

**METALEPTOBASIS MAUFFRAYI SPEC. NOV.
FROM ECUADOR AND PERU
(ZYGOPTERA: COENAGRIONIDAE)**

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The new sp. is described from Ecuador (holotype ♂: Napo Province, Parque Nacional Yasuni, July 1996; allotype ♀: Napo Province, Parque Nacional Yasuni, November 1997; both deposited in FSCA, Gainesville, FL, USA). Males can be distinguished by the long cerci, subequal to epiprocts.

INTRODUCTION

There are currently 16 species in *Metaleptobasis* (WASSCHER, 1998), all Neotropical. The addition of *M. mauffrayi*, which is similar to *M. amazonica* (SJÖSTEDT, 1918), increases the total to 17 species. The larva is unknown.

Specimens studied were from the Florida State Collection of Arthropods (FSCA), private collections, and the International Odonata Research Institute (IORI).

METALEPTOBASIS MAUFFRAYI SP. NOV.

Figures 1-7

Material. – **Holotype** ♂: ECUADOR, Napo Province, Parque Nacional Yasuni, ditches on Road PC29/PC30 about 3.2 km from main road junction, 18-VII-1996, Jerrell J. Daigle leg. (JJD); – **Allotype** ♀: ECUADOR, Napo Province, Parque Nacional Yasuni, forest pool on main road 3.6 km N of Yasuni Biological Research Station, 16-XI-1997, Ken J. Tennesen leg. (KJT); – **Paratypes** (27 ♂, 2 ♀): same data as holotype, 7 ♂ (JJD) and 6 ♂ (KJT); same data as allotype but 10-VI-1995, 2 ♂, Sidney W. Dunkle leg. (SWD) and 15-XI-1997, 2 ♂ and 1 ♀ (KJT); Limoncocha, 25-XI-1980, 1 ♂, Minter J. Westfall, Jr leg. (FSCA); Sucumbios Province, S of Sushufindi, stream and marsh 2 km S of Yamaramsku School on Limoncocha Rd, 19-VII-1996, 1 ♂, William F. Mauffray leg. (IORI); PERU, Loreto Department, Explorama Inn, 25 mi NE of Iquitos, 9-VII-1990, 7 ♂ (SWD); Explornapo Camp near Sucusari R., 100 mi NE of Iquitos, 30-VI-1990, 1 ♂ and 1 ♀ (SWD).

The holotype, allotype, and several paratypes are deposited in the Florida State Collection of

Arthropods (FSCA) and the International Odonata Research Institute (IORI) in Gainesville, Florida. The remaining paratypes are in the collections of Jerrell J. Daigle, Sidney W. Dunkle, William F. Mauffray, Ken J. Tennessen, the National Museum of Natural History (USNM) in Washington, D.C., and Pontificia Universidad Catolica del Ecuador (PUCE), Ecuador.

E t y m o l o g y. – The species is named after William (Bill) F. M a u f f r a y, IORI manager, for his contributions to New World Odonatology.

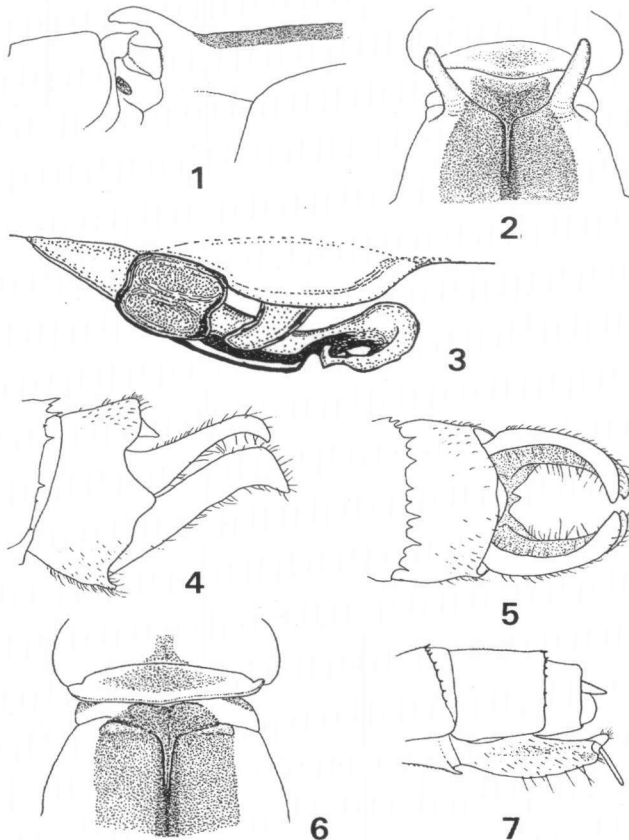
MALE (holotype): H e a d. – Eyes in life mostly green, bright red posteriorly. Mandibles, maxillae, and labium light brown. Genae and postclypeus gray. Face, antennae, occiput, and vertex black. Vertex with several irregular gray or brown dots. Ocelli clear, rear of head dark brown.

