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NOTES AND DESCRIPTIONS OF SOME PHAONIINAE (DIPTERA, MUSCIDAE)

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Since publication of a partial revision of the *Mydaea* of the Neotropical region (Snyder, 1941), several additional species have been collected or have come to hand. A revised key to the genus is therefore included to facilitate identification of these species.

Key to Neotropical *Mydaea* Robineau-Desvoidy, Sensu Stricto

1. Dorsocentral bristles 2 : 3 2
   Dorsocentral bristles 2 : 4 4
2. Fore tibiae without a median posterior bristle; margins of calyptrae darkened ..... *nubivena* Snyder
   Fore tibiae with a median posterior bristle; margins of calyptrae not darkened 3
3. Palpi and at least the second antennal segment yellow ..... *merida* Snyder
   Palpi and antennae entirely black ..... *cresa*, new species
4. With a dark costal cloud; fore tibiae with a median posterior bristle ..... *fumicosta* Snyder
   Without a dark costal cloud; fore tibiae without a median posterior bristle. 5
5. Margins of upper calyptrae infuscated; cross veins with narrow infuscated clouds ..... *plaumanni* Snyder
   Margins of upper calyptrae and cross veins not infuscated 6
6. At narrowest part of front, the frontal vitta three to four times as wide as parafrontal ..... *caras*, new species
   At narrowest part of front, the frontal vitta only as wide as width of parafrontal ..... *compressicornis*, new species

Mydaea cresa, new species

Female: Length 5.5 mm. Head black, grayish pruinescent. Frontal vitta velvety black, with a subshiny stripe which is sparsely pruinescent and extends three-fourths the distance to

base of antennae. Front at vertex two-sevenths of head width and widened to five-fourteenths anteriorly. Parafrontals narrow, with a row of bristles, the anterior four to five pairs inwardly and the posterior two pairs outwardly directed. There are several short setulae laterad to the row of parafrontal bristles. Ocellar, inner, and outer vertical bristles strong. Juncture of parafacials and parafrontals as long as width of third antennal segment, parafacials narrowed to one-half this width below. Cheeks twice as high as width of third antennal segment and with about eight well-developed bristles along lower margin. Palpi and antennae black. Antennae inserted opposite, and extending to slightly below lower edge of, eyes; third segment twice as long as second. Longest aristal hairs as long as greatest aristal diameter. Eyes with a few, very short, and widely scattered hairs.

Thorax black, bluish gray pruinescent; indistinctly quadrivittate. The median two vittae are narrowest but are most distinct. Acrostical setulae in five to seven irregular rows; acrosticals 0:1; dorsocentrals 2:3; pra minute or absent; with a few setulae adjacent to the posterior notopleural bristle; scutellar setulae not descending below level of marginal bristles. Sternopleurals 1:2; hypopleura entirely bare.

Legs black, except the basal one-third of hind femora and all tibiae which are fulvous, the base of the tibiae slightly darker. Fore femora normal. Fore tibiae with a median posterior bristle. Mid femora with three to five strong ventral bristles and with a weaker apical anterior one. Mid tibiae with two median posterior bristles. Hind femora with a complete row of strong anteroventral bristles and a row of shorter and weaker posteroventral bristles on basal half. Hind tibiae with two anterodorsal and one anteroventral median bristles.

Wings yellowish hyaline, darker at base and with a slightly darker area in the subcostal cell beyond the auxiliary vein. Anterior cross vein with a very faint cloud. Costal thorns and setulae scarcely developed. Third and fourth veins slightly divergent apically, posterior cross vein slightly curved. Calyptrae white, the ventral one with a narrow yellow margin. Halteres fulvous.

Abdomen black, bluish gray pruinescent; with distinct dorsal and lateral checkerings. Second tergite with apical lateral bristles; third with a complete row of strong marginals and three

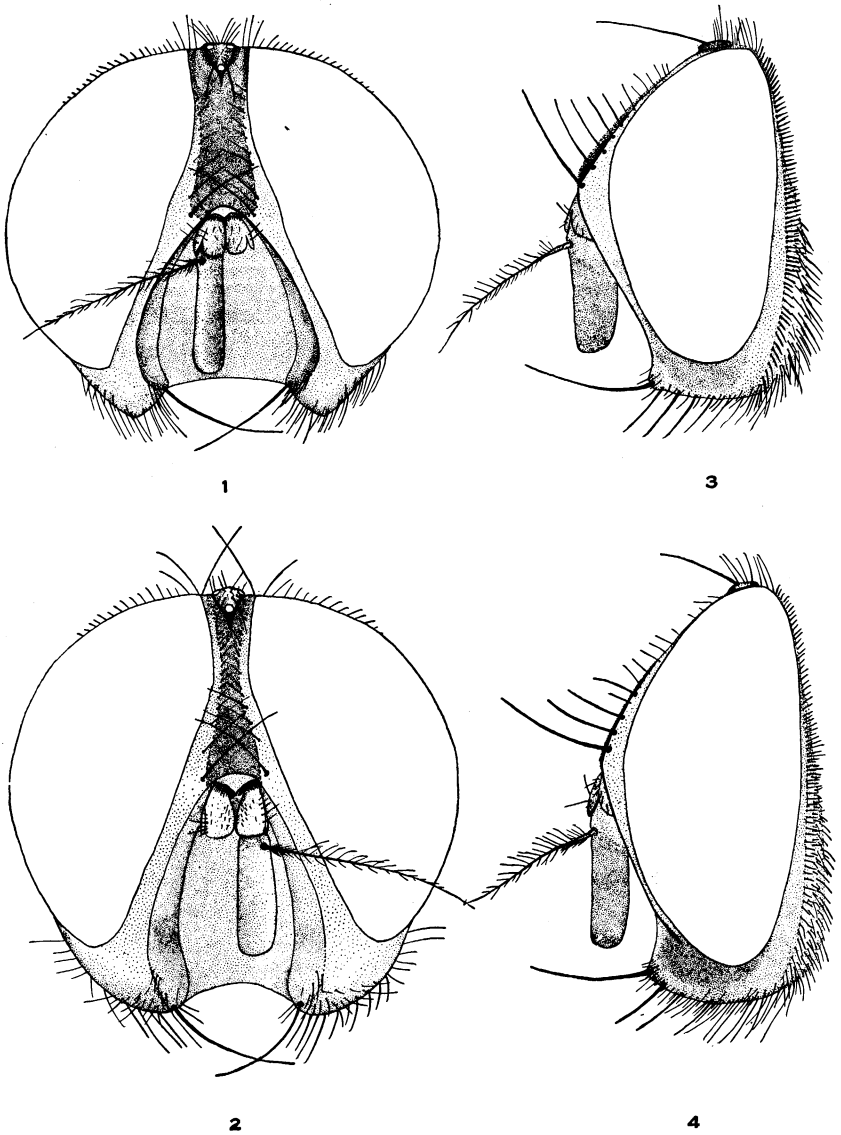


FIG. 1. *Mydaea caras*, new species, front view, head of male.
FIG. 2. *Mydaea compressicornis*, new species, front view, head of male.
FIG. 3. *Mydaea caras*, new species, side view, head of male.
FIG. 4. *Mydaea compressicornis*, new species, side view, head of male.

or four weaker lateral discals. Fourth with a complete row of apical and discal bristles. Basal sternite bare. Suranal plate of ovipositer with thorns.

