

A new species of Embiidina (Embioptera)
from Zaïre

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Summary

A new species of the genus *Machadoembia* is described from Zaïre.

Introduction

The following new species is a member of the genus *Machadoembia* ROSS which is best represented in Angola and southwestern Zaïre by many undescribed species in the writer's collection. This new species described below occurs in the most northeasterly extent of the range of this genus.

***Machadoembia arcuata* ROSS, new species**

(fig. 1)

Holotype: Male, on slide, deposited in Musée Royal de l'Afrique Centrale, Tervuren, Belgique. Type labels: 'Eala, XI-1935, J. GESQUIERE, 3441.' It is assumed that Eala is the experimental botanical garden of Ineac, 7 km from Mbandaga, Zaïre.

Description:

Appearance: moderately large, alate; color light brown with head, legs, and terminalia darker. Color details (on slide): Cranium dark brown laterally, blending to medium brown medially. Antennae concolorous with sides of cranium, apices gradually becoming slightly paler. Mandibles dark mahogany-brown throughout, dental margins red-amber; gular surface of cranium light brown, submentum only slightly darker. Entire thorax varied shades of light brown (perhaps yellowish in live specimens); forelegs darker brown, coxae paler; mid and hind legs dark brown, coxae and trochanters yellow-brown; wings medium brown; apical half of left tergal process dark amber; cerci entirely dark brown except for membranous outer basal half of basal segment of right cercus. Dimensions (on slide): body length 11.0 mm; forewing length 8.2 mm, breadth 2.1 mm.

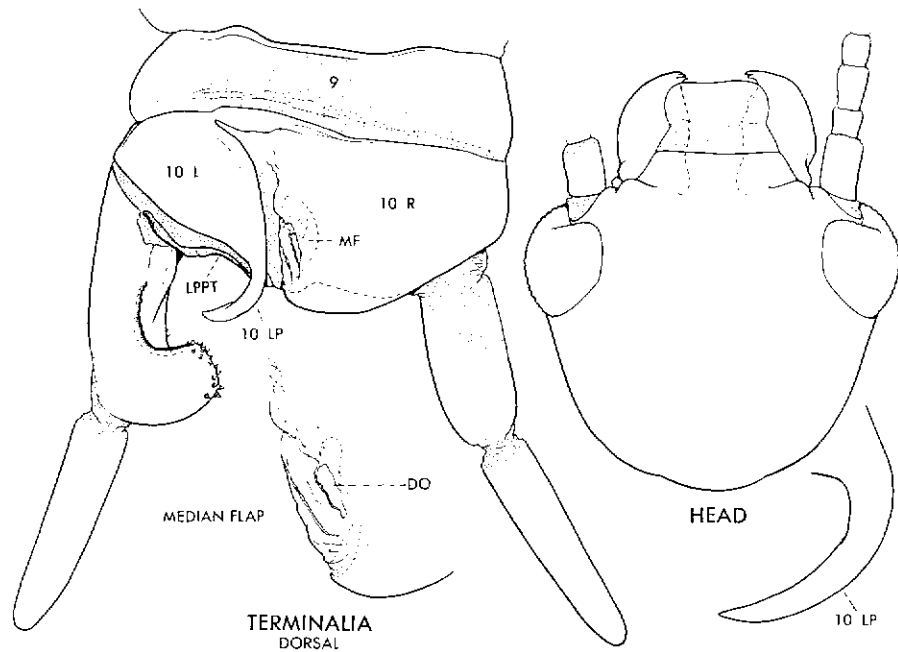


Fig. 1 : Head and terminalia of *Machadoembia arcuata* n. sp., holotype. Symbols : 9: ninth abdominal segment. 10 L and 10 R: hemitergites of tenth abdominal segment, 10 LP: process of 10 L. MF: median flap of 10 R, DO: dorsal operculum of MF. LPPT: left paraprot. Figures not drawn to scale. Membranous areas are stippled. Setae omitted except for peg-like setae (echinulations) on lobe of left cercus.

Important anatomical characters : as figured, very similar to *angolica* ROSS, 1952, but differing, as follows : mandibles somewhat shorter ; abdominal terminalia with caudal margin of tenth tergite broadened at base of medial cleft ; left tergal process (10 LP) more strongly directed mesad, thence abruptly arcuated leftward to form an almost perfect semi-circle ; wrinkles of median flap (MF) more deeply pigmented ; apex of left cercus lobe truncate instead of obtusely angulate.

Female: Topotypic fragmented specimen. Piceous black ; smooth, shining ; legs concolorous with body except for yellow-brown coxae, trochanters and tibial bases ; cerci only slightly paler. Paragenital sterna : Sternum VIII pale, unsclerotized medially, dark on lateral fourth, valvifers undeveloped. Sternum IX broad, continuously and uniformly cuticularized except for a pale, indistinct, longitudinal medial line ; basal margin broadly but shallowly emarginated, membranous within emargination. Aperture of accessory gland conspicuous as a transverse, laterally-rounded slit which has sclerotic, but scarcely cuticularized base isolated beneath membrane of the sternal cleft. This specimen is too incomplete to serve as the allotype.

Paratypes : Two males with type data deposited in the Musée Royal de l'Afrique Centrale and the California Academy of Sciences.

Remarks :

Most significant of the many characters distinguishing males of *arcuata* from those of *angolica* ROSS, the only other named species, is the semicircular arcuation of the left tergal process (10 LP) ; that of *angolica* is almost straight. Females differ in the stronger, more uniform cuticularization of the ninth sternum, the more prominent aperture and surrounding sclerotization of the accessory gland, and the shorter, *Embia*-like hind basitarsus without trace of a medial ventral papilla.

Reference

Ross, E. S., 1952. - The Embioptera of Angola. *Publicações Culturais Companhia di Diamantes de Angola, Lisboa* n° 14: 41-54, 33 figs.

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