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NOTES ON THE GENUS PYGOPHORA SCHINER, WITH THE DESCRIPTION OF ONE NEW SPECIES (Diptera: Muscidae)

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Abstract: Data from an unpublished manuscript of J. R. Malloch make it possible to describe and illustrate the ♂ abdomen of *Pygophora bakeri* Crosskey, and to describe a new species, *P. nebulifera* Steyskal. Both of these species are from the Philippine Islands.

Among the effects of the late J. R. Malloch remaining in the U. S. National Museum, Dept. of Entomology, a partially completed revision of the genus *Pygophora* was found, including descriptions of several new species and a number of drawings. Certain specimens loaned to R. W. Crosskey for the preparation of his 1962 revision of *Pygophora* bore Malloch manuscript names and were evidently used as the basis of Malloch's unpublished work. Crosskey described a few of Malloch's species, using the names selected by Malloch, and placed others under already available names.

One of the species recognized as new by Malloch, *P. bakeri*, was described by Crosskey with an introductory statement that "unfortunately the one male lacks the abdomen, but since the female is distinguishable from that of all other species a female holotype has been designated." Since the abdomen of *P. bakeri* male was evidently available to Malloch, the descriptive matter and figure pertaining to it is here presented from his manuscript.

Another species, labeled as *P. nebulifera* by Malloch, was returned by Crosskey noted as a new species; but the single specimen lacked hind legs, and Crosskey refrained from describing it. Since the Malloch manuscript contains a description prepared from specimens apparently in good condition, I am describing the species here, using the name selected by Malloch and basing my description on that of Malloch, adding figures prepared by me from the postabdomen left by Malloch glued to a piece of card pinned with the remainder of the specimen. The notes made by Malloch referring to female specimens now apparently lost are also included. Both species are from the Philippine Islands.

Pygophora bakeri Crosskey, 1962, Trans. Zool. Soc. Lond. **29** (6): 499. Fig. 1

"Abdomen (of male) slightly compressed below, dark gray, with a central series of spots, one on each tergite from second to fifth inclusive, the sixth tergite greasy in type so that it is impossible to tell if it also has spots, the fourth and fifth tergites each with a spot on each side of the central one and the fifth with another black spot between the second and the lateral edge. Profile of apex of abdomen as in Figure...(1). A notable feature of this species in both sexes lies in the presence on the disc of the fifth tergite of

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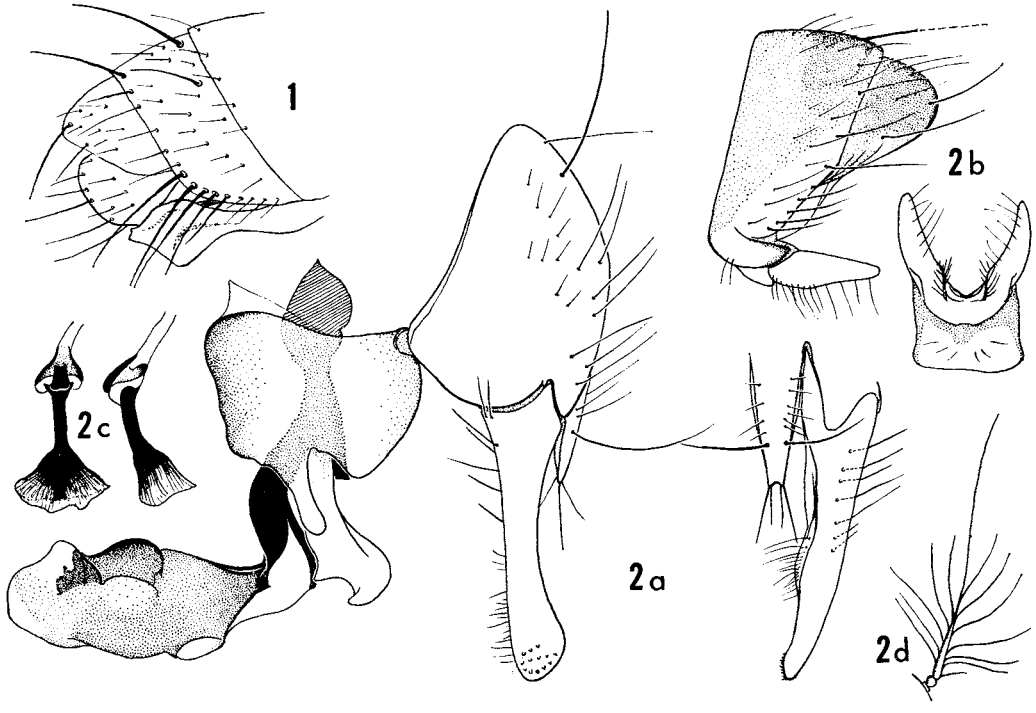

Figs. 1–2. 1, *Pygophora bakeri* Crosskey, right side view of topotypical ♂ paratype; 2, *Pygophora nebulifera* Steyskal, n. sp., ♂ : a, profile of epandrium, hypandrium, and associated copulatory apparatus, including posterior view of cerci and surstylus; b, profile of segments 5–8, with view of sternite 5; c, lateral and posterior view of ejaculatory apodeme; d, arista.

a pair of long strong erect bristles that are found in no other species of the genus as yet known to me. The very long processes of the fifth sternite of the male are also very striking."—from Malloch manuscript.

