

DIAGNOSES OF NEW MOSQUITOES FROM SURINAM, WITH A NOTE ON SYNONYMY

(Diptera, Culicidae)

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Sabethes bipartipes Dyar and Knab.

Sabethes chroiopus Dyar and Knab.

Male specimens of *Sabethes bipartipes* have never been found, neither females of *Sabethes chroiopus*. In July, 1919, we found some larvæ and pupæ in rather clear water, held by a fallen banana-leaf. From the larvæ we reared *Limatus cacophrades* Dyar and Knab and *Lemmanymia methysticus* Dyar and Knab; from the pupæ, five female *Sabethes bipartipes* and two male *Sabethes chroiopus*. This makes it very probable that *Sabethes bipartipes* and *chroiopus* represent females and males of one species, which shows sexual dimorphism in the coloration of the paddles.

Sabethoides imperfectus, new species.

Female. Proboscis long, slightly swollen at apex, black. Palpi one-seventh of proboscis, black. Antennæ moderate. Clypeus nude. Eyes large, contiguous at vertex. Occiput clothed with flat, shining violet and purple scales. Prothoracic lobes collar-like with blue flat scales. Mesonotum with green and coppery scales, lighter on the margins. Scutellum trilobate, vestiture similar to that of mesonotum. Postnotum without scales, four setæ on posterior end. Pleuræ and coxæ white. Abdomen short, compressed, dorsal vestiture bluish with irregular, basal coppery-white bands; the sides with blue and white scales intermixed, forming patches on the segments, venter pale golden. Wings rather narrow, infuscated; outstanding scales of veins elliptical, obliquely subtruncate. Legs slender, black, with coppery and violaceous reflections; mid tarsi with apex of second, all the third and all the fourth joint, except the tip white on one side. Claw formula: 0.0-0.0-0.0. Length: Body, 3.5 mm.; wing, 3 mm.

This species comes very near to *Sabethoides nitidus* Theob.; the proboscis is more swollen, the abdomen is much shorter,

there are more blue scales and more pure white scales forming lateral patches on the abdomen. We have *Sabethoides nitidus* also from Surinam, but compared with this species it is different. *Sabethoides imperfectus* could with almost equal right be called a *Sabethinus*, showing that these two ill-defined genera may not be held separate in the future.

Two females were captured while biting us in the woods.

Cotype, No. 22697, U. S. National Museum.

Lemmamyia pseudomethysticus, new species.

We found larvæ of the three species of the old genus *Limatus*, but we bred four females from larvæ in fallen palm-leaves and tree-holes, which have all the characters of *Limatus durhamii* Theob.: First abdominal segment with golden scales, mid legs without white; the colors on the abdomen, however, are separated in a straight line as in *methysticus* Dyar and Knab. The hind legs have one claw only, of course. The larvæ come nearer to those of *methysticus* than to those of *durhami*. They have eight teeth on each side of the mental plate and the mandibles have four teeth, both as in *methysticus*; *durhami* has seven and five, so has *cacophrades*. *Limatus methysticus* D. & K. has been removed from the genus *Limatus* by Dyar and made the type of a new genus, *Lemmamyia* on genitalic characters. We take the risk, and place this new species in this same genus. Only further breeding can prove whether it belongs there or not.

Cotype, No. 22698, U. S. National Museum.

Dendromyia roucouyana, new species.

Female. Proboscis moderate, swollen apically. Palpi short, one-fifth of the proboscis. Antennæ moderate. Clypeus nude. Occiput clothed with dark flat scales, a small white spot at the vertex, a large white patch at the under side of the head following the eye-margin for a short distance. Prothoracic lobes well separated, with dark scales with brilliant violaceous blue reflection. Mesonotum with broad elliptical brown scales with grayish violet reflection. Scutellum trilobate, vestiture as that of mesonotum. Postnotum with a group of setæ. Abdo-

men with the colors separated in a straight line. Outstanding wing-scales broadly elliptical, a few obliquely subtruncate. Legs with the mid-tarsi with more than half of the second joint, all of the third and fourth joint white on outer side and the fifth joint also with many white scales. Claw formula: 0.0-0.0-0.0. Length: Body, about 3 mm.; wing, 3 mm.

