognophomyia* Alexander

Neognophomyia spectralis new species.

General coloration of mesonotal præscutum reddish yellow, the posterior sclerites darker; vertex yellow, with a brown central area; thoracic pleura with a conspicuous dorsal black stripe; tips of femora, tibiæ and basitarsi broadly blackened; wings with a pale yellow tinge, patterned with brown, including a subbasal fascia; abdominal tergites conspicuously patterned with brownish black and yellow; male hypopygium with the tergal spines blackened, nearly straight; phallosome produced at apex into lateral horns.

MALE.—Length about 5–5.5 mm.; wing 6–7 mm.

Rostrum obscure yellow; palpi brown. Antennæ with scape and pedicel dark brown; basal flagellar segments pale brown, the outer ones paling to brownish yellow; flagellar segments passing from oval through long-oval; verticils conspicuous. Head yellow, the anterior vertex with a conspicuous brown area; anterior vertex moderately wide, a little more than twice the diameter of the scape.

Pronotum yellow medially, brownish black on sides. Mesonotal præscutum reddish yellow, more yellowish on lateral and humeral portions, in cases more darkened, especially near suture; scutum yellow, each lobe with two brown areas; scutellum black, more or less pruinose; postnotum brownish black, including both the mediotergite and pleurotergite. Pleura reddish yellow with a broad black longitudinal stripe beginning on sides of pronotum, involving the anepisternum, dorsal pteropleurite and the postnotum, as described. Halteres yellow. Legs with the coxæ yellow to reddish yellow; trochanters yellow; femora, tibiæ and basitarsi yellow, with broad and conspicuous black tips; remainder of tarsi black. Wings with a pale yellow tinge, patterned with brown, including a broad seam from stigma across anterior cord, and narrower seams on *m-cu* and outer end of cell *1st M*₂; a less conspicuous subbasal band from origin of *Rs* extending obliquely across cell *M* into cells *Cu*, *1st A* and *2nd A*; extreme base of wing blackened; veins

yellow to brownish yellow, darker brown in the patterned areas. Venation: R_2 at near midlength of petiole of cell R_3 ; cell 1st M_2 strongly narrowed at proximal end; *m-cu* from about one-half to approximately its own length beyond the fork of M .

Abdominal tergites yellow, handsomely patterned with brownish black, the segments chiefly darkened with a large yellow area at posterior border of each segment, encroaching on the base of the succeeding segment, the outer segments more uniformly darkened, greatly restricting the yellow color; sternites yellow, the terminal segments more darkened; hypopygium chiefly obscure brownish yellow. Male hypopygium with the tergal spines appearing as long, nearly straight, blackened blades, a little expanded at base, thence gradually narrowed to the acute tips. Outer dististyle relatively slender; outer margin of distal third with five long setæ, additional to the single terminal bristle. Inner dististyle large and massive, terminating in a broad blackened beak, the apical border with about seven or eight strong setæ; basal tooth or flange of style strongly blackened, provided with four strong setæ. Phallosome relatively wide, at apex produced into a slender spinous point that is directed laterad, immediately cephalad of which is a broadly rounded emargination.

Holotype, ♂, Baños, Tungurahua, altitude 2,000 meters, July 14, 1939 (Macintyre). Paratopotypes, 7 ♂♂, altitude 1,700–2,000 meters, May 11–June 2, 1937; paratype, 2 ♂♂, Pititi, near Baños, altitude 1,900 meters, June 14, 1937 (Macintyre).

The only generally similar species is *Neognophomyia hirsuta* (Alexander) of eastern Brazil, which has the pattern of the body, legs and wings somewhat the same but with the male hypopygium entirely different. This latter species has the sub-basal darkened wing band much wider and more continuous than in the present fly.

***Neognophomyia interrupta* new species.**

Allied to *hostica*; general coloration yellow, the præscutum with the disk chiefly reddish yellow; wings grayish yellow, with a narrow brown seam along cord; abdomen pale, with tergites three, five and six conspicuously dark brown; male hypopygium with the outer dististyle strongly constricted at near midlength, the bulbous outer portion terminating in two subequal elongate setæ; tergal spines pale, angularly bent beyond midlength.

