

TWO NEW SPECIES OF SARCOPHAGIDAE  
(DIPTERA)  
FROM THE MADAGASCAN REGION

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From the « Musée Royal de l'Afrique Centrale, Tervuren », I received, among other material, two new species of Sarcophagidae (=Calliphoridae s. lat.), represented by one single male each. They are so well characterized by the genitalia, that it seems justifiable to base the descriptions on them. Both specimens were collected by Mr. J. VADON and are deposited in the collection of the Muséum National d'Histoire Naturelle de Paris.

I wish to thank Dr. P. BASILEWSKY for making the material available to me, Professor J. GEAR, director of the S.A.I.M.R., for providing the necessary research facilities, and Mrs. Evelyn NESBITT née Bauristhene for making the drawings.

**Phumosia vadoni** n. sp.

In my key to the Madagascan species of the genus *Phumosia* ROBINEAU-DESOVIDY (ZUMPT, 1962), the specimen runs down to *P. keiseri* ZUMPT, from which it is strikingly different with respect to the shape of the paralobi and the phallosome (fig. 1).

**Male.** — Eyes separated from one another by a broad frons, measuring at its narrowest point (at the tip of the ocellar triangle) one fourth of eye-length. The frons is widened towards the vertex as well as the lunula, frontal stripe black in the upper half, orange in the lower one, parafrontalia and facialia white pollinose. Upper facets of eyes only slightly larger than the lower outer ones. Inner and outer vertical bristles, frontal and ocellar bristles present, row of parafrontals complete, background of parafrontalia black, parafacialia, antennal groove and buccae yellow-orange. Third antennal

segment about 3 times as long as the second, its outer margin blackened, otherwise antennal segments yellow-orange. Facial ridges with densely placed setae in the lower 3/4th. Vibrissa long, peristomal bristles long and black, buccal area with black hairs, postbucca with yellow ones. Height of bucca about 1/4th of eye-length. Palpi and proboscis yellow.

Thorax predominantly metallic green and blue including the mesopleuron, whereas the sternopleuron shows only a triangular

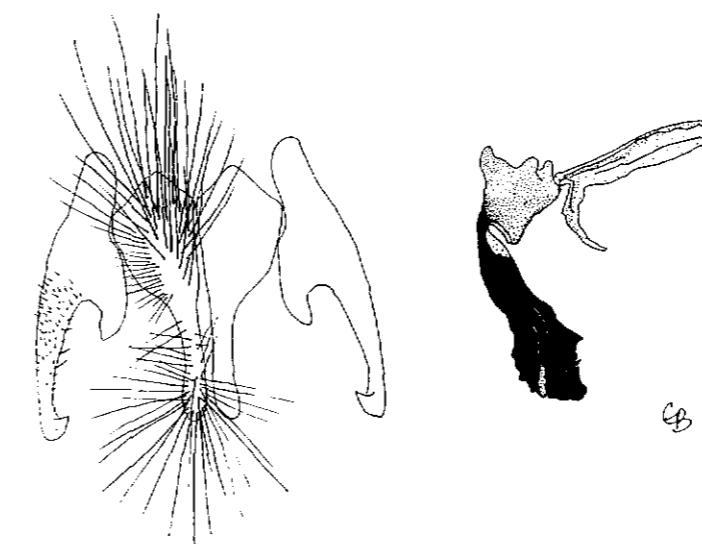


FIG. 1. — *Phumosia vadoni* n. sp.  
Cerci with paralobi in dorsal and phallosome in lateral view.

metallic blue dot bordered by 3 sternopleural bristles. The remaining pleural parts as well as the stigmata mainly yellow to orange. Acrostichals = 2 + 2, dorsocentrals = 2 + 4, intra-alar bristles = 1 + 3, presutural and outer posthumeral bristles present, furthermore 3 humeral bristles, 2 notopleural and 3 supra-alar bristles present. Scutellum with 4 pairs of marginal and one pair of discal bristles. The propleural bristle is doubled, the prostigmatic bristle is single. Propleuron, prosternum and alar-declivity setulose. Mesopleuron in the upper part with a number of black bristly hairs, row of posterior bristles normal. Wing brownish tinged, costal spine small. The first longitudinal vein ( $r_1$ ) bare,