Larva. Body smooth; air-tube five times as long as wide with many single stout hairs and a tuft of four at the base; a false pecten of about eight teeth at the middle. Comb of eighth segment with about twelve very large spines in a single row, each spine sharply pointed.

We have only two females, bred from Bromeliaceæ in the Lawa district, March, 1917. We place the species in *Dendromyia* because of its resemblance to *Dendromyia smithii* Coq. and *mataea* D. & K. We do not generally describe females as types for new species in a difficult genus, but make an exception with this species which has such a characteristic larva.

Cotype, No. 22699, U. S. National Museum.

Cleobonnea argenteorostris, new species.

Female. Proboscis distinctly swollen at the tip, dark scales above, pale scales below; palpi short; antennæ moderate; margin of eyes with a narrow line of white, flat scales; occiput with dark flat scales, white on cheeks and underside. Prothoracic lobes clothed with flat white scales and dark bristles. Mesonotum clothed with appressed dark, bronzy brown elliptical scales with gray reflections, anterior margin silvery white. Scutellum with the coloration similar to that of mesonotum. Postnotum brown, no scales, a group of yellow hairs posteriorly. Abdomen with the colors separated in a straight line, venter with yellowish white, somewhat raised scales. Outstanding wing-scales broadly elliptical, rounded at tip, many of them obliquely truncate. Legs with pale brassy luster on upper side of mid tarsi. Claw formula: 0.0-0.0-0.0. Length: Body, 3 mm.; wing, 2.5 mm.

Male. Proboscis with whitish scales on under side on apical

fourth, the basal fourth white scaled all round. Palpi short, white scaled.

Genitalia. Side pieces twice as long as wide, a slight lobe present covered with minute hairs and small setæ. Clasp filament with three lobes arising from a very short stem, the mid lobe somewhat larger than the lateral ones; mid lobe expanded subapically, strongly tapered toward apex, tip slender, an incision going down for one-third of the length of the lobe; one margin with a row of setæ; below expanded portion there are two appendages, one small slender straight, the other one with short slender stem and much expanded apical part; one lateral lobe agrees in shape with the mid lobe, but is not so sharply pointed and is without appendages; the other lateral lobe is more quadrately elongate, one tip of outer margin broadly expanded, with a few short spines, other tip thumb-shaped, with a sharp spine, a few more spines present on margins. Harpes broad, with curved toothed tip. One uncal plate small slender, one plate slender long, serrate on one margin, one plate long curved at tip. Each basal appendage with two rather short spines at tip.

Larva. Head-hairs in twos, ante-antennal hairs multiple. Comb of eighth segment of 18 spines in a single row, air-tube five times as long as wide, false pecten all over the tube except at base. Many small two- and three-haired tufts on the tube.

Larvæ found in Bromeliaceæ, Lava River, March, 1917.

Cotype, No. 22700, U. S. National Museum.

Hystatomyia lamellata, new species.

Male. Proboscis moderate, swollen apically. Palpi short. Clypeus nude. Occiput clothed with flat, dark scales, a margin of white scales around the eyes and a few milky white ones near the median line. Prothoracic lobes dark, the tips coppery-white. Mesonotum dark brown, with bronzy and blue reflection. Scutellum trilobate with vestiture similar to mesonotum. Postnotum without scales, with a group of hairs. Abdomen compressed, the colors separated in a straight line. Wings hyaline, scales of veins narrowly ovate. Legs black,

with bronzy and blue reflection, mid tarsi with brassy luster above, white beneath on four last joints. Fore and hind tarsi without white. Claw formula: 0.0-0.0-0.0. Length: Body, 2.5 mm.; wing, 2.5 mm.