HOLOTYPE: Female, Cuernavaca, Mexico, 9800 feet elevation, August 15, 1943 (F. M. Snyder).

Mydaea compressicornis, new species

MALE: Length 6.0 mm. Head black, silvery gray pruinescent, the pruinescence on the frontal vitta more sparse. Palpi fulvous. Antennae fulvous brown, except at base of the third segment where it is more fulvous. Otherwise the head as in figures 2 and 4.

Thorax black, light bluish gray pruinescent; indistinctly quadrivittate and with a dark median vitta extending from disc of scutellum to opposite the second or third postsutural dorsocentral bristle. Acrostical setulae in about 14 irregular rows. Acrosticals 0:1; dorsocentrals 2:4; pra short, about one-fourth to one-third as long as the posterior notopleural bristle. Notopleura with a few setulae adjacent to the posterior bristle. Scutellar setulae descending to, but not below, level of marginal bristles. Sternopleurals 1:2; hypopleura with a few short setulae on the subtriangular portion above hind coxae.

Legs blackish brown, the knees fulvous and the tibiae, particularly on the basal half, more fulvous brown. Fore femora normal. Fore tibiae without median bristles. Mid femora with about four ventral bristles on basal half between which are interspersed finer setulae, the apical bristles on the anterior surfaces scarcely developed. Mid tibiae with two median posterior bristles. Hind femora with a row of anteroventral bristles; those at base shorter and more slender than the apical ones; with a row of posteroventral bristles on basal half. Hind tibiae with two median anterodorsal and one anteroventral bristles.

Wings hyaline; costal thorns and setulae minute. Third and fourth wing veins slightly divergent apically. Posterior cross vein nearly straight. Calyptrae white, halteres yellow.

Abdomen black, bluish gray pruinescent with dorsal and lateral checkerings. Tergites bristled as in *cresa.* Basal sternite bare, others except fifth with a pair of apical bristles.

FEMALE: Length 6 mm. Similar to the male. Head as in figure 5. Legs darker. Pulvilli and claws smaller. Apex of

fourth visible abdominal tergite fulvous. Tergal bristles shorter and more slender.

TYPE MATERIAL: Holotype, male; allotype, female; paratype, one female; all from Medellín, Colombia, 4500 feet elevation, September 5, 1943 (F. M. Snyder).

Mydaea caras, new species

MALE: Length 5 mm. This species is so very similar to *compressicornis*, new species, that it may be distinguished from it only by the shape of the head, as illustrated in figures 1 and 3. *Caras* is slightly smaller, and the antennae are darker.

TYPE MATERIAL: Holotype, male, Caracas, Venezuela, September 25, 1943 (F. M. Snyder); paratype, one male, same data as holotype.

Mydaea plaumanni Snyder

Mydaea plaumanni SNYDER, 1941, Amer. Mus. Novitates, no. 1134, p. 3.

Descriptive notes of the male of this species are presented, since the original description was based upon a female.

MALE: Length 6.5 mm. Similar to the female, differs from it in the following respects: Front at narrowest part between eight- and nine-tenths of head width; the frontal vitta at this point as wide as each parafrontal. The stronger parafrontal bristles extend to the narrowest part of front and with one to three short setulae extending to anterior ocellus. Ocellar bristles stronger than the most robust parafrontal bristles.

The leg bristles are somewhat stronger and those of the femora are less hair-like.

Additional material seen from Villarica, Paraguay, July, 1937 (F. Schade), and Cuernavaca, Mexico, 5000 feet, August 15, 1943 (F. M. Snyder).

The metasternal hairs are absent in the above specimens. The species appears to be most closely related to *compressicornis*, new species, and may be distinguished from it by the infuscated base of palpi and the stronger ventral bristles on the mid femora in addition to the characters mentioned in the key.

Mydaea meridia Snyder

Mydaea meridia SNYDER, 1941, Amer. Mus. Novitates, no. 1134, p. 3.

A single teneral male specimen which is tentatively identified as this species agrees with the female except as follows: The

front is quite broad but bristled as in the female. Antennae entirely fulvous. The thorax is less distinctly vittate, and the humeri are concolorous with the disc.

Fore tibiae with a single median posterior bristle. Abdomen with the first, second, and the lateral basal areas of the third visible tergites yellow, rest of tergites infuscated except for a narrow, brown, apical band on the first tergite and a broader one on second tergite which, at the mid-line, joins a broad triangular central spot which extends anteriorly almost the entire length of the tergite.

SPECIMENS EXAMINED: One male, Mexico City, Mexico, 9000 feet, August 15, 1943 (F. M. Snyder).

Helina arroya, new species

MALE: Length 7.5 mm. Head black, silvery gray pruinescent except for a velvety black frontal vitta. Narrowest part of front one-ninth of head width, or as wide as distance across posterior ocelli inclusive. At the same level, the parafrontals slightly narrower than diameter of anterior ocellus, and the frontal vitta two and one-half times as wide as parafrontal. The parafrontals with a row of moderately long and well-developed inwardly directed bristles which extend to the narrowest part of front. Ocellar bristles strong, slightly more well developed than the anterior parafrontal bristles. Ocellar setulae half as long and strong as ocellar bristles. Juncture of parafacials and parafrontals twice as long as width of third antennal segment, the parafacials scarcely narrowed below. Cheeks three times as high as width of third antennal segment and with one or two short, forwardly and upwardly directed setulae in the middle of the row of bristles along their lower margin. Bristles adjacent vibrissae numerous and well developed. Palpi and antennae black. Third antennal segment twice as long as second. Aristal hairs two-thirds as long as width of third antennal segment and about twice as long as greatest aristal diameter. Antennae inserted opposite middle of eyes and extending to below their lower margin. Eyes bare.

Thorax black, grayish pruinescent except on posterior portion of dorsum and on scutellum where it is brownish; distinctly quadrivittate, the thoracic bristles and clothing setulae long and slender. Acrostical setulae in three or four irregular rows. Acrosticals 0:1; dorsocentrals 2:3, with one or two long setulae interspersed between the postsutural ones; pra absent, no

setulae adjacent either notopleural bristle. Sternopleurals 2:2. Hypopleura and prosternum bare; scutellum with setulae extending only to the level of marginals.

