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NEW DORILAIÐÆ FROM THE BELGIAN CONGO,
by D. Elmo HARDY (Honolulu).

Since the writer's paper on the African DORILAIÐÆ has been in the hands of the printer, many new species have come to his attention from the Belgian Congo. The material discussed in this paper is from the Institut royal des Sciences naturelles, Brussels, Belgium. The writer is indebted to M. A. COLLART for having had the opportunity to study this interesting collection.

Dorilas (Eudorylas) bredoi n. sp.
(Figs. 1 a-c.)

This species is related to *D. meruensis* HARDY because of the short third and fourth costal sections. It is very distinctive and cannot be confused with any species known to the writer. It differs from *meruensis* as follows: The third antennal segment is brown to black and the humeri are black; the tibiae have broad black bands and the tarsi are black; the wings are shorter than the body; the fifth costal section is two and one-third times longer than the third and fourth sections combined; the apical cell is just slightly more than half as wide, at the wing margin, as the r-m crossvein is long and the m crossvein is two times longer than the last section of the fifth vein.

Female. Head. Third antennal segment short acute at apex (fig. 1 a), densely whitish pubescent. The face is just slightly

narrower than the front and is densely silvery pubescent. The front is whitish pubescent and is distinctly narrowed on the upper portion. Thorax. Chiefly shining, rather lightly pollinose. The mesonotum and scutellum are covered with very fine grayish pollen but the shining ground color is not obscured. The dorsocentral hairs extend the full length of the mesonotum but they are very weak and microscopic. The hind margin of the scutellum has a few short bristles, the propleura are bare. The humeri are black except for a small yellowish spot on their hind margins. The halteres are yellowish with a faint brownish tinge on the knobs. Legs. The femora are all black except for the extreme apices which are yellow. The tibiae are discolored with brown to black on their median portions. The tarsi are dark brown to black. The hind trochanters are polished and have several long hairs on the under side. The femora are stout, the flexor spines and extensor bristles are well developed. The hind tibiae are moderately swollen medianly and slightly curved. There are no strong bristles on the outer edge. Wings. Hyaline, stigmata brown and not quite filling the third costal sections. The third section is about equal in length to the fourth and the two combined are less than half as long as the fifth (fig. 1 c). The r-m crossvein is situated at the basal third of the discal cell and the last section of the fourth vein is very slightly curved. Abdomen. The sides are very slightly rounded, widest at about segment three. The first tergum is entirely gray pollinose, the other terga are shining black on their apical halves, opaque brown on their bases and grayish on the sides. The hind margin of the sixth tergum is straight. Ovipositor. The base is globose and shining black. The piercer is rufous, straight and slender (fig. 1 b). It extends to the apex of the fourth abdominal segment.

Length : body, 4.8 mm ; wings 3.9 mm.

Male unknown.

Holotype female : Elisabethville, Belgian Congo, April 30, 1939 (H. J. BREDO).

Type returned to the Institut royal des Sciences naturelles, Belgium.

Dorilas (Eudorylas) modicus n. sp.

(Figs. 2 a-b).

This species appears to be most closely related to *D. angustifacies* HARDY. It differs by having the abdomen more polished ;

the face not narrowed; the wings hyaline and the fourth vein straight; the male genitalia are also very differently constructed in the two species.

Male. Head. Eyes joined for almost one-half the length of the front. Lower portion of front subshining black in the middle, dark gray to black pubescent on the sides. Face equal in width to the front and densely whitish pubescent. Second antennal segment with long yellow bristles below, these extend to the apex of the third segment. Third segment yellow, slightly brownish above and obtuse at apex (fig. 2a). Thorax. Brown pollinose on the dorsum, gray on the sides. The humeri and knobs of the halteres are brown to black. The propleura are bare and the dorsocentral and marginal scutellar hairs are very weak. Legs. Chiefly yellow, femora with pale brown median bands, tarsi yellowish brown to blackish. Femora rather slender, flexor spines and extensor hairs well developed. Hind tibiae moderately swollen and slightly curved and each has a row of erect bristles extending from just beyond the middle to the apex on the outside surface. The hind trochanters have a few pale hairs beneath. None of the tibiae possess apical spurs. Wings. Hyaline, stigma pale brown and filling all of the third costal section. The third section is about two times longer than the fourth. The two combined are equal in length to the fifth section. The r-m is situated at the basal one-third of the discal cell and the last section of the fourth vein is straight or nearly so. Abdomen. Terga one and two dark grayish pollinose, the other terga are polished brown to black. The first tergum has three to four long bristles on each side, the remainder of the abdomen possesses sparse, short black bristles. Hypopygium. About two-thirds as long as the fifth segment and with a large subapical membranous area toward the left side (fig. 2b). The ninth segment (coxopodite) is large and well developed, the basal portion of it is visible from a dorsal view. The ninth segment is slightly longer than wide and yellowish brown to black in color. The harpagones are yellowish. They are short and broad, rounded at apices.

