



A new *Argyrodiaptomus* (Copepoda: Calanoida: Diaptomidae) from the southwestern Brazilian Amazon

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Abstract

Argyrodiaptomus paggii n. sp. is described from specimens collected in the Igarapé Boa Esperança, in the vicinity of the Samuel Reservoir, State of Rondônia, Brazil. The new species differs from its congeners by the following autapomorphies: (1) Schmeil's organ large at apex, constricted at medial portion; (2) row of setules on the outer margin of basis first leg; (3) a peculiar disposition and structure of the spinules on the inner border of the basis of male's left and right fifth leg; and (4) female's second urosomite partially fused and telescoped into the genital somite. We provide a discussion about some aspects of the morphology and geographical distribution of all members of the genus.

Key words: *Argyrodiaptomus*, Copepoda, Neotropical region, southwestern Amazon Basin, new species, taxonomy, systematic, zoogeography, zooplankton

Introduction

The genus *Argyrodiaptomus* was first proposed by Brehm (1933), with *A. granulatus* Brehm, 1933, from Uruguay, as its type species, and the diagnostic characters of the genus being: "...characteristics of the fifth feet of the male: (1) inner border of second basal segment of left foot covered with tubercles or spinules, or both; (2) terminal spine (or seta) of left foot longer than terminal digitiform process; (3) inner distal angle of second basal segment of right foot bears a small rounded process; and (4) posterior face of first segment of exopodite of right foot bears a conical or digitiform process." (Brehm 1933: p. 285) Since then, several additions and changes were made to this taxon, including the description of new species and the reallocation or synonymization of others (e.g., Wright 1935; Kiefer 1936; Wright 1938a; Ringuelet 1958; Dussart 1985a & b; Dussart & Matsumura-Tundisi 1986; Reid & Pinto-Coelho 1994; Reid 1997; Paggi 2006). However, the taxonomy of this diverse genus, currently containing 10 species, still needs revision.

The distribution of *Argyrodiaptomus* is exclusively Neotropical. It occurs in the entire pre-Andean South America, except Patagonia. The current geographical distribution of the known species in this genus is presented in table 1.

Despite knowledge of the geographical distribution of the species within *Argyrodiaptomus*, the geographical origin of this genus remains unclear. Wright (1938b) presumed the genus probably originated in eastern Brazil and invaded the southern region of South America. However, the presence of *Argyrodiaptomus* in the northern region of this continent could suggest otherwise (viz. Brandorff 1978; Santos-Silva *et al.* 1989; Reid 1997).

In this work we describe a new species of *Argyrodiaptomus* from specimens collected in the southeastern region of the Amazon Basin. The morphological similarities among its congeners, as well as the importance of this new record are analyzed and discussed.