Legs black, articulation of tibiae and femora and a variable apical portion of hind tibiae reddish brown. Fore femora normal. Fore tibiae with a median posterior bristle. Mid femora with three or four long ventral bristles on basal half and a row of shorter anterior ones; apical bristles absent on anterior surfaces. Mid tibiae with two or three median posterior bristles. Hind femora with a complete row of strong, anteroventral bristles. Hind tibiae with three anterodorsal bristles, two strong ones at the middle and a weaker one on basal third; two median anteroventral bristles and a weak but distinct posterodorsal one on basal one-third and with five to seven median posterior setulae. Fore tarsus long and slender. Pulvilli and claws on all legs well developed.

Wings fulvous hyaline at base and along the longitudinal veins, but nowhere infuscated. Costal thorn and setulae scarcely developed. Third and fourth veins slightly divergent apically; posterior cross vein scarcely curved. Veins bare. Calyptrae yellowish white. Halteres fulvous.

Abdomen slightly elongated, black, yellowish gray pruinescent, with a pair of round brownish spots on second visible segment and a pair of smaller subconfluent ones on first segment. Clothing setulae on all segments long. Basal sternite with a few setulae. Others longer than broad and with long setulae. Fifth sternite deeply cleft, without distinctive armature.

FEMALE: Length 6.5 mm. Pruinescence of head more yellowish gray than in the male. Front at vertex three-sevenths of head width, widened to one-half anteriorly. The parafrontal bristles extending the entire length of front, the posterior two pairs outwardly directed. The ocellar setulae are short, but the inner and outer verticals are as well developed as the ocellar bristles. Bristles adjacent vibrissae sparse and less well developed than in the male.

Thorax with the vittae distinctly brownish and with a median vitta extending from scutellum to opposite level of anterior intra-alar bristle. Bristled as in the male, but clothing setulae very short.

Legs black, the lighter colored area near articulation of femora and tibiae more extensive ventrally; all tibiae light reddish

brown on apical portions. Bristled as in male but the bristles shorter and the hind tibiae have two or three posterodorsal bristles and are without posterior setulae.

Costal thorns well developed. Otherwise wings as in the male.

Abdomen with paired brown central spots on second and third visible segments and with a median dorsocentral vitta on second, third, and fourth segments. The larger bristles inserted in round brown spots. The bristles and clothing setulae much shorter than in the male.

TYPE MATERIAL: Holotype, male; allotype, female; paratypes, six males and two females; all Mexico City, Mexico, 9000 feet, August 15, 1943 (F. M. Snyder).

The above description is based upon the holotype and allotype. The paratypes exhibit all of the essential characters; however, there is a variation in the extent of the light color of the hind tibiae and towards apex of the mid tibiae in the males. Some of the interspersed setulae in the dorsocentral rows are so bristle-like in certain specimens that the dorsocentrals might be considered to be 2:4 or 2:5.

The males will key out best to *lasiosterna* Snyder in the previously presented key to Neotropical *Helina* (Snyder, 1941, p. 5) and may be separated from that species by the shape of abdominal sternites and entirely darkened tarsi. If the dorsocentrals are assumed to be 2:4, the male runs to couplet 14 or *copiosa* Van der Wulp. It may be separated from those species in couplet 14 by the lack of presutural acrostical bristles and may be separated from *copiosa* by not having infuscated cross veins. The female will run out to the sixth couplet and may be separated from *copiosa* by the absence of the pra and from *caneo* Snyder by the more extensively infuscated femora and the absence of dorsal spots on first abdominal tergite.

Helina copiosa (Van der Wulp)

This species was included by error in that portion of a key to *Helina* (Snyder, 1941, p. 6) containing species with three postsutural dorsocentral bristles. The species should be considered to have four pairs of postsutural dorsocentral bristles. It will then run to couplet 22 and may be separated from *bifimbriata* Malloch by the absence of long, fine, posteroventral bristles on the hind femora.

AIRALIPS, NEW GENUS

Related to the *Helina lucorum* group, *Mulfordia* Malloch, and *Ariciella* Malloch.

This genus is separated from its relatives by the presence of fine hairs on the dorsal portion of the pteropleura, slender black setulae along the posterior margin of the metathoracic spiracle among the flap-like covering of hairs, setulae on the ventral surface of the third wing vein beyond the node, and hairs on the hypopleura below the spiracle.

It may be separated from *Mulfordia* by the absence of hairs on the dorsal apical margins of the hind coxae and by having the fourth wing vein not curved forward at apex. It differs from *Ariciella* by lacking the bristle-like setulae on the hypopleura in front of the spiracle and by the absence of setulae on the postalar declivity.

GENOTYPE: *Spilagaster plumata* (Stein).

KEY TO SPECIES

1. Scutellar setulae descending onto ventral surface of scutellum; with two equally long and strong stigmatal bristles.....2
   Scutellar setulae not invading ventral surface of scutellum; with a single stigmatal bristle on each side or with a strong and a very much weaker one.....3
2. Antennae, palpi, and a portion of scutellum fulvous.....*plumata* (Stein)
   Antennae, palpi, and entire scutellum infuscated.....*caerulea*, new species
3. Dorsocentrals 2:3.....*fuscomarginata*, new species
   Dorsocentrals 1:3.....*differentia*, new species

Airalips plumata (Stein)

Spilogaster plumata STEIN, 1904, Ann. Hist. Nat. Mus. Natl. Hungarici, vol. 2, p. 446; SNYDER, 1940, Amer. Mus. Novitates, no. 1060, p. 9.

Front of male at narrowest part one and one-half times as wide as distance across posterior ocelli inclusive. Parafrontals contiguous for about one-third of their length, silvery gray pruinescent and with three to five pairs of bristles which extend posteriorly only to the point where parafrontals become contiguous. Anterior ocellar bristles three-fourths as long as vibrissae. Eyes less hairy than in the female.

Humeri and scutellum slightly fulvous. Dorsocentrals 2:3; intra-alars 2; pra short but distinct in female, usually absent in male; humerals 2; a few hairs on notopleura adjacent to the anterior bristle; mesopleura with a bristle below the anterior

notopleural bristle; stigmatals strongly duplicated; scutellar setulae descending onto ventral surface. Posterolateral angles of prosternum, hypopleura below spiracle, pteropleura below base of calyptrae, and the area of the metapleura below the insertion of lower calyptrae with fine hairs or setulae.

Fore tibiae with a short, median, anterodorsal bristle which is usually stronger in the females. Mid femora with two to four anteroventral bristles on basal half, a row of short, anterior setulae on basal half and with an apical anterodorsal, dorsal, posterodorsal, and posterior bristle, the latter longest and strongest. Hind femora with two to five anteroventral bristles on apical one-third to one-half; males sometimes with a few very short median posterior setulae which are only slightly longer than the clothing setulae.

Apical abdominal tergite with a row of strong discal and apical bristles in males. Male hypopygium fulvous.

