## DESCRIPTION OF THE MALE OF PSEUDOMETHOCA OCULATA (BANKS) (HYMENOPTERA: MUTILLIDAE)

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### ABSTRACT

The previously unknown male of *Pseudomethoca oculata* (Banks) is described from Highlands Co., Florida.

#### RESUMEN

Se describe el macho previamente desconocido de *Pseudomethoca oculata* (Banks) del condado de Highland en la Florida.

Pseudomethoca oculata (Banks) was described from female specimens in 1921. It occurs on the Coastal Plain of the southeastern United States from North Carolina to southern Florida (Mickel 1924). Although females of this species are sometimes relatively abundant, there are no reports of males.

During a study of the Mutillidae of the Archbold Biological Station (Highlands County, Florida), we obtained from malaise traps a large series of male *Pseudomethoca* that differ markedly from any described species. We believe that these are males of *P. oculata* because: 1) female *P. oculata* were abundant at the site of the malaise traps at the time the males were collected; 2) intensive collecting did not produce specimens of any undescribed female *Pseudomethoca*, though we did collect both males and females of four additional described species of *Pseudomethoca*; 3) it is much simpler to assume that these abundant males are associated with the abundant females of *P. oculata* than to assume that the males represent an abundant undescribed species whose females have not yet been observed.

DIAGNOSIS: Distinguished from other North American species by the shape of the parameres, which are elongate, slender, strongly arcuate, as in Figures 1 and 2, and by the tegulae (Fig. 3), which are strongly bent downward posteriorly and coarsely punctate throughout. Otherwise superficially resembles *P. simillima* (Smith), as discussed below.

DESCRIPTION OF ALLOTYPE: Black, with dorsal areas of thorax and dorsal area of propodeum dark red; gastral segments 1 and 2 reddish orange; segments 3-4 dark red. Long hairs on head, body, appendages black, short hairs on tarsi dark grey, pygidial hairs light grey.

Head clothed with long sparse, erect, black hairs; entire head confluently punctate except for finely granulate antennal fossae, finely granulate narrow postocular area, small polished area anterior to median ocellus, small polished area laterad of lateral ocellus. Apical half of clypeus transversely concave, with a pair of well separated median teeth. Antennal scape coarsely punctate, carinate ventrally; pedicel and flagellum finely punctate and hairy as usual in genus.

Thorax covered with sparse long black erect hairs; thorax coarsely, confluently punctured, except for metapleuron, which is polished, minutely punctate with sparse silver decumbent hairs on lower half. Tegulae coarsely punctate strongly bent downward posteriorly, and covered with coarse punctures. Mesosternum posteriorly with a fine brush of hyaline hairs, contrasting strongly with coarse black hairs of adjacent coxae, and not overlapping into metasternal pit.

Wings completely, evenly infuscated, as usual for genus.

Legs with sparse long black hairs. Femora externally with poorly defined well separated small punctures, interspersed with punctures about three times as large. Tibiae externally with confluent poorly-defined large and small interspersed punctures. Tarsi densely covered with short dark gray hairs.

Propodeum very coarsely reticulate, with very sparse, long, black, erect hairs.

Gaster generally covered with long black erect hairs. Discal areas terga 1 and 2 with punctures whose actual pits are separated by more than twice their diameters, each pit in a shallow vague depression. Tergum 1 with a more densely punctate subapical band; terga 2-6 densely punctate and hairy apically. Pygidium densely punctate on sides and on basal half of median area, with hyaline short recumbant hairs; apical median area smooth and glabrous, not extensively overlapped by basal hairs. Sternum 2 with large shallow punctures whose pits are generally separated by their own widths. Sterna 3-6 with apical bands of small dense punctures and black hairs; last visible sternum concave, rugosely punctate, with short, sparse, hyaline hairs.

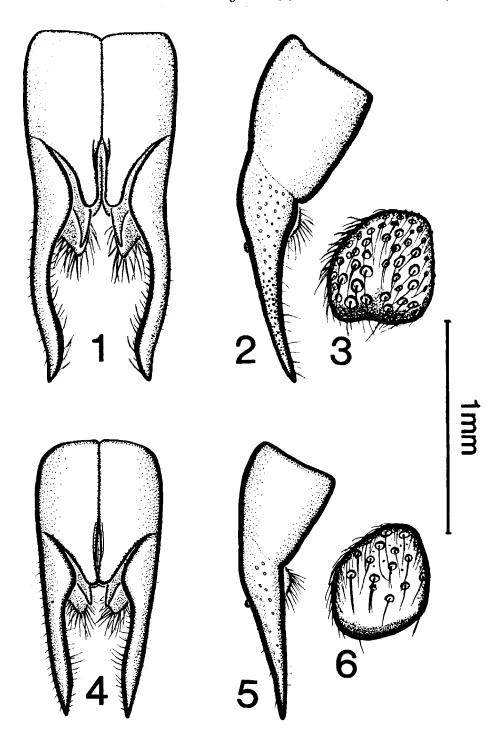
Genitalia as in Figures 1, 2.

