DESCRIPTIONS OF SOME NEW MOSQUITOES FROM TROPICAL AMERICA.

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The following new species have been recognized among the material collected for study in the preparation of the forthcoming monograph of Culicida by Dr. L. O. Howard and the present authors.

ANOPHELES CRUZII, new name.

We propose this name to replace Myzomyia Intzii Theobald, which is preoccupied by Myzorhynchella Intzii Cruz, since we do not recognize either Myzomyia or Myzorhynchella as distinct from Anopheles. We note further the existence of Manguinhosia Intzi Peryassú, which will also require a new name, if it prove, as we now suppose, that the new genus Manguinhosia is not separable from Anopheles.

It gives us much pleasure to dedicate this interesting species to Dr. Oswaldo Cruz, the well-known hygienist and bacteriologist of Rio de Janeiro.

The larva has been discovered by Mr. A. H. Jennings in the Panama Canal Zone, living in the water between the leaves of bromeliaceous plants, which appears to be its only habitat.

AËDES EPACTIUS, new species.

Female.—Proboscis long and slender, black; palpi entirely black-scaled; vertex of the head anteriorly with broad whitish scales, posteriorly with darker scales; thorax deep brown-scaled, with slight bronzy luster and with whitish markings; these markings consist of two very broad outcurved bands on the anterior half of the mesonotum, which become approximated and narrowed at the middle, and run parallel with each other to the scutellum; the sides of the meso-

^a Os Culicideos do Brazil, Trabalho do Instituto de Manguinhos, 1908, p. 112.

 $[^]b$ We would suggest the name $Anopheles\ peryassui$ as a substitute, in honor of the author of the paper here cited.

notum and the hind margin of the scutellum are whitish-scaled; pleura with patches of white scales; abdomen black-scaled above, with rather narrow white basal bands, black and white-banded beneath; the wing-veins are clothed with long and narrow dusky scales; legs black, the knees white, involving both ends of the joints; the front legs with base and apex of the first tarsal joint and the base of the second white-ringed; middle legs with the base and apex of the first tarsal joint narrowly white-ringed, base and apex of the second joint still more narrowly so, the base of the third joint narrowly ringed; hind legs with the last tarsal joint entirely white, the remaining ones broadly white-ringed at base and apex; front and middle tarsal claws toothed, the hind ones simple. Length, 4 mm.

In the male the palpi are long, but do not attain the apex of the proboscis by about one-fourth its length, sparsely hairy, black-scaled without annulations; the head is densely whitish-scaled; the mesothoracic markings are similar to those of the female, but the white scaling is heavier; the antescutellar bare space is surrounded by white scales, which are poorly indicated in the female; abdomen black-scaled above, with basal white bands, black and white-banded beneath. Length, 4 mm.

Ten specimens from Córdoba, Mexico, and Almoloya, in the State of Oaxaca, Mexico, bred from larvæ in holes or hollows in bowlders in stream beds. (F. Knab.)

Type.—Cat. No. 11963, U.S.N.M. .

This species is closely related to Aëdes atropalous Coquillett, but differs in the coloration of the thoracic markings.

AËDES CUNEATUS, new species.

Female.—Proboscis rather long, black-scaled; palpi entirely black-scaled; occiput pale yellowish-scaled, with a brown spot at each side; mesonotum deep brown-scaled, with slight luster, and with two narrow pale yellowish subdorsal stripes; these stripes are thickened along the median portion and become much narrowed on the posterior third, reaching the scutellum outwardly of the antescutellar bare space; they have a more or less distinct brassy luster; there are a few of these yellowish scales along the sides of the antescutellar bare space and the mid-lobe of the scutellum is clothed with similar scales; abdomen black-scaled above, without bronzy luster, with cream-white lateral basal segmental triangular patches; beneath cream-white scaled, with apical black segmental bands; wings with dark narrow scales along the veins; legs black-scaled, with bronzy luster; femora ventrally and basally white; tibiae of all the legs whitish-scaled on the inner side; tarsi not ringed; claws all toothed. Length, 4.5 mm.

In the male the palpi somewhat exceed the proboscis, black-scaled, with bluish luster, the terminal segments clothed with numerous long hairs; head densely yellowish scaled on the occiput, with a silvery luster; the yellowish thoracic stripes are much more diffuse behind the middle than in the female; the stripes become greatly expanded on the sides and they also coalesce more or less with the yellowish scaling around the antescutellar bare space; the abdomen is black-scaled above, the second segment with pale basal band, the succeeding segments with lateral basal triangular segmental white patches; the under surface white-scaled, with narrow apical black bands on the segments. Length, 5.5 mm.

Thirty-five specimens from Córdoba, Mexico, bred from larvæ in temporary puddles. (F. Knab.)

Type.—Cat. No. 11964, U.S.N.M.

AEDES ARGENTESCENS, new species.

Female.—Proboscis long and slender, black-scaled; palpi black-scaled; head with the occiput clothed with silvery scales, a large and dark spot on each side; mesonotum clothed with deep brown scales and with two subdorsal lines of silvery scales; these lines are much broadened along their middle third, becoming much attenuated posteriorly, reaching the scutellum well to the sides of the antescutellar bare space; bare space bordered with silvery scales; scutellum silver-scaled; abdomen deep black, with coppery luster above, and with lateral basal segmental triangular silvery white spots; beneath creamy white, with large triangular black apical segmental lateral spots, which do not unite to form bands; wings with dark long and narrow scales along the veins; legs dark-scaled, with pronounced bronzy luster; the femora pale at base and beneath, tibiæ narrowly pale-scaled on the under side; tarsi not ringed; claws toothed on all the feet. Length, 2.5 mm.