Length : body, 2.6-2.8 mm; wings, 3.4 mm.

Female unknown.

Holotype male : Elisabethville, Belgian Congo, April 25, 1939 (H. J. BREDO).

Type in the Institut royal des Sciences naturelles, Belgium.

Dorilas (Eudorylas) unanimus n. sp.

(Figs. 3 a-c.)

This species is related to *D. diversus* HARDY but it is larger in size, the third antennal segment more acuminate, the last section of the fourth vein is sinuate and the sides of the abdomen are rounding.

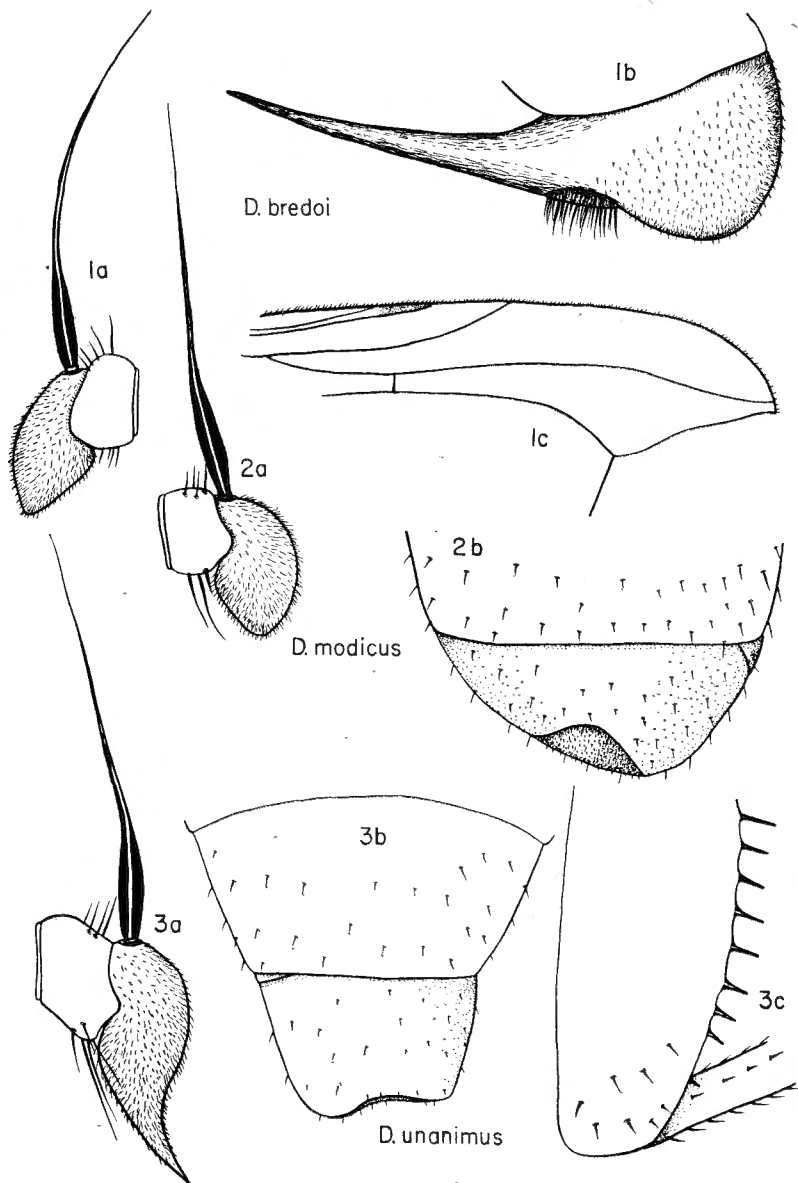
Male. Head. The eyes are joined for about half the length of the front. The face and the lower portion of the front are black in ground color and whitish pubescent. The antennae are black, the third segment is long acuminate at its apex (fig. 3 a). Thorax. Brown pollinose on the dorsum, gray on the sides. The humeri and halteres are yellow. The propleura are entirely bare, the margin of the scutellum is nearly so. Legs. Chiefly black, extreme apices of femora and tibiae, broad bases of tibiae and the first two to three subsegments of tarsi yellow. Femora stout, flexor spines very well developed, especially on the hind femora (fig. 3 c). Extensor bristles are present only on the middle femora. The hind tibiae are swollen in the middle and slightly arcuate, there are no strong, erect bristles on the swollen portion. Hind trochanters with numerous long hairs below. Wings. Brownish fumose, stigmata dark brown and filling all of the third costal sections. The third section is one and one-half times longer than the fourth and is about one-fourth shorter than the fifth section. The r-m cross-vein is just beyond the basal third of the discal cell and the last section of the fourth vein is moderately curved. Abdomen. Sides rounded, widest at segments three to four. Entirely opaque, it appears to be brownish pollinose on the dorsum and grayed on the sides, with no evidence of gray bands across the terga. (The abdomen has been greased so that the nature of the pollen is obscured.) Hypopygium. One-third to one fourth shorter than the fifth abdominal segment, rather quadrate in outline and with a very large apical membranous area (fig. 3 b). The harpagones are not plainly visible, they appear to be rather slender, rounded at apices and curved upward.