Genitalia: Side-pieces over twice as long as wide; outer angle uniformly produced, leaving the clasp-filament as a small club-shaped appendage arising well beyond middle of side-pieces; a ridge of broad setæ extends beyond and below the middle of the side-piece. Four ligulate appendages and a leaf with broad base and pointed tip on side-piece near apex. A small lobe medianly and basally. Harpes weak with rounded tip, a slight tooth laterally at apex. Each basal appendage with five stout setæ.

We have two males, bred from Bromeliaceæ. Cie des mines d'or, Lawa River. They come very near *Wyeomyia autocratica* D. & K. of the monograph of mosquitoes of North and Central America and the West Indies. These two males come without any doubt in the new genus *Hystatomyia*, to which *autocratica* should also be referred.

Cotype, No. 22701, U. S. National Museum.

Prosopolepis flui, new species.

Female. Proboscis short, swollen at tip, black. Palpi short, one-fifth of proboscis, black. Antennæ slender. Clypeus with small elliptical, somewhat outstanding white scales on margin. Occiput with brown, flat scales, whitish at sides, a few black erect scales near the neck. Prothoracic lobes well separated with flat, brown scales. Mesonotum with small brown appressed scales. Scutellum with small flat, dark scales with whitish luster. Postnotum with a group of setæ posteriorly and a patch of dull, white scales in front. Abdomen sub-cylindrical, dorsally black, ventrally yellowish white, colors separated in a straight line. Wings very slightly smoky, scales of veins elliptical. Legs brownish-black, with slight metallic reflection, vestiture not roughened, pale beneath; three last hind tarsal joints white nearly all round, the apices of third and fourth joint with a black ring; mid legs with the base of

the tibiæ whitish on one side, the last four tarsal segments silvery white on one side, the white on second segment very narrow, on the last segment more yellowish and darker. Front legs with a faint coppery shine on three last segments. Claw formula: 0.0-0.0-0.0. Length: Body, 4.5 mm.; wing, 4 mm.

Albina, April, 1917; Dam, January, 1919. We captured adults in the woods at these two places in daytime.

This species differs from the other species of *Prosopelepis* by having scales on the postnotum.

Cotype, No. 22702, U. S. National Museum.

Culex (Carrollia) iridescens Lutz.

Culex (Carrollia) secunda, new species.

We have a number of males and females, which we cannot separate on colorational characters from *Culex (Carrollia) iridescens* Lutz from the Canal Zone. The larvæ and the male genitalia differ, however. The species was originally described from Brazil, to which our region is nearer than the Canal Zone. We presume our species to be the same as Lutz's species and we propose a new name, *Culex (Carrollia) secunda*, for the species from Panama.

The larval differences are as follows:

Air-tube with eleven hair-tufts, pecten with eleven teeth,

iridescens Lutz

Air-tube with six to eight hair-tufts, pecten with three to six teeth,

secunda, n. sp.

The differences in the genitalia are:

Outer arm of side-piece a rod with four flattened, apical spines,

iridescens Lutz

This arm reduced to a spine.....*secunda*, n. sp.

Culex (Carrollia) infoliata, new species.

The coloration of this new species is similar to that of the two species just mentioned, but differs in details. The genitalia have the tip of the clasp-filament subspherical as in *Culex (Carrollia) urichii* Coq. The larvæ are different from any other *Carrollia* larva known at present, by having the comb of the eighth segment in a triangular patch.

Cotype, No. 22703, U. S. National Museum.

Coloration

General coloration gray, abdomen subcylindrical, very little compressed, wing-scales linear to narrowly ligulate....*infoliata*, n. sp.
 General coloration black, abdomen strongly compressed, wing-scales ligulate to elliptical with a few linear scales intermixed.....*iridescens* Lutz, *secunda*, n. sp.

