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Muscidae from the Bahama Islands (Diptera)

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The material on which the present paper is based was collected by the Van Voast-American Museum of Natural History Bahama Islands Expedition.

Aside from *Neodexiopsis peninsula*, the cosmopolitan *Musca domestica*, and *Stomoxys calcitrans*, the Bahama muscid fauna is essentially littoral.

It seems probable that carrion-breeding species belonging to the genera *Fannia*, *Ophyra*, and *Hydrotaea* not represented in the present collection will be found to occur on these islands. It is of interest to note that except for the new species of *Lispe* described below, all species have been collected on, or adjacent to, beaches of the Florida coast.

As all specimens were collected in 1953, the year has been omitted from the date records.

Lispe bahama, new species

MALE: Length, 5.8 mm. Head black, grayish pruinulent. When viewed from in front the face is golden yellow, and the front opaque black, with a complete, narrow, gray pruinulent, frontal triangle extending to base of antennae. Without indications of any dark spot adjacent to juncture of parafacials and parafrontals in any angle of vision. Without lateral hairs beyond the penultimate anterior parafrontal bristles. Parafacial hairs continued dorsally in a weak series

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only to opposite, or slightly below, base of arista. Palpi strongly dilated, similar in shape to those of *tentaculata*; brown to brownish fuscous.

Thorax black, gray pruinulent; a narrow, poorly defined, median, dark vitta present. Postsutural dorsocentrals three, subequal; preepisternum III with two or three hairs.

Legs black. Fore femora normal. Fore tibiae with a submedian posterior bristle; the anterodorsal and posterodorsal series of clothing hairs somewhat more upright and longer than those on other surfaces; apical dorsal and posterodorsal longer than the posteroventral bristle which is only subequal to the tibial diameter. Mid femora with two to three long, hair-like, anteroventral bristles at the basal 0.33, and a group of shorter ventrals on basal 0.5 which are somewhat clumped at base of femur. Mid tibiae with a submedian anterodorsal and two posterodorsal to posterior bristles. Hind femora moderately slender and curved; with a complete row of long anteroventral bristles which are longer than those in the anterodorsal series; without posteroventral bristles. Hind tibiae with a median anterodorsal and a somewhat shorter anteroventral bristle at apical 0.33, and an apical dorsal; other surfaces with only the normal clothing hairs. Tarsal segments not unusually modified in structure or bristling.

Wings hyaline; third and fourth veins parallel, or very slightly divergent at apices. Calyptrae white. Halteres fulvous to yellow.

Abdomen black, densely gray pruinulent. First to third visible tergites with a faint, median, dark vitta when viewed from above and behind; third with a brownish apical band on each side which begins at the edge of the dorsal surface and is continued onto the sides about midway to the inner (ventral) margin of tergite; fourth with an apical brown to fuscous band which is interrupted at the midline by gray pruinoscence which is part of the over-all dorsal pruinosity. Fifth tergite (or basal hypopygial segment) prominent, velvety black, and with a snow white, median dorsal, triangular spot. Fifth sternite with a shallow, median, V-shaped cleft; each process with two or three long, hair-like bristles on their lateral margin, but none of these extends more than half of the distance to apex of abdomen.

TYPE MATERIAL: Holotype, male, Turks and Caicos Islands, South Caicos Island, February 11, 1953 (E. B. Hayden), Van Voast-American Museum of Natural History Bahama Islands Expedition.

The abdominal markings and the shape of the fifth abdominal sternite, together with the shape and bristling of the hind femora, clearly indicate that *bahama* belongs to the *Lispe palposa* species

group. The presence of a submedian anteroventral bristle on the hind tibiae makes it difficult to trace this species to this group in my key to Nearctic *Lispe* (Snyder, 1954, p. 8), but the other characters in the third couplet in that key enable it to be traced to either *canadensis* Snyder or *johnsoni* Aldrich to which it is closely allied. The shape and hairiness of the operculum of the mesothoracic spiracle in *bahama* appear to be midway between those of the above two species, while the shape and bristling of hind femora are more similar to those of *canadensis*. The golden yellow face and the presence of a submedian anteroventral bristle on the hind tibiae will readily distinguish *bahama* from other Nearctic species of this group. To my knowledge no members of the *palposa* group have been reported or described from the Neotropical region.

Lispe nasoni Stein

Rum Cay near Port Nelson, March 16, one female; Andros Island, Fresh Creek, April 23, one female (E. B. Hayden and L. Giovannoli).

Lispe albitarsis Stein

Exuma Cays, Stanyard Cay, January 13, three females (E. B. Hayden).

Phyllogaster rufitibia (Stein)

Abaco Cays, Great Sale Cay, May 10, one female (L. Giovannoli and G. B. Rabb).

This species was originally described from Arica and Tacna, Chile, and Mollendo, Peru, by Stein (1911, p. 144). Hockett (1936, p. 197) lists Malloch's *Tetramerinx californiensis* (1918, p. 274) from San Francisco, California, as a synonym. The female from the Bahamas and a male that I collected on Pine Island on the west coast of central Florida, January 10, 1946, are conspecific in my opinion and do not differ from the descriptions of Stein or Malloch. It thus appears that this species, while rather rare in collections, is quite widely distributed.

Phyllogaster cordyluroides Stein

Turks and Caicos Islands, South Caicos Island, February 11, one male; Great Inagua Island, 12 miles north of Matthew Town, January 29, one female, one male; Rum Cay near Port Nelson, March 16, five females; Eleuthera Island, New Portsmouth (Roch Sound), March 23, one female (E. B. Hayden and L. Giovannoli). San Salvador Island, near Cockburn Town, March 18, two females (E. B. Hayden, L. Gio-

vannoli, and G. B. Rabb). Andros Island, Mangrove Cay, April 26, three females (E. B. Hayden).

Neodexiopsis peninsula Snyder

Grand Bahama Island, Pine Ridge, May 13, six females; Turks and Caicos Islands, cays 3.5 miles southwest of North Caicos Island, February 28, two females (E. B. Hayden).

Limnophora narona (Walker)

Cat Island, Bennetts Harbour, March 24, 12 males, 14 females. Rum Cay near Port Nelson, March 16, four males, five females. Long Island, Deadman's Cay, March 11, two males, nine females. Crooked Island, Landrail Point, March 5, one male, two females. Mayaguana Island, near Abraham Bay, March 3, one female. Turks and Caicos Islands, cays 3.5 miles southwest of North Caicos Island, February 28, one male (all E. B. Hayden). Exuma Cays, Stanyard Cay, January 13, three males (E. B. Hayden), one male (E. B. Hayden and L. Giovannoli). San Salvador Island, near Cockburn Town, March 18, one female (E. B. Hayden), one female (L. Giovannoli and G. B. Rabb). Grand Bahama Island, West End, May 12, one female (E. B. Hayden and G. B. Rabb).

Stomoxys calcitrans (Linnaeus)

Long Island, Clarence Town, March 13, one female (L. Giovannoli).

Musca domestica Linnaeus

New Providence Island, 2 miles east of Nassau, April 14, one male. New Providence Island, Nassau, April 16, two females (E. B. Hayden). Eleuthera Island, New Portsmouth (Roch Sound), March 28, one female (E. B. Hayden and L. Giovannoli).

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