**Mesocyclops ogunnus** Onabamiro 1957 (Crustacea: Copepoda: Cyclopoida): First report for northeastern Brazil

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**ABSTRACT**: *Mesocyclops ogunnus* is a copepod originally recorded in Africa and Asia, being considered an invader species in reservoirs in the Americas. The present work records its occurrence in northeastern Brazil for the first time. This species was collected in the Três Lagoas region in the city of João Pessoa, State of Paraíba, Brazil, which increases its geographical distribution beyond the central-western, southeastern and southern regions of the country.

The genus *Mesocyclops* Sars, 1914, is included in the family *Cyclopidae* and currently comprises 71 species (Holynska 2000), being one of the most diversified and successful genera of cyclopoid copepods found in continental waters (Silva 2008; Van de Velde 1984). Most species of this genus are found in subtropical (Holynska 2006; Holynska and Brown 2003) and inter-tropical zones, as for example of the African species (Mouelhi et al. 2000).

According to Gutierrez-Aguirre and Suárez-Morales (2001) 21 species and subspecies of the genus *Mesocyclops* have been described for the neotropical region; and of these, 15 have been reported to Brazil: *M. annulatus* Wierzejski, 1892; *M. annulatus diversus* Herbst, 1962; *M. aspericornis* Daday, 1906; *M. brasili anus* Kiefer, 1933; *M. ellipticus* Kiefer, 1936; *M. finitimus* Kiefer, 1933; *M. longiset us* Van de Velde, 1984; *M. kieferi* Van de Velde, 1984; *M. leuckarti* Claus, 1857; *M. longiset us* Thiébaud, 1912; *M. longiset us* Kurata, 1949; *M. meridionalis* Kurata, 1949; *M. meridionalis* Kurata, 1949; *M. ogunnus* Onabamiro, 1957; and *M. parananaensis* Kurata, 1949.

*Mesocyclops ogunnus* has been originally recorded in Africa and Asia, being considered an invader species in reservoirs in the Americas. The present work records its occurrence in northeastern Brazil for the first time. This species was collected in the Três Lagoas region in the city of João Pessoa, State of Paraíba, Brazil, which increases its geographical distribution beyond the central-western, southeastern and southern regions of the country.

**Figure 1**: Geographical distribution of *M. ogunnus* in Brazil. The shaded areas represent previous reports of the species according to the literature. Expanded area represent the local of the new record of the species for the northeastern region of the country (João Pessoa, State of Paraíba).
This report of *M. ogunnus* for the northeastern region of Brazil (State of Paraíba) represents an important increase in the distribution of this species and a strong indication of the capacity of this copepod species to invade Neotropical ecosystems. The relevance of this report is related to the importance of possible impacts of this copepod on local ecosystems.

**Figure 2.** Female of *M. ogunnus* with two egg sacks. Photo: C. Liberal.

**Figure 3.** (A - B) Detail of the caudal ramus. (D - C) Detail of seminal receptacle.

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**Literature Cited**


Matsumura-Tundisi, T. and W. M. Silva. 2002. Occurrence of *Mesocyclops ogunnus* Onabamiro, 1957 (Copepoda Cyclopoida) in water bodies of the Universidade Federal da Paraíba (UFPB) and the Laboratório de Invertebrados Paulo Young (LIPY) at UFPB.

The present records are the first occurrence of *M. ogunnus* in northeastern Brazil. Specimens were collected in May of 2009 in Três Lagos (7°9’56.54” S and 34°53’44.51” W) in the western part of João Pessoa, State of Paraíba. The sampling were held performing horizontal hauls along the margins using a zooplankton net (100 µm mesh size). Immediately after collection, the samples were preserved in 3% formaldehyde. The specimens (Figure 2) were registered (UFPB.CRUST – 2397) and deposited in the Laboratório de Invertebrados Paulo Young (LIPY) at the Universidade Federal da Paraíba (UFPB).

Some of the main diagnostic characteristics of *M. ogunnus* are the presence of a row of spines on the maxillular palp, fifth pediger with many lateral spines and few dorsal spines, absence of internal spines in the caudal ramus (Figure 3 A-B). Other characteristics are basipodite of the antenna ornamented by a row of spines in the distal portion, leg 4 basipodite with 2 groups of long slender spines on its posteromedial surface, and leg 4 endopodite article with 3 terminal spines subequal in length and spinulate along most of their margins (Van de Velde 1984). and the seminal receptacle with broad horizontal lateral arms and long curve pore-canal (Figure 3 C-D) (Jeje 1988; Reid and Pinto-Coelho 1994). Therefore the characteristics of the specimens collected were compatible with the diagnosis of the species.


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