MALE.—Length about 4.5 mm.; wing 5 mm.

Rostrum pale yellow; palpi pale, the outer segments darkened. Antennæ with scape and pedicel light yellow; flagellum broken. Head obscure brownish yellow; eyes (male) relatively large.

Pronotum yellow. Mesonotal præscutum yellow, with three more or less confluent more reddish stripes that form a nearly continuous discal area;

scutal lobes brownish black, the remainder of scutum more brownish yellow; scutellum and mediotergite brownish yellow, the pleurotergite almost covered by an oval velvety black spot, as is common in the genus. Pleura reddish yellow the anepisternum a little infuscated. Halteres uniformly pale yellow. Legs with the coxæ and trochanters yellow; remainder of legs broken. Wings grayish yellow, the prearcular and costal fields somewhat brighter yellow; a narrow but conspicuous brown seam along cord, becoming indistinct or obliterated at fork of *M*; veins brownish yellow, darker in the infuscated areas. Venation: *R*₂ at about one-third the length of petiole of cell *R*₃; vein *R*₃ oblique; cell 1st *M*₂ only slightly widened outwardly; *m-cu* at near one-third the length of the cell.

Abdomen conspicuously patterned; basal tergites brownish yellow, darkened laterally; tergites three, five and six conspicuously dark brown; tergites four, seven and eight pale; hypopygium and sternites more uniformly yellow. Male hypopygium with the outer dististyle strongly constricted at near midlength, the base widened, the apex bulbous, its extreme tip broadly obtuse with two subequal elongate setæ. In *hostica*, the style is unusually slender, gradually narrowed beyond the basal enlargement, the tip unusually slender and thus with only a single apical seta. Inner dististyle much as in *hostica*, more widened at near midlength, the setæ at this point slightly more numerous, longer and paler. Phallosome narrower. Tergal spines somewhat as in *hostica*, the basal section shorter.

Holotype, ♂, Zumbi, Rio Zamora, Santiago-Zamora, altitude 700 meters, November 5, 1941 (Laddey).

The most similar described species is *Neognophomyia hostica* Alexander, of Peru, which differs most evidently in the coloration of the abdomen and in the structure of the male hypopygium, as compared above.

Genus *Gonomyia* Meigen

***Gonomyia* (*Progonomyia*) *acrissima* new species.**

General coloration gray, the præscutum with three conspicuous brown stripes; thoracic pleura dark gray with a broad yellow longitudinal stripe; legs dark brown, the tarsi black; wings with a weak grayish tinge, unpatterned except for the very pale brown and inconspicuous stigma; male hypopygium with the mesal face of basistyle before apex with a longitudinal group of acute spines, these exceeding 60 in number.

MALE.—Length 5.5–5.6 mm.; wing 6–6.2 mm.; antenna about 1–1.1 mm.

Rostrum black, sparsely pruinose; palpi brownish black. Antennæ with the scape dark brown, pedicel and flagellum black; flagellar segments subcylindrical to long-oval with verticels that are subequal in length to the segments. Head gray; vertex with a median brown line.

Pronotum blackened, pruinose, the lateral portions, together with the anterior pretergites, obscure yellow. Mesonotal præscutum gray, with three

conspicuous brown stripes, the median one not reaching the suture, the laterals crossing the suture onto the scutal lobes; pseudosutural foveæ black, conspicuous; posterior sclerites of notum gray, the posterior border of scutellum more obscure yellow; postnotum gray, the dorsal portion of pleurotergite and adjoining portion of mediotergite obscure yellow. Pleura dark gray, with a broad and conspicuous yellow stripe extending from behind the fore coxæ across the dorsal sternopleurite, behind including the ventral pteropleurite, meron and metapleura. Halteres with stem yellowish brown, knob darker brown. Legs with coxæ light brown, sparsely pruinose; trochanters brownish yellow; remainder of legs dark brown, the tarsi passing into black. Wings with a weak grayish tinge, unpatterned except for the very pale brown stigma; extreme wing base paler; veins brown, brightened at base of wing. Venation: *Sc* relatively short, *Sc*₁ ending a distance beyond origin of *Rs* about equal to *m-cu*, *Sc*₂ a slightly shorter distance before origin; *R*₂ indicated by a very faint element at midlength of stigma; cell 2nd *M*₂ nearly twice its petiole; *m-cu* from three-fifths to two-thirds its length before the fork of *M*.

