

2 Plates

DROSOPHILA BREUERAÆ, A NEW NEOTROPICAL SPECIES OF THE ANNULIMANA GROUP (DIPTERA, DROSOPHILIDAE)

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1971

ABSTRACT

Drosophila breuerae, sp. n., (type-locality: Colombia, Palmira, Facultad de Agronomía) is related to *D. arapuan* and *arassari* in the absence of prescutellar bristles; to *D. gibberosa* and *ararama* in the absence of prescutellars and in the presence of convergent anterior scutellars, differing from these species in the structure of the male genitalia.

Drosophila breuerae, sp. n.

♂ — body length: 4.56 mm; wing length: 4.20 mm.

Head predominantly dark brown; front brown; ocellar triangle dark brown, with greyish reflexes, surrounded by a greyish triangle which reaches the frontal suture; occiput dark brown; region of insertion of orbital bristles also dark brown; proclinate orbitals about three-fourths as long as the posterior reclinate ones; anterior reclinate situated at the side of the proclinate, with half the length of the posterior ones; face dark brown, carina grooved, greyish-brown; antennae dark brown, lighter in the distal portion of the 1st and 2nd segments; arista with 12 to 14 rays; gena dark brown in the median portion and yellowish laterally; 2 oral bristles, the 2nd slightly shorter than the 1st; mouthparts dark brown.

Thorax dark brown, with grey dots, sometimes agglomerated in certain regions (Fig. 1); bristles implanted on the dots; anterior dorso-central bristles three-fifths as long as the posterior ones; acrostichal hairs in 7 irregular rows; no prescutellars; anterior sternopleural bristles two-thirds as long as the posterior ones; median sternopleurals one-third as long as the posterior ones; scutellum dark brown, with 6 grey spots with variable form (Fig. 1); anterior scutellar bristles slightly, posterior scutellar bristles clearly, convergent; halteres brown.

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Legs dark brown, except for the first three tarsal segments of all the legs, which are yellow; fore coxa with 2 strong bristles; fore femur with 2 ventral rows of strong bristles.

Wings (Fig. 2) hyaline, crossveins clouded; apex of first costal section black; costal index 3.5: 3.6; 4th vein index 1.4; 5x index 1.0.

Abdomen brown, with the posterior margin of all tergites lighter.

Genitalia (Figs. 3-9): genital arch with anal plates covered by irregularly distributed bristles; genital arch with bristles only in the ventral region; heel of the genital arch inconspicuous, and toe conspicuously pointed, covering part of the forceps; forceps covered with hairs, about 10 primary teeth and 10 marginal bristles; hypandrium: arch of hypandrium with anterior end spatulate, with a reinforcement of chitin medianly; concha of hypandrium wide, with 1 anterior bristle each; penis and annexes: penis with one pair of dorsal projections; posterior end of the penis with two small beaks; pincers of the penis with the anteroposterior length larger than the dorsoventral one; 2 bristles in the posterior region.

♀ — body length: 4.60 mm; wing length: 4.40 mm; similar to the male; fore coxa with one row of large bristles.

Holotype ♂ and 3 paratypes (2 ♂ and 1 ♀), from Colombia, Palmira, Facultad de Agronomía, 1000 m, 27.XI.1955 (B. Heed) (sweeping over a pile of fresh cacao pods), in the Museu de Zoologia da Universidade de São Paulo; 6 paratypes (2 ♂ and 4 ♀), same data as the holotype, in the Department of Zoology, University of Texas, Austin.

Taxonomic discussion

Drosophila breuerae, sp. n., belongs to the subgenus *Drosophila*, group *annulimana*. It is related to *D. arapuan* Cunha & Pavan (in Pavan & Cunha, 1947: 36) and *arassari* Cunha & Frota-Pessoa (in Pavan & Cunha, 1947: 32), in the absence of prescutellar bristles; to *D. gibberosa* Patterson & Mainland (in Patterson, 1943: 195) and *ararama* Pavan & Cunha (1947: 28) in the absence of prescutellars and in the presence of convergent anterior scutellars; it differs from all other species of the *annulimana* group in the structure of the male genitalia.

According to Prof. M. R. Wheeler (in litt.) these flies, when being reared in laboratory, were crossed with stocks from Turrialba, Costa Rica, and Bucaramanga, Colombia, and crosses were carried through the F₂ generation. So these areas may be included in the area of distribution of this species.

The specific name represents a homage to Mrs. Marta Erps Breuer, from the Departamento de Biologia Geral, Instituto de Biociências, Universidade de São Paulo, in recognition for her contributions to the knowledge of the neotropical Drosophilidae.

