



6-30-1977

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Recommended Citation

Guimarães, Lindolpho R. (1977) "Supplementary note on Venezuelan bat flies (Diptera: Nycteribiidae)," *Great Basin Naturalist*: Vol. 37 : No. 2 , Article 4.

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SUPPLEMENTARY NOTE ON VENEZUELAN BAT FLIES
(DIPTERA: NYCTERIBIIDAE)

Lindolpho R. Guimarães¹

ABSTRACT.—*Basilia dunnii* Curran (1935) is reported from Venezuela for the first time, and comments are made on four other indigenous species.

After the publication of *Venezuelan Nycteribiid Bat Flies* (Guimarães 1972) I received 17 additional vials with 33 specimens of nycteribiids from Dr. Vernon J. Tipton. They were collected in the same area where the previous collection was made. The cumulative total number of specimens collected by the personnel of the Smithsonian Venezuelan Project (SVP) is 166, from 94 host specimens. There are five species represented in the new material, of which one had been recorded previously from Venezuela and one, *Basilia dunnii* Curran (1935), is reported for the first time.

Basilia anomala Guimarães and D'Andretta,
1956

Fig. 1

Basilia anomala: Guimarães, 1972: 1

PRESENT RECORD.—One female ex *Rhogeessa tumida* (SVP 11109), Miranda: 5 km E Rio Chico, near Puerto Tuy, 6-XI-1966.

REMARKS.—This is the second known female of the only South American species with three tergal plates.

The abdomen of the female figured in the original description (Guimarães and D'Andretta 1956) was swollen, and so somewhat different from the specimen figured herein, chiefly with regard to the shape of tergal plates I and III. In this specimen, the abdomen is rather shrunken, the lateral margins of tergal plate I are rolled up, and the posterior margin looks bilobate, due to a notch on the midline; viewed under the stereomicroscope, the midline of the tergite

appears depressed. Tergal plate III is more regular: the lateral margins converge toward the back, and the posterior margin is slightly emarginate.

Basilia dubia Guimarães and D'Andretta,
1956

Basilia dubia: Guimarães, 1972: 3

PRESENT RECORDS.—Two females, ex *Myotis albescens* (SVP 16173), Amazonas:

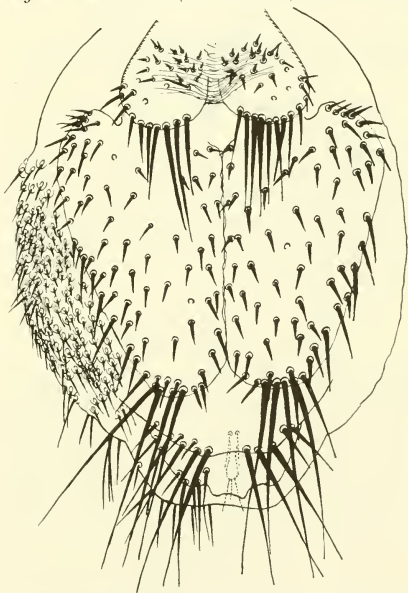


Fig. 1. *Basilia anomala*, abdomen of female, dorsal view (SVP 11109).

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Belém, Rio Cunucunuma, 150 m elev., 1-II-1967; 3 females and 2 males, ex *Myotis albescens* (SVP 16210), Amazonas: Belém, Rio Cunucunuma (mouth Caño Culebra), 150 m elev., 2-II-1967; 3 females, ex *Myotis albescens* (SVP 19515 and 19634), Amazonas: 1 km down Casiquare Canal from Capibara, 130 m elev., 6-VI-1967 and 13-VI-1967.

REMARKS.—The characters that distinguish this species from *B. carteri* show some variability. The females mentioned in my 1972 paper had a less cordiform tergal plate I than specimens previously known; one specimen, from Apure, had no pustulate setae on the lateral connexivum. Among the females now examined, the majority of which have tergal plate I perfectly cordiform, I found one specimen with the margin truncate, and one specimen with a much more elongate plate than the others. In some specimens the pustulate setae of the lateral connexivum are so few (3-4) and so small that they are hardly visible.

Basilia ferrisi Schuurmans-Stekhoven, 1931

Basilia ferrisi: Guimaraes, 1972: 7

PRESENT RECORDS.—One female (SVP 43462) ex *Myotis simus*, Monagas: Mata de Bejucó, 54 km SE Maturin, 18 m elev., 3-VI-1968; two females (SVP 44232), ex *Myotis nigricans*, Falcon: Capatárida, 40 m elev., 26-VI-1968.

