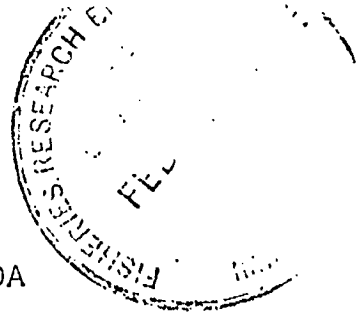


FISHERIES RESEARCH BOARD OF CANADA
Translation Series No. 648



Parasitic copepods of fishes from
the seas of Angola

By L. Nunes-Ruivo

Original title: Copepodes parasitas de peixes dos
mares de Angola.

From: Anais da Junta de Investigacoes do Ultramar,
Vol. 9, No. 2, pp. 9-45, 1956. Lisbon.

Translation of pages 9-12, 17, 43-45, by H. T. Belo,
Bureau for Translations, Foreign Languages Division,
Department of the Secretary of State of Canada

Fisheries Research Board of Canada
Biological Station, Nanaimo, B. C.

1966

FOREIGN LANGUAGES
DIVISION



DIVISION DES LANGUES
ÉTRANGÈRES

TRANSLATED FROM - TRADUCTION DE Portuguese INTO - A English

SUBJECT - SUJET

AUTHOR - AUTEUR Nuno-Ruivo, L.

TITLE IN ENGLISH - TITRE ANGLAIS Parasitic Copepods of Fishes from the Seas of Angola.

TITLE IN FOREIGN LANGUAGE - TITRE EN LANGUE ÉTRANGÈRE Copepodes parasitas de peixes dos mares de Angola.

REFERENCE - RÉFÉRENCE (NAME OF BOOK OR PUBLICATION - NOM DU LIVRE OU PUBLICATION) Annals of the Portuguese Overseas Research Board - 9(2): 9-45.

PUBLISHER - ÉDITEUR

CITY - VILLE DATE 1956 PAGES 9-45 typed 20 pp.

9-12, 17, 43-45.

REQUEST RECEIVED FROM REQUIS PAR

OUR NUMBER NOTRE DOSSIER NO 5065

DEPARTMENT MINISTÈRE Fisheries

TRANSLATOR TRADUCTEUR H.T. Delo

YOUR NUMBER VOTRE DOSSIER NO

DATE COMPLETED REMPLIE LE 10.12.65

DATE RECEIVED REÇU LE 29.10.65

Translation 43 pages

NUNES-RUIVO, L. - 1956

PARASITIC COPEPODS OF FISHES
FROM THE SEAS OF ANGOLA.

ANNALS OF THE PORTUGUESE OVERSEAS

RESEARCH BOARD - 9(2): 9-45.

pl. 9-127 171 43-4

-/-

Department of the Secretary of State
Translation Bureau - Foreign Languages Div.
Dept. of Fisheries - Our no. 5865.

FOREWORD

In this reference paper are studied the Parasitic Copepods of fishes found upon the coast of Angola by the Fishing Research Mission on board of the S/S "Baldaque da Silva" (1).

The main purpose of this collection is to develop the knowledge about this area of geographic distribution of some well-known species, determining their appearance in the coast of Angola -- practically unexplored -- and also to indicate some new hosts of these species.

There is a description of these two new species Eudactylina J.P. van Beneden, E. vilelai n. sp. and E. valsei n. sp. It would be of great interest a methodical search of this region. In fact, the attainments about this group of Parasitic Copepods of fishes in the west coast of Africa are, generally, sporadic and divided in parts. Specifying: the catches made in Mauritania by Th. Monod, and studied by A. Brian (1924); the results obtained by the Belgian Oceanographic Expedition to the western coast of Africa between the Equator and the 25th degrees Latitude South, still unpublished, and particularly the large collection which has been methodically achieved by J. Cadenat, director of the Laboratory of Corée, I.F.A.N., off the coast of Senegal. This collection was already partly published (A. Capart, 1953); Cl. Delamare Deboutteville and Lydia Nunes-Ruivo, 1953), and the greater part still being studied by these two latter authors.

(1) With our thanks to Dr. Herculano Vilela, guide of this Mission, who so kindly entrust us with the study of this material.