In the male the palpi exceed the proboscis, black-scaled, the terminal portion densely clothed with long black hairs; head with the vertex clothed with dull silvery scales; the markings of the mesonotum similar to those of the female, but the submedian stripes greatly expanded on the middle portion; abdomen black-scaled above, with slight coppery luster, the basal segmental lateral spots becoming united into bands on segments 3, 4, 6, and 7, eighth segment mostly whitish scaled. Length, 3.5 mm.

Six specimens from Córdoba, Mexico, and Almoloya, State of Oaxaca, Mexico, bred from larvæ in temporary puddles. (F. Knab.)

Type.—Cat. No. 11965, U.S.N.M.

The light markings show a silvery metallic luster, with a grayish east, which varies in intensity in different specimens.

AEDES HARUSPICUS, new species.

Female.—Proboscis rather short, slender, brown-scaled, with a sprinkling of lighter ones, a light ring near the middle; palpi dark-scaled; occiput clothed mostly with whitish scales and with four quadrate patches of darker scales; mesonotum bright brown-scaled, mottled with patches of white scales, these white scales densest in the region before the scutellum; scutellum clothed with shining whitish scales; scales of the pleura white; abdomen black-scaled above, with broad apical soiled white bands on all but the last segment; beneath mottled, with dull whitish and light brown scales, the segments becoming lighter apically, but without defined bands; femora and tibiae black-scaled, with a sprinkling of lighter scales, a whitish ring on each femur toward the apex; tarsi black, with white basal rings, becoming successively narrower on each joint; wings broad, the scales on the veins black and white, giving a mottled effect; claws simple. Length, 3.5 mm.

Male.—The abdominal bands are clearer white and narrower than in the female: otherwise the coloration is similar.

Twenty-one specimens, Port Antonio, Jamaica, bred from larvæ in seaside pools, November 15, 1906. (M. Grabham.)

Type.—Cat. No. 11995, U.S.N.M.

We expected that Doctor Grabham would himself describe this species, but after the destruction of his collection by the earthquake he has requested us to describe it from the specimens he had previously sent us.

AËDES HORRIDUS, new species.

Proboscis and palpi clothed with violet-black scales; occiput whitish-scaled, with a violet-black spot at the side; mesonotum broadly yellowish white-scaled at the sides, a band of deep brown scales occupying about one-third of the width of the disk and extending back to the antescutellar space, the lateral yellowish white scales surrounding the antescutellar space behind; scutellum yellowish white-scaled; postscutellum densely yellowish white-scaled; abdomen above violet blue with lateral apical yellowish spots on all but the last segment, beneath yellowish-scaled, the seventh segment with basal violet scales, eighth segment entirely violet-scaled. Legs deep violet-scaled, the basal two-thirds of the femora yellowish, the knees silvery white, the hind legs with the scales on the tibiae and tarsi roughened, suberect, the last two joints white. Length, 4.5 mm.

Fifty-six specimens: Victoria, Texas, May 31 (W. E. Hinds); Cypress Bayou, Texas, August 23, 1903 (J. D. Mitchell); Greenville, Texas, June 30, 1904 (H. S. Barber); Dallas, Texas, June 28 (H. S. Barber); Dennison, Texas, June 24 (H. S. Barber); Westpoint, Mississippi, August 11, 1904 (H. S. Barber); Corinth, Missis-

sippi, August 14 (H. S. Barber); Jackson, Mississippi, August 8, 1904 (H. S. Barber); Vanburen, Arkansas, July 6, 1904 (H. S. Barber); Fort Smith, Arkansas, July 8 (H. S. Barber); Little Rock, Arkansas, July 11, 1904 (H. S. Barber); Danville, Arkansas, July 10 (H. S. Barber); Helena, Arkansas, July 30 (H. S. Barber); Chattanooga, Tennesse, August 20, 1904 (H. S. Barber); Rives, Tennessee, July 27 (H. S. Barber); Wister, Oklahoma, July 2 (H. S. Barber); Woodstock, Virginia, August 4, 1904 (F. C. Pratt); Plummer's Island, Maryland, July 18, 1904 (R. P. Currie).

Type.—Cat. No. 11999, U.S.N.M.

This species has been identified heretofore as Janthinosoma lutzii Theobald and Janthinosoma albipes Theobald, but differs obviously from these more southern forms.

AËDES ALDRICHI, new species.

Similar to A. hirsuteron Theobald and A. aestivalis Dyar, but the vestiture of the occiput and the sides of the disk of the mesonotum are frosted white with a very slight yellowish cast; the anterior angles of the mesonotum are not brown-scaled; the abdomen has a distinct bronzy luster; the stems of the forked cells are longer; the species is smaller; otherwise the three species are very similar. Length, 3.5 mm.

Six specimens, all females, Market Lake, Idaho (J. M. Aldrich). Type.—Cat. No. 12010, U.S.N.M.

The specimens were sent us by Professor Aldrich mixed with A. idahocusis Theobald. Aldrich's remarks, quoted by Theobald.^a obviously refer to this small species and not to idahocusis, which is larger. We take pleasure in naming this species for Prof. J. M. Aldrich.

CULEX CHRYSONOTUM, new species.