Basilia dunnii Curran, 1935

Fig. 2

Basilia dunnii Curran, 1935: 3, Figs. 1, 2; Scott, 1936: 497 (citation); Del Ponte, 1944: 118, 124 (citation and key); Guimaraes, 1946: 16, 20 (citation and key); Guimaraes and D'Andretta, 1956: 26 and 95, Figs. 152, 153 (key and redescription of holotype); Maa, 1965: 380 (included in the subgenus *Pseudelytromyia*); Guimaraes, 1966: 399, Fig. 37 (comments and description of male) Guimaraes, 1968: 101.2 (citation).

PREVIOUS RECORDS AND HOSTS.—Panamá: Santa Rosa, ex *Myotis nigricans* (holotype); Canal Zone, Juan Mina, ex *Myotis n. nigricans*; Darien, Rio Tuira, ex *Myotis albes-*

PRESENT RECORDS.—Five females (SVP 29146 and 29149), ex *Myotis albescens*, Amazonas: almost directly across Rio Manapiare from camp, 155 m elev., 26-VII-1967; two females (SVP 30603), ex *Myotis albescens*, Amazonas: Paria, 25 km SEE Puerto Ayacucho, 114 m elev., 13-IX-1967.

REMARKS.—*B. dunnii* is here recorded for the first time from Venezuela; it was known only from Panamá. The holotype was found on *Myotis nigricans*; all other records were from *Myotis n. nigricans* (1) and from *Myotis albescens* (4).

The two figures of the female of this species (Curran 1935, Guimaraes and D'Andretta 1956) were based on the holotype. In the specimen now figured the discal setae of tergal plates I and II are fewer than in the holotype. The male was described and figured by me in 1966.

In my key to females of Venezuelan species of *Basilia* (Guimaraes 1972) *B. dunnii*

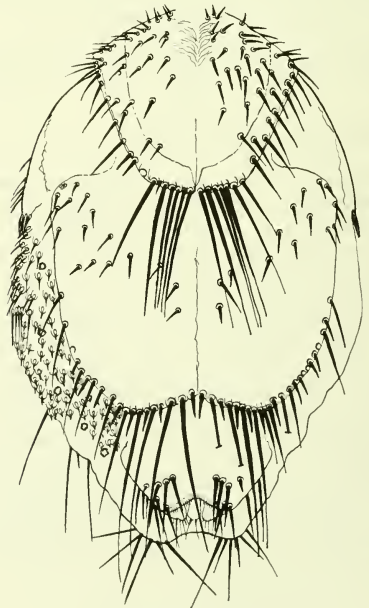


Fig. 2. *Basilia dunnii*, abdomen of female, dorsal view (SVP 29146).

should appear in the last couplet, after *B. ferrisi*, as follows: "Tergal plate II with discal setae in irregular rows converging obliquely toward the midline; longer setae of posterior margin of tergal plate I not reaching the posterior margin of tergal plate II."

Basilina ortizi Machado-Allison, 1963

Figs. 3, 4, 5

Basilina ortizi: Guimarães, 1972: 2

PRESENT RECORDS.— Five males and seven females ex *Eptesicus* (SVP 25562A, 26765, 26767, 26768, 26770, 26771, and 26773),

Amazonas: San Juan, Rio Manapiare, 155 m elev., 9 and 15-VII-1967.

REMARKS.— As previously noted (Guimarães 1972), this species closely resembles *B. bequaerti*. It is indeed difficult to believe that it is a good species, but only the examination of specimens from the same host and area will allow a firm decision.

On the basis of the specimens seen, it seems to me that the setae of the lateral connexivum, especially the outer ones, are a little longer in *B. ortizi* than in *B. bequaerti*. The posterior processes of tergal plate II are narrower in *ortizi*, although not as thin as those of *B. wenzeli*.

The number of setae on this process is also quite variable. Guimarães and D'Andretta (1956) state that *B. bequaerti* has from four to six spiniform setae and from two to four long and robust setae.

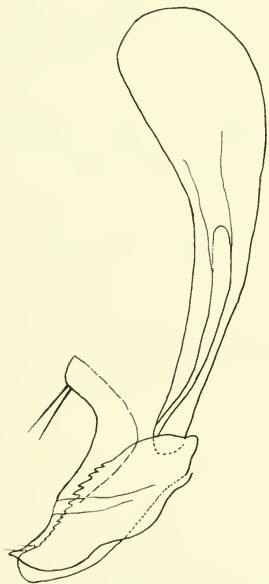


Fig. 3. *Basilina ortizi*, spiniform setae of the posterior margin of the fourth visible sternite of the male.