Abdominal tergites dark grayish brown, sternites slightly paler; eighth and ninth segments somewhat paler brown, the styli darker. Male hypopygium with the apex of basistyle obtuse, unarmed; mesal face immediately back from tip with an extensive longitudinal area of acute spines, these totalling in excess of 60. Outer dististyle a semicylindrical blade, its apex narrowed into an acute black spine. Intermediate style a long darkened blade, about one-half longer than the outer style; at near one-third its length bearing a more slender branch or arm that is approximately one-half as long as the main apical branch; stem near the branch with numerous setæ, these becoming even longer and more conspicuous on base of lateral branch; main or axial branch glabrous, gradually narrowed to the subacute cultriform apex. Inner dististyle broad, obtuse at apex, near margin provided with several setæ, those at and near apex longest. *Æ*deagus relatively slender, narrowed outwardly, near apex with small and inconspicuous lateral shoulders.

Holotype, ♂, Baños, Tungurahua, altitude 1,450 meters, April 23, 1939 (Macintyre). Paratopotype, 1 ♂.

The present fly is readily distinguished from all other generally similar forms by the structure of the male hypopygium, especially the spinous area near apex of basistyle. Such armature is uncommon in the subgenus and in all other cases the number, arrangement and shape of the spines is different; in *Gonomyia* (*Progonomyia*) *compacta* Alexander there is a relatively large group of spiculose points; in *G. (P.) serena* Alexander, the spines of the general type of the present fly but very few in number; in *G. (P.) thiosema* Alexander, an even larger group of elongate spinous pegs on mesal face of basistyle but

these with obtusely rounded tips. In all these species, the structure of the dististyles is likewise distinctive.

Gonomyia (Progonomyia) hyperplatys new species.

General coloration of notum grayish brown; antennæ black throughout; pleura blackened, sparsely pruinose, with a conspicuous yellow longitudinal stripe; knobs of halteres darkened; wings yellowish, restrictedly patterned with pale brown; Sc_1 ending shortly beyond origin of R_s ; male hypopygium with the phallosome unusually wide, appearing as a broadly flattened plate, each outer lateral angle further produced.

MALE.—Length about 6 mm.; wing 6.6 mm.

Rostrum and palpi dark brown. Antennæ brownish black throughout; flagellar segments subcylindrical, passing into long-oval, with verticils that exceed the segments. Head brownish gray on anterior vertex, deepening in color behind the antennal bases, the broad posterior vertex clear gray.

Pronotum obscure yellow medially, dark brown sublaterally; pretergites yellow. Mesonotum dark grayish brown, the humeral and lateral portions light yellow; scutellum more reddish brown; mediotergite dark brown, with a conspicuous yellow area on either side of basal half; dorsal portion of pleurotergite similarly yellow. Pleura blackened, sparsely pruinose, with a conspicuous yellow longitudinal stripe extending from above the fore coxæ across the dorsal sternopleurite to the ventral pteropleurite and meral region. Halteres with stem yellow, knob weakly darkened. Legs with the coxæ basally dark brownish gray, the tips restrictedly yellow; trochanters brown; remainder of legs broken. Wings with a yellowish tinge, restrictedly patterned with rather pale brown, the areas chiefly restricted to the vicinity of the veins, distributed as follows: Origin of R_s ; stigma; cord and base of cell *2nd M*₂; two small isolated spots in Anal cells, one near outer end of cell *1st A* adjoining vein *2nd A*, the other near center of cell *2nd A*; veins brown. Venation: Sc short, Sc_1 ending shortly beyond origin of R_s , Sc_2 about an equal distance before this origin, R_s relatively long, square and spurred at origin; R_2 about twice R_{3+4} ; *m-cu* from about one-third to one-half its length before fork of *M*.