ACKNOWLEDGMENTS

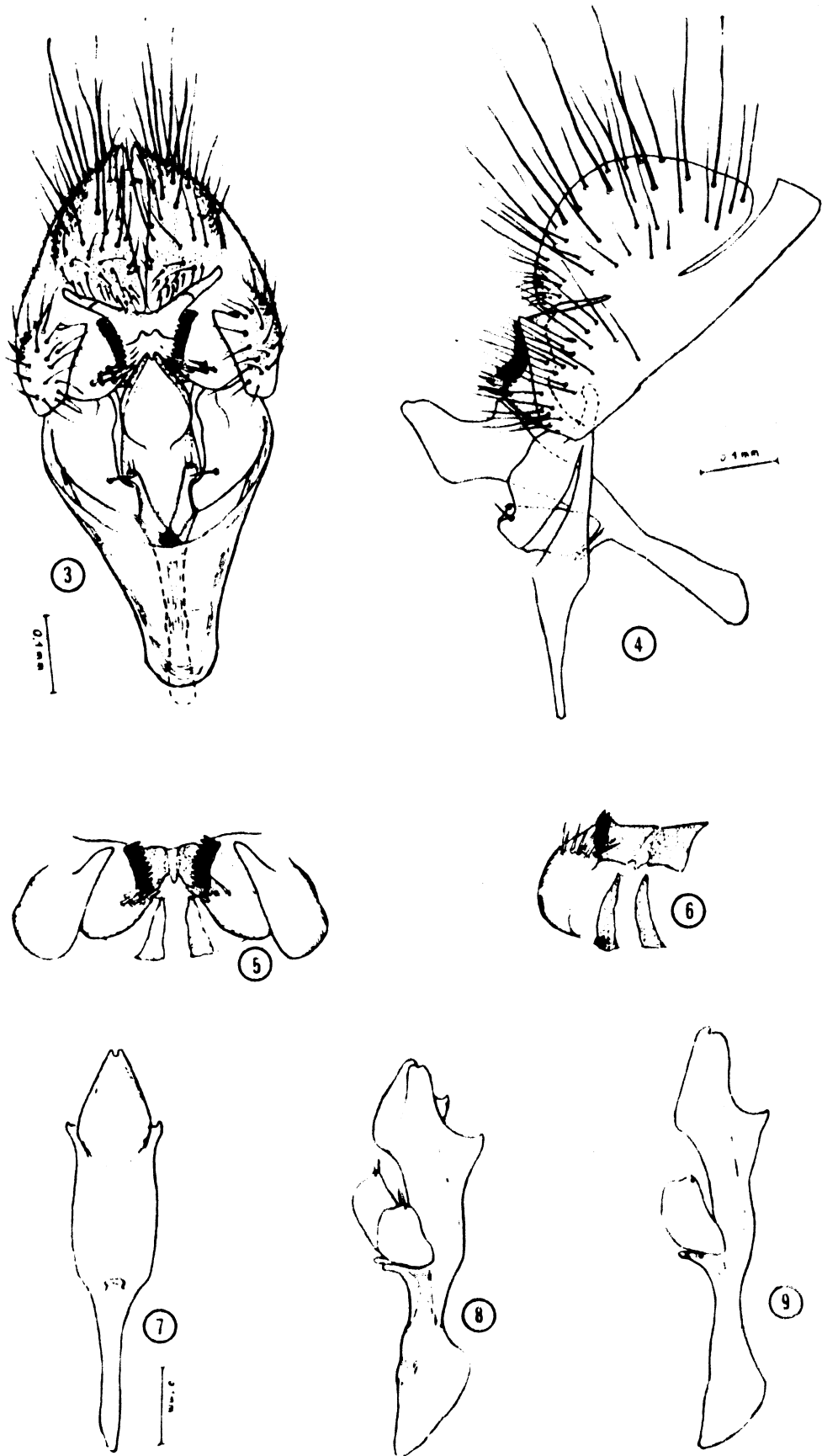
I am deeply obliged to Prof. Marshall R. Wheeler (Department of Zoology, University of Texas, Austin), for his kindness in sending me the specimens and for the informations regarding the crosses; to Mrs. Marta Erps Breuer, for the illustrations of this paper; and to Mr. Nelson Papavero (Museu de Zoologia, Universidade de São Paulo) for his orientation and the revision of the manuscript.



Fig. 1. *Drosophila bicincta* sp. n. Thorax, dorsal view.



Fig. 2. *Drosophila breuerae*, sp. n. Wing.



Drosophila breueriae, sp. n., Male genitalia: 3, ventral view; 4, lateral view; 5-6, forceps; 7, pennis, lateral view; 8, same, semi-lateral view; 9, same, lateral view.

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