Length : body, 5.4 mm ; wings, 6.5 mm.

Female unknown.

Holotype male : Rutshuru, Belgian Congo, Dec. 6, 1937 (J. GHESQUIÈRE).

Type returned to the Institut royal des Sciences naturelles, Belgium.



- Fig. 1. — *Dorilas bredoi* n. sp. : a. antenna; b. female ovipositor lateral; c. anterior margin of wing.
 Fig. 2. — *D. modicus* n. sp. : a. antenna; b. male hypopygium, dorsal.
 Fig. 3. — *D. unanimus* n. sp. : a. antenna; b. male hypopygium, dorsal; c. apical portion of hind femora.

Dorilas (Dorilas) vinnulus n. sp.

(Figs. 4 a-b.)

This species is related to *D. bequaerti* (CURRAN). It is distinguished by the presence of a large membranous area at the apex of the male hypopygium; by having the hypopygium much shorter than the fifth abdominal segment and by the lack of the strong, spur-like bristles that *bequaerti* has at the apices of the front and middle tibiae.

Male. Eyes joined for more than one-third the length of the front. Front brownish to faintly gray pubescent, face densely gray. Third antennal segment short, rounded at apex (fig. 4 b), bright yellow in color. The bristles on the under side of the second segment are yellow and some are as long as the third segment. THORAX. Black in ground color, brown pollinose on the dorsum, gray on the sides. Humeri yellow with a slight brownish tinge. Halteres bright yellow. Bristles of propleural fans yellow. Hind margin of scutellum with long yellow bristles. Legs. Entirely yellow, except for the brownish middle and hind coxæ and the apical subsegments of the tarsi. Femora rather slender, the flexor spines are well developed. The hind tibiae are swollen medianly and slightly curved, they each have four strong, erect bristles on the outside surface of the swollen portion. The hind trochanters have considerable fine hair beneath and the middle coxæ each have a dense clump of long curved hairs at apices. Wings. Very pale brownish fumose, stigma dark brown and filling all of the third costal section. Third section nearly two times longer than the fourth and about equal in length to the fifth. The r-m crossvein is near the basal one-fourth of the discal cell and the last section of the fourth vein ($M_1 + 2$) is moderately curved. The petiole of the cubital cell is one-fourth longer than the m-cu crossvein. Abdomen. The sides are nearly straight; it is slightly widest at about segments three to four. The first tergum is densely gray pollinose. Terga two to five have a broad opaque brown band on the anterior one-third to three-fifths. The hind margin of each of these terga is polished black, tinged lightly with rufous; in the middle and gray on the sides. The abdomen is rather sparsely pilose except for the numerous long yellow bristles on the sides of the first three segments. Hypopygium Brown to blackish in ground color, with a tinge of yellowish on the ninth and on the top of the eighth segment. The eighth

segment is densely brown pubescent, it is about two-thirds as long as the fifth segment and has a large membranous area at the apex (fig. 4 a).