3rd longitudinal vein ( $r_{4+5}$ ) provided with a few black setae, first posterior cell ( $R_5$ ) open. Legs yellow; fore-tibia with several antero-dorsal and a strong submedian postero-ventral bristle; mid-tibia with one antero-dorsal and 2 postero-dorsal bristles, ventral bristles wanting; hind-tibia with 3 antero-dorsal and 2 postero-dorsal bristles.

Abdomen with tergite I+II partly yellow, tergite V with its hind margin demarcated narrowly yellow, otherwise tergites metallic green. Ventral side of abdomen predominantly reddish-yellow.

Length: 9 mm.

Locality: Maroantsetra, N.E. Madagascar, IX.1959, 1 ♂,  
J. VADON.

#### *Sarcophaga vadoni* n. sp.

The hypopygium (fig. 2) shows some similarity to that of *S. caudagalli* BÖTTCHER (see ROHDENDORF, 1937), the vesicae, however, have a peculiar, hook-shaped appearance. The juxta bears long appendages, whereas the harpes may be homologized with a pair of short and pointed appendages just beneath the vesicae. The membranal lobi are short, but clearly identified (comp. ZUMPT & HEINZ, 1950). In my key to the Madagascan *Sarcophaga* species (ZUMPT, 1964), this species runs down to *S. peregrina* (ROBINEAU-DESOVY), but the hind-tibia is provided with several long ventral hairs.

Male. — Head silvery pollinose, frontal stripe black, subparallel, frons at its narrowest point measures 1/4th of eye-length. The parafrontals reach the hind margin of the second antennal segment. Inner vertical bristle long and thick, outer one only a little longer than the adjoining postocular bristles, frontal and ocellar bristles well developed. Parafrontalia and facialia setulose, the latter with an irregular row of bristly hairs near the lower eye margin. Antennae deep black, third segment about twice as long as the second, arista with long hairs on both sides. Height of bucca 3/10 of eye-length, vibrissa long and thick, all hairs black, including those on the post-bucca and the occiput. Palpi black.

Thorax glossy black, with a thin white and olive pollinosity, so that the usual longitudinal stripes are faintly developed. Only

the prescutellar pair of acrostichals present, but weak, dorso-centrals = 3 + 3, intra-alars = 1 + 3, presutural bristles long and thick, 2 long and 2 short supra-alar bristles, scutellum with 3 pairs of long marginal and one pair of discal bristles. Propleuron densely setulose, propleural and prostigmatic bristles accompanied by bristly hairs, sternopleurals = 1 : 1 : 1. Wing hyaline, epaulet black,

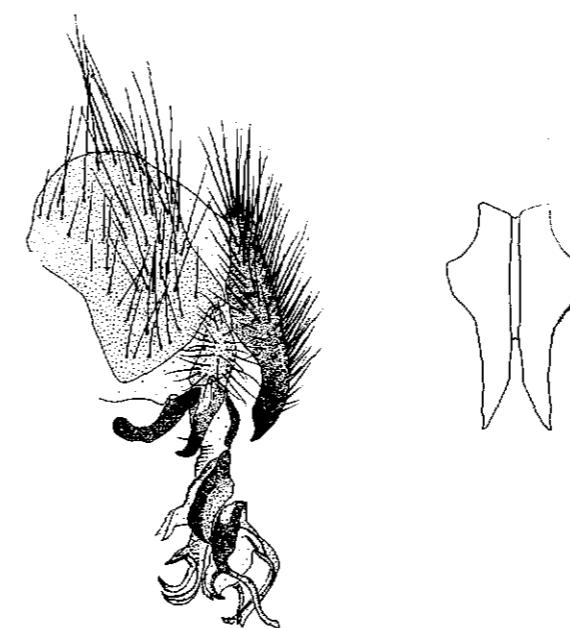


FIG. 2. — *Sarcophaga vadoni* n. sp.  
Hypopygium in lateral view and outline of cerci dorsally.