ANNALS OF THE OYASHIMA RESEARCH BOARD

SPECIES STUDIED

Family CALIGIDAE

Caligus polaris Kroyer, sur Sarda sarda (Bloch)

Caligus bonito Wilson, s/ Katsuwonus pelamis (L.)

Caligus katuwo Yamaguti, s/ Neothunnus albacora (Lowe)

Pandarus bicolor Leach, s/ Eulamia sp.

Acththeinus dentatus Wilson, s/ Squalus acanthias L.,
new host.

Trebius caudatus Kroyer, s/ Squalus fernandinus Molina,
new host.

Mesibius orientalis, Heller, s/ Sphyrna syaena (L.)

Family DICHELIMSTHILDAE

Antosoma crassum (Abild.), s/ Isurus oryzaeformis Raf.

Nemesis robusta (v. Bened.), s/ Mustelus sp. and Sphyrna
nyaena (L.)

Pseudocycnus appendiculatus Heller, s/ Katsuwonus pelamis
(L.) new host; Neothunnus albacora (Lowe) and
Parathunnus obesus.

Eudactylina acanthii A. Scott, s/ Squalus acanthias L.

Eudactylina vilelai n. sp., s/ Squalus fernandinus Molina
and Centrophorus uvato (Ralph).

Family CHONDROCANTHIDAE

Chondrocanthus maruccii (Holten), s/ Merluccius capensis
Cast., new host.

Family Lernaeidae

Peroderma cylindricum Heller, s/ Sardinella eba.

MEPA 11-105 - 1 ♀ ovisacs and 1 ♂; in the branchias of Sarda sarda (Bloch). Baía Farta, Oct. 25, 1952.

MEPA 11-12 - 1 ♀ with ovisacs, in Sarda sarda (Bloch); Region of Luanda (Angola), Aug. 16, 1952.

Until the present, this species was not found in the western coast of Africa.

CALIGUS BONITO WILSON

(Plate II, fig. a)

Bibliography:

- WILSON (C.B.), 1905, pages 589-594, plate XIII, figs. 150-153, fig. text; s/ Gyamosarda pelamis Lin. Woods Hole.
- BRIAN (A.), 1924, page 13; s/ Cybian sp. Mauritania.
- BRIAN (A.), 1935, pages 37-40, fig. XIV.
- YAMAGUTI (S.), 1936, pages 8-9, plate V. figs. 69-71; plate VI, figs. 72-85; s/ Muthynus pelamis (L.). Yaidu (Japan).
- CARVALHO (F.J.), 1951, page 13; s/ Katsuwonus pelamis. São Paulo.
- CAUSEY (D.), 1953, page 8; s/ Sarda sarda (Bloch). Port Aransas (Texas).

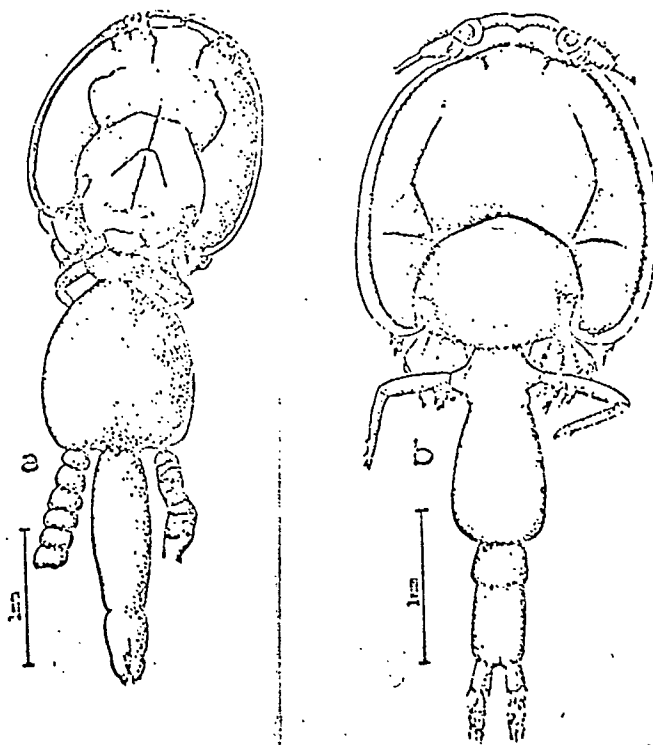
Material and origin:

- 2 ♀ without the ovisacs; 1 ♂; MEPA 11-220: in the branchias of Katsuwonus pelamis (L.) - Caiado, January 1953, Baía Farta.
- 1 ♀; MEPA 11-657 extracted from the branchias of Katsuwonus pelamis (L.), Oct. 21, 1952. Baía Farta.