Length : body, 5.1 mm; wings, 6.4 mm.

Female unknown.

Holotype male Eala, Belgian Congo, June 18, 1935 (J. GHESQUIÈRE).

Type returned to the Institut royal des Sciences naturelles, Belgium.

Congomyia n. genus.

This genus is related to *Dorilas* MEIGEN and is best distinguished by the closed apical cell in the wing. The wings are black fumose and the stigmata are not differentiated from the wing membrane. The wings are densely covered with conspicuous microchætæ. The first antennal segments are rather well developed, they are much larger than in any other DORILAINÆ known to the writer. The propleura are bare, as in *Dorilas* (*Eudorylas*). The anterior basalar and the subalar sclerites are larger, more swollen, than is usual in this family. The ridge leading from the wing base to the scutellum has a dense fringe of moderately long white pubescence. The front margin of the mesonotum possesses numerous long bristles and the first abdominal tergum has a dense clump of bristles on each side instead of the usual single row of bristles. The metanotum has a distinct transverse depressed area or furrow above the median portion.

Genotype, *Congomyia nigripennis* n. sp.

Congomyia nigripennis n. sp.

(Figs. 5 a-e.)

Male. A very large totally black species, except for the bright orange-yellow tegulæ and for the yellowish tinge on the pleura. This is the largest DORILAINÆ known to the writer. Head. Large and round, as wide as the thorax and almost equal to its length, minus the scutellum. The eyes are joined for about one-third the length of the front. The front is entirely opaque black,

with dense dark colored pubescence. The face is shining black in ground color and rather lightly pubescent. The mouthparts and the antennæ are black. The first antennal segment is large compared to other members of this family, it is almost half as long as the second segment. The second segment possesses a clump of long black bristles above and a smaller group of short black bristles below. The third segment of each antenna is rather small, obtuse and rounded at the apex. It is thickly brown to black pubescent (fig. 5 b). The basal portion of the arista is also pubescent. **Thorax.** Subshining black in ground color, rather densely brown pubescent. The front portion of the mesonotum possesses numerous long black bristles. The bristles along the sides of the mesonotum are rather short and more sparse. The dorso-central bristles and the marginal scutellars are very weak. The humeri are black and have several long bristles on upper portion. The area of the mesonotum adjacent to the wing base is strongly sunken in and there is a small pit (somewhat like a pin puncture) just behind the middle of this concavity. Each tegula is bright orange, the tiny lobe just behind it is lemon yellow. Most of the pleura are dark brownish, tinged with yellow, the anterior basalar and the subalar sclerites are black. These sclerites appear to be larger, more protuberant than in other species, the anterior basalar sclerite is about half the size of the humeri. The axillary cord is densely fringed with white pubescence. The halteres are entirely black. The margins of the posterior spiraculæ are very densely fringed with long gray pubescence. **Legs.** The middle coxæ are divided at apices and each possesses a long slender sub-apical projection, as seen from lateral view, and a row of long black bristles at apex above (fig. 5 c). Hind trochanters with a few short inconspicuous hairs below, besides the fine pubescence. Femora moderately stout, flexor spines very weak, with only seven or eight tiny bristles on apical portion. The extensor bristles are very well developed, especially on the inside surfaces, the inner extensor row extends almost to the base of the femur. The hind tibiæ are arcuate and slightly swollen in the middle; two or three of the bristles on the outside of this swollen portion are distinctly larger than the other tibial bristles. The hind tarsi are rather strongly flattened and the under surfaces are densely yellow pilose. The basitarsi are equal in length to the next four subsegments. **Wings.** Dark brown to black fumose without any indication of a stigma being present. The third costal section is two times