Male genitalia

Arm of side-piece preceded by a patch of setæ.....*infoliata*, n. sp.
 Without this structure.....*urichii* Coquillet

The larvæ live in tree-holes, like the other *Carrollia* species. We have them from the interior, Dam, January, 1919.

Culex (Culex) brevispinosus, new species.

A typical *Culex* in general appearance, extremely similar to *Culex (Culex) coronator* D. & K. and *Culex (Culex) surinamensis* Dyar. There are small triangular spines present on the air-tube of the larva, placed near the tip as in *coronator*. They are very much smaller, however, than in *coronator* and the air-tube is much longer and narrower, and there is no chance to confuse the two larvæ. The male genitalia come also very near to those of *coronator*, but the upper arm of the second plate is capitate instead of bearing a long slender sharply angled tooth as in *coronator* or a short thumb-shaped tooth as in *surinamensis*. The adults do not have the faint pale rings on the tarsi present in *coronator* and still more distinct in *surinamensis*.

Cotype, No. 22704, U. S. National Museum.

Culex (Choeroporpa) alcocci, new species.

Proboscis very long, black. Palpi short in the female, long in the male. Occiput densely clothed with yellowish brown upright forked and narrow curved scales medianly, with flat gray scales on the sides. Mesonotum shining yellowish-gray, clothed with very long, narrow curved black scales with strong golden-yellowish luster. Abdomen depressed, black above, pale below, a few dull white scales on the sides of the segments basally. Wings with elliptical scales. Legs bronzy brown, femora pale beneath. Length: Body, 3 mm.; wing, 2.5 mm.

Larva: Both pairs of head hairs multiple, short. Antennæ very stout, dark, spicular, a large tuft from a notch at outer third. Abdomen glabrous. Air-tube long, six times as long as wide, tapering on basal half, pecten of about seventeen teeth on basal two-fifths, five pairs of moderately long ventral hair-tufts. Lateral comb of eighth segment in a triangular patch. The thorax of the larva is white or azure blue, contrasting strongly with the black of the large head. They live in temporary pools in the woods.

Male genitalia: They show the typical clasp-filament of a *Choeroporpa* without a horn-like tuft. The outer division of the lobe of the side-piece bears a large leaf. The second plates of the unci are bifid. The genitalia come nearest to *Culex mutator* D. & K., but the second uncal plates have no sub-basal hook.

Zanderij, March 1, 1918.

Cotype, No. 22705, U. S. National Museum.

Culex (*Choeroporpa*) *saramaccensis*, new species.

Proboscis rather long. Palpi short in the female, long in the male. Antennæ moderate. Occiput clothed with brown, flat scales, with a dull grayish luster and many upright forked scales on the nape. Mesonotum dark brown, with long narrow-curved bronzy brown scales. Scutellum with similar vestiture. Abdomen with black scales dorsally, dark scaled ventrally, a few dull white scales at the sides of the segments. Wings hyaline, with broadly linear to narrowly elliptical scales. Legs brownish, paler on under side.

Genitalia: Clasp-filament without horn-like tuft, side-piece without a leaf, second uncal plate without subbasal hooks, bifid, outer division of lobe of side-piece with single terminal filament free from the others.

Larva: Head-hairs in twos or single. Antennæ large, spicular, a tuft at outer third. Body hairy. Air-tube moderate, six times as long as wide, tapering on basal half, slightly curved, with five pairs of long ventral tufts. Pecten on basal two-fifths, reaching beyond the first ventral tuft. Comb of the eighth segment of very large spines in three rows.

The genitalia come nearest to *Culex chrysonotum* D. & K., but differ in the arrangement of the filaments on the lobe of the side-piece.

We found the larvæ in rock-pools in the Surinam River, Kabelstation, December, 1918.

Cotype, No. 22706, U. S. National Museum.

Culex (*Choeroporpa*) *albinensis*, new species.