ALLOTYPE: Male, Archbold Biological Station, Lake Placid, Highlands Co., Florida; 2 Oct. 1983; Malaise trap; M. Deyrup. Deposited in Florida State Collection of Arthropods (Galnesville).

PARATYPES: 78 males, Archbold Biological Station, Lake Placid, Highlands Co., Florida; Malaise traps; M. Deyrup; 28-IX-83 (3), 30-IX-83 (3), 2-X-83 (2), 4-X-83 (4), 6-X-83 (2), 8-X-83 (3), 16-X-83, 18-X-83, 20-X-83 (4), 22-X-83 (5), 24-X-83, 26-X-83 (4), 30-X-83 (4), 1-XI-83 (2), 15-XI-83 (2), 21-XI-83, 23-XI-83 (4), 27-XI-83 (2), 3-XII-83 (2), 5-XII-83 (2), 9-XII-83, 10-IX-84, 12-IX-84, 24-IX-84, 26-IX-84, 5-X-84, 8-X-84 (2), 10-X-84, 12-X-84 (2), 15-X-84 (2), 16-X-84, 17-X-84 (2), 18-X-84, 30-X-84 (2), 1-XI-84, 7-XI-84, 9-XI-84, 19-XI-84, 23-IX-85 (3), 7-X-85. The first 10 specimens listed above are deposited in the U.S. National Museum, the next 10 in the Florida State Collection of Arthropods (Gainesville), the next 20 in the collection of Donald Manley, the remainder in the collection of the Archbold Biological Station.

Variation: The extent of dark red on the thorax is variable. Most specimens have a black head, dark red dorsal areas on the thorax and propodeum; a few specimens have a completely black head, thorax and propodeum; one specimen has the head as well as the thorax dark red. There is no evidence of a seasonal pattern in this variation. Body length, which depends somewhat on the telescoping of the gastral segments, varies from about 8.5 mm to 12.5 mm. The length of the forewing varies from 6.3 mm to 8.8

Males of *P. oculata* strongly resemble those of *P. simillima*. Shared character states 1) absence of decumbent hairs on the head and body, 2) the shape and sculpture of the clypeus, 3) the antennal scape carinate, 4) sculpture of the thorax, propodeum, and gaster, and 5) gastral segments basally red. *P. simillima* differs in having 1) short



- Fig. 1. Pseudomethoca oculata (Banks), male gentalia, dorsal view.
  Fig. 2. Same, lateral view.
  Fig. 3. Pseudomethoca oculata (Banks), left tegula.
  Fig. 4. Pseudomethoca simillima (Smith), male genitalia, dorsal view.
  Fig. 5. Same, lateral view.
  Fig. 6. Pseudomethoca simillima (Smith), left tegula.

parameres that are not arcuate in dorsal view (Figs. 4, 5), 2) tegulae smooth and shining on posterior half (Fig. 6), 3) consistently black thorax and propodeum, 4) long erect hyaline hairs on various parts of the legs and body, and 5) punctures on the occiput slightly more separated.

Both *P. oculata* and *P. simillima* are easily distinguished from males of *P. oceola* (Blake) by the presence of very dense, long pale hairs beneath the femora of the latter.

### ACKNOWLEDGMENTS

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### REFERENCES CITED

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# AULACOBLISSUS, A NEW GENUS OF MICROPTEROUS BLISSINAE FROM VENEZUELA (HEMIPTERA: LYGAEIDAE)

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## ABSTRACT

Aulacoblissus brailovskyi is described as a new genus and species of Blissinae from the mountains of Venezuela. It is the most micropterous blissine lygaeid known. The relationships of the genus are discussed and it is concluded that it is most closely related to *Heteroblissus* Barber. Distinguishing characters are given. Illustrations include a dorsal view of the insect and details of the pygophore, paramere, and sperm reservoir.

### RESUMEN

Se describe a *Aulacoblissus brailovski* como un nuevo género y especie de Blissinae de las montaña de Venezuela. Es el más conocido micróptero blissine lygaeid. Se discuten las relaciones del género y se concluye que está muy cercamente relacionado a *Heteroblissus* Barber. Se proveen características distintivas. Ilustraciones incluyen una vista dorsal del insecto y detalles de la pygophore, paramere, y del depósito de espermas.