SPECIMENS EXAMINED: Ten males and 24 females, from Villarica, Paraguay, July, September, and December (F. Schade); Chapada, Brazil, November and December; Rio de Janeiro, Brazil, July; and Natal, Brazil, February and May (F. M. Snyder).

In all specimens except one male and one female from Villarica there are hairs on the prosternum and on the metapleura below the base of the lower calyptrae.

The specimens from Chapada and Rio de Janeiro, Brazil, are part of the S. W. Williston collection in the American Museum of Natural History.

Airalips differentia, new species

FEMALE: Length 7.0 mm. Head black with grayish pruinescence. Cheeks and frontal vitta more velvety and with reddish reflections. Front at vertex about one-fifth of greatest head width, widened to one-third anteriorly. Juncture of parafacials and parafrontals as long as width of third antennal segment, the parafacials reduced to a distance equal to greatest diameter of arista below. Cheeks one and one-half times as high as width of third antennal segment and with a row of three or four short, widely spaced bristles along ventral margin which are only one-third as long and strong as vibrissae. Parafrontals with a single pair of strong anterior, inwardly directed bristles which are as strong as the anterior ocellar bristles and the inner vertical

bristles, all of which are about as long as length of front. Outer verticals, postocellars, and two pairs of outwardly directed, posterior, parafrontal bristles short, only half as long as the front. Antennae brown, the root of third segment and arista slightly fulvous. Antennae inserted opposite middle of eyes. Third segment comparatively narrow, about three and one-half times as long as second. Longest hairs on arista about half as long as length of third antennal segment. Palpi slender, black, and with numerous fine bristles. Proboscis brownish, with grayish pruinescence. Eyes with short, widely scattered, fine hairs.

Thorax black, grayish blue pruinescent, and with four very narrow black vittae. With a very short pair of fine, prescutellar, acrostical, setulose bristles. Presutural acrostical setulae in 10 to 12 rows; dorsocentrals 2:3; intra-alars 2; humerals 1; pra one-half as long as the posterior notopleural bristle; notopleura with a few setulae adjacent to the anterior bristle. Sternopleurals 1:2; prosternum, and hypopleura below spiracle, with a few fine hairs. Scutellar setulae descending slightly below level of marginals but not onto ventral surface.

Legs orange brown, the tarsi almost black. Fore femora normal. Fore tibiae with a median anterodorsal bristle on basal one-third. Mid femora with a single short, ventral bristle on basal one-fourth, two or three scarcely differentiated anterior bristles at middle, and with a strong apical, anterodorsal, dorsal, posterodorsal, and posterior bristle, the latter strongest. Mid tibiae with two posterior bristles on basal one-half. Hind femora with a single strong, anteroventral bristle on apical one-fifth, other surfaces except anterodorsal without bristles. Hind tibiae with one median anterodorsal and two anteroventral bristles; the basal setulae of a series of short, scarcely discernible posterodorsal setulae on apical one-third slightly more developed, so there appears to be a very weak calcar which is not so long as diameter of tibiae where situated.

Wings hyaline, but slightly brownish yellow along costal margin and adjacent to the posterior cross vein. Costal thorns and setulae scarcely developed. Several setulae beyond node on ventral surface of third wing vein. Third and fourth wing veins divergent at apices. Posterior cross vein distinctly curved. Calyptrae white, with a narrow brown margin, halteres yellowish, the knobs dark brown.

Abdomen bluish black, bluish gray pruinescent. Apex of

fourth visible tergite slightly brownish, with an indistinct dorsocentral vitta along middle of abdominal tergites. First and second abdominal segments with one or two apical lateral bristles. Third with three or four apicals and fourth with two basals. Basal sternite bare, others with a few short apical bristles. Suranal plate without thorns.

HOLOTYPE: Female, Rio Charape, Peru, September 13 (C. H. T. Townsend), United States National Museum.

Airalips fuscomarginata, new species

FEMALE: Length 6.5 mm. Quite similar to *differentia,* the antennae darker and only the arista brownish. Juncture of parafacials and parafrontals about three-fourths as long as width of third antennal segment and the bristles along ventral margin of cheeks shorter, more numerous, and closely placed.

Dorsocentrals 2:3, the anterior presutural pair one-half as long as the stronger and more well-developed posterior presutural pair. With a single stigmatal bristle on each side.

Legs lighter, especially apical portion of femora. Mid femora with three or four ventral bristles on basal three-fourths, the basal two strongest and about as long as diameter of femora. No conspicuous weak posterodorsal setula on hind tibiae.

Wings entirely hyaline and posterior cross vein not so distinctly curved. Halteres darker and the dark margins of the calyptrae slightly more conspicuous.

Third abdominal tergite with a row of six apical bristles.

HOLOTYPE: Female, Cali District, western Cordillera, Colombia, January 26, 1935 (Severo Quintero).

Airalips caerulea, new species

FEMALE: Length 8.5 mm. Head black, silvery gray pruinescent, the frontal vitta dark, the frontal triangle narrowly extending to the base of the antennae. Front at vertex one-fourth of greatest head width, broadened to slightly more than one-third at widest part. Juncture of parafacials and parafrontals as long as width of third antennal segment, narrowed to about diameter of arista below. Cheeks one and one-half times as high as width of third antennal segment. With four pairs of parafrontal bristles, the posterior three pairs about one-third to one-half as strong as anterior pair, the anterior two pairs inwardly, the posterior two pairs outwardly, directed. Parafrontals with

numerous fine hairs between the bristles. The vibrissae, anterior parafrontal, anterior ocellar, and inner vertical bristles equally developed, the posterior three pairs of parafrontal bristles and outer verticals short, about one-half as long as the other bristles. Palpi black, longer than apical chitinized portion of proboscis, the latter equal in length to third antennal segment. Antennae inserted opposite center of eye, the base of third segment and arista obscurely brownish. Arista long plumose, the longest hairs about three times as long as width of third antennal segment, third antennal segment two and nine-tenths times as long as second. Eyes with a few scattered short hairs.

Thorax black, bluish gray pruinescent, with four very narrow shiny black vittae. Acrosticals 0:1; dorsocentrals 2:3; intra-alars 2; humerals 2; pra very short but distinct; notopleura with setulae at base of anterior bristle; two strong and one weak pair of scutellar bristles; scutellar setulae descending onto ventral surface; prosternum and propleura bare. Sternopleurals 1:2; pteropleura near base of wings and hypopleura below spiracle and above hind coxae with hairs. Stigmatal bristle strongly duplicated. With a short but distinct bristle on mesopleura opposite anterior notopleural bristle.