Proboscis rather long. Palpi short in the female, long in the male. Antennæ moderate. Occiput clothed with flat grayish scales and many erect forked scales; a few narrow curved scales between the eyes. Mesonotum dark brown with bronzy brown narrow curved scales. Scutellum with similar vestiture. Abdomen black-scaled dorsally, dark-scaled ventrally, laterally with basal, segmental silvery-white patches. Wings hyaline, with broadly linear to narrowly elliptical scales. Legs moderate, brown; tarsi with brassy luster. Length: Body, 2.5 mm.; wing, 2.5 mm.

Genitalia: Clasp-filament without horn-like tuft, side-piece without a leaf, second uncal plate with a subbasal hook on inner margin, the fork denticulate centrally with horn-like limbs.

Larva: Antennæ large, spiculate, a tuft at outer third. Body spicular. Air-tube six times as long as wide, tapering on basal half, with a dark band at the middle. Pecten on basal third, about sixteen teeth. Five pairs of ventral tufts. Comb of the eighth segment several large spines in a patch.

The genitalia come close to *Culex educator* D. & K. but differ in the second uncal plate.

We found the larvæ in ground pools near Paramaribo.

Cotype, No 22707, U. S. National Museum.

Culex (*Choeroporpa*) *coppenamensis*, new species.

Male. Proboscis moderate, swollen at tip. Palpi long. Occiput clothed with broad, flat scales all over, many black erect scales posteriorly and a group of white semi-erect scales medianly and posteriorly. Mesonotum black, with bronzy brown, narrow curved scales. Scutellum with similar vesti-

ture. Abdomen blackish above, distinct dorsal, segmental, basal, white bands except on first two segments, continuing as lateral patches. Venter dark. Wings hyaline, scales broadly elliptical, narrower near base of the wings. Legs bronzy brown. Claw-formula: 1.1-1.1-0.0. Length: Body, 3 mm.; wing, 2.5 mm.

Genitalia: Clasp-filament without horn-like tuft, second uncal plate with the apex with three points, one of them more strongly chitinized than the others and hook-like. Harpes with comb-shaped tip. Outer division of lobe of side-piece branched, one long branch with a short expanded leaf, one short one with a long terminal filament and three hair-like appendages; inner division divided, each part with a long filament with bent tip.

Larva: Head-hairs all single. Antennæ spicular, a large tuft at outer third. Body slightly spicular. Air-tube stout, slightly tapering, six times as long as wide; pecten on basal two-fifths of about sixteen teeth; five pairs of hair-tufts beyond the pecten. Comb of eighth segment a triangular patch.

We found the larvæ in a ground-pool at Kabelstation in the interior, May, 1919.

Cotype, No. 22708, U. S. National Museum.

Culex (*Choeroporpa*) *nicceriensis*, new species.

Proboscis moderate, swollen at tip. Palpi long in the male, short in the female. Occiput clothed with coppery brown narrow curved scales, black upright forked scales and flat white scales at the sides. Mesonotum black, with coppery brown narrow curved scales. Scutellum with similar vestiture. Abdomen blackish above, distinct dorsal, basal, segmental, white bands, except on first two segments, continuing as lateral patches. A patch of dull flat golden scales on the middle of the first segment dorsally. Venter black. Wings hyaline, scales broadly elliptical, narrower near base of the wings. Legs bronzy brown. Length: Body, 2 mm.; wing, 2 mm.

Genitalia: Side-piece twice as long as wide; a divided lobe on outer third, outer division with a terminal filament with

bent tip, a large leaf longer even than the filament, with a few shorter, flattened, hair-like appendages subapically, inner division with a filament on a stout pedicle and another filament from the base of this pedicle. Harpes slender, the tip comb-shaped. Clasp-filament broadened at apex, roughened outwardly, with snout-like termination. Second uncal plate with a concave tip, one point sharp, the other point rounded and not denticulate.