Female.—Proboscis black-scaled, rather long, gradually enlarged toward the apex; palpi black-scaled, with a few metallic scales at the apices; occiput clothed with golden scales, becoming brownish at the sides, margins of the eyes whitish-scaled; mesonotum clothed with narrow golden scales, the posterior portion dark brown-scaled, two golden lines extending from the golden area backward to the scutellum on each side of the antescutellar bare space; scutellum golden-scaled; pleura with whitish scales; abdomen depressed, blunt at the apex, dark-scaled, with strong coppery luster and dark blue reflections in some lights, no dorsal segmental bands; segments 5, 6, and 7 with silvery basal lateral spots; beneath the segments have broad silvery white bands at the bases, the apices dark-scaled, with coppery luster; wings with narrow dusky scales along the veins; legs dark-scaled,

with strong bronzy luster, the ventral surface of the femora silvery-scaled, the inner side of the tibiæ obscurely silver-scaled, the knees touched with silver scales; tarsi not ringed: claws simple. Length, 3 mm.

Male.—Proboscis long and slender, enlarged at the apex; palpi considerably longer than the proboscis, black-scaled, without annulations, the apical portion clothed with long black hairs; head and thoracic markings as in the female; abdomen dark-scaled above, with coppery luster; segments 4 to 8 with basal lateral silvery spots; the under surface with silvery basal segmental bands. Length, 3 mm.

Nine specimens, Ancon, Canal Zone, Panama; Cartagenita, Paraiso District, and Miraflores in the Canal Zone, bred from larvæ in a ditch, from a small patch of algæ beside railroad track, and from a swamp. (A. H. Jennings.)

Type.—Cat. No. 11966, U.S.N.M.

Similar to *C. spissipes* Theobald and *C. fur* Dyar and Knab, but easily distinguished by the narrow wing-scales and the more extensive golden area of the mesonotum.

CULEX DAUMASTOCAMPA, new species.

Female.—Proboscis long and slender, swollen at the apex; palpi black-scaled; occiput golden-scaled, with black scales sparsely intermixed, a large dark spot on each side; thorax deep brown scaled, the front and lateral margins on the anterior half very broadly bright golden-scaled; scutellum dark-scaled; abdomen dark-scaled above, with bronzy luster, slightly lighter colored beneath, but without distinct banding; scales along the wing veins long and narrow, darkly colored; legs dark-scaled, with bronzy luster; hind legs with the under surface of the femora silvery white-scaled, the apices of the tibiæ and a rather broad ring at the base of the first tarsal joint silvery white-scaled; second and third tarsal joints very narrowly silver-white-ringed at the bases, the rings obsolete on the fourth and fifth joints; front and middle legs without rings; tarsal claws simple. Length, 2 mm.

Male.—Palpi long and slender, nearly as long as the proboscis, black-scaled, without annulations; head and thoracic markings as in the female; abdomen dark-scaled above, with strong coppery luster; beneath the scaling is more brassy, but there are no segmental bands; knees of the hind legs silvery scaled; tibial and tarsal markings as in the female. Length 2 mm.

Three specimens, Porto Bello, Fort San Felipe, Panama, bred from larvæ in water between the leaves of bromeliaceous plants. (A. H. Jennings.)

Type.—Cat. No. 11967, U.S.N.M.

CULEX PINAROCAMPA, new species.

Female.—Proboscis moderately long and slender, not distinctly swollen at the tip; black-scaled above and beneath; palpi blackscaled; occiput clothed with recumbent whitish and bronzy brown scales and with upright dark forked ones; the whitish scales form a margin to the eyes, a median line and large lateral patches; mesonotum bronzy brown-scaled, with several spots of light scales—a pair of median subdorsal spots, a pair farther forward at the lateral margin, another pair above the roots of the wings; the front margin is light-scaled, as also the margin of the antescutellar bare space; scutellum light-scaled, with a brassy luster; abdomen above blackscaled, with bluish luster, the segments with narrow basal bands, which are broadened mesially on all but the last two segments; on the last three segments the bands are expanded toward the lateral margins; ventrally the abdomen is pale-scaled, the apices of the segments obscurely dark-banded; femora dark-scaled above, lightscaled beneath nearly to the apices, knees yellowish white-scaled; tibiæ vellowish white-scaled at bases and apices, tarsi of all the legs with the first, second, third, and fourth joints vellowish white-ringed at bases and apices; mid and hind legs with the fifth tarsal joint entirely yellowish white-scaled; last tarsal joint of the forclegs in part obscurely bronzy-scaled; wings with the scales along the veins dusky, long, and very narrow; claws simple. Length, 5.5 mm.

Male.—Proboscis stouter than in the female, black-scaled, with a white mark on the ventral surface before the middle; palpi long and slender, dark-scaled, longer than the proboscis, with narrow yellowish white annulations, more than half of the apical portion clothed with long hairs; head and thoracic markings as in the female; abdomen long and slender, black-scaled above, with clear white basal segmental bands, broader than in the female, the eighth segment nearly entirely white-scaled; venter light-scaled, with apical dark bands, lateral margins of the abdomen with numerous long pale cilia; tarsi marked as in the female. Length, 5 mm.

One hundred and seventeen specimens, Córdoba, Mexico, bred from larvæ in puddles along the Rio San Antonio. (F. Knab.)

Type.—Cat. No. 11968, U.S.N.M.

CULEX CONSTERNATOR, new species.

Female.—Proboscis long and slender, not distinctly swollen at the apex, entirely dark-scaled, with bronzy luster; palpi nearly one-fourth the length of the proboscis, slender, dark-scaled, with bronzy luster; occiput dark-scaled, the margins of the eyes distinctly and rather broadly silver-white-scaled; mesonotum dark brown scaled, with slight luster; pleura green, with patches of white scales; abdo-

men depressed, truncate at tip, clothed above with dark scales, with distinct coppery luster, the bases of the segments with lateral triangular silvery white spots; venter dull whitish-scaled, unbanded; wings with the scales along the veins dusky, long and very narrow; legs dark-scaled, with bronzy luster, the underside of the femora pale-scaled; tarsi not ringed; claws simple. Length, 4 mm.