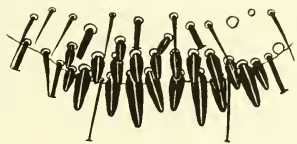


Fig. 4. *Basilina ortizi*, genitalia of the male, lateral.

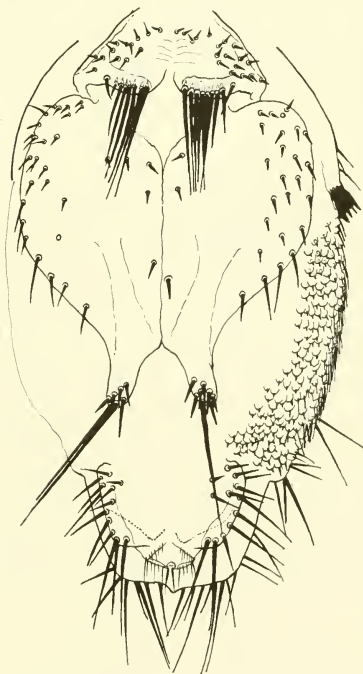


Fig. 5. *Basilina ortizi*, abdomen of the female, dorsal view (SVP 26771).

They illustrate one specimen with six spiniform setae and three long setae on one of the processes and, respectively, four and four on the other. The drawing of the type by Machado-Allison (1963) shows three spiniforms on one side and four on the other, and two long setae on either side. The specimens I am identifying as *ortizi* have at most two long setae; the specimen now figured has two spiniform and two long setae on one side, respectively, and seven and one on the other side.

Differences in the posterior elevation of the mesonotum and in the shape of the anal segment are probably due to preservation.

In the figured female the genital and adanal plates are similar to those of *B. bequaerti*.

The aedeagus of the figured male resembles that of *B. bequaerti* in the serration of the dorsal margin, but its distal end is thicker, while the parameres are much thinner distally than in *B. bequaerti*. However, since little is known of the variability of the male genitalia in *Basilina*, the significance of the differences mentioned is not clear.

LITERATURE CITED

- CURRAN, C. H. 1935. New species of Nycteribiidae and Streblidae (Diptera). American Museum Novitates No. 765: I-II, 12 figs.
- DEL PONTE, E. 1944. *Basilina romanaei*, nobis (Diptera, Nycteribiidae) de la Argentina. Annales del Instituto de Medicina Regional, Tucuman, Argentina 1 (1):117-128, 3 figs.
- GUIMARÃES, L. R. 1946. Revisão das espécies sulamericanas do gênero *Basilina* (Diptera, Nycteribiidae). Arquivos de Zoologia do Estado de S. Paulo, Brasil 5:1-88, 98 figs., 1 map.
- . 1966. Nycteribiid batflies from Panama (Diptera, Nycteribiidae), p. 393-404, figs. 35-37. In R. L. Wenzel and V. J. Tipton, editors, Ectoparasites of Panama, Chicago, Illinois).
- . 1968. Family Nycteribiidae, p. 1-8. In A Catalogue of the Diptera of the Americas South of the United States. Museo de Zoologia, Universidade de São Paulo, No. 101.
- . 1972. Venezuelan Nycteribiid Batflies (Diptera, Nycteribiidae). Brigham Young University Sci. Bull. Biol. Ser. 17 (I):1-2, 2 figs.
- GUIMARÃES, L. R., AND M. A. D'ÁNDRETTA. 1956. Sinopsis dos Nycteribiidae (Diptera) do Novo Mundo. Arquivos de Zoologia do Estado de S. Paulo, Brasil 10:1-184, 232 figs., 3 tables, 5 maps.
- MACHADO-ALLISON, C. E. 1963. Un nuevo Nycteribiidae (Diptera) de Venezuela. Acta Biologica Venezuelica 3:455-459, 6 figs.
- SCHUURMANS-STEKHOFEN, J. H., JR. 1931. Eine seltene, ungenügend beschriebene *Basilina*-Art (Diptera Pupipara) aus Venezuela. Zeitschrift für Parasitenkunde 3 (2):205-219, 6 figs.
- SCOTT, H. 1936. Descriptions and records of Nycteribiidae (Diptera Pupipara), with a discussion of the genus *Basilina*. Linnean Society's Journal—Zoology 39 (267):479-505, 11 figs.
- THEODOR, O. 1967. An illustrated catalogue of the Rothschild Collection of Nycteribiidae (Diptera) in the British Museum (Natural History) with keys and short descriptions for the identification of subfamilies, genera, species, and subspecies. British Museum (Natural History), vii + 506 pp., 898 figs., 5 pls., 6 maps, London.