Legs fulvous, tarsi and streaks on coxae black. Fore and mid coxal bristles very long and strong. Fore femora normal. Fore tibiae with one median anterodorsal bristle. Mid femora with two ventral bristles on basal one-third, an apical anterior, dorsal, posterodorsal, and posterior bristle. Mid tibiae with two strong and one weak posterior bristles. Hind femora with a single strong, subapical, anteroventral bristle. Hind tibiae with one median anterodorsal and two anteroventral bristles.

Wings hyaline, costal thorns and setulae weak; third and fourth veins divergent apically; third vein with two or more setulae on ventral surface beyond the node. Posterior cross vein slightly curved. Calyptrae hyaline, margins slightly yellow; halteres brownish orange.

Abdomen black, bluish gray pruinescent, with dorsal and lateral checkerings. First abdominal tergite with a single lateral discal and marginal bristle; second with a single lateral subapical; third with a row of apicals and fourth with a row of discals and a row of weaker apicals. Basal sternite bare; others with a single pair of strong apicals.

HOLOTYPE: Female, Caracas, Venezuela, 3000 feet, September 25, 1943 (F. M. Snyder).

PSEUDOPTILOLEPIS, NEW GENUS

This genus may be distinguished by the following combinations of characters: pteropleura, postalar declivity, hypopleura in front of spiracle, and lateral margins of posterior portion of prosternum setulose. Posterior thoracic spiracle with several strong setulae in lower margin in addition to the flap-like covering of hairs. Hind coxae with a row of short setulae along the dorsal apical margin (fig. 7). Stem vein with several long, fine setulae at base on dorsal and ventral surfaces and another group opposite humeral cross vein on ventral surface (fig. 6). Node and third vein setulose on both surfaces, those on dorsal surface extending to beyond anterior cross vein, and those on ventral surface extending only to the cross vein. Fourth wing vein, strongly curved forward, ending slightly behind wing tip; curvature of fourth vein evenly rounded. Lower calyptrae with fine, upstanding setulae on dorsal apical one-fourth to one-third of disc. The calcar is absent on the hind tibiae.

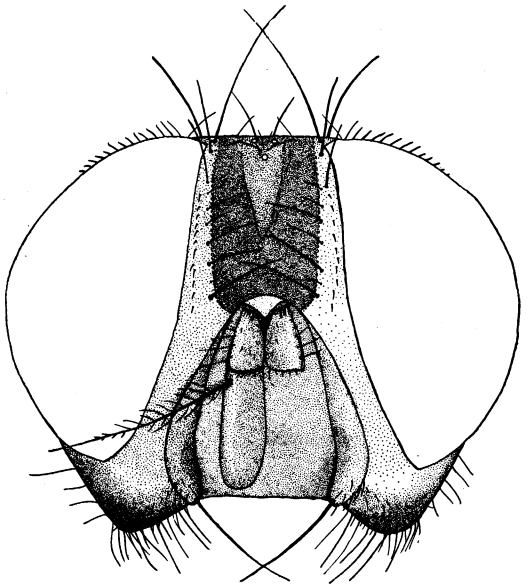
GENOTYPE: *Pseudoptilolepis fulvapoda*, new species.

The most distinguishing features of this genus are the squamal and hind coxal hairs. It appears most closely allied to *Chaetogenia* Malloch (1929, p. 308) but may be distinguished from that genus by the absence of hairs on the fifth wing vein and by the presence of hairs on disc of lower calyptrae. **Ptilolepis* Bezzi, the only other muscid genus known to me possessing the squamal setulae, is a true member of the Muscinae and is readily separated from the present genus by the truncate lower calyptrae and angular bend of the fourth wing vein.

Mydaea latipalpis Stein (1918, p. 216) may belong to this genus, but an examination of the type should be made before including it. It may be distinguished from the three species included by the four pairs of postsutural dorsocentral bristles.

KEY TO SPECIES

1. Propleura with fine yellow hairs in center.....*fulvapoda*, new species
   Propleura entirely bare.....2
2. Hind femora at least, and margins of lower calyptrae infuscated.....
   .....*nigripoda*, new species
   All femora and margins of lower calyptrae not infuscated.....3
3. Apical anterodorsal and apical dorsal bristle on fore tibiae subequal, as long as diameter of tibiae.....*nudapleura*, new species
   Apical anterodorsal bristle absent or, if setulose, not so long as the dorsal bristle or diameter of tibiae.....*confusa*, new species



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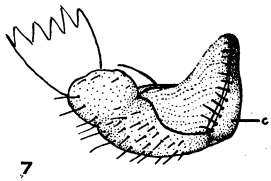

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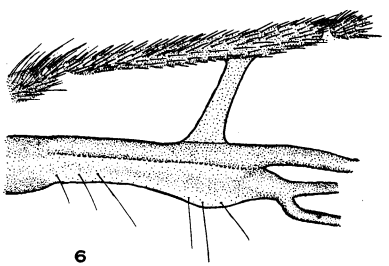

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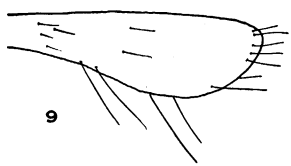

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FIG. 5. *Mydaea compressicornis*, new species, front view, head of female.
FIG. 6. *Pseudoptilolepis fulvapoda*, new species, ventral surface, stem vein.
FIG. 7. *Pseudoptilolepis nigripoda*, new species, left hind coxa (c) and trochanter.
FIG. 8. *Pseudoptilolepis fulvapoda*, new species, palpus of female.
FIG. 9. *Pseudoptilolepis nigripoda*, new species, palpus of female.

Pseudoptilolepis fulvapoda, new species

MALE: Length 5 to 7 mm. Head yellow, the dorsal half of occiput infuscated. Parafrontals linear, contiguous for almost their entire length so that the frontal vitta is reduced to a mere triangular spot above base of antennae. Parafrontals with a complete row of bristles, those on anterior half longer and stronger and directed inward or backward, while the posterior ones, except the last pair, are fine and directed forward; the posterior pair outwardly directed, strong, and about as long as the ocellar bristles. Eyes separated by a distance equal to the diameter of the anterior ocellus. Juncture of parafacials and parafrontals not protruding, scarcely as long as greatest diameter of arista, the parafacials slightly narrower below. Cheeks narrow, three-fourths as high as width of third antennal segment, and with a single upwardly directed black bristle in addition to the usual row on the ventral margin. Facial ridges with short, fine, pale setulae which extend upward to opposite the middle of third antennal segment. Antennae yellow; third segment three times as long as second. Longest aristal hairs slightly longer than the greatest width of third antennal segment. Beard yellow, other setulae and hairs on head black. Palpi yellow, not conspicuously dilated (fig. 8). Eyes bare.