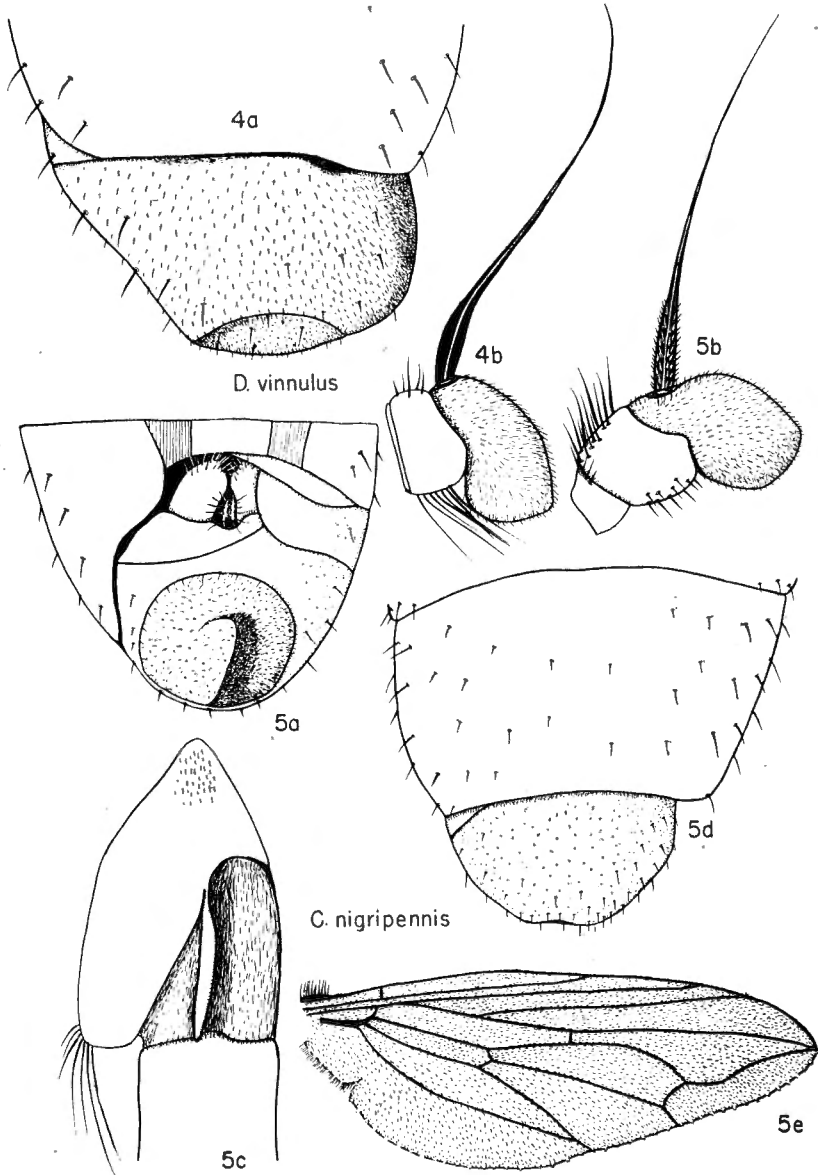


Fig. 4. — *D. vinnulus* n. sp. : a. male hypopygium, dorsal; b. antenna.

Fig. 5. — *Congomyia nigripennis* n. sp. : a. male hypopygium, ventral; b. antenna; c. lateral view of right middle coxa; d. male hypopygium, dorsal, slightly tipped to show the apical membranous area; e. wing.

longer than the fourth and is equal in length to the fifth. The r-m crossvein is situated just slightly beyond the basal third of the discal cell. The last section of the fourth vein ($M_1 + 2$) is sinuate and meets with vein R5 at its tip, completely closing the apical cell (R5). The m crossvein is curved and is slightly longer than the last section of the fifth vein ($M3 + 4$). The cubital cell has a long petiole at apex, this is slightly longer than the m-cu crossvein (fig. 5e). Abdomen. Subshining black in ground color, gray pollinose on the first tergum, brown on remainder of abdomen. Sides just slightly rounded, widest at about segments three to four. First tergum rather densely bristled on the sides, other segments with short, sparse bristles, these are more numerous on the sides. Genitalia. Very densely brown pubescent and entirely opaque. From a direct dorsal view the eighth segment is symmetrical, rounded at apex and about half as long as the fifth segment. When tilted slightly, or turned over, a small portion of the ventral membranous area can be seen (fig. 5 d). The membranous area covers almost the entire ventral portion of the eighth segment (fig. 5 a). The seventh tergum is visible from a dorsal view. The harpagones are yellowish in color, are short, thick and rounded at apices (fig. 5 a).