T h o r a x. – Prothorax reddish brown, except propleuron light brown. Two blunt 0.6 mm long mesepisternal horns (Figs 1-2); divergent laterally. Black middorsal thoracic carina; mesepisternum black in medial half with metallic green reflections; reddish brown laterally.

Mesinfraepisternum light brown. Mesepimeron light brown dorsally, light green ventrally. Metepisternum light greenish-blue. Metinfraepisternum light brown. Metepimeron cream tinged with light green. Venter cream.

Legs. – Pale brown; armature black, no claw teeth.

Wings. – Venation typical of genus. 12



Figs 1-7. *Metaleptobasis mauffrayi* sp. n., holotype ♂ (Figs 1-2, 4-5), paratype ♂ (Fig. 3), and allotype ♀ (Figs 6-7): (1) lateral view of thoracic horn; – (2) dorsal view of thoracic horn; – (3) lateral view of secondary genitalia; – (4) lateral view of caudal appendages; – (5) dorsal view of caudal appendages; – (6) dorsal view of thorax and mesostigmal plates; – (7) lateral view of ovipositor.

postnodal crossveins in forewings, 12 in hindwings. Veins black with brown pterostigma overlying 1 cell, its proximal side oblique.

A b d o m e n. – Mostly black with a pale basal ring on segments 3-7, cream ventrally. Segment 1 light green with a black dorsal spot rearward. Segment 2 black dorsally, green ventrally with reddish brown tinges. Posterior hamules exceptionally large, hooked anteriorly as a blunt L-shape (Fig. 3). Segments 3-6 each with black apical ring. Segment 7 black, dark reddish brown ventrally. Segment 8 reddish brown dorsally, yellowish orange ventrally. Segment 9 mostly orange, darker basally and dull yellow apically. Segment 10 orange with dorsal margin extended as a (flexible?) convex tab. Caudal appendages orange, tips dark reddish brown. Cerci almost as long as paraprocts (Fig. 4), apical tips almost overhanging the paraprocts in both dorsal and lateral views. Cerci in lateral view wider at base, then narrowing apically with tips converging downwards. Larger paraprocts wider and even-edged to the decurved tips. In dorsal view (Fig. 5), tips of both cerci and paraprocts converging inwards.

M e a s u r e m e n t s (mm). – Total length including appendages 47.0, abdomen 40.0, forewing 23.0, and hindwing 22.5.

FEMALE (allotype). – Almost identical to holotype male except: labrum brown, no thoracic horns, and segment 8 with a vulvar spine. Horns represented by a transverse ridge behind medial half of mesostigmal lamina (Fig. 6). Yellowish-orange ovipositor extends beyond posterior margin of segment 10; style black (Fig. 7). Light orange cerci conical, shorter than segment 10.

Wings – as in holotype except 13 postnodal crossveins in forewings, 12 in hindwings.

M e a s u r e m e n t s (mm). – Total length including appendages 45.5, abdomen 37.5, forewing 24.0, and hindwing 23.5.

VARIATION AMONG PARATYPES. – Paratypes similar to holotype and allotype. Male horns sometimes pointed and tapered. The total length of ♂ ranges from 40-47, ♀ 45-46; abdomen ♂ 34-40, ♀ 37.5-39; forewing ♂ 21.5-23, ♀ 24-26; hindwing ♂ 21-23, ♀ 23.5-25.0; postnodal crossveins in forewing of ♂ 11-14, ♀ 12-13, hindwing ♂ 12-13, ♀ 11-13.

Older males become darker with the top of head completely black and the brown antehumeral area much darker, almost mahogany brown. The pale green sides of thorax turn to pale sky-blue. In very old males, a light pruinosity develops over most of the lower thorax. The female vulvar spine may be variable. Two specimens had either a bifid or a trifid notched vulvar spine.

DISCUSSION

Metaleptobasis mauffrayi is known from eastern Ecuador and eastern Peru. It should be found in the Rio Napo watershed of western Brazil. Its nearest relative, *M. amazonica*, is only known from northern Brazil. The recorded flight time is 10 June to 25 November.

This species flies close to the surface near or over quiet pools in shaded rain-forest swamps and sluggish streams. Companion species flying with *M. mauffrayi* were *Forcepsioneura ephippiger* Selys and *Psaironeura tenuissima* Selys.

In the field, the pale greenish-blue color pattern on the lower thorax will separate *M. mauffrayi* males and females from its reddish-brown counterpart, *M. amazonica*. The male appendages of *M. mauffrayi* differ from *M. amazonica* in that the reddish-brown tipped cerci are nearly subequal to the paraprocts. In *M. amazonica*, the black tipped cerci are about 3/4 the length of the paraprocts.

Dr Sidney W. Dunkle (pers. comm.) has opined that a new genus could be erected for *M. mauffrayi* based on its atypical secondary genitalia morphology, such as the large posterior hamule. Dr Ken T. Tennesen suggested expanding the definition of *Metaleptobasis* to accommodate future atypical species. I am in favor of the latter. A complete revision of *Metaleptobasis* is much needed. Since there exists material representing about 7 undescribed species from South America, such a revision will have to incorporate future descriptions of any new species.

ACKNOWLEDGEMENTS

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