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MEDEDELINGEN

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CONTRIBUTION A L'ÉTUDE DES DIPTÈRES  
DE L'URUNDI.

II. — A new Genus of *Bombyliidæ*  
from the Belgian Congo,

by A. J. HESSE (Cape Town).

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Gen. *Françoisia* n. gen.

M. F. J. FRANÇOIS, Administrator of Ruanda-Urundi in the Belgian Congo, has very kindly submitted a few specimens of a Bombyliid which proves to be an entirely new genus and of which I am giving a description below.

I have great pleasure in naming this new Bombyliid after M. FRANÇOIS who, despite his many administrative duties, has nevertheless found time to collect and study the *Bombyliidæ* of Ruanda-Urundi. At the same time I also wish to thank him for asking me to describe this new genus.

This new genus is characterized as follows :

Head subglobular, but much broader across eyes than long, broader than thorax; occiput relatively short behind vertex, the lobes slightly separated posteriorly, but sometimes subcontiguous, the occiput also fairly deeply and transversely depressed in the middle just behind vertex and in line with hind margins of eyes; eyes large, separated above in both sexes, the interocular space on vertex not, scarcely, or only a very little narrower in ♂♂ than in ♀♀, with the hind margins of

eyes distinctly subangularly indented on sides and with a distinct bisecting line, extending forwards for a little distance; ocellar tubercle small, only slightly elevated, elongate, situated some distance before vertex, prolonged behind in form of a raised ridge; frons gradually widening anteriorly, slightly to distinctly longitudinally depressed medially along midline; face conically prominent and projecting, slightly directed upwards, its upper surface not in a straight line with that of frons, appearing transversely depressed at its base, with a distinct, longitudinal, groove-like depression along its dorsal midline, the sides of face convex, appearing subtumid; genal grooves narrow and line-like; buccal cavity large, well-developed; proboscis distinctly projecting for some distance beyond apex of buccal cavity; palps relatively short in comparison with those of *Exoprosopa* and related genera; antennæ widely separated, with joint 1 relatively short, joint 2 transverse and 3 conical, broadened basally, provided with a distinct style, bearing a short, slender, spine-like, terminal element; integument of head more or less shiny; hairs and scaling on head not very long or dense, the hairs on antennæ and face short, sparse on latter.

Thorax relatively and markedly short, with the integument also more or less shining under the hairs and scaling; humeral tubercles prominent, transverse; pleuræ relatively bare, the greater part of pteropleuron, lower part of metapleuron, hypopleuron and hinder part of metapleural part entirely bare and even sternopleuron and lower part of mesopleuron with only sparse hairs and scales; hairs in collar above, on upper part of mesopleuron, the propleural tuft, hairs on upper anterior part of pteropleuron and the metapleural tuft shortish, stoutish, dense and brush-like, the individual hairs blunt apically; shortish and stout prealar bristles present.

Wings pedunculate, the axillary lobe and alula much reduced and narrowed, the fringe along hind margins of alula and squama composed of shortish, hair-like scales (or hairs); second vein originating a little or some distance before middle cross vein; three submarginal cells present; first posterior cell and anal cell broadly open apically, the latter markedly so; vein between discoidal and second posterior cells shortish, slightly sinuous; basal comb feebly developed; basal hook well-developed.

Abdomen broader than thorax and head, broad and flat, the sides more or less parallel, densely covered above and below with flattened scales; hairs relatively sparse on sides, very short above, the dense tuft on each side basally composed of stiff and stoutish, blunt, brush-like ones like those on thorax.

Legs relatively short and stoutish; front femora without spines, but front and middle ones with separated, fine hairs on outer lower aspect; middle and hind femora with some spines; front tibiae with spicules and with rather conspicuous, curved, apical spicules or spurs; front tarsi modified in both sexes, more so in ♀♀, shorter than other tarsi, shorter and with distinctly longer and denser hairs in ♀♀, and with joint 1 in ♀♀ also relatively thicker; claws with a basal tooth, the front ones not much reduced in size, only very slightly smaller than middle claws.