Male.—Palpi long and slender, very slightly longer than the proboscis, dark-scaled, with bronzy luster and without annulations; head and mesothorax colored as in the female; abdomen long and slender, dark-scaled above, with coppery luster, the segments with basal silvery white lateral spots; venter pale-scaled. Length, 3 mm.

Thirty-nine specimens, Córdoba, Mexico, bred from larvæ in water in a hollow tree. (F. Knab.)

Type.—Cat. No. 11969, U.S.N.M.

CULEX STENOLEPIS, new species.

Female.—Proboscis rather long and slender, black-scaled, labellae pale-scaled; palpi entirely black-scaled; occiput clothed with pale brownish scales, with brassy luster, the margin of the eyes narrowly white-scaled, broadened into a patch at the sides, numerous erect forked scales particularly basally; mesonotum deep brown-scaled, with bronzy luster and mottled with patches of brassy scales; these scales are most conspicuous along the margins and form two oblique subdorsal bars; anteriorly they form a dorsal patch and are also abundant around the antescutellar bare space and the bases of the wings; scutellum covered with brassy scales; abdomen depressed, truncate at the tip, dull black-scaled above, with narrow white basal segmental bands; beneath the basal bands occupy about half of each segment; wings with the veins clothed with brownish long and very narrow scales; legs black; femora white-scaled beneath except the apical portion; knees white-scaled; tibiæ with their apices pale-scaled, a line of pale scales along their inner surfaces; tarsi of all the legs white-ringed at base and apex of each joint, the front legs very narrowly so, on the hind legs very broadly; last tarsal joint of the hind legs entirely white-scaled; claws simple. Length, 3.5 mm.

Male.—Proboscis long, rather slender, black-scaled, with a white ring around the middle, the labellæ pale-scaled; palpi long, exceeding the proboscis, slender, clothed with black scales, narrowly annulated with white, the apical half covered with long black hairs; head and thorax marked as in the female; abdomen deep black-scaled above, without luster, the basal segmental white bands much broader than in the female; legs marked as in the female. Length, 4 mm.

Forty-seven specimens, Córdoba, Mexico, bred from larvæ in water between the leaves of bromeliaceous plants. (F. Knab.)

Type.--Cat. No. 11970, U.S.N.M.

CULEX AIKENII, new species.

Female.—Unknown.

Male.—Proboscis long and slender, the apical portion somewhat stouter, clothed with brownish and gravish scales, giving a mottled effect, without light ring; palpi very long and slender, slightly thickened in their apical halves, clothed with brownish scales and mottled with gravish ones; the second segment with a broad white ring before the middle; apical half of the palpi clothed with long hairs; occiput clothed with gray and pale brown scales, the margin of the eyes white-scaled, the usual upright dark forked scales present; mesonotum clothed with light vellow-brown and gravish scales, without distinct lines or pattern; abdomen dusky-scaled above, the segments broadly banded with white basally; on the sixth and seventh segments the bands extend along the lateral margins to the apices of the segments; eighth segment mostly black-scaled above; beneath the abdomen is light-scaled without bands, ciliation of the abdominal margins pale, long, and abundant; veins of the wings clothed with pale brownish long and narrow scales, those along the costa black; legs blackish-scaled, with lighter mottling on the femora and tibie; the tarsi show a faint bronzy luster and are not ringed; under surfaces of the femora pale-scaled; tibiæ paler scaled on the inner side. Length, 3 mm.

Three specimens, New Amsterdam, Dutch Guiana, February 17, 1908. (J. Aiken.)

Type.—Cat. No. 11977, U.S.N.M.

We realize the undesirability of describing species of *Culex* from the male sex alone, on account of the difficulty of ever associating the proper female; but in this case Doctor Aiken has communicated to us the larva, which makes future identification of the female easy. The larva is almost the exact counterpart of our *Culex regulator*, described from Santo Domingo, but the male adult differs strikingly from the male of *regulator*, so that there is no question but that the two forms are distinct species. It is proper to state that the larva sent us by Doctor Aiken is a whole larva, not the skin from a bred specimen, and therefore the authority for the association rests with him.

Named for Dr. J. Aiken, who collected the specimens and has kindly sent us a series of species from Dutch Guiana.

CULEX EUMIMETES, new species.

Female.—Proboscis moderately long and slender, not swollen at the tip, black-scaled, a rather broad white ring at the middle; palpi slender, black-scaled, the apices white-scaled; occiput clothed with brownish scales with brassy luster; eyes narrowly margined with silvery white, much broadened at the sides; mesonotum bright brown-scaled, with brilliant bronzy luster and with traces of pale shining scales along the margins and around the antescutellar bare space; mesially there are two subdorsal spots of pale scales; scutellum pale-scaled; abdomen depressed, dull black-scaled, the segments with rather narrow basal white bands; venter pale-scaled, with obscure apical dark bands; wings with the scales along the veins dark, long and very narrow; legs black; femora with the under surface white-scaled; knees narrowly white-scaled; apices of the tibiæ white-scaled, the inner side of the tibiæ and tarsi with a line of pale scales; tarsi of all the legs white-ringed at both ends of the joints, the rings very broad on the hind legs, the last tarsal joint of the hind legs white with a small black ring; claws simple. Length, 3.5 mm.

