

A NEW SPECIES OF *SCHILDIA* FROM JAMAICA  
(DIPTERA: ASILIDAE)

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The genus *Schildia* was erected by Aldrich (1923)<sup>1</sup> for *S. microthorax* from Costa Rica and since that time no additional species have been described for the genus. However, according to Dr. Charles H. Martin (Personal communication, 1961), there are at least three other species now placed in other genera which actually should be included in *Schildia*, but he is certain that the species herein described is not one of these.

*Schildia jamaicensis*, new species

MALE: Length, 8.5 mm. Head, black; face gray pollinose, frons and vertex, dark gray pollinose, posteriorly dark gray-brown except for a median dorso-ventral band of gray; mystax, two pale hairs; post-orbital bristles black, few, moderately well developed; antennal segments 1 and 2 gray-white, 3 with basal half gray-white, distal half and style, dark brown, style about one-fourth the length of segment 3, segments 1 and 2 with a circlet of short setae; proboscis, dark brown.

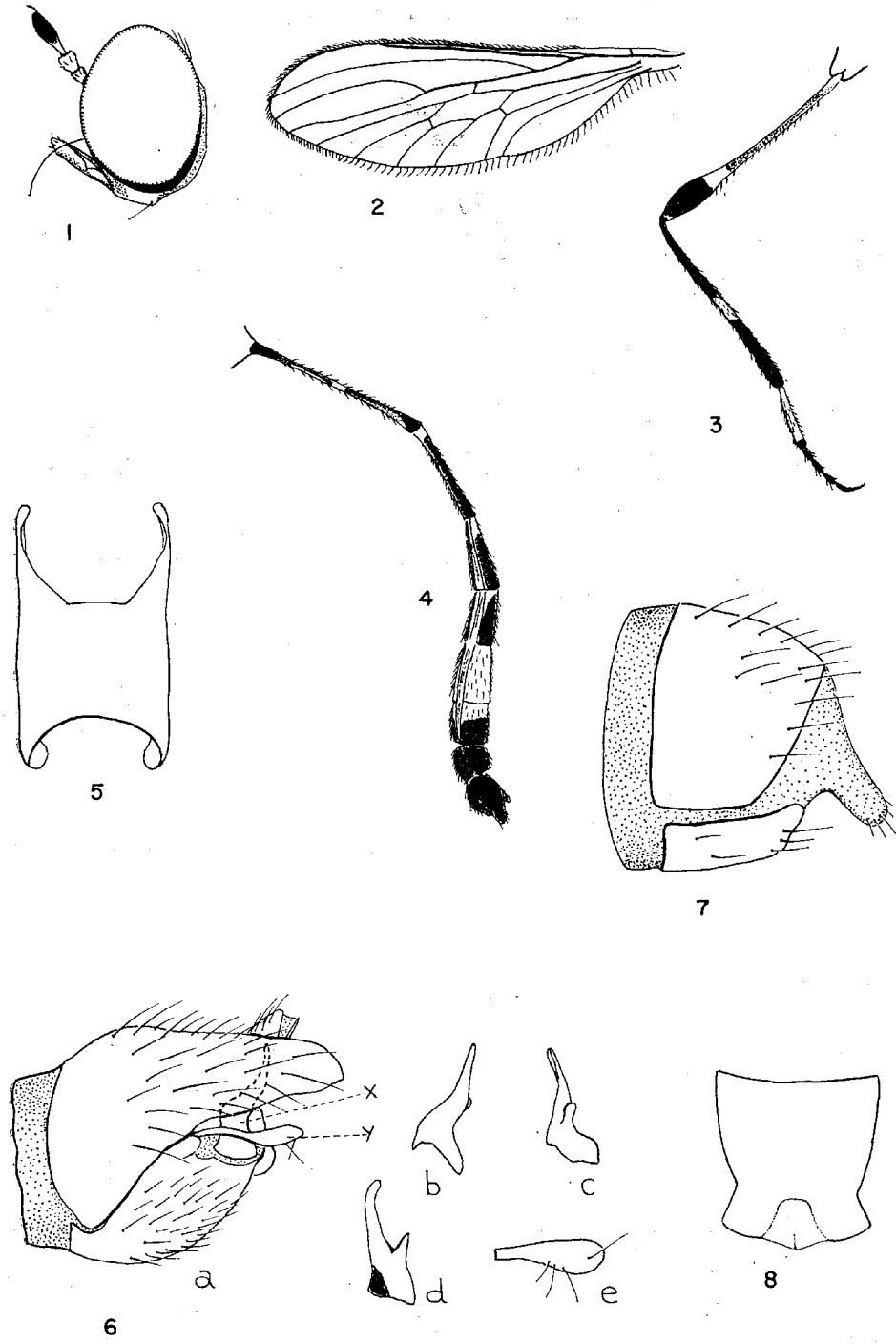
Thorax, polished dark brown, gray-white and ivory white; pronotum gray-white pollinose; mesonotum, dark brown, humeri ivory white bounded medially by a gray or dirty white area, post-alar callosities, ivory white; a pair of narrow, faint, brown stripes, dorsocentrally; chaetotaxy, presutural dorsocentrals 1, postsutural dorsocentrals 1, supraalars 1, postalars 1; in lateral view, the mesonotum projecting noticeably beyond the anterior margins of the mesopleura; scutellum brown with very minute marginal setae; mesopleura yellow-white dorsally and anteriorly, brown medially, darker brown ventrally and posteriorly.