Thorax yellow, with an obscurely brownish pair of presutural vittae, which extend posteriorly to about middle of postsutural disc. With distinct gray pruinosity on the presutural portion between the vittae; less distinctly pruinose laterally. Acrosticals 0:1; the presutural acrostical setulae in about 10 irregular rows and with two or three presutural setulae slightly more well developed than the others. Dorsocentrals 2:3; intra-alars 1; pra short but distinct, about one-half as long as the posterior notopleural bristle; notopleura not setulose. Scutellum with a pair of strong basal and apical bristles, and a weaker pair of subbasal and subapical ones. Scutellar setulae descending onto ventral surface. Sternopleurals 1:2; a single strong stigmatal bristle on each side; mesopleura with a weak but distinct bristle opposite anterior notopleural bristle.

Legs entirely yellow. Fore femora normal. Fore tibiae with a median posterior to posteroventral bristle. Fore metatarsus with a clump of short, basal, ventral setulae from which apparently arises a single long, fine, black hair and with a pair of similar long, fine, apical ventral hairs on it and other tarsal seg-

ments. Pulvilli and claws short. Mid femora with a row of fine ventral setulae on basal half and with one or two apical posterior and posterodorsal bristles. Mid tibiae with four or five posterior bristles and a single median posteroventral bristle. Hind femora with a complete row of fine, anteroventral and posteroventral bristles, the former longest apically and the latter longest basally. Hind tibiae with two median anterodorsal and anteroventral bristles, the apical anteroventral thorn-like bristle slightly curved.

Wings brownish hyaline; the anterior cross vein only with a very narrow, scarcely distinguishable, infuscated cloud. Calyptrae brownish hyaline, margins of both upper and lower ones distinctly darker, the marginal hairs pale, those on disc black. Halteres yellow.

Abdomen brownish yellow, the apical two segments bluish black, which are concolorous with an indistinct, median, darkened spot on the second visible tergite. Second and third tergites with distinct lateral apical bristles and the fourth with a complete row of discals and apicals. Basal sternite hairy. Fifth sternite with the cleft moderately excavated. Hypopygium black.

FEMALE: Length 6 mm. Similar to the male, differing in having the head at vertex slightly less than three-tenths of head width, parallel sided to base of antennae. Parafrontals with a pair of strong, subapical, and median bristles and with several less well-developed ones between; with a pair of short, outwardly directed, posterior, parafrontal bristles opposite ocellar triangle, and with several small setulae opposite the row of parafrontal bristles.

Hind femora without strong posteroventral bristles. The fifth abdominal segment without the row of strong apical bristles.

TYPE MATERIAL: Holotype, male, Nova Teutonia, Brazil, latitude 27° 11′ S., longitude 52° 23′ W., May 23, 1939 (Fritz Plaumann); allotype, female, topotypical, June 13, 1939; paratype, one male, topotypical, June 14, 1939.

Pseudoptilolepis nigripoda, new species

FEMALE: Length 5.5 mm. Head fulvous, dorsal half of occiput and ocellar triangle dark. Parafacials and parafrontals with sparse, silvery gray pruinescence. Front parallel sided at

vertex, one-fourth of greatest head width. With a complete row of parafrontal bristles, the apical ones strongest and inwardly directed; posterior two pairs outwardly directed. Inner and outer vertical bristles well developed, subequal to the strong ocellars. Postocellars weak, one-half as long as ocellars. With a row of weak setulae laterad to the parafrontal bristles. Juncture of parafacials and parafrontals about three-fourths as long as width of third antennal segment; parafrontals scarcely distinguishable below. Cheeks about three-fourths as high as width of third antennal segment and with two upwardly directed black bristles in addition to the usual ventral row. Antennae yellow, inserted opposite middle of eyes. Third segment two times as long as second. Longest aristal hairs as long as width of third antennal segment. Palpi fulvous, broadly dilated (fig. 9). Eyes bare.

Thorax shiny bluish black, the humeral, postalar, and apical areas of scutellum fulvous. The darkened areas with whitish pruinescence. Bristled as in *fulvapoda* except none of the presutural acrostical setulae are well developed. Propleura bare.

Fore legs fulvous, mid and hind legs dark brown; all tarsi dark fulvous. Legs bristled as in *fulvapoda.*

Wings as in *fulvapoda.* The margins of both calyptrae dark brown, strongly differentiated from the lighter colored disc.

Abdomen bluish black, the basal segment, and a basal lateral area of second, yellow. Basal segment with a darkened apical margin. Fifth segment with a row of strong discal and a row of shorter apical bristles.

MALE: Length 6 mm. Similar to the female, differs in having the front linear, for most of its length no wider than diameter of anterior ocellus, the frontal vitta obscured except at base of antennae. With a complete row of parafrontal setulae, as in *fulvapoda.* Palpi not broadened at all, parallel sided.

Thorax and legs bristled as in *fulvapoda,* except the posteroventral bristles on hind femora shorter and finer.

Abdomen with all segments yellowish at base and with a dark, apical, transverse band.

TYPE MATERIAL: Holotype, female, Balboa, Panama Canal Zone, June 12, 1943 (F. M. Snyder); allotype, male, Barro Colorado Island, Canal Zone, October, 1942 (J. Zetek); United States National Museum. Additional localities, Blue Fields, Nicaragua, and El Ceremo, Panama, in fruit-fly traps.

Pseudoptilolepis nudapleura, new species

FEMALE: Length 6.5 mm. Very similar in structure to *nigripoda*. Head color more yellowish and the front slightly widened anteriorly. Cheeks with a single upwardly directed bristle. Palpi not quite so broadly dilated (fig. 10).

Thorax fulvous, with a narrow castaneous central stripe and with sparse, silvery gray pruinescence. Bristled as in *fulvapoda*, but, like *nigripoda*, it has no well-developed, presutural, acrostical, bristle-like setulae, and the propleura is bare.

Legs entirely fulvous. Bristled as in *fulvapoda*, except the hind femora has two or three moderately long, median, posteroventral bristles, and the apical anterodorsal and dorsal bristles on fore tibiae are subequal, longer than diameter of tibiae where situated.

Abdomen as in *nigripoda*.

HOLOTYPE: Female, Villarica, Paraguay, August, 1937 (F. Shade).

Pseudoptilolepis confusa, new species

FEMALE: Length 5.5 mm. Head yellow, ocellar triangle and upper half of occiput except area from neck to outer verticals dark brown. Front at vertex one-fourth of head width, only slightly widened anteriorly, otherwise as in *fulvapoda*. Palpi slightly broadened (fig. 11).

Thorax fulvous, with a rather conspicuous white pruinescent presutural spot in acrostical area. Bristled as in *fulvapoda*, except propleura is bare in center.

Wings hyaline, calyptrae white; halteres fulvous yellow.

Legs entirely fulvous, bristled as in *fulvapoda*, except metatarsal hair shorter and less distinct; posteroventral setulae on hind femora very short, scarcely developed. Hind tibiae with two anterodorsal and one or two anteroventral bristles.

