

**THE REDISCOVERY OF *LEPTAGRION CAPIXABAE* SANTOS, 1965
(ODONATA: COENAGRIONIDAE)**

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Abstract – The sp. was only known from the holotype ♂, labelled “Espírito Santo – Brazil” and deposited at MNHN, Paris. Here, 4 ♂ from Estação Biológica de Santa Lucia, Santa Teresa, Espírito Santo, Brazil (collected in 2002 and 2003) are brought on record. A photograph of ♂ anal appendages is also provided.

Introduction

The genus *Leptagrion* is frequently observed in phytotelmata in many different ecosystems in South America (WILLIAMSON, 1917; SAN-

TOS, 1968a, 1968b, 1979; LOUNIBOS et al., 1987). This strict association with bromeliads should expose these organisms to threats as a consequence of the intense collecting of these plant species in many Atlantic forest habitats in Brazil. As an example of this kind of environmental impact on the endemic *L. acutum* (Santos, 1961), it was listed as endangered of extinction by the government conservation agency in Brazil (IBAMA, 2003). The information available about the ecology and behavior of this genus is still very fragmented and based on a few obser-

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variations of each species. The lack of detailed data makes difficult the adequate development of conservation strategies for those species, especially because we have very few observations about their geographical distribution.

In the past few years we have conducted an extensive study (DE MARCO & FURIERI, 2000) on the species of *Leptagrion* at the Estação Biológica de Santa Lúcia (EBSL), mainly on aspects of natural history of *L. perlongum* Calvert, 1909. This area is localized in the municipal district of Santa Teresa, Espírito Santo state, Brazil, (19°57'10"S, 40°32'25"W). The area has a surface of about 440 ha, with altitudes varying from 550 to 950 m. The region has a tropical sub-hot, hyper-humid, sub-dry climate (NIMER, 1989) and is classified as subtropical humid (Cfa) without drought (MENDES & PADOVAN, 2000). The reserve has a well preserved pluvial Atlantic montane and sub-montane forest, sensu RIZZINI (1979). The main reason to study bromeliad-dweller species in this area is the high species richness and abundance of bromeliads in the Serana region of Espírito Santo, particularly at the EBSL (THOMAZ & MONTEIRO, 1997; VARASSIN & SAZIMA, 2000).

Leptagrion capixabae was first described by SANTOS (1965), based on a single specimen deposited in the Natural History Museum of Paris, France. This species was considered close to *L. andromache* and *L. aculeatum*. The only information available on the identification label was "Espírito Santo – Brazil". COSTA &

GARRISON (2001) reviewed the Brazilian species of *Leptagrion* but did not present any new data about *L. capixabae*, and only present it in a taxonomic key based on the morphological descriptions of SANTOS (1965). Here we present information about the rediscovery of this species in the EBSL based on four individuals observed from November 1998 to April 2003.

L. capixabae is readily identified by its distinct male cercus with a pronounced nodule and a stout terminal tooth (Fig. 1). All collected individuals are stored in the entomological collection of the Laboratório de Ecologia Quantitativa, Universidade Federal de Viçosa, Minas Gerais, Brazil.

Material

BRAZIL, Espírito Santo: Santa Teresa, Estação Biológica de Santa Lúcia, 1 ♂, 15-II-2002, G.B. Dias & K.S. Furieri leg., 1 ♂, 9-X-2002, P. De Marco leg.; 1 ♂, 4-III-2003, F.C.C. Barreto & K.S. Furieri leg.; 1 ♂, 1-II-2002, F.C.C. Barreto leg.

Discussion

Apparently the population density of this species is low at EBSL. All individuals were observed perched alone on big bromeliads, *Alcantarea* sp., and our observations indicate that this species has at least a residence behavior, if not a territorial behavior, but the low sample size prevents further conclusions. *Leptagrion* exuviae are frequently observed on this bromeliad, but we have not had success in the correct association with *L. capixabae* adults. If populations of *L. capixabae* naturally occur in low densities, the local extinction risk is a real factor and this must be considered in the management plan of this reserve. We suggest that *L. capixabae* is possibly endangered in Espírito Santo state mainly due to actual information on distribution and possible low population sizes. Further studies on the distribution of this species should include areas of "pontões", rock hills that are usually covered by *Alcantarea* bromeliads, which could be the natural habitat for *L. capixabae*.

Acknowledgements – This work was part of the "Biodiversidade da Mata Atlântica no Estado do Espírito Santo" project funded by CNPq and sponsored by the Instituto de Pesquisas da Mata



Fig. 1. *Leptagrion capixabae*, ♂: anal appendages, dorsal view.

Atlântica (IPEMA) and Museu de Biologia Prof. Mello Leitão (MBML).

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Received October 6, 2003