The specimen of Caligus bonito Wilson, which were studied by us, does agree perfectly well with the description made by Wilson (1905). Yamaguti (1936), revising this species has studied it comparatively with Caligus kituwo, of which he is the author;

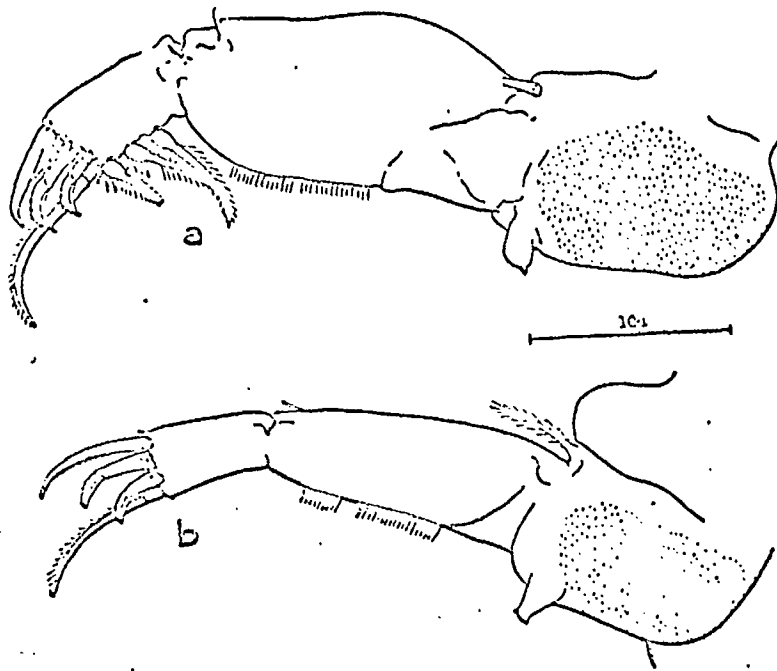
this last parasit, which is also a Scombridae, is extremely similar in its habitus a C. bonito. Having both species among the material at our disposal, we can emphasize that the main morphological difference and the most evident one between them it is the configuration of the first pair of paws. (Plate II).

PLATE I



- a. Caligus pelamydis Kr. dorsal aspect;
b. Caligus katuno Yamaguti, dorsal habitus.

PLATE II



a. Paws of the *Caligus bonito* Wilson.

b. Paws of the *Caligus katuwo* Yamaguti.

The presence of *C. bonito* Wilson in the coast of Angola will widen the area of distribution of the parasite in the East Atlantic, following naturally the area of distribution of the hosts.

CALIGUS KATUWO Yamaguti

(Plate I, fig. b; Plate II, fig. b)

Bibliography:

YAMAGUTI (S.), 1936, pages 6-8, plate IV, fig. 56-58.

Parasiting in the branchias of Euthynnus polyanus (L.). In the seas of Japan.

Material and origin:

- 4 of which three ovisacs: 1 . MPPA 11-211, in the branchias of a Albacora - Hcothynnus albacora (Lowe). Baía Farta, Jan. 10, 1953. Together with two specimen of Pseudocycopus appendiculatus Heller.

We have already noted one of the main characteristics which

distinguish this species of Caligus bonito Wilson. The same considerations are extended to the male of both species. We exhibit in the Plate II the habitus of the male of C. katuwo, which was not observed by Yamaguti.

This Copepoda was only known in the Pacific (Yamaguti, 1936). It is probable that its presence will become known in other parts of the South Atlantic, where the Scombrideos are also common.

PANDARUS BICOLOUR Leach

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BRIAN (A.), 1906, pages 55-56, plate II, fig. 1; s/ Galeus canis.

Portoferraio, Mediterranean.

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