basicosta yellow, veins brown, longitudinal vein ( $r_1$ ) dorsally bare, third vein ( $r_{4+5}$ ) with a row of black setae, which nearly reaches the cross-vein ( $r-m$ ). Legs with femora and tarsi black, tibiae dark red-brown; fore-tibia in the upper half with 2 short antero-dorsal bristles, and a long submedian postero-ventral bristle; mid-femur without ctenidium, ventrally with long hairs and bristles, mid-tibia with 2 antero-dorsal and 2 postero-dorsal bristles, furthermore with one each on the antero- and postero-ventral side,

hairs short; hind-femur ventrally with long hairs and bristles, hind-tibia with a few hairs on the lower inner side, which are as long or slightly longer than the tibial diameter, dorsal side with 2 long posterior and several anterior bristles, submedium anteroventral bristle long and thick.

Abdomen olive and grey pollinose. A chess-board pattern is not developed, but a dark, ill-defined longitudinal median stripe is detectable and changes in its width with the light incidence. Tergites III and IV each with a pair of long median marginal bristles, tergite V with a row of marginal bristles, but without discals. First genital segment black, without marginal bristles, the second reddish.

*Length* : 9 mm.

*Locality* : Maroantsetra, N.E. Madagascar, IX.1959, 1 ♂,  
J. VADON.

#### REFERENCES

- ROHDENDORF B.B., 1937. — Fam. Sarcophagidae. Fauna URSS, Insecta : Diptera, vol. 19, n° 1, XV+501 pp.  
 ZUMPT F., 1962. — The Calliphoridae of the Madagascan region (Diptera). Part I. Calliphorinae. *Verhandl. naturf. Ges. Basel*, 73, pp. 41-100.  
 ZUMPT F., 1964. — The Calliphoridae of the Madagascan region (Diptera). Part II. Miltogramminae and Sarcophaginae. *Verhandl. naturf. Ges. Basel*, 75, pp. 47-77.  
 ZUMPT F. and HEINZ H.J., 1950. — Studies on the sexual armature of Diptera II. A contribution to the study of the morphology and homology of the male terminalia of Calliphora and Sarcophaga (Dipt., Calliphoridae). *Ent. mon. Mag.*, 86, pp. 207-216.

#### CONTRIBUTIONS A L'ETUDE DES COLEOPTERES PSELAPHIDES DE L'AFRIQUE

##### 6. Une espèce inédite constituant un nouveau genre de la tribu des Brachyglutini

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##### Genre *Plectrobythus*, nov.

Genre très remarquable par la diversité des caractères sexuels secondaires des mâles, mais cependant proche de *Baxyris* JEANNEL, dont il diffère par les paramères achètes de l'édéage. Il partage bien ce caractère avec le genre *Speobaxyris* JEANNEL, mais il se sépare nettement de celui-ci par sa morphologie générale.

Caractères sexuels secondaires des mâles portant sur les articles 5, 6 et 7 des antennes, sur tous les tibias et sur les fémurs postérieurs.

Dans le tableau des genres de la tribu des Brachyglutini proposé par JEANNEL (Révision des Psélaphides de l'Afrique Intertropicale, in Ann. Mus. R. Afr. Centr., Sc. Zool., vol. 75, 1959), *Plectrobythus* doit s'insérer après les genres *Baxyris* et *Speobaxyris*, comme suit :

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| 1. Paramères de l'édéage sétifères . . . . .<br>— Paramères de l'édéage achètes . . . . .<br><br>2. Forme allongée ; pattes et antennes longues et grêles, n'offrant aucun caractère sexuel secondaire chez le mâle . . . . .<br>— Forme trapue ; pattes et antennes plus courtes et plus épaisses ; tibias et antennes modifiés chez le mâle . . . . . | Gen. <i>Baxyris</i> JEANNEL<br>Gen. <i>Speobaxyris</i> JEANNEL<br>Gen. <i>Plectrobythus</i> nov. |
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