

## NOTES ON GEOGRAPHIC DISTRIBUTION

### **Amphibia, Ceratophryidae, Ceratophryinae, *Ceratophrys joazeirensis*: Distribution extension**

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The species *Ceratophrys joazeirensis* was described by Mercadal (1986) based on samples from the municipality of Juazeiro, State of Bahia, Brazil (9°24'38"S and 40°30'26"W). It was originally identified by Bras. Exp. 1904-12 as *Ceratophrys dorsata* (Mercadal 1986), a synonym of *Ceratophrys aurita*. Mercadal (1981) observed that the individuals were octoploid through the technique of erythrocyte measurement of preserved samples, a condition previously verified for *C. aurita* and *C. ornata*. Different from the latter two species, *C. joazeirensis* was recorded from semi-arid habitats, similar to *C. cranwelli*, a diploid species, typically found in the Chaco domain, with whom it shares some characteristics (Lynch 1982; Mercadal 1986).

According to Mercadal (1986) and Frost (2004; Frost et al. 2006), *C. joazeirensis* is only known from the type locality and there is no information on its population status. As it is difficult to find the species in the field, very little data is available (Infonatura 2006).

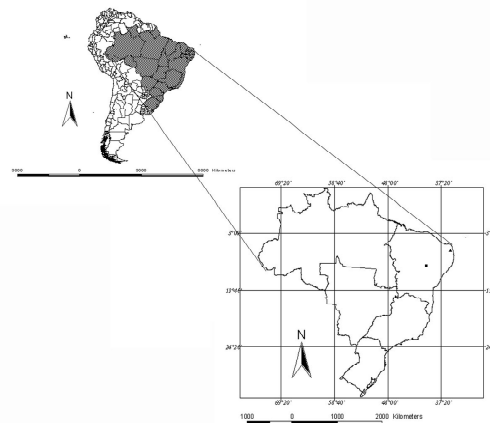
Individuals of *C. joazeirensis* were collected during field trips carried out in May 2003, February, March, and July 2004, the rainy period in the region, on the outskirts of the Parque Estadual Pedra da Boca (6°26'07"S and 35°39'41"W), municipality of Araruna, northern Paraíba state, Brazil.

The collected specimens were identified based on the original description, and deposited in the

Coleção Herpetológica do Departamento de Sistemática e Ecologia, Universidade Federal da Paraíba, Brazil (UFPB 4303 – 4307) and in the Coleção Célio F. B. Haddad, Departamento de Zoologia, Instituto de Biociências, UNESP, Rio Claro, São Paulo, Brazil (CFBH 07411; CFBH 07412).

The first record was of a specimen collected in the vicinity of the Parque Estadual Pedra da Boca by C. Arzabe, F.R. Delfim, G.G. Santana, S.H.F. Abrantes, Y.C. Cordeiro de Lima (municipality of Araruna, Paraíba). The other specimens were collected by K.S.Vieira, W.L.S. Vieira and M. D. da Silva on the outskirts of Passa e Fica municipality (6°26'15.19"S and 35°38'37.61"W), State of Rio Grande do Norte, northeastern Brazil.

The new records for *C. joazeirensis* in the States of Paraíba and Rio Grande do Norte extend the distribution of the species by about 627.63 km and 629.15 km northwards, respectively, from the type locality (Juazeiro, State of Bahia) (Figure 1), implying therefore, that the distribution area of the species is much wider.



**Figure 1.** Map of the distribution of *Ceratophrys joazeirensis* indicating the occurrence sites of the species. The square indicates where the species was first registered, and the triangle indicates the new records in the States of Paraíba and Rio Grande do Norte, northeastern Brazil.

Goin et al. (1968) suggested that a high DNA content, such as the presence of octoploidy, is

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characteristic of species from humid environments, a condition found with *C. aurita* and *C. ornata*. Thus, there could be a correlation between nuclear DNA content, development speed and ecological preference. However, even though it has an 8n ploidy level, *C. joazeirensis* does not fit the relationship presented by Goin et al. (1968). It would be interesting to check for the existence of a sympatry zone with *C. aurita*, since the distribution areas of the two species are almost parallel, as this would provide new data to try to elucidate the event of polyploidy in the genus (Mercadal 1986).

### Acknowledgements

This paper was part of another study, initially funded by Projeto de Conservação e Utilização Sustentável da Diversidade Biológica Brasileira (PROBIO), for Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq) and supported by Programa de Pós-graduação em Biologia (Zoologia) of the Universidade Federal da Paraíba. We thank the Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis (IBAMA) for providing authorizations to capture the animals (number 112/2003-CGFAU/LIC), and F. R. Delfim, G.G Santana, S.H.F. Abrantes and Y.C. Cordeiro de Lima for the field efforts during PROBIO.

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Received June 2006

Accepted July 2006

Published online August 2006