Male.—Proboscis rather long, not swollen at apex, white-ringed at the middle; palpi slender, considerably longer than the proboscis, black-scaled, with white annulations, the apical two-thirds clothed with long hairs; head and thoracic markings as in the female; abdomen long and slender, dull black-scaled above, the segments with very broad basal white bands, expanded laterally on the sixth, seventh, and eighth segments; venter pale-scaled, with an indication of subapical dark banding; legs marked as in the female. Length, 3.5 mm.

Ten specimens, Orizaba. Mexico, bred from larvæ found in a puddle of drainage water in the suburbs of the city. (F. Knab.)

Type.—Cat. No. 11971, U.S.N.M.

The adult so closely resembles that of *U. stigmatosoma* Dyar that it is almost impossible to distinguish them; but the larve are very dissimilar.

SABETHES TARSOPUS, new species.

Female.—Proboscis moderately long, slender, swollen at the apex, clothed with black scales, with a metallic blue luster; palpi blackscaled, with blue luster; prothoracic lobes brilliantly blue-scaled: mesonotum similar, becoming paler in color with a greenish silvery tinge on the scutellum; pleura and coxe silver-scaled; metanotum with a group of bristles near the apex, its surface clothed with flat silver scales; postscutellum brilliantly light blue-scaled; abdomen with metallic blue scales above and at the sides, beneath silvery whitescaled, the colors separated in a straight line; tip of the abdomen with coarse black bristles; legs mostly metallic blue-scaled, with purple luster; the front and mid legs ciliate, hind pair simple; the front legs are ciliate on the apical half of the tibiæ and the base of the first tarsal joint, the ciliation following the upper and lower surfaces; the apical portion of the second and all of the following joints silvery white marked beneath; mid-legs with the ciliation on the apical half of the tibiæ and the first and second tarsal joints, very

long along the dorsal margin of the tibia and first tarsal joint; second tarsal joint, including its ciliation, silvery white; third tarsal joint and most of the fourth silver-white, the apex of the fourth above and all of the fifth black-scaled; there is an elongate white spot on the ventral surface of the tibia just above the ciliation; hind legs without ciliation and with the fourth and fifth tarsal joints silver white on the inner side. Length, 4.5 mm.

Three specimens, Bocas del Toro, Panama, September 28, 1903 (P. Osterhout); Paraiso, Canal Zone, Panama, November 1, 1907 (A. H. Jennings); Córdoba, Mexico, March 16, 1908 (F. Kuab).

Type.—Cat. No. 11972, U.S.N.M.

This and the following species are close to the one identified as *Sabethes longipes* Fabricius by Theobald, but wrongly, as Fabricius's description obviously implies another insect.

SABETHES SCHAUSI, new species.

Female.—Proposcis very slender, swollen at the tip, rather short, dark-scaled, with blue luster; palpi dark-scaled; occiput clothed with light metallic blue scales; prothoracic lobes clothed with pale iridescent scales; mesonotum with bright greenish and iridescent scales, becoming blue upon the scutellum; pleura and coxæ silverwhite-scaled; metanotum covered with silver scales, a group of bristles near the apex; abdomen above and at the sides dark-scaled, with deep blue and purple iridescence; venter silvery white scaled; tip of the abdomen with coarse black bristles; sixth segment blackscaled beneath along median line; legs mostly dark metallic bluescaled with purple reflection, all three pairs ciliate, the cilia forming broad paddles on the middle pair; front legs ciliate along nearly the entire upper surface of the tibia and two-thirds of the lower surface; first tarsal joint ciliate along upper surface; second tarsal joint white-marked on the apical half of the inner surface; mid-legs with the apical half of the tibiæ, all of the first tarsal joint broadly ciliate along front and hind margin; second tarsal joint ciliate along hind margin; the tibiæ have a long white dash on the inner side above the paddle; the second joint with its ciliation and the third joint are snow white, fourth and fifth black-scaled; hind legs with the apical third of the tibia ciliate, the ciliation rather short; fourth and fifth joints white-scaled on the inner side; some dark scales at their apices. Length, 7 mm.

One specimen, Omai, British Guiana. (W. Schaus.)

Type.—Cat. No. 11973, U.S.N.M.

. It gives us pleasure to dedicate to our good friend, Mr. William Schaus, the only specimen of mosquito that he has sent us from tropical America.

LESTICOCAMPA SCHEDOCYCLIA, new species.

Female.—Proboscis long, moderately slender, not swollen at the apex, clothed with black scales with bluish iridescent reflection; palpi slender, about two-fifths the length of the proboscis, clothed with black scales, with blue and iridescent luster; occiput clothed with flat iridescent scales, blue and green predominating, and quite dark in appearance in some lights, in other lights entirely silvery; there is a large silver patch on the vertex; prothoracic lobes well separated, the upper portion clothed with dark blue and violet iridescent scales, the lower portion with silvery white scales; mesonotum brown-scaled, with bronzy luster; scutellum clothed with flat, light greenish, and iridescent scales; metanotum with a group of seta near the apex, without scales; postscutellum clothed with blue and green iridescent scales; abdomen long and slender, subcylindrical, blunt at the end, clothed above and at the sides with dark scales, which show blue, green, and bronzy reflections; beneath white-scaled, the lateral margins shallowly indented on each segment; tip of the abdomen with numerous coarse bristles; veins of the wings clothed with bronzy brown broad scales; legs mostly dark-scaled, with blue, bronzy, and iridescent reflections; femora pale-scaled beneath; front and mid legs without white markings; hind legs with a white spot at the apex of the femora beneath, a white spot on the under sides of the tibia beyond the middle, the tarsi with basal white dashes on the under side, becoming progressively longer on each segment and reaching nearly to the apex of the fifth joint; legs without ciliation. Length, 4 mm.

