

A giant water bug from the Lower Cretaceous Crato Formation of Brazil (Heteroptera: Belostomatidae: Lethocerinae)

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Abstract

The oldest indisputable representative of the subfamily Lethocerinae, *Lethocerus vetus* sp. n., is described from the Early Cretaceous crato Formation in Brazil. Its preserved structures are nearly identical to those of Recent *Lethocerus*.

Key words: Insecta, Heteroptera, Belostomatidae, Lethocerinae, *Lethocerus vetus*, new species, Araripe, Brazil, Cretaceous

Introduction

Since Nel & Paicheler (1992)'s revision of fossil aquatic bugs, only a few new Belostomatidae have been described (Popov et al. 1994, 2000; Zhang et al. 1994; Martínez-Delclòs et al. 1995; Popov 1996; Fraser et al. 1996; Polhemus 2000; Prokop & Nel 2000; Zamboni 2001). The oldest record of the family is from the Late Triassic of Virginia, USA (Fraser et al. 1996; Grimaldi & Engel 2005: 325). There are few Belostomatidae described from the Early Cretaceous Crato Formation in Brazil, i.e., a citation of Martins-Neto (1987); the belostomatine *Neponymphes godoii* Zamboni, 2001; *Araripebelostomum martinsnetoi* Nel & Paicheler, 1992; and some figured but still undescribed specimens (Grimaldi & Maisey 1990; Grimaldi & Engel 2005). The present fossil is the first very large member of Lethocerinae from this Formation.

Family Belostomatidae Leach, 1815

Subfamily Lethocerinae Lauck and Menke, 1961

***Lethocerus* Mayr, 1853**