Abdomen brownish black; ninth segment abruptly yellow, the styli again blackened. Male hypopygium with the outer dististyle a short, slender, curved rod that narrows to the acute blackened tip, the outer margin with delicate microscopic setulæ. Intermediate style broadly flattened, entirely dark-colored, the inner margin at near midlength produced into a sharp spine, the surface basad of this with conspicuous setæ; apical portion of style appearing as a broad flattened basal flange that narrows into a long arm that is narrowly but deeply notched at apex. Inner dististyle a dusky lobe with strong spinous setæ along the entire inner face, the terminal one longest. Phallosome unusually wide for a member of this subgenus, appearing as a broadly flattened plate subtending the œdeagus, each outer lateral angle produced further into a flattened lobe or blade, with about seven setæ chiefly distributed along the outer margin near apex.

Holotype, ♂, Baños, Tungurahua, altitude 1,450 meters, April 23, 1939 (Macintyre).

The present fly is entirely different from other described species of the subgenus, differing especially in the structure of the male hypopygium and particularly of the phallosome. The most similar form is *Gonomyia (Progonomyia) velutina* Alexander, which differs in the wing pattern and in all details of structure of the male hypopygium.

Genus *Cryptolabis* Osten Sacken

Cryptolabis (Cryptolabis) alticola new species.

General coloration black, more or less pruinose; lateral pretergites abruptly yellowish white; legs black; wings with a strong brownish tinge, the prearcular and costal fields yellow; *Rs* very long; male hypopygium with the dististyle large and conspicuous, exerted, consisting of an outer flattened setuliferous blade and a bispinous inner body; tergal plate bearing conspicuous lateral arms that terminate in several strong setæ; aedeagus long and slender.

MALE.—Length about 4.5 mm.; wing 5.2 mm.

Rostrum and palpi black. Antennæ brownish black; flagellar segments oval, with conspicuous verticils. Head black, presumably pruinose in fresh specimens.

Pronotum, mesonotum and pleura of the unique type dull black, the surface presumably more or less pruinose in fresh specimens; pretergites abruptly and conspicuously yellowish white. Halteres brown, the apex of knob brighter. Legs black, with relatively conspicuous suberect setæ. Wings with a strong brown tinge, the prearcular and costal fields yellow; axillary region restrictedly infuscated; veins and macrotrichia brown. Macrotrichia of cells relatively abundant, beyond the cord extending from outer end of cell R_2 to cell M_4 , in the radial field involving all of the cells with the exception of the basal fourth to fifth. Venation: *Sc* relatively short, Sc_1 ending some distance before the end of *Rs*; *Rs* very long, exceeding in length vein R_3 ; R_{2+3+4} at origin nearly perpendicular to *Rs*, subequal in length to R_{2+3} ; cell M_3 deep; *m-cu* at near midlength of M_{3+4} ; vein 2nd *A* gently sinuous.

Abdomen brownish black; hypopygium black. Male hypopygium with the dististyle large and conspicuous, exerted; consisting of an outer fleshy lobe or blade that may represent a separate style, and the main body of the style itself; outer blade flattened, densely covered with short setæ; inner portion of style with apex dilated into a truncated portion, the outer margin with two strong blackened spinous points, the more basal one erect, the outer spine more appressed. What appears to be the tergite appears as a transverse plate with the median portion strongly produced into a rounded lobe, the lateral arms appearing as strong cylindrical lobes that are directed strongly

mesad and then caudad, the tips with about seven elongate setæ. *Ædeagus* unusually long and slender, blackened, transversely corrugated.

Holotype, ♂, Hacienda Talahua, Bolivar, altitude 3,100 meters, April 28, 1939 (Brown).

Cryptolabis (*Cryptolabis*) *alticola* is entirely different from the other described species of the genus. It is most similar to species such as *C. (C.) chilotanica* Alexander, of southern Chile, yet very distinct in the structure of the male hypopygium. For a discussion of the type locality, consult Brown (Ann. Ent. Soc. Amer., 34: 848; 1941).