Two specimens, interior of Nicaragua, without precise locality. (Dr. F. W. Thornton.)

Type.—Cat. No. 11974, U.S.N.M.

PROSOPOLEPIS JOCOSA, new species.

Female.—Proboscis moderately long and slender, the apical portion swollen, black-scaled; palpi short, slender, black-scaled; clypeus black-ish, clothed with silvery gray scales; eyes contiguous; occiput dark-scaled, with faint metallic reflection, the margin of the eyes narrowly silver-gray-scaled; prothoracic lobes well separated, prominent, clothed with blackish scales, with faint luster; mesonotum dark-scaled, with faint metallic luster and with grayish reflections over the roots of the wings and on the scutellum; metanotum with a group of setæ near the apex and without scales; postscutellum with numerous long pale hairs and with dark scales like those of the abdomen; abdomen clothed above with blue-black scales, with very faint metallic luster; beneath silver-white-scaled, the lateral margins straight; tip of the abdomen with numerous coarse bristles; scales of the wing-

veins brown, broad, those along the costa blue-black; legs dark-scaled, with blue and bronzy luster and without white markings; femora whitish beneath. Length, 4 mm.

One specimen, Caldera, Canal Zone, Panama. (A. H. Jennings.) Type.—Cat. No. 11975, U.S.N.M.

The genus *Prosopolepis* Lutz was founded on the presence of scales on the clypeus, which is not a fundamental character. However, the species before us is separable from *Lesticocampa* by the slender proboscis of the latter, not enlarged at the tip, and we therefore recognize the generic name.

PHONIOMYIA SIMMSI, new species.

Female.—Proboscis long and slender, black-scaled; palpi short, slender, black-scaled; occiput dark-scaled, with bronzy and blue reflections; eyes margined with whitish scales, which are more conspicuous on the vertex; wedge between the eyes white-scaled; prothoracic lobes dark-scaled, with blue reflection; mesonotum dark-brown-scaled, with bluish reflection; metanotum with a group of setæ near the apex, without scales; postscutellum clothed with scales like those of the abdomen; abdomen dark-scaled above, with coppery and blue reflections; beneath silvery white-scaled, the lateral margins straight; tip of abdomen blunt, bristly; wing-veins clothed with brown, rather broad scales; legs dark-scaled, with blue and bronze reflections; under side of the femora and tibiæ whitish-scaled; on the hind legs the tarsi are light-scaled beneath, becoming clear silvery white upon the last tarsal joint. Length, 3.5 mm.

One specimen, Porto Bello, San Felipe, Panama, bred from a larva in water in the leaves of bromeliaceous plants. (A. H. Jennings.)

Type.—Cat. No. 11976, U.S.N.M.

Named, at the suggestion of Mr. A. H. Jennings, in honor of Mr. H. Simms, a most efficient sanitary inspector at Empire, in the Canal Zone, Panama.

WYEOMYIA ABASCANTA, new species.

Female.—Proboscis moderately long and slender, somewhat swollen at the apex, black-scaled; occiput dark-scaled, with blue and green metallic reflection, the margin of the eyes dull white-scaled; prothoracic lobes dark-scaled, with blue, purple, and bronzy reflections, a patch of silvery white scales at the apex, basal portion silvery white scaled; mesonotum bronzy brown scaled, with dark bluish reflection; pleura silvery white scaled; abdomen dark-scaled above, beneath coarsely white-scaled, the colors separated on the sides in a straight line; legs dark, with bronzy and blue reflections, the mid legs with the apex of the second tarsal joint, all of the third and fourth joints

and part of the fifth silvery white-scaled on the under side. Length, 3.5 mm.

Male.—The markings are as in the female.

Two specimens, Trinidad, British West Indies, June. (A. Busck.) *Type.*—Cat. No. 11983, U.S.N.M.

WYEOMYIA GYNÆCOPUS, new species.

Female.—Proboscis moderately long, slender, much dilated toward the apex, black-scaled; palpi black-scaled, with bronzy luster, the tips silvery white; occiput dark-scaled, with green and blue iridescence, the margin of the eyes narrowly silvery white scaled; prothoracic lobes dark-scaled, with bluish iridescence, the apices narrowly silvery tipped, the basal portion mostly white-scaled; mesonotum bronzy brown-scaled, with obscure bluish reflection; abdomen deep bronzy brown above, with blue reflection, beneath coarsely white-scaled, the colors separated on the sides in a straight line; legs dark, with bronzy and bluish reflections, the hind legs with the under side of the fourth and fifth tarsal joints white-marked; on the fourth joint the white extends from the base nearly to the apex, the fifth white at the base. Length, 3.5 mm.

One specimen, Esparta, Costa Rica, September 18, 1905. (F. Knab.) Type.—Cat. No. 11984, U.S.N.M.

WYEOMYIA ABLECHRA, new species.

Female.—Proboscis long and slender, dilated at the apex, black-scaled; palpi slender, black-scaled; occiput dark-scaled, with blue and green reflections, the margin of the eyes dull whitish scaled, interrupted on each side below the vertex; prothoracic lobes metallic violaceous, a large patch of silvery scales at the apex, basal portion silvery-scaled; mesonotum dark-scaled, with faint bronzy and blue reflections; abdomen dark-scaled above, with slight blue reflection, beneath white-scaled, the colors separated on the sides in a straight line; legs dark-scaled, with bronzy reflection; on the mid-legs the apical portion of the second tarsal joint and all of the third, fourth, and fifth silvery white beneath; hind legs with a dash of silvery white at the bases of all the tarsal joints beneath. Length, 3.5 mm.

