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SHORT COMMUNICATIONS

OXYAGRION MIRNAE SPEC. NOV. FROM BRAZIL (ZYGOPTERA: COENAGRIONIDAE)

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The new sp. is described, illustrated and compared with the other 25 congeners. Holotype ♂: Virginia, Minas Gerais, Brasil, 3-II-2010; deposited in author's collection.

INTRODUCTION

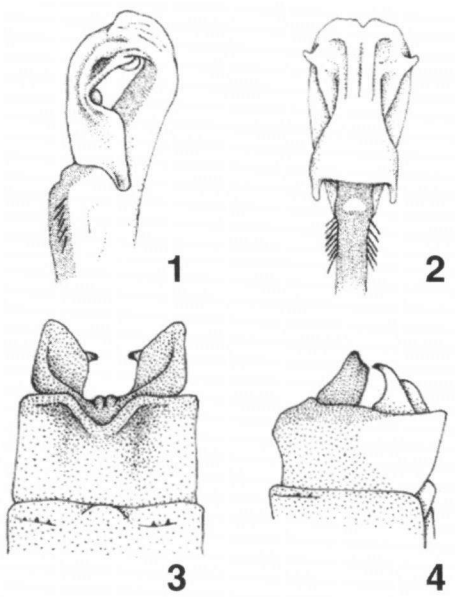
The taxonomy of the coenagrionid genus *Oxyagrion* has been hampered by lack of a clear definition of the characters separating it from its closer genus *Acanthagrion*. This has been recently provided by von ELLENRIEDER & LOZANO (2007) who recognized 25 species in the genus. Out of these 18 are from Brazil as described by SELYS (1876), CALVERT (1909), COSTA (1978, 1988) and COSTA et al. (2000, 2006). We describe herein *O. mirnae* sp. n. from the State of Minas Gerais.

OXYAGRION MIRNAE SP. NOV.

Figures 1-4

M a t e r i a l. – **Holotype** ♂: Brazil, State of Minas Gerais, Virginia, 14-II-2010, Fazenda dos Campos, 1500m, O. Mielke & M. Casagrande leg. – **Paratypes**: 3 ♂, same data as holotype. Specimens deposited in A.B.M. Machado collection, Belo Horizonte, Brazil.

E t y m o l o g y. – I dedicate this species to my good friend, Prof. M i r n a M. C a s a g r a n d e who collected the specimens and whose wanderings throughout South America, in search of butterflies, have very much contributed to my odonatological studies.



Figs 1-4. *Oxyagrion mirnae* sp. n., holotype: (1) penis in lateral view; – (2) same, ventral view; – (3) last abdominal segments, dorsal view; – (4) same, lateral view.

MALE **(holotype)**. – H e a d. – Labium yellow, labrum greyish orange, anteclypeus and postclypeus orange brown, remainder parts of face and upper part of head brownish orange with a trident black markings in front of medium ocellus and an oblique dark stripe between lateral ocelli and eye. Behind this stripe the surface is stippled with black. Antennae black.

T h o r a x. – Pronotum brownish orange with a middorsal black line and transverse ones separating the lobes; a dorsal C shape dark band and another separating pronotum from propleuron. Propleuron light brown. Mesepisternum brownish orange with middorsal carina and adjacent area dark, mesepimeron and metepisternum brownish orange with a central greyish area. Metepimeron orange yellow. Humeral suture black, with a comma-shaped black elongated spot at its upper part and another at the upper limit of 2nd lateral suture.

Legs brown, lateral surface of femora black.

Wings hyaline, venation black peterostigma light brown trapezoid. Px in Fw 12 in Hw 12, R3 arising near Px 5 in both wings; Petiolation at Ac in both wings.

A b d o m e n. – S1-S6 greyish yellow with narrow black ring at the transverse sutures. S7 anteroventraly greyish yellow, dorsoposteriorly black, S8 black, S9 brown becoming greyish blue after soaking in 70% alcohol (Figs 1-2). It is most probably blue in the insect alive. After alcohol treatment a pair of black dots becomes visible at the dorsum of S9. S10 black with a pale (blue) dorso-lateral band partially connected medially with that of the other side. Cercus black. Paraprocts light brown.

STRUCTURAL CHARACTERS. – Hind prothoracic lobe bilobed the median lobe two-lipped and medially cleft. Penis (Figs 1-2) with lateral lobes (Fig. 2) at flexure, distally prolonged anterodorsally but not really bilobed (Figs 1-2). Hind border of S10 with a large V-shaped incisure (Fig. 3). Cercus in lateral view (Fig. 4) decumbent, about 2/3 the length of S10, with a short distal incisure. Paraprocts shorter than cercus (Fig. 4).

Measurements (mm). – Total length (31.0), Hw 19.1, abdomen 25.2

FEMALE. – Unknown.

VARIATION IN PARATYPES. – Colour of paratypes uniform. Venation as follows (including holotype). Px in Fw 12 (40%), 13 (60%), Px in Hw 11 (40%), 12 (60%), R3 in Fw and Hw arising near Px 5 (40%), 6 (60%). Petiolation at Ac (100%). Measurements (mm) including holotype. Total length 31.0-34.5 (mean 32.7), Hw 16.5-19.5 (mean 18.3), abdomen (with appendages) 24.7-27.6 (mean 26.2).

DISCUSSION

Oxyagrion mirnae has all diagnostic characters of the genus *Oxyagrion* as recently redefined by VON ELLENRIEDER & LOZANO (2007). It keys out to *O. brevistigma* Selys, 1876 in the general key of COSTA (1978) and in the more recent key of HECKMAN (2008) both based mainly on colour. The penis, the appendages and the shape of the pterostigma are very different from those of *O. brevistigma.* In the key of COSTA (1978), based mainly on the appendages, it keys out to *O. simile* Costa, 1978 but differs from this species by penis structure and by the presence of a pair of black dots on dorsal part of S9 (absent in *simile*). *O. mirnae* can be readily separated from the other species of the genus; except *O. abunae* Leonard, 1977 and *O. hermosae* Leonard, 1977 by its abdominal colour with no trace of red, being greyish yellow from S1-S6 whereas in the other species the genus is majorly red, carmin red or crimeson red or yellowish red in *O. brevistigma.* In *O. abunae* recently transfered to *Oxyagrion* from *Acanthagrion* (VON ELLENRIEDER & LOZANO, 2007), the abdomen also has no trace of red but the dominant colour is black dorsally and blue in the remainder aspects (VON ELLENRIEDER & LOZANO, 2007). In *O. hermosae* the abdomen is predominantly black throughout but in some areas it is deep cherry red or greenish yellow (LEONARD, 1977). Thus by its colour and structural characters *O. mirnae* is no doubt a new species of *Oxyagrion.*

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