Larva: Antennæ large, spicular, a tuft at outer third. Upper head-hairs in threes. Body very slightly spicular. Air-tube ten times as long as wide, pecten on basal two-sevenths of about sixteen teeth, only six ventral tufts left in our single mount, suggesting the presence of five pairs. Comb of eighth segment a large triangular patch.

We have a male and a female bred from larvæ in ground-pools at Kabelstation, December, 1918, and May, 1919.

The genitalia come near to those of *Culex invocator* Pazos from Cuba, but differ in details of the structure of the outer division of the lobe.

Culex (Choeroporpa) maroniensis, new species.

Male. Proboscis expanded apically. Palpi long. Occiput covered with flat whitish scales and black upright forked scales and a few narrow curved scales. Mesonotum with bronzy brown scales. Abdomen black above, a row of indistinct small, white, segmental, lateral, basal spots. Venter dark with pale basal bands. Wings hyaline, scales ligulate to elliptical. Legs bronzy brown. Claw formula: 1.1-1.1-0.0. Length: Body, 2.5 mm.; wing, 2 mm.

Genitalia: Side-piece with a divided lobe on outer third; outer division with a number of filaments and setæ, inner division with a terminal rod and another one with hooked tip at its base. Harpes slender, with comb-shaped tip, with large number of teeth. Second uncal plate with a basal hook, apex with rounded inner corner and a strongly chitinized outer point; the margin between denticulate and forming another chitinized point in the center.

The genitalia come near to those of *albinensis*, but they have an extra chitinous point at the apex of the second uncal plate.

We have only one male, found in Surinam, but we lost the note of the exact locality.

Culex (Melanoconion) ensiformis, new species.

Proboscis slender. Palpi short in the female, long in the male. Occiput brown, with creamy white curved scales in the middle, grayish flat scales at the sides and with numerous black erect scales. Mesonotum with creamy golden, narrow curved scales, but a broad median and two lateral stripes of brown narrow curved scales. Scutellum brown with some creamy golden scales. Abdomen black above with basal segmental lateral white patches; center black, with narrow pale basal bands. Wings hyaline with ovate scales near the tip. Legs black, tips of femora, tibiæ and bases of first tarsal joints paler. Length: Body, 3 mm.; wing, 2.5 mm.

Genitalia: Side-piece with a lobe at outer third and simple clasp-filament. Outer division of the lobe small with a ribbed leaf and a seta, inner division with a rod and a seta. Harpes with comb-shaped tip. Plate at the base of the side-piece narrow, blade-like.

Larva: Antennæ large, a tuft beyond the middle, spinulate. Upper head-hairs multiple, lower single. Body pilose. Lateral comb of the eighth segment of many small spines and one row of very long spines in a patch. Air-tube long and slender with five pairs of tufts and a pecten of about eleven spines on basal third.

We found the larvæ in grassy pools, Kabelstation, December, 1918; Dam, January, 1919.

This species is very characteristic in the larva, because of the long air-tube and the large spines in the comb of the eighth segment.

Cotype, No. 22709, U. S. National Museum.

Culex (Melanoconion) commevynensis, new species.

Male. Proboscis moderate, expanded apically. Palpi long. Occiput with pale golden, narrow curved scales, yellowish and

black upright forked scales and flat white scales at the sides. Mesonotum with pale golden brown, narrow curved scales on anterior half of mesonotum, brown on posterior half. Abdomen black above, with narrow white basal bands except on the two first segments. Lateral basal, segmental spots. Venter dark with pale basal bands. Wings hyaline with broadly elliptical scales. Legs bronzy brown. Claw formula: 1.1-1.1-0.0.

Genitalia: Side-pieces with a simple clasp-filament; a divided lobe on outer third; outer division with a large leaf and a seta, inner division with a heavy stout spine and a seta at its base. Between the lobe and the apex of the side-piece a large scale-like structure. Unci with several plates, one blade-like at the base of the side-piece. Harpes slender, with comb-shaped tip with seven broad teeth.

Only one male, bred from a ditch, Alkmaar, March, 1919; near *Culex ensiformis*.