Eighteen specimens, Sonsonate, Salvador, August 16, 1905. (F. Knab.)

Type.—Cat. No. 11985, U.S.N.M.

WYEOMYIA ABLABES, new species.

Female.—Proboscis long and slender, somewhat enlarged towards the apex, black-scaled; palpi black-scaled; occiput dark-scaled, with blue and green reflections, the margin of the eyes narrowly whitish scaled and forming a distinct silver spot on the vertex; prothoracic lobes dark-scaled, with violaceous luster, the tips silvery-scaled;

mesonotum dark-scaled, with faint bronzy and blue reflections; pleura silvery white-scaled; abdomen black-scaled above, with slight blue and bronzy reflections, beneath white-scaled, the colors separated on the sides in a straight line; legs dark-scaled, with bronzy and blue luster; on the middle legs the extreme apex of the second tarsal joint and all of the third and fourth white beneath; on the hind legs the fourth and fifth tarsal joints are white beneath except at their extreme apices. Length, 3.5 mm.

Male.—Resembles the female in coloration.

Eighteen specimens, selected from a series, Córdoba, Mexico, bred from larvæ in water between the leaves of bromeliaceous plants. (F. Kuab.)

Type.—Cat. No. 11986, U.S.N.M.

WYEOMYIA ABEBELA, new species.

Female.—Proboscis rather long and slender, enlarged toward the apex, black-scaled; palpi black-scaled; occiput dark-scaled, the margin of the eyes clear white scaled, forming a patch on the vertex; prothoracic lobes pearly violaceous in the middle, the tip and base silvery white; mesonotum dull brown-scaled, with obscure bronzy and blue reflection; pleura silvery white-scaled; abdomen dark-scaled above, with faint bronzy and blue luster, beneath coarsely white-scaled, the colors separated on the sides in a straight line; legs entirely dark-scaled, with bronzy and blue reflection, the femora and hind tibiæ light-scaled beneath; tarsi without white markings. Length, 3 mm.

Male.—Coloration as in the female.

Six specimens, Córdoba, Mexico, bred from larvæ in water between the leaves of bromeliaceous plants. (F. Knab.)

Type.—Cat. No. 11987, U.S.N.M.

WYEOMYIA ABIA, new species.

Female.—Proboscis slender, moderately long, much swollen at the apex; palpi dark-scaled; occiput dark-scaled, with obscure blue and green luster, the eyes narrowly margined with dull white scales, the margin interrupted toward the vertex; prothoracic lobes clothed with pearly iridescent scales, the apices without white tips; mesonotum bronzy-scaled, with obscure bluish reflection; abdomen bronzy-scaled above, with bluish reflection, beneath coarsely white-scaled, the colors separated on the sides in a straight line; legs dark-scaled, with bronzy and blue reflections; mid-tarsi with the apical half of the second and all of the third and fourth joints silvery white-scaled on one side; front and hind tarsi unmarked. Length, 3 mm.

Male.—Coloration as in the female.

Two specimens, Dominica, West Indies. (F. E. Campbell.)

Type.—Cat. No. 11988, U.S.N.M.

WYEOMYIA ANDROPUS, new species.

Female.—Proboscis rather short and stout, swollen toward the apex, black-scaled; palpi black-scaled; occiput dark-scaled, with greenish and brownish reflections, the eyes not distinctly white-margined above, the marginal scales being of a grayish cast; prothoracic lobes dark-scaled, with greenish and bronzy luster and without pale scales on the apices; mesonotum dull brown-scaled, with obscure bronzy and bluish luster; abdomen dark-scaled above, nearly black, beneath yellowish white-scaled, the colors separated on the sides in a straight line; legs dark-scaled, with bronzy and bluish reflections, without white markings on the tarsi. Length, 3 mm.

Male.—The proboscis somewhat longer and more slender than in the female, abdomen expanded toward the tip, the claspers widely separated and conspicuous; fore tibiæ and tarsi silvery yellowishscaled beneath, the color whitest and most conspicuous on the second, third, and fourth joints; mid-legs, with the tibia, the basal half of the first tarsal joint silvery white marked beneath, the apical half of the second joint and all of the succeeding joints silvery white marked above and beneath; hind legs entirely dark.

Twenty-six specimens, Porto Bello, Fort San Felipe, and Caldera Island, Porto Bello Bay, Panama, bred from larvæ in water between the leaves of bromeliaceous plants. (A. H. Jennings.)

Type.—Cat. No. 11989, U.S.N.M.

WYEOMYIA CLASOLEUCA, new species.

Female,—Proboscis moderately long and slender, the apical third much swollen, black-scaled; palpi black-scaled; occiput dark-scaled, without light margin to the eyes; prothoracic lobes dark metallic blue-scaled with purple reflection, the apices without lighter scales; mesonotum dark dull brown-scaled, nearly black; abdomen dark-scaled above, with obscure bronzy and bluish reflections, beneath silvery white-scaled, the colors separated on the sides in a straight line; legs dark-scaled, with bronzy and blue reflection; on the hind legs the fourth tarsal joint is silvery white-marked beneath from the base nearly to the apex, the fifth tarsal joint silvery white-marked beneath throughout; fore and mid tarsi entirely dark. Length, 3.5 mm.