Abdomen,<sup>2</sup> polished brown, elongate clavate; segment 2 nearly twice as long as segment 3; tergites polished dark brown, somewhat darker at apices, a narrow ring of gray present at about mid-length of segment 2, tergites 3-5 pale gray at base, tergite 6 entirely pale gray, tergites 7 and 8 and tergal portions of segment 9 dark brown except for the tips of the surstyli and proctiger; sternites somewhat paler in color; vestiture moderate, black.

Wings, hyaline with violaceous reflections; membrane with a scant to moderate number of microtrichia uniformly distributed, veins with microtrichia (not shown in drawing) except on subcosta and  $R_{1+2}$ . Halteres, stem white, knob, dark brown.

<sup>1</sup> Aldrich, J. M. 1923. New genera of two-winged flies of the subfamily Leptogastrinae of the family Asilidae. Proc. U. S. Nat. Mus., Vol. 62, Art. 20, p. 4.

<sup>2</sup> In order to study the terminalia, they were cut from the abdomen and treated in concentrated KOH at room temperature for two hours, then washed in water and placed in glycerine for examination under the microscope. The male abdomen used in figure 4 was treated in the same manner.



Legs with coxae, pale yellowish white; fore and middle femora pale gray-brown with two faint brown bands, apices, brown; hind femora pale, gray-brown basally, shading to darker brown apically, clavate portion gray-white on basal third, apical two-thirds, dark brown; fore and middle tibiae pale gray-brown with two faint bands of darker brown, hind tibiae dark brown with a gray-white band at about mid-length; fore and middle tarsi with segments 1-3 pale gray, 4 and 5 brown, hind tarsi with basitarsi pale gray but with dark brown apices, succeeding segments entirely dark brown. Pubescence, black, scant to moderate except on the hind tibiae where it is rather pronounced.

**FEMALE:** Length, 9 mm. The female is very similar to the male in general appearance. The 8th sternite (Fig. 8) appears to be bi-lobed at its posterior margin but there is actually a thinly sclerotized area connecting the two "lobes". The region posterior to the 8th segment seems to be entirely membranous and may represent the 9th segment and proctiger. In dried specimens, the 8th segment is withdrawn into the 7th segment.

**Holotype:** Male, St. Andrew, Long Mountain, 3 April 1960 (T. H. Farr).

**Allotype:** Female, St. Andrew, Long Mountain, 23 February 1961 (T. H. Farr).

**Paratypes:** 15 males, 11 females. Males. St. Andrew, Long Mountain, 22 February 1961, 23 February 1961, 9 March 1960, 18 March 1962, 26 March 1961 (2), 30 March 1962, 1 April 1960, 3 April 1960 (2), 30 April 1960, 12 May 1962, 30 September 1956; Trelawny, Windsor Estate, 24 January 1962, 24 August 1955. Females. St. Andrew, Long Mountain, 15 April 1962, 16 April 1960, 19 August 1956, 25 August 1957 (2), 29 September 1957 (2); Trelawny, Windsor Estate, 24 January 1962 (4). All collected by T. H. Farr.

The holotype and allotype are deposited in the United States National Museum. Deposition of paratypes as follows: British Museum (N. H.), 3 males, 2 females; Institute of Jamaica, Science Museum, 8 males, 6 fe-

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#### EXPLANATION OF FIGURES

1. Head, left lateral aspect.
2. Wing.
3. Right posterior leg.
4. Male abdomen, left lateral aspect.
5. Male, dorsal outline of 9th tergite.
6. Male, 9th abdominal segment.
  - a. Left, lateral aspect of 9th segment and associated structures.
  - b, c, d. Three aspects of process "x" (dististylus?).
  - e. Mesal aspect of apical half of process "y" as seen beneath a cover-slip.
7. Female, left, lateral aspect of 8th abdominal segment and associated structures.
8. Female, outline of 8th sternite.

Note: Membranous areas in figures 6 and 7 are represented by stippling.

males; Charles H. Martin collection 2 males, 1 female; United States National Museum, 2 males, 2 females.

DISCUSSION: Males vary in length from 7.5-9.0 mm; females from 7.5-10.0 mm. Although there is some variation in intensity of color, the pattern is virtually the same throughout the series. In some specimens, the 6th abdominal segment has changed from the original gray-white color to brown.

The palpi are so small that they are difficult to see unless the proboscis is dissected from the head. They are about two-thirds the length of the proboscis, two segmented with the first segment nearly twice the length of the second.

In dried specimens, abdominal segment 7 appears to be entirely dark brown, but when the abdomen is expanded, the tergite and sternite are seen to be pale gray in the basal third. A specimen which had been stunned with ethyl acetate was examined under a microscope where it was observed that the exoskeleton of the 6th and part of the 7th abdominal segments was actually transparent and visceral movement was clearly discernible in the transparent area. Apparently post-mortem changes render this region opaque gray-white.

I have not examined the genotype but Aldrich's description of *microthorax* indicates that the antennae are yellow and that the mesonotum is brownish yellow; in *jamaicensis*, the antennae are gray-white and dark brown and the mesonotum is mostly dark brown. The "second joint" of the abdomen of *microthorax* is described as having a yellow ring in the middle; in *jamaicensis*, the ring on segment 2 is gray-white. Aldrich makes no mention that his species has the 6th abdominal segment distinctly different in color from the other segments; in *jamaicensis*, the gray-white 6th segment contrasts markedly with the dark brown of the other segments.

Twenty-two of the specimens were collected in a logwood woodland (*Haematoxylon campechianum*) along the base of a steep bank and six were collected in a moist woodland along the base of a limestone cliff. Nearly all were taken as they hung head uppermost from the underside of spider webs located in hollows of the bank and cliff. The flies were not trapped in the webs because they were observed to leave and return to them at will.