Culex (Mochlostyrax) curopinensis, new species.

The adults show no tangible differences from *Culex (Mochlostyrax) alogistus* Dyar. The larvæ also look very similar, but the genitalia are distinct.

Side-pieces with a lobe, extending from the middle to near the tip; divided into three portions, outer bearing three rods, a small leaf-like appendage and a seta, others bearing each a long filament with tapered recurved tip. Clasp-filament stout, with foot-shaped tip. Harpes with comb-shaped tip. Second uncal plate ending in three points, middle one with distinct radial pecten. Two appendages at the base of the genitalic structures, partly chitinized and finger-shaped, this chitinized part bearing at least one long seta.

The basal lobes of *alogistus* are much larger.

Culex curopinensis is common all over the colony throughout the year.

Cotype, No. 22710, U. S. National Museum.

Culex (Mochlostyrax) multispinosus, new species.

We do not see differences in the adults from *Culex (Moch-*

lostyrax) *alogistus*, except that perhaps the scales on the head show less white and are of a darker color. The larvæ and male genitalia differ, however.

Genitalia: These differ from *alogistus* in having two lateral lobes at the base bearing long wavy hairs, reaching the tip of the side-piece. Besides small normal basal lobes are present.

Larva: Antennæ prominent, a tuft beyond the middle, spinulate. Lateral comb of the eighth segment of about fourteen spines in a regular nearly straight row. Air-tube about three times as long as wide, slightly curved, eight pairs of very long hair-tufts along posterior margin, the length of the tube. Pecten of about nine teeth, placed on basal two-fifths of the tube.

Larvæ in permanent pools, Kabelstation, May, 1919.

Cotype, No. 22711, U. S. National Museum.

Aedes arborealis, new species.

Proboscis uniform. Palpi short in the female, long in the male. Occiput with golden narrow curved scales on a wide median zone and along the eye-margins, a patch of flat white scales on the cheeks becoming more yellowish medianly. Mesonotum clothed with golden brown scales. Three broad lines, one median and two subdorsal, of golden yellow scales run from the anterior margin to the ante-scutellar area. More laterally a golden yellow line starting at the front margin reaches the scutellum. More laterally still is a patch of golden scales near the root of the wing, and a few diffuse patches in front of this. A few golden scales mixed with the brown ones around the ante-scutellar area. Abdomen and legs much like those of *Aedes fulvithorax* Lutz. Wings with the outstanding scales lanceolate, rounded. Claw formula: Female, 0.0-0.0-0.0; male, 1.1-1.1-0.0. Length: Body, 4 mm.; wing, 3 mm.

Genitalia: They place the species in the *Howardina* group, where it comes near to *fulvithorax* Lutz, but the seta adjacent to the terminal seta on the harpago is nearly as long as it, whereas it is much shorter in *fulvithorax*.

Larva: Antennæ slender, uniform, smooth, a single hair beyond the middle. Head-hairs double. Skin smooth. Lateral comb of eighth segment a triangular patch. Air-tube stout, twice as long as wide, pecten of eleven teeth not reaching the middle of the tube, and followed by a two-haired tuft.

This species was bred by us from a tree-hole, Dam, January, 1919, in the interior. The coloration of the adult is something between that of *Aedes fulvithorax* Lutz and *Aedes septemstriatus* D. & K.

Cotype, No. 22712, U. S. National Museum.

Aedes argyrothorax, new species.

Male. Proboscis uniform. Palpi two-thirds as long as proboscis. Occiput with silvery-white flat scales, a black patch on the cheeks, a few upright forked scales behind. Mesonotum with the front half with silvery white scales, the hind margin slightly V-shaped, the point directed forward. Abdomen black above, with silvery, segmental basal, lateral spots. Wings with the scales ligulate. Legs with the femora black and white, tibiæ black, tarsi black, but base and tip of first joint and base of second joint white on mid and hind legs. Claw formula: 2.1-2.1-0.0. Length: Body, 3.5 mm.; wing, 2.5 mm.