The material cited by Malloch is the same as that cited by Crosskey.

Pygophora nebulifera Steyskal, n. sp. Fig. 2 a–d.

The following description is based on the manuscript of Malloch.

♂. Face, frons on its anterior 2/3, the antennae, and palpi, orange-yellow, posterior 1/3 of frons and entire occiput darker, fuscous, the triangle, orbits posteriorly, and the entire occiput densely gray-dusted, the orbits becoming orange-yellow dusted from near middle to anterior margins. Frons at vertex 0.2 of head-width, widened to anterior margin; upper reclinate bristle about 4× as far from lower one as it is from the vertical bristle, and very distinctly behind level of posterior ocelli; supernumerary orbital bristles lacking; ocellar bristles short and fine. Antennae short, 3rd segment about 2.5× as long as 2nd, rounded at apex, its tip falling short of attaining level of vibrissae by about 1/2 length of 2nd; arista long plumose on less than basal 1/2 (fig 2d). Gena not as high as width of 3rd antennal segment. Palpi with a few short black hairs at apices.

Thorax black, densely covered with gray dust, mesonotum darkest, but without dark vittae. Acrostichal hairs fine, irregularly uniseriate presuturally. Basal pair of scutellar bristles stronger than apical pair. Squamae rather small, but the lower one about 2× as large as upper.

Legs yellow, mid and hind coxae slightly infuscated and gray dusted at bases. No ventral apical process on hind tibia. Fore femur with only 1 long fine bristle on posteroventral surface, close to apex, the anteroventral surface with a few very short fine bristles at base; fore tibia with no short anterodorsal bristles; the apical anterodorsal bristle fine, about as long as metatarsus, the submedian posterior bristle fully 1/2 as long as tibia; tarsus slender, at least as long as tibia; claws of moderate length, short-haired. Mid femur with no ventral bristles, the anterior surface with 2 rather widely separated bristles on anterior surface, one close to middle, and the other well beyond it; mid tibia with 2 posterior bristles, the one at 0.61 of tibial length much the longer; mid and hind coxae without fasciculate apical bristles. Hind femur with some fine anteroventral and posteroventral bristles, 2 in each series beyond middle much longer than the others; hind tibia with 2 anterodorsal and 2 posterodorsal bristles, the one close to middle on anterodorsal surface longest, and one long, rather fine, curved anteroventral bristle that is about 1/2 as long as tibia, the preapical anterodorsal and posterodorsal bristles subequal in length and almost transversely situated.

Wings hyaline, with a large dark brown patch on apex that extends from costa above level of outer cross vein to slightly over 4th vein, falling short of cross vein on latter and showing weaker in the center of cells. Inner cross vein very slightly beyond middle of discal cell; 2nd and 3rd veins very divergent apically, 3rd and 4th subparallel apically; penultimate section of 4th vein about 3/4 as long as ultimate.

Abdomen yellow on basal 1/2, blackened on apical 1/2, with paired spots and a central elongate spot on each tergite from 3rd to apex black, but the type specimen is greasy so that it is not possible to state definitely the exact details of markings, not laterally compressed; the processes of the 5th sternite yellow. Structure of the apex of abdomen as shown in fig 2 a and b; ejaculatory apodeme as in fig 2 c.

♀. Very similar to the ♂, and with the same dark apical mark on the wing, the latter character being unique as far as I know in the genus, all other species in which the ♂ has a dark mark on the wing having no such mark in the ♀♀. The legs are shorter and stronger, with the bristles stouter and shorter. The abdomen is yellow at base, becoming darker towards apex, the 2nd tergite has a brownish mark in center, and the next 3 tergites have each 5 blackish spots, the center one large and more or less fused with the one on each side of it. Length, 4 mm.

Holotype ♂ (USNM 68048), Imugin, N. Viscaya, Philippine Islands, C. F. Baker. The Malloch manuscript mentioned "Type, allotype, and one female allotype", all from the same locality and in Malloch's collection, but the holotype is the only specimen now known.

This species will run in Crosskey's key (1962, p. 406) to couplet 31, second alternate, but the acrostichal hairs are in one irregular row, and then to couplet 37, which leads to *Pygophora liturata* (Walker), *P. enigma* Crosskey, and *P. longipila* (Stein). *P. nebulifera* disagrees with the characters of all of these species in femoral bristling, aristal hairs, and postabdominal details.