

**METALEPTOBASIS LILLIANAE SPEC. NOV. FROM BOLIVIA
(ZYGOPTERA: COENAGRIONIDAE)**

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The new sp. is described and illustrated. Holotype ♂ and allotype ♀ (in copula): Bolivia, Cochabamba Department, Chapare prov., lake 2.5 km W of Villa Tunari gate on Hwy 4, 12-XI-2001; both deposited in U.A.G.R.M. in Santa Cruz, Bolivia. ♂♂ are characterized by the knobbed shaped paraprocts, and the homochromatic ♀♀ by their black ovipositor. Both can be distinguished from other congeneric spp. by their dark, almost black terminal abdominal segments.

INTRODUCTION

Previously, they were 18 known species of *Metaleptobasis* (DAIGLE, 2003), all neotropical. However, I included *Metaleptobasis rosea* (Selys, 1877)[*Leptobasis*] in this genus, but this is now known as *Inpabasis rosea* (Selys, 1877)[*Leptobasis*] (GARRISON, 2002). This reduced the known number of species to 17. The addition of *M. lillianae*, which is most similar to *M. manicaria* (WILLIAMSON, 1915) from northern South America, increases the total to 18 species. The genus is recorded for the first time from Bolivia. The larva is unknown.

DESCRIPTION

METALEPTOBASIS LILLIANAE SP. NOV.

Figures 1-5

Material. — **Holotype** ♂ and **allotype** ♀ (in copula): BOLIVIA, Cochabamba Department, Chapare prov., lake 2.5 km W of Villa Tunari gate on Hwy 4, 12-XI-2001, Jerrell J. Daigle leg. (JJD); — **Paratypes** (18 ♂, 1 ♀): same data as holotype, 1 ♂, 1 ♀ (JJD), 1 ♂ Jim T. Johnson leg. (JTJ) and 4 ♂ Ken J. Tennesen leg. (KJT); same data as holotype but 11-XI-2001, 12 ♂ (JJD). — The holotype, allotype, and a paratype are deposited in the Universidad Autonoma "Gabriel Rene Moreno" (U.A.G.R.M.) in Santa Cruz, Bolivia. The

remaining paratypes are in the collections of Jerrell J. Daigle, Ken J. Tennessen, Jim Johnson, Rosser W. Garrison, the Florida State Collection of Arthropods (FSCA), the International Odonata Research Institute (IORI) in Gainesville, Florida, and the National Museum of Natural History (USNM) in Washington, D.C., USA.

Etymology. — The species is named after my mother, Lillian Agnes Russett Daigle, for encouraging me to explore the wonders of the natural world.

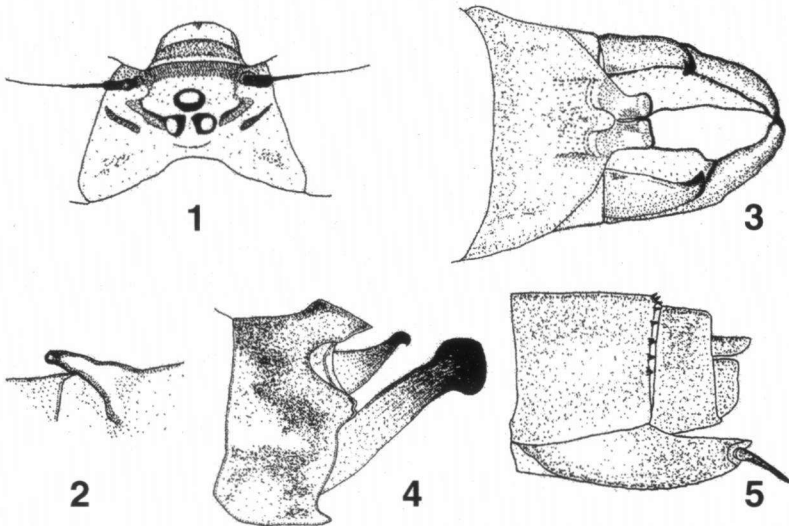
MALE (holotype): Head. — Eyes in life green, posterior quarter portion blood-red and edged with black. Light brown labrum with bluish tinges and a small dark central spot. Mandibles and genae light blue. Anteclypeus mottled blue, postclypeus dark brown. Antefrons light blue, postfrons dark brown. Antennae brown with basal segments ringed with black, blue, and brown. Occiput and vertex mostly brown and light brown, bluish area between antennae and eyes (Fig. 1). Ocelli ringed with black basally, two parallel black slash marks lateral to ocelli. Rear of head light brown.

