RESEARCH NOTE

Occurrence of *Anisakis physeteris* Baylis, 1923 and *Pseudoterranova* sp. (Nematoda) in Pygmy Sperm Whale *Kogia breviceps* (De Blainvillei, 1838) (Physeteridae) in Northeastern Coast of Brazil

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An adult male pygmy sperm whale, *Kogia breviceps* (De Blainvillei, 1838) (Physeteridae), 2.73 m long was found stranded on Cacimba do Padre beach, Fernando de Noronha archipelago (3°51'S; 32°25'W), Brazil on 2 May 1987. At necropsy, nematodes were collected from the stomach, fixed in 70°GL alcohol and cleared in beechwood creosote. Their identification was based on JT Davey (1971 *J Helminthol 45*: 51-72) and D Gibson (1983 p. 321-338. In HM Platt and LF Khalil (eds), *Concepts in Nematode Systematics*). Measurements were made with the use of a calibrated filar micrometer with the range given in micrometers followed by the mean in parenthesis, and number of specimens measured. Studied material is deposited in the Helminthological Collection of the Instituto Oswaldo Cruz (CHIOC), Rio de Janeiro, Brazil.

Twelve specimens of *Anisakis physeteris* Baylis, 1923 were studied and measure 19.60-36.57 (24.90)12 long by 0.35-0.69 (0.51)12 wide. All present typical lips 0.06-0.13 (0.09)7 long, anterior esophagus 1.79-2.87 (2.38)12 and posterior ventriculus 0.25-0.41 (0.35)12 long. The ratio of esophagus/ventriculus is 6:1 - 9:1 (7.1)11. Nerve ring is at 0.32-0.51 (0.42)9 from anterior end. Subequal spicules measure 0.23-0.32 (0.26)4 long. Number of caudal papillae is variable reaching a total of 33 pairs: 25 precloacal, 3 adcloacal and 5 postclocal, 2 near the cloaca and 3 just anterior to the posterior extremity. In females the vulva is 7.62-8.85 (8.6)5 from the anterior end. A single egg measures 0.09 long by 0.06 wide (CHIOC no. 33.539).

All four specimens of *Pseudoterranova* sp. examined were immature, measuring 7.39-10.16 (8.21)4 long by 0.27-0.33 (0.30)4 wide. Anterior esophagus measure 0.87-1.45 (1.12)4; ventriculus 0.43-0.53 (0.47)3 and intestinal caecum 0.50-0.53 (0.52)4. Lips are 0.04 x 0.06 (0.04x0.06)3. Nerve ring is situated at 0.19-0.23 (0.20)4 from anterior end, at level of excretory pore. The distance from anus to posterior tip is 0.09-0.20 (0.14)3 (CHIOC no. 35.540).

According to A Ross (1979 *Ann Cape Prov Mus (Nat Hist) 11*: 259-327) the diet of *K. breviceps* consists basically of cephalopods and is supplemented by crustaceans and pelagic fish. The stomach examined showed, in addition to the nematodes, the presence of 36 cephalopod beaks (23 inferior and 13 superior) identified as five genera all from the family Cranchiidae (*Histioteuthis* sp., *Onychoteuthis banksi*, *Enoploteuthis* sp., *Mastigoteuthis* sp., *Neoteuthis thieli*). Due to the fact that cephalopods are considered second intermediate or paratenic hosts of *Anisakis* (JW Smith & R Wooten 1978 *Adv Parasitol 16*: 93-163) this information may give us an indication of the parasites life cycle in this area.

According to previous authors (JA Raga 1994 p. 132-179. In D Robineau et al. *Handbuch der Saugetiere Europas*, MD Dailey & WK Vogelbein 1991 *Fish Bull US 89*: 355-365, Davey 1971 *loc. cit.*) the list of hosts for *A. physeteris* includes *Physeter macrocephalus* (L., 1758) (=*P. catodon*), *Globicephala melas* (Traill, 1809) (=*G. ventricosus*), *Hyperodon ampullatus* (Forster, 1770), *Ziphius cavirostris* (Cuvier, 1823), *Balaenoptera acutorostrata* Lacépède,1804 and *Kogia breviceps*. All these hosts have strictly oceanic habits, differing from those of *Anisakis typica* (Diesing, 1860) and *Anisakis simplex* (Rud., 1809) that have both oceanic and coastal habits. The genus *Pseudoterranova* was previously reported from *Delphinapterus leucas* (Pallas, 1776), *Monodon monoceros* L. 1758, *Phocoena phocoena* (L., 1758), *Delphinus delphis* L., 1758, *Lagenorhynchus albirostris* (Gray, 1846), *B. acutorostrata*, *B. musculus* (L., 1758) and *K. breviceps*, all hosts with oceanic and coastal habits.

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Previous studies on cetaceans' parasites from Brazil were reported by CP Santos et al. (1996 *J Helm Soc Wash 63*: 149-152). This is the first report of *A. physeteris* and *Pseudoterranova* sp. in *K. breviceps* in northeastern Brazil and represents a new geographical distribution for these parasites.

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