Two specimens, Caldera Island, Porto Bello Bay, Panama. (A. H. Jennings.)

Type.—Cat. No. 11990, U.S.N.M.

WYEOMYIA DYMODORA, new species.

Female.—Proboscis very long and slender, as in *Phoniomyia*, but slightly swollen at the tip, black-scaled; palpi black-scaled; occiput dark-scaled, with blue and green iridescence, margin of the eyes not

distinctly light-scaled, and without white spot on the vertex; prothoracic lobes dark-scaled, with obscure bluish luster, without light scales at the apices; mesonotum obscurely brown-scaled; abdomen dark-scaled above, with bluish reflection, white-scaled beneath, the colors separated on the sides in a straight line; wings with the scales on the veins elongate, rather narrow; legs dark-scaled, with bronzy and blue reflection, fore and mid tarsi without white beneath; hind tarsi with the fourth and fifth joints silvery white-marked beneath, the fourth joint black at the apex, the white on the fifth joint continuous. Length, 3.5 mm.

Two specimens, Caldera Island, Porto Bello Bay, and Fort San Felipe, Porto Bello, Panama, bred from larvæ in water between the leaves of bromeliaceous plants. (A. H. Jennings.)

Type.—Cat. No. 11991, U.S.N.M.

The species resembles W. clasoleuca Dyar and Knab in coloration, but the long proboscis, almost like that of a *Phoniomyia*, and the narrow wing scales will easily separate it.

WYEOMYIA BARIA, new species.

Female.—Proboscis moderately long and slender, much swollen apically, dark-scaled; palpi dark-scaled; occiput dark-scaled, with obscure bronzy luster: at the sides the eyes very narrowly white-margined; on the vertex a minute white spot; prothoracic lobes dark-scaled, the apices silvery scaled, the basal portion also silver-scaled; mesonotum dark brownish-scaled, with bronzy and bluish luster; abdomen dark-scaled above, with brownish and bluish luster, beneath white-scaled, the colors separated on the sides in a straight line; legs dark-scaled, with bronzy and blue reflections; front and mid tarsi unmarked; hind tarsi with the fourth joint silvery white scaled to the apex beneath; the fifth joint silvery white-marked beneath on its basal two-thirds. Length, 3 mm.

One specimen, Sonsonate, Salvador, August 30, 1905. (F. Knab.) *Type*.—Cat. No. 11992, U.S.N.M.

WYEOMYIA MEGALODORA, new species.

Female.—Proboscis long and rather slender, swollen at the apex; occiput dark-scaled, obscurely iridescent, margin of the eyes narrowly dull white-scaled; prothoracic lobes pale violaceous, iridescent, without light scales at the apices; mesonotum dark brownish-scaled, with obscure bronzy and bluish luster; abdomen above blackish-scaled, with faint bronzy and bluish luster, beneath coarsely white-scaled, the colors separated on the sides in a straight line; legs dark-scaled, with bronzy and bluish reflections; the tarsi of the front and hind legs unmarked; the middle legs, with the apical half of the

second and all of the succeeding joints, silvery white-marked beneath. Length, 3.5 mm.

Two specimens, Sonsonate, Salvador, August 30, 1905. (F. Knab.) *Type.*—Cat. No. 11993, U.S.N.M.

The prothoracic lobes in certain lights have a shining appearance at their apices, but do not seem to be clothed with differently colored scales from those of the general surfaces of the lobes.

WYEOMYIA MATÆA, new species.

Female.—Proboscis long and slender, swollen at the apex, dark-scaled, with a line of whitish scales on the under surface: palpi dark-scaled; occiput dark-scaled, with faint bluish and bronzy reflections, the margin of the eyes dull white-scaled, interrupted on each side of the vertex; prothoracic lobes dark blue and violaceous, with strong iridescence; mesonotum dark bronzy brown-scaled; abdomen above blackish brown-scaled, with obscure bronzy and blue reflections, beneath coarsely white-scaled, the colors separated on the sides in a straight line; legs dark-scaled, with bronzy and blue reflection, the under surfaces of the femora and tibiæ pale brassy-scaled; mid-legs with the apical half of the second joint and all of the third, fourth, and fifth silvery white-marked on one side; front and hind tarsi unmarked. Length, 3.5 mm.

Two specimens, Sonsonate, Salvador, August 49, 1905, and Santa Lucrecia, State of Vera Cruz, Mexico, June 21, 1905. (F. Knab.)

Type.—Cat. No. 11994, U.S.N.M.

WYEOMYIA ARGYRURA, new species.

Female.—Proboscis moderate, swollen at the tip, black-scaled; occiput dark-scaled with iridescent reflections, a diffuse silvery spot at the vertex, sides of the head white-scales, running up part way along the ocular margin; prothoracic lobes entirely silvery-scaled; mesonotum dark bronzy brown-scaled; abdomen black-scaled above with bluish reflection, the tip silver-scaled; beneath silvery-scaled, the colors separated on the sides in a straight line. Legs deep brown-scaled with bluish and bronzy reflections, femora and tibiæ white beneath as also the front tarsi, the white broader and more distinct on the third joint; on the hind legs all the tarsal joints have silvery white basal marks beneath, which extend well towards the apex; mid tarsi with the apex of the second, and all of the succeeding joints silver white-scaled above and beneath. Length, 2.5 mm.

One specimen, San Antonio de los Baños, Cuba (J. H. Pazos).

Type.—Cat. No. 12009, U.S.N.M.

Nearest to W. sororcula Dyar and Knab, but distinguished by the silvery tip of the abdomen.