Abdomen fulvous brown, with a transverse black apical band which is medianly dilated on second and third tergites. A strong row of discal bristles on apical tergite; basal sternite bare.

MALE: Length 6 mm. Head yellow, silvery pruinescent, only upper half of back of head brown. Front at narrowest part as wide as distance across posterior ocelli inclusive. Parafrontals contiguous along one-third their length. Parafrontal setulae anterior to posterior pair much reduced.

Thorax yellow with dense, silvery white pruinescence; presutural spot of female absent in the male. Bristled as in *fulvapoda*, but pra absent.

Legs as in *fulvapoda* male except bristles at middle of posteroventral surface of hind tibiae longest.

Wings hyaline; calyptrae yellowish white; halteres yellow.

Abdomen yellow, with an apical brown band on first to third tergites. That on first narrowest, that on third broadest, and with a trace of a very narrow median vitta.

TYPE MATERIAL: Holotype, female, and allotype, male, Quebrada, Secca, Venezuela, in United States National Museum.

ORAMYDAEA, NEW GENUS

Proboscis with mentum lanceolate, without labellae (fig. 12). Face strongly concave, facial ridges prominent, with several rows of short bristles. Arista plumose. Propleura, pteropleura, and prosternum bare; hypopleura with one or two setulae above hind coxae. Fourth wing vein slightly curved forward apically. Node with a single strong bristle on dorsal and ventral surface. Hind tibiae without calcar.

The deeply dished face, long third antennal segment, and hairy facial ridges are very similar to the Neotropical *Chadrella macrosoma* Van der Wulp. However, the peculiar mouth parts and non-truncate lower calyptrae will readily separate the two. It appears to be most closely allied to the Mydaeini and not the Stomoxydinae despite the peculiar mouth parts.

GENOTYPE: *Oramydaea latifrons*, new species.

Oramydaea latifrons, new species

MALE: Length 5.5 mm. Head black, silvery gray pruinescent, when viewed from behind the front velvety black; viewed from in front, with a grayish frontal triangle reaching to base of antennae. Eyes bare. Shaped and bristled as in figures 13 and 14.

Thorax black, grayish pruinescent, without vittae; scutellum with a subtrianglar, grayish pruinescent area at lateral angle so that the median portion of scutellar disc appears black. Pleura very sparsely pruinescent, viewed from behind appearing almost shiny. Acrosticals 0:1, very weak; dorsocentrals 2:4, the anterior postsutural pairs shorter; intra-alars 2; pra not differentiated. Scutellar setulae not descending below level of marginals, without setulae adjacent to the notopleural bristles.

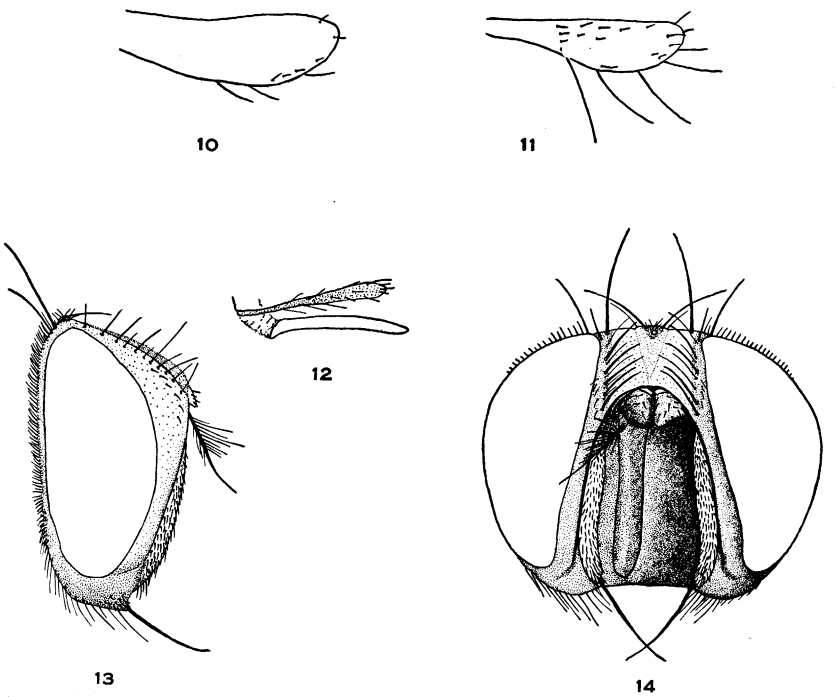

FIG. 10. *Pseudoptilolepis nudapleura*, new species, palpus of female.
FIG. 11. *Pseudoptilolepis confusa*, new species, palpus of female.
FIG. 12. *Oramydaea latifrons*, new species, lateral view, proboscis of male.
FIG. 13. *Oramydaea latifrons*, new species, lateral view, head of male.
FIG. 14. *Oramydaea latifrons*, new species, front view, head of male.

Sternopleurals 1:2. Posterior spiracle very small, round; both spiracles with brownish black flaps and without setulae in flap-like covering of hairs.

Legs entirely black. Fore femora normal. Fore tibiae without median bristles. Mid femora with two median anterior, two or three ventral bristles on basal half and an apical posterodorsal and two apical posterior bristles. Mid tibiae with two median posterior bristles. Hind femora with three widely spaced anteroventral, and two posterodorsal, bristles on median one-third. Hind tibiae with three submedian anterodorsal and anteroventral bristles. Pulvilli and tarsal claws well developed.

Wings hyaline, slightly yellowish towards base. Costal thorn and setulae scarcely developed. Subcosta abruptly and strongly

curved forward apically. Posterior cross vein strongly curved. Penultimate section of fourth vein five-ninths as long as ultimate. Fourth vein gently curved forward ending well behind wing tip. Calyptrae white, lower one not truncate, extending well beyond margin of upper. Halteres fulvous.

Abdomen black, bluish gray pruinescent. All tergites with a median black spot. Second tergite with a single lateral bristle; third with a row of eight apicals; fourth with six lateral discals and a row of apicals. Basal sternite with one or two setulae; others longer than broad, with a pair of well-developed apicals; fifth distinctly cleft, without distinctive armature.

HOLOTYPE: Male, Accra, Gold Coast, August 3, 1942 (F. M. Snyder).

DASYMORELLIA MALLOCH

Trichomorellia STEIN, 1919, Arch. Naturgesch., sect. A, vol. 83, p. 109.
Dasymorellia MALLOCH, 1923, Ann. Mag. Nat. Hist., ser. 9, vol. 12, p. 526.
Chlorellia SHANNON AND DEL PONTE, 1926, Rev. Inst. Bact., Buenos Aires, vol. 4, p. 567; 1928, *ibid.*, vol. 6, p. 142.

As noted by Shannon and Del Ponte, this genus belongs to the Phaoniinae because of the non-truncate lower calyptrae. It appears closely allied to the African *Pyrellina* Malloch, but is separated from that genus by the bare prosternum and absence of hypopleural hairs below the spiracle.