Ovipositor in ♀♀ with a row of stoutish spines on each side.

Hypopygium of ♂ (cf. text-figure, lower figure) resembles that of some species of *Exoprosopa*; apical joint of each of the two fused clasper-like organs flattened and depressed above, its beak-like apex curved upwards and outwards; medial aedeagal complex (AA.) with a ventral aedeagal process (VAP.) and two spine-like processes dorsally at base of aedeagus (Ae.); ventral lateral structures (VLS.) of middle globular part (MGP.) rudimentary or vestigial; posterior process (PP.) of middle part also reduced.

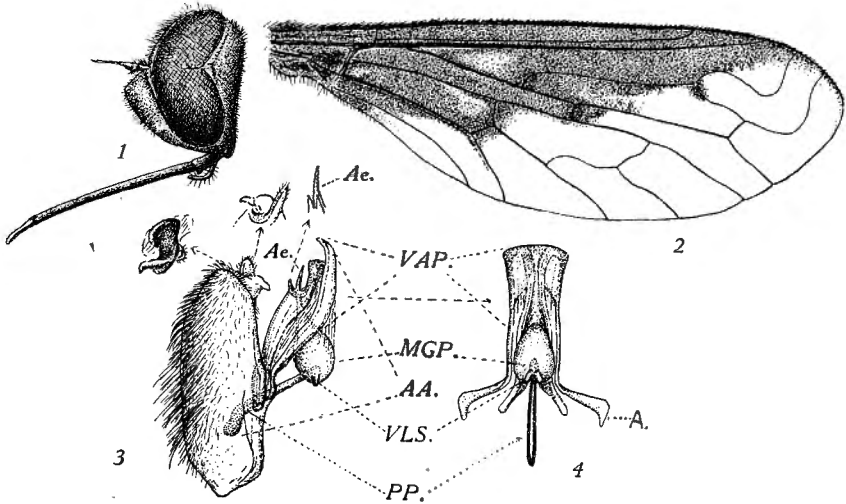
This genus is related to *Exoprosopa*, but may at once be separated from representatives of the latter by the relatively longer proboscis; much shorter palps; relatively longer buccal cavity; dorsal groove-like depression on face; more indistinct genal grooves; more pedunculate wings in which the axillary lobe and alula are more reduced than in even the stalk-winged species of *Exoprosopa*; origin of the second vein which is distinctly or much before middle cross vein; fringe of hair-like scales on margins of alula and squama; relatively more extensively bare pleurae; relatively short thorax; less reduced front claws; and the stiff, stoutish, blunted and brush-like hairs on sides on upper parts of pleurae, prosternal part and on sides at base of abdomen.

The genotype and only known species is *Françoisia sulci-facies* n. sp. described below.

*Françoisia sulcifacies* n. sp.

Body entirely or predominantly pitchy black, but the pleuræ and to a certain extent the venter sometimes more dark brownish or piceous; antennæ especially joint 3, and palps dark brownish or piceous; a streak across lower part of face, a faint oblique streak below each antenna, the buccal rim and sides inside buccal cavity dull yellowish; legs with the femora pitchy blackish to piceous, the tibiæ and tarsi more yellowish.

Vestiture with all the hairs, bristly hairs and bristles on head and body above and below black; head in front with



Head, wing and hypopygium of *Françoisia sulcifacies*, n. gen., n. sp.

Fig. 1. — Head of ♂ in profile,  $\times 8 \frac{1}{2}$ .

Fig. 2. — Right wing of ♀,  $\times 9 \frac{1}{2}$ .

Fig. 3. — Side view of hypopygium of ♂, showing right-hand part of the two fused clasper-like organs and single medial aedeagal complex (AA.), and also showing separately apical and ventral views of the apical joint of right-hand clasper-like organ and the two dorsal spines at base of aedeagus (Ae.).

