#### **NOTA BREVE**

# RECORDS OF PARASITIC COPEPODS OF SHARKS FROM THE SOUTHWESTERN ATLANTIC

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During one cruise carried out by the RV "Atlantico Sul" (Project Argos I) in the Southern Brazilian continental shelf (Santa Catarina and Rio Grande do Sul States) sharks were caught in two stations, between 34°47'02" - 32°10'68" S and 51°51'58" - 50°06'70" W.

These sharks were infected with parasitic copepods on several parts of the body. They were withdrawn with scalpel and fixed in 4% formaldehyde in sea water.

Four different species of parasitic copepods on three sharks species were found (Tab.1).

Table 1. List of parasitic copepods collected, host and habitats.

Parasitic Copepods	Host	Habitats
Order Siphonostomatoida Thorell, 1859		
Family Pandaridae Milne-Edwards, 1840		
Pandarus bicolor Leach, 1916	Carcharhinus signatus (Poey, 1868)	dorsal surface
<i>Dinemoura latifolia</i> (Steenstrup e Lutken, 1861)	Isurus oxyrhinchus Rafinesque, 1809	surface, caudal fin
Echthrogaleus coleoptratus (Guérin-Meneville, 1837)	Prionace glauca (Linnaeus, 1758)	outer surfaces, anal fin
Family Dichelesthiidae Milne- Edwards, 1840		
Anthosoma crassum (Abildgaard, 1794)	<i>Isurus</i> oxyrhinchus Rafinesque, 1809	buried in mouth cavity

#### Material examined

- P. bicolor. 10 females, length range of 7.87 to 9.75 mm.
- *D. latifolia*: 4 females, length range of 13.8 to 15.9mm; 8 males, length range 8.28 to 9.74 mm.
- E. coleoptratus: 2 females, length range of 9.30 to 10.10 mm; 1 male of 5.80 mm length.
  - A. crassum: 4 females, length range of 11 to 11.80 mm.

All females of the four species found are adults and ovigerous.

## Species distribution

- *P. bicolor*: Shetland Islands, (Wilson, 1907), Angola coast (Dollfus, 1946), Atlantic and Pacific oceans (Kabata, 1992).
- D. latifolia: North Atlantic: USA coast, Faroe Islands, South Atlantic: Rio Grande do Sul coast (Brazil) Mediterranean and Japan seas and Pacific ocean (Wilson, 1907; Yamaguti, 1963; Montú, 1982).
- E. coleoptratus: North Atlantic, Mediterranean sea, Indian and Pacific oceans (Yamaguti, 1963; Kabata, 1992).
- A. crassum: North and South Atlantic, North and South Pacific, Mediterranean and Adriatic seas and west of Indian ocean (Kabata, 1992).

#### Remarks

All diagnostic structures of the four studied species agree with the descriptions by Yamaguti (1963) and Kabata (1979, 1992), and with the characteristics described by Cressey (1967) for the genera.

In comparison with the body length of the females of *P. bicolor* reported by Wilson (1907, 9 mm) and Kabata (1992, 8 to 10 mm) the specimens observed in the present study are smaller. For the other species Wilson (1907) reported a smaller body size-range 15 mm for females, and 8.3 for males of *D. latifolia* and 13 mm for females of *E. coleoptratus*. Kabata (1992) gave 10 to 14 mm for females and 6 to 8 for males of *E. coleoptratus*, which is larger than the Brazilian specimens. In *A. crassum*, the size - range of females studied by Kabata (1992) is larger, 8.5 to 15 mm.

#### REFERENCES

- CRESSEY, R.F. 1967. Revision of the Pandaridae (Copepoda, Caligoida). Proc. U.S. National Museum, 121 (3570): 1-133.
- DOLLFUS, R.P. 1946. Essai de catalogue des parasites poisson-lune *Mola mola* (L. 1758) et autres Molidae. Annls. Soc. nat.Charente-Marit., New Ser., 3: 70-76.
- KABATA, Z. 1979. Parasitic Copepoda of British Fishes. The Ray Society, 152: 468 pp and 2031 figs.
- KABATA, Z. 1992. Copepods parasitic on fishes. Synopses of the British Fauna (New Series), The Linnean Society of London and the Estuarine and Coastal Sciences Association. Ed. Kermack, Barnes and Crothers, 47: 264 pp.
- MONTÚ, M. 1982. Alguns copepodos parasitas de peixes do sul do Brasil. Arq. Biol. Tecnol. 25 (3/4): 329-339.
- WILSON, C.B. 1907. North American parasitic copepods belonging to the family Caligidae. Parts 3 and 4. A revision of the Pandaridae and Cecropidae. Proc. U.S. Natn. Mus., 33: 323-490.
- YAMAGUTI, S. 1963. Parasitic Copepoda and Branchiura of fishes. Interscience Publ., New York, London and Sydney. 1104 pp.