Genitalia: They place the species in the *Gualteria* group near *Aedes oswaldi* Lutz, *thorntoni* D. & K., and *podographicus* D. & K. Side-pieces without lobes. Clasp-filament uniform. Harpes narrow. Harpagones moderately long, pilose, with a pilose basal quadrangular arm; filament about as long as stem, broadened beyond the base, gradually narrowing and curved toward tip. Unci moderate.

We have two males, one of which was captured near a tree-hole on an estate near Paramaribo.

Cotype, No. 22713, U. S. National Museum.

Megarhinus aldrichanus, new species.

Female. Proboscis curved, palpi two-thirds of its length, terminal joint minute, blunt. Occiput with flat bright, bluish-green scales, whitish at sides. Mesonotum with dark bronzy brown scales, more greenish blue in front and at the sides; no

stripes. Abdomen black above with green and violet reflection; venter golden scaled with dark median line, last two segments nearly completely dark beneath. Legs without white.

This species differs from any other *Megarhinus* by the absence of abdominal tufts and of white on the legs in the female. We saw our specimens emerge from the pupæ and the tufts were not left in the pupal skins.

We have two females, bred from ground Bromeliaceæ, Dam, January, 1919.

Megarhinus guadeloupensis guianensis, new subspecies.

We have one female and one male from different localities which we are not sure belong to the same species. Both, however, come near to *Megarhinus guadeloupensis*. The female differs by the coloration of the palpi which is substantially silvery blue. The hind legs have white on the fifth tarsal joint also. The male differs in the antennæ which are more plumose and bear blue scales on the second joint.

We hope to give complete descriptions of these species in the near future in a publication on the mosquito fauna of Surinam. Our material will be placed in the collection of the Colonial Institute, Amsterdam, Holland. Cotypes, except of uniques, are also in the collection of the U. S. National Museum, Washington, D. C., and we have added the type numbers of the specimens so deposited.

We are much indebted to Doctor Dyar of Washington for his assistance in studying our material, especially our mounts of the male genitalia.

NEW SPECIES OF ELASMUS FROM AUSTRALIA

(Hymenoptera, Elasmidae)

By A. A. GIRAULT

Elasmus pavo, new species.

Like *flavipostscutellum*, but postscutellum black at base, abdomen orange but margined down sides for a bit over proximal half except for a space at proximal one-eighth; also distal fourth above metallic save (sometimes) for a very narrow orange stripe near tip. Mandibles 6-dentate. Scape pale. Head punctures rather sparse. Pedicel rather long, equal to funicle 3, funicle 1 twice longer than wide.

Gordonvale, Queensland, forest, July 9, 1918. Also Aloomba, July 10. Also Brisbane, November, 1916 (H. Hacker).

Elasmus kulabaga, new species.

Like *divinus*, but abdomen wholly metallic, the distinct infuscation of the fore wing is uniform and over distal fourth. Mandibles 7-dentate. Head punctures tolerably dense. Scape pale. Funicle 1 twice longer than wide. Also first leg pale save femur above, coxa at base; 2 and 3 green save apex of coxæ, base of femora and the tibiæ. Postscutellum all yellow.

From canes, Nelson, October, 1915 (A. P. Dodd).

Elasmus nakomara, new species.

Like *formosus*, but propodeum all metallic, upper edge hind coxæ so, the mandibles only 5-dentate. Funicle 1 thrice longer than wide.

Brisbane, June (H. Hacker).

Elasmus arumburinga, new species.

Like *formosus*, but pronotum widely black to scutum's middle, then rest of scutum metallic and distal two-thirds parapsides, this metallic acute on its cephalic end, a dot under tegula, all of propodeum save latero-caudal margin. Mandibles 6-dentate. Cephalic margin scutellum narrowly metallic. Head densely punctate, also upper edge hind coxa.