Fig. 4. — Ventral view of aedeagal complex (AA.) dissected out. (A. = attachment of aedeagal complex to each side of the two fused clasper-like organs; AA. = medial aedeagal complex; Ae. = aedeagus; MGP. = middle globular part of aedeagal complex; PP. = posterior process or strut; VAP. = ventral aedeagal process; and VLS. = ventral lateral structures of middle part).

a brownish pruinescence; sparse scaling on head dark or blackish, but gleaming greyish whitish to dull silvery, a small patch on each side of frons above antennæ and streak of pruinescence below antennal bases silvery whitish; scales bordering eye-margins behind, especially above indentation, brilliantly silvery; scaling on thorax above mostly greyish yellowish, especially on anterior part and across base of scutellum, but with some finer ones across disc at level of wing-bases, across base and on sides between these as well as those on disc of scutellum darker or black, gleaming graphite-like; those in a feeble streak on extreme sides of thorax more whitish; very sparse scaling on sternopleuron dark; plumula white; scaling on abdomen above and also the broader and longer ones across hind margins of tergites, especially last one, dark or black, but gleaming or shining graphite or anthracite-like to silvery in certain lights, giving the abdomen a greasy appearance; a broad, conspicuous, transverse band of white scales present across basal half of tergite 2; scaling on venter mainly dark or dark brownish, gleaming paler or more whitish across hind margins of sternites and posteriorly in ♀♀; scaling on legs black, with a greasy lustre.

**Thorax** only a little more than twice length of scutellum.

**Wings** (text-figure, top right) faintly smoky greyish hyaline, with nearly the anterior costal half very dark blackish brown to black, this infuscation extending across from base of axillary lobe to slightly round apex of wings to apex of second apical vein, occupying at least basal half of anal cell, entire basal cells, bases of fourth posterior, discoidal and first posterior cells, at least basal half of enclosed submarginal cell; a distinct dark spot present at base of submarginal cross vein which is confluent with main infuscation and darker spot-like areas also present within main infuscation at bases of fourth posterior and discoidal cells and on middle cross vein; prediscoidal spot elongate, greyish; second vein originating at a point before middle cross vein which is distant about 2 to nearly 3 times length of middle cross vein, its apical part very sinuous, deeply recurved; discoidal cell about as broad as or a little narrower apically than at base of third posterior cell, its apex subacute, its apical vein very feebly S-curved; second posterior cell rhomboidal, slightly narrower on hind margin than third posterior cell; vein between discoidal and third

posterior cells meeting fourth posterior cell a good distance away from base of latter; anal cell long, narrow, broadest on hind margin of wing, the much reduced axillary lobe thus much shorter than anal cell; squamæ and halteres dark brown.

Head (cf. text-figure, top left) with the interocular space on vertex about 3 times width of ocellar tubercle; buccal cavity at least as long as or even a little longer than front part of head from vertex to apex; antennæ with joint 1 about twice as long as 2, joint 3 relatively short, subequal in length to 1, conical, broadened bulb-like basally, its style long, slender, about or nearly twice length of the joint itself; proboscis about 3.2 - 4.2 mm long from extreme base of buccal cavity to apex.

Legs with 1 spine on anterior face of middle femora and 3-6 spines on hind ones below, usually from just before the middle, also with some apical spines above; front femora slightly longer than tibiæ.

Ovipositor of ♀ with 5 reddish-gleaming spines on each side.

Hypopygium of ♂ as shown in the text-figure (lower figure), with the ventral aedeagal process (VAP.) broad, flattened and shovel-shaped (right-hand lower figure); posterior process (PP.) of middle globular part (MGP.) narrow, almost rod-like, its apical part bent downwards; two fused clasper-like organs very hairy above and their inner apical angles, bounding the apical joints, long and prominent.

From 2 ♂♂ and 3 ♀♀ (Types [♂ Holotype and ♀ Allotype] and paratypes in the Institut royal des Sciences naturelles de Belgique and one paratype in the South African Museum, Cape Town).

Length of body : about 6.8 mm.

Length of wing : about 7.9 mm.

Locality : Butetsi in Ruanda-Urundi, Belgian Congo (leg. F. J. FRANÇOIS, 28-V-1950).

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