KEY TO NEOTROPICAL *Dasymorellia*

1. All femora entirely black; at least the lower calyptrae infuscated along the margin 2
   All femora partly fulvous; margins of calyptrae not infuscated ..... *fulvitibia*, new species
2. Halteres pale; first wing vein setulose; abdomen not bluish; eyes bare; presutural acrosticals not strong ..... *nigritibia*, new species
   Halteres black; first wing vein bare; abdomen iridescent blue; eyes with distinct hairs; presutural acrosticals strong ..... *trichops* Malloch

Dasymorellia fulvitibia, new species

FEMALE: Length 7.5 mm. Head entirely black, grayish pruinescent, three-fifths as long as high. Front at vertex three-tenths of head width, slightly widened opposite the anterior, forwardly directed orbital bristle, then narrowed to width at vertex at base of antennae. Parafrontals as wide as distance across posterior ocelli inclusive. Juncture of parafacials and parafrontals three-fourths as long as width of third antennal

segment; the parafacials narrowed to half this length below. Cheeks one and three-fourths times as high as width of third antennal segment. With 10 to 12 pairs of inwardly directed parafrontal bristles which extend from base of antennae to anterior ocellus, the posterior two are outwardly directed; with one very strong and one or two weaker forwardly directed bristles at dorsal third laterad to the cruciate row of parafrontals. Inner verticals strong, equal in strength to the strong, forwardly directed orbital bristle; outer verticals weaker, equal in strength to the anterior ocellars; posterior ocellars scarcely developed. Facial ridges with distinct setulae reaching to about opposite middle of third antennal segment. Antennae black; third segment two and one-fifth times as long as second. Antennae inserted opposite the middle of eyes and extending to almost opposite the lower level of eyes. Longest aristal hairs half as long as length of third antennal segment. Palpi black; proboscis grayish pruinescent. Eyes bare.

Thorax black in ground color, densely whitish gray pruinescent, and with four very narrow black vittae, the space between the median dorsocentral vittae with a dense white pruinescent spot and with a grayish spot at lateral margins of scutellum. Acrosticals 0:2, acrostical setulae in 10 to 14 irregular rows; dorsocentrals 2:4; intra-alars 2; pra strong, as long as posterior notopleural bristle; notopleura with numerous hairs adjacent to both the notopleural bristles. Scutellar setulae descending below level of marginals and invading ventral surface at base. Sternopleurals 1:2; propleura bare; pteropleura setulose; hypopleura bare in front of spiracle, bare below spiracle but with hairs above hind coxae; postalar declivity bare; infra-alar bulla bare; supraspiracular convexity with very short, black pile; posterior thoracic spiracle with numerous setulae among the black, flap-like covering of hairs along the posterior margin; prosternum bare.

Coxae, trochanters, tarsi, basal half of tibiae, and apical third of mid and hind femora, and an anterodorsal cloud on fore femora black, rest of legs fulvous. Fore femora normal. Fore tibiae with a row of very short anterodorsal setulae. Mid femora with two strong ventral bristles on basal half and with an apical anterodorsal and two posterior bristles; on apical third of posterior surface is a row of short, bristle-like setulae. Mid tibiae with four weak posterodorsal and three stronger posterior

bristles. Hind femora with a row of strong anteroventral bristles on apical half and with several weaker ones on basal half; with a single, median, posteroventral bristle. Hind tibiae with two median anterodorsal and three to four anteroventral bristles, with a weak posterodorsal bristle near base on posteroventral surface in addition to calcar.

Wings hyaline; costal setulae and thorns undeveloped. Fourth vein strongly curved forward, ending at about the tip of wing. Posterior cross vein slightly curved. First vein hairy dorsally from beyond humeral cross vein to its apex and third vein hairy on both surfaces from node to apex. Calyptrae yellowish brown hyaline; halteres pale.

Abdomen bluish black, grayish pruinescent, with a narrow median dorsocentral vitta and with dorsal and lateral checkerings. Second and third visible tergites with two or three strong lateral apical bristles on each side and a complete row of discals and apicals on last tergite. Basal sternite setulose, others almost as broad as long and with a pair of strong apicals.

TYPE MATERIAL: Female, Guatemala City, Guatemala, 5000 feet elevation, August 20, 1943 (F. M. Snyder); paratype, one female, Cuernavaca, Mexico, 5000 feet elevation, August 15, 1943 (F. M. Snyder).

There are some slightly more well-developed presutural acrostical setulae which might almost be considered as acrostical bristles.

Dasymorellia nigritibia, new species

FEMALE: Length 8 mm. Similar to *fulvitibia*, differing in having the front not so distinctly widened at dorsal third. Cheeks slightly reddish black. Legs entirely black, only the articulation of tibiae and femora brownish. Hind femora with three or four apical anteroventral bristles and two median posteroventral bristles. Hind tibiae with two or three anterodorsal and three anteroventral bristles. Calyptrae margined with deep brown. Abdominal sternites distinctly longer than broad.

HOLOTYPE: Female, Medillín, Colombia, 4500 feet elevation, September 5, 1943 (F. M. Snyder).

Dasymorellia trichops Malloch

Trichomorellia cyanea STEIN (*nec* Macquart), 1918, Ann. Hist. Nat. Mus. Natl. Hungarici, vol. 16, p. 204; 1919, Arch. Naturgesch., sect. A, vol. 83, p. 109.

Dasymorellia trichops MALLOCH, 1923, Ann. Mag. Nat. Nist., ser. 9, vol. 12, p. 526.

Chlorellia aenula SHANNON AND DEL PONTE, 1926, Rev. Inst. Bact., Buenos Aires, vol. 4, pp. 567, 580; 1928, *ibid.*, vol. 6, p. 142.

This species is known from Argentina, Brazil, Peru, and Bolivia. There are several additional males and females before me from Baños, Ecuador, 1850 meters, December 26, 1938, and March 11, 1939 (F. M. Brown), and Medillín, Columbia, 4500 feet, September 6, 1943 (F. M. Snyder).

The true *cyanea* Macquart belongs to *Myospila*.

Unless otherwise stated, all holotypes recorded in this paper are, or will be, deposited in the American Museum of Natural History.

REFERENCES

MALLOCH, JOHN R.

1929. Exotic Muscaridae (Diptera). Ann. Mag. Nat. Hist., ser. 10, vol. 2, pp. 308–319.

SNYDER, FRED M.

1941. Contribution to a revision of Neotropical Mydaeini (Diptera: Muscidae). Amer. Mus. Novitates, no. 1134, 22 pp.

STEIN, PAUL

1918. Zur Weitern Kenntnis Aussereuropaeischer Anthomyiden. Ann. Hist. Nat. Mus. Natl. Hungarici, vol. 16, pp. 147–244.