



Checklist of helminth parasites of cetaceans from Brazil

JOSÉ L. LUQUE¹, LUÍS C. MUNIZ-PEREIRA², SALVATORE SICILIANO⁵, LIEGE R. SIQUEIRA²,
MAGDA S. OLIVEIRA² & FABIANO M. VIEIRA^{3,4}

¹Departamento de Parasitologia Animal, Universidade Federal Rural do Rio de Janeiro, Caixa Postal 74508, Seropédica, RJ, Brazil, CEP 23851-970. E-mail: jlluque@ufrj.br

²Laboratório de Helmintos Parasitos de Vertebrados, Instituto Oswaldo Cruz, FIOCRUZ, Av. Brasil 4365, RJ, Brazil, CEP 21040-900. E-mail: lmuniz@ioc.fiocruz.br; liege@ioc.fiocruz.br; sanches@ioc.fiocruz.br

³Curso de Pós-Graduação em Biologia Animal, Instituto de Biologia, Universidade Federal Rural do Rio de Janeiro, Seropédica, RJ, Brazil. E-mail: fmatosvieira@gmail.com

⁴Laboratório de Taxonomia e Ecologia de Helmintos, Departamento de Zoologia, Universidade Federal de Juiz de Fora, Campus Universitário, Juiz de Fora, MG, Brazil, CEP 36036-330

⁵Departamento de Endemias, Escola Nacional de Saúde Pública/FIOCRUZ; Rua Leopoldo Bulhões, 1480, 6o. andar, sala 620, Rio de Janeiro, RJ, Brazil, CEP 21041-210

Abstract

Based on published records and unpublished information retrieved from the Helminthological Collection of the Oswaldo Cruz Institute (CHIOC), a checklist of the helminth parasites of cetaceans from Brazil was generated. A total of 215 records of 18 species of helminths were associated with 22 species of cetaceans in Brazil. Six species determined only to genus were also included. The majority of these helminth species are nematodes (33.3%) and trematodes (33.3%), which total 66.6% of the helminth fauna of cetaceans from Brazil. The Acanthocephala represents 22.2% of species, and the Cestoda 11.1%.

Key words: helminth, biodiversity, Cetacea, Brazil

Introduction

Brazil is the fifth largest country in the world and has the highest species diversity of all of the megadiversity countries, accounting for roughly 14% of the world's biota (Lewinsohn & Prado 2002). Helminth species are the most diverse group of metazoan parasites of vertebrates and are recognized as an important component of global biodiversity (Poulin & Morand 2004). Research efforts directed at documenting parasite species have increased recently. As knowledge of parasite biodiversity is dependent on previous studies of host biodiversity, the loss of host species diversity implies a possible loss of parasite species diversity.

Living Cetacea comprise 89 species distributed in all oceans and seas (Fordyce 2002). Differences in water masses in the South Atlantic makes the Brazilian coast a place with a high cetacean biodiversity. To date, 44 species of cetaceans have been recorded in Brazilian waters (Souza *et al.* 2005). The abundance and distribution patterns of the cetacean species are heterogeneous. Some species are known based on a few stranded specimens collected and may represent extralimital records (e.g. Commerson's dolphin, *Cephalorhynchus commersonii* (Lacépède) (Odontoceti, Delphinidae), Peale's dolphin, *Lagenorhynchus australis* (Peale) (Odontoceti, Delphinidae) and the Southern right whale dolphin, *Lissodelphis peronii* (Lacépède) (Odontoceti, Delphinidae) - and some species of beaked whales, like the recently published record of Arnoux's beaked whale *Berardius arnuxii* Duvernoy (Odontoceti, Ziphiidae) (Siciliano & Santos 2003). But at least 31 cetacean species use the Brazilian waters on a regular basis. This group comprises the whales (e.g. Southern right, humpback, Antarctic and dwarf minke whales) which migrate seasonally with the