Thorax. — Prothorax brown, slightly darker dorsally. Two stout mesepisternal horns (0.7 mm long) tapering apically. Horns directed antero-laterally (Fig. 2). Black middorsal carina; mesepisternum black in medial quarter, brown laterally. Mesinfraepisternum, mesepimeron, metepisternum, metinfraepisternum, and metepimeron all brown. Venter pale brown.

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

Wings. — 13 postnodal crossveins in forewings, 12 in hindwings. Veins black; dark brown pterostigma overlying 1 cell, its proximal side oblique.

Abdomen. — Mostly black dorsally with brown laterally, incomplete pale basal



Figs 1-5. *Metaleptobasis lillianae* sp. n., holotype ♂ (1-4), and allotype ♀ (5): (1) dorsal view of head; — (2) lateral view of cephalad-directed left thoracic horn; — (3) dorsal view of caudal appendages; — (4) lateral view of caudal appendages; — (5) lateral view of ovipositor.

rings and dark apical rings on segments 3-6. Segment 1 and 2 mostly brown with black dorsally. Segments 3-4 with light bluish tinges overlaying the brown lateral areas. Segments 5-6 with darker blue tinges, almost black. Segment 7 brown with black tinges basally and laterally, pale basal ring only. Segment 8 brown with darker brown in basal half. Segment 9 with a basal triangular-shaped dark brown area extending rearward and down both sides of segment. Segment 10 variegated with equal amounts of black and yellow-brown areas. Dorsal margin elevated and trapezoidal in lateral view; slightly bifid to base but strongly truncated dorsally. Caudal appendages dark brown, black apically. In dorsal view, both cerci and paraprocts converging inwards at tips (Fig. 3). Cerci in lateral view wide at base, then narrowing apically with black tips hooked downward. Cerci about $\frac{1}{2}$ the length of the paraprocts. Viewed laterally, brown paraprocts of uniform width, blacker apically, rounded and knob shaped towards apex (Fig. 4).

Measurements (mm). — Total length including appendages 48.0, abdomen 40.5, forewing 24.2, and hindwing 24.1.

FEMALE (allotype). — Very similar to holotype including thoracic horns; incomplete abdominal rings not as distinct. Color pattern very similar except abdominal segment 10 uniformly dark brown. Ovipositor black with dark brown area dorsally, extends just beyond posterior margin of segment 10 and to level of dark brown conical cerci (Fig. 5). No vulvar spine; styli black.

Wings. — As in holotype except 13 postnodal crossveins in hindwings.

Measurements (mm). — Total length including appendages 46.0, abdomen 39.0, forewing 25.5, and hindwing 25.0.

VARIATION AMONG PARATYPES. — Paratypes similar to holotype and allotype. Some ♂ with bent, depressed or broken thoracic horns. Total length (mm) of ♂ ranges from 44-48, ♀ 48; abdomen ♂ 37-40.5, ♀ 40; forewing ♂ 22-24, ♀ 25; hindwing ♂ 22-24, ♀ 25.5. Postnodal crossveins in forewing ♂ 11-14, ♀ 13 and hindwing ♂ 12-14, ♀ 13.

DISCUSSION

Metaleptobasis lillianae is known only from central Bolivia. The nearest relative, *M. manicaria*, is known from Trinidad and Venezuela. This species was found in the shaded and tangled forest margin of a large lake. Other Odonata found nearby in the shade were *Anatya januaria* Ris and *Lestes falcifer* Sjöstedt.

The darkened terminal abdominal segments will distinguish *M. lillianae* males and females from *M. manicaria* Williamson, which have pale terminal abdominal segments. The cerci are barely decurved, not strongly decurved as in *M. manicaria*. Viewed laterally, the dorsal margin of abdominal segment 10 is more elevated and trapezoidal than in *M. manicaria*. The thoracic horns are more depressed and directed more laterally than the conspicuously elevated, anteriorly and dorsally directed horns of *M. manicaria*.

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