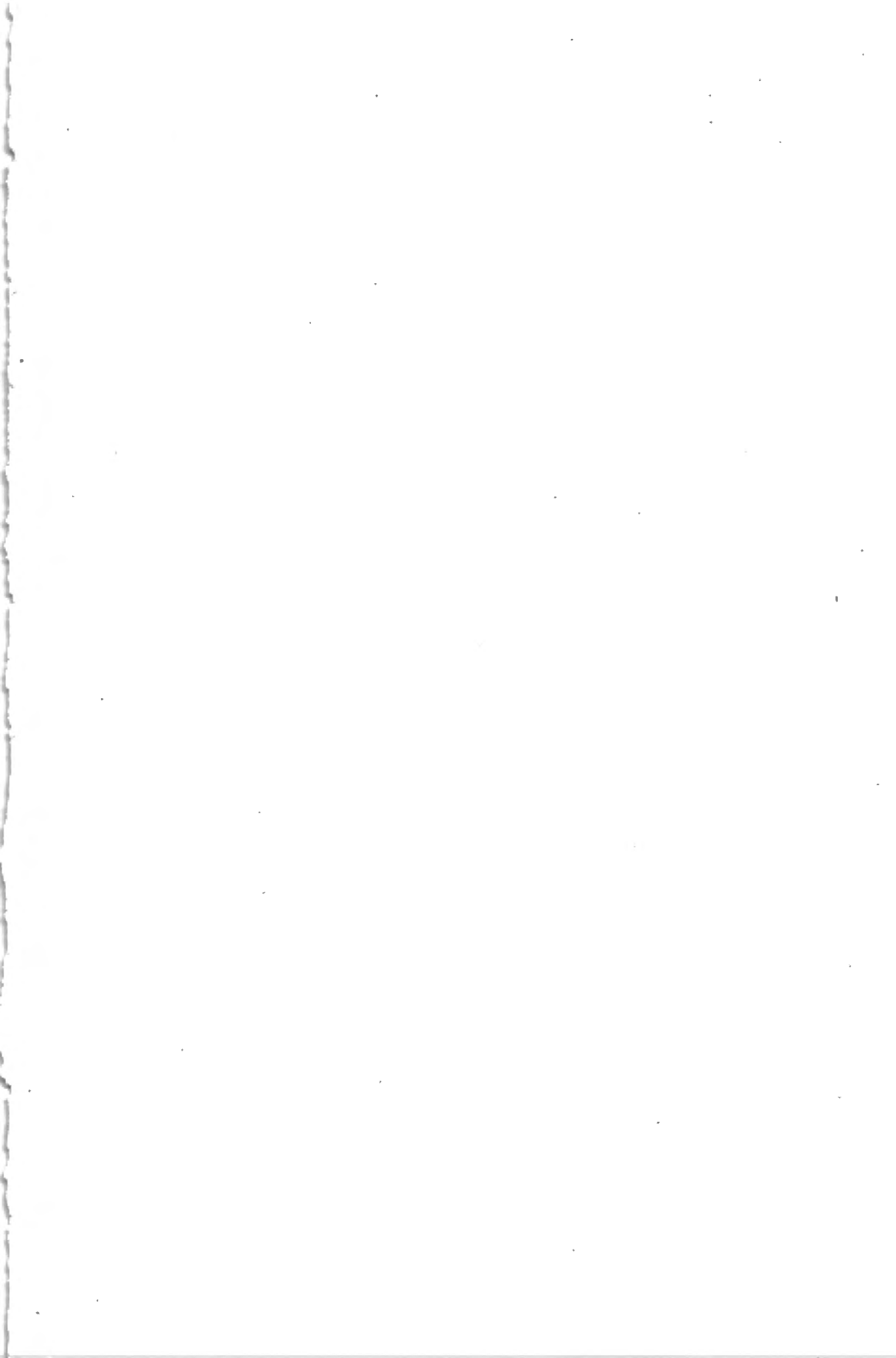
Length : body, 8.0 mm ; wings, 9.0 mm.

Female unknown.

Holotype male: Eala, Belgian Congo, March, 1936 (J. GHE-S-QUIÈRE).

Type returned to the Institut royal des Sciences naturelles, Belgium.

DEPT. OF ZOOLOGY-ENTOMOLOGY UNIVERSITY OF HAWAII.



AD. GOEMAERE, Imprimeur du Roi, 21, rue de la Limite, Bruxelles.