



## Revision of *Ilyocryptus* Sars, 1862 (Cladocera: Ilyocryptidae) of Brazil with description of two new subspecies

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### Abstract

Analyzing numerous samples from Brazil, we found only three previously described species of *Ilyocryptus* (Cladocera: Anomopoda: Ilyocryptidae): *I. paranaensis paranaensis* Paggi, 1989, *I. sarsi* Stingelin, 1913 and *I. spinifer* Herrick, 1882. Two new taxa, being Neotropical subspecies of the species previously described from Palaearctic, *I. cuneatus brasiliensis* subsp. nov. and *I. silvaeducensis paraensis* subsp. nov., are described. Maps of Brazilian records are provided for each species using both original and literature data. Most part of records of Brazilian ilyocryptids concerns *I. spinifer*, which is among the most common cladocerans in the Neotropics, while other taxa occur significantly rare. *I. spinifer* has a wide distributional range. “*I. sarsi*” seems to be a group of close topical congeners, quite possible that *I. sarsi* s. str. is an exclusively Neotropical taxon. Three other recorded species are Neotropical endemics. We believe that previous records of *I. sordidus* (Lévin, 1848) from Brazil were misidentifications, probably of two newly described taxa, or *I. sarsi*.

**Key words:** Branchiopoda, Anomopoda, taxonomy, fauna, South America

### Introduction

The first record of the *Ilyocryptus* Sars, 1862 (Cladocera: Ilyocryptidae) from Brazil was made by Ihering (1895), who described *Acanthocercus immundus* F. Mueller, regarded recently as a junior synonym of *I. spinifer* Herrick, 1882, which was described from North America (Kotov & Dumont 2000). Since then, the main contributions to study of this genus in Brazil and closest countries were made by Sars (1901), Daday (1905), and Stingelin (1913). Subsequently, the interest to ilyocryptid and generally cladoceran taxonomy was lost, only some records or very scarce descriptions were published (Brandorff *et al.* 1982).

Only in the new millennium, some detailed redescrptions of Brazilian species appeared. A very characteristic Neotropical species, *I. sarsi* Stingelin, 1913, was redescrbed by Kotov *et al.* (2002a), and its neotype was selected from Sars' sample from Ipiranga, State of São Paulo. Many populations of *I. spinifer* from Brazil were examined by Kotov and Dumont (2000). Subsequently Kotov and Štifter (2004) found a new Neotropical member of the *spinifer*-group, *I. plumosus*, but it is not recorded from Brazil. Many authors provided information on new records of ilyocryptids from this country (Brehm 1937, 1938; Schubart 1938, 1942; Bergamin 1939; Green 1972; Hardy 1980; Robertson 1980; Montú & Gloeden 1986; Bohrer *et al.* 1988; Smirnov & Santos-Silva 1995; Sousa-Dabés 1995; Campos *et al.* 1996; Nunes *et al.* 1996; Lansac-Tôha *et al.* 1997, 1999; Rocha & Por 1998; Rocha *et al.* 1998; Branco *et al.* 2000; Crispim & Watanabe 2000; Starling 2000; Espíndola *et al.* 2000; Morini & Pinto-Silva 2000; Rossa *et al.* 2001; Sampaio *et al.* 2002; Azevedo & Bonecker 2003; Hollwedel *et al.* 2003; Lima *et al.* 2003; Neves *et al.* 2003; Serafim Jr. *et al.* 2003; Elmoor-Loureiro