pp. 843–846

GH 1 B4X NH

5 February 1970

0

OF THE

BIOLOGICAL SOCIETY OF WASHINGTON

HATSCHEKIA PACIFICA NEW SPECIES (COPEPODA: CALIGOIDA) A PARASITE OF THE SAND BASS, PARALEBRAX NEBULIFER (GIARD)

BY ROGER F. CRESSEY Smithsonian Institution, Washington, D. C.

As part of a survey of the copepods parasitic on the inshore fishes of La Jolla, California this paper describes a new species of *Hatschekia* contained in six collections from the gills of *Paralebrax nebulifer* (Giard).

All collections were made by Mr. Edmund Hobson and Mr. Lloyd Richards of the Tiburon Marine Laboratory, U. S. Bureau of Sport Fisheries and Wildlife.

All material has been deposited in the Smithsonian Institution, Division of Crustacea.

Hatschekia pacifica new species Figures 1–9

Material studied: Holotype \heartsuit (USNM 126976) and 67 paratype $\heartsuit \diamondsuit$ (USNM 126977) collected from the gills of *Paralebrax nebulifer* at La Jolla, California 2 October 1968. Five additional collections from the same host and locality were made on 22 July 1968 ($2 \heartsuit \heartsuit$), 8 August 1968 ($2 \heartsuit \heartsuit$), 24 September 1968 ($5 \heartsuit \heartsuit$), 1 October 1968 ($3 \heartsuit \heartsuit$), and 2 October 1968 ($2 \heartsuit \heartsuit$).

Female: Body form as in figure 1. Total length 2.48 mm. Greatest width 0.6 mm. Cephalon comprises about one-eighth total length. Thoracic segment bearing first and second pairs of legs distinct.

Genital segment comprises approximately 75 percent of body length. Dorsal body surface without ornamentation. Posterior corners of genital segment smoothly rounded. Abdomen small and one-segmented. Caudal rami (fig. 2) small, about three times as long as wide, and bearing six setae, no ornamentation of the rami or setae could be seen under highest magnification.

First antenna (fig. 3) three-segmented; last two segments incompletely divided, all segments bearing naked setae as in the figure. Second antenna (fig. 4) in form of a stout claw, penultimate segment covered

66—Proc. BIOL. Soc. WASH., VOL. 82, 1970 (843)



Hatschekia pacifica new species

with fine spinules on distal half. Mandible blade (fig. 5) narrowing abruptly at distal fourth and terminating as two teeth, entire structure lying within mouth cone. First and second maxillae (fig. 6) each consisting of two broad but weakly sclerotized setae; first maxilla setae short and furcalike. Maxilliped (fig. 7) 4-segmented, terminating as a bifid claw and with setae borne on the inner distal corners of the penultimate and antipenultimate segments.

First leg (fig. 8) biramose; exopod 2-segmented and armed as in the figure, endopod 1-segmented and bearing five setae: all segments with rows of spinules as indicated in the figure. Second leg (fig. 9) biramose; each ramus 2-segmented and armed as in the figure, rows of spinules on both exopod segments and the last endopod segment.

Egg strings uniseriate and generally about twice the length of the body, each string containing 50–75 eggs.

Male: Unknown.

Remarks: This new species differs from most of the known species of *Hatschekia* on the basis of the separation of the leg bearing segment from the cephalon. It seems most closely related to *H. conifera* Yamaguti but can be easily distinguished from it because of the processes present on the terminus of the genital segment of *conifera*; it can be further separated by the nature of the armature of the first and second legs, the setae of *pacificus* being much longer than in *conifera*.

This new species is only the third recorded from eastern Pacific waters. The other two are *conifera* by Cressey 1968 and *pinguis* Wilson 1908.

LITERATURE CITED

- CRESSEY, R. F. 1968. A redescription of *Hatschekia conifera*, Yamaguti 1939, (Copepoda, Caligoida), including the first description of the male. Proc. Biol. Soc. Wash., 81 (21): 173– 178.
- WILSON, C. B. 1908. North American parasitic copepods: a list of those found upon the fishes of the Pacific coast, with descriptions of new genera and species. Proc. U. S. Nat. Mus. 35 (1652): 431-481.
- YAMAGUTI, S. 1939. Parasitic copepods from fishes of Japan. Pt. 5. Caligoida, III. Vol. Jub. Prof. S. Yokhida, 2: 443–487.
- 4

FIGS. 1–9. Hatschekia pacifica new species, female: 1, dorsal view; 2, caudal ramus, ventral; 3, first antenna; 4, second antenna; 5, blade of mandible; 6, first and second maxilla; 7, maxilliped; 8, first leg; 9, second leg. All drawings except figure 5 drawn with the aid of a camera lucida —figure 5 freehand.



Cressey, Roger F. 1970. "Hatschekia pacifica New Species Copepoda Caligoida A Parasite Of The Sand Bass Paralebrax nebulifer." *Proceedings of the Biological Society of Washington* 82, 843–845.

View This Item Online: <u>https://www.biodiversitylibrary.org/item/107490</u> Permalink: <u>https://www.biodiversitylibrary.org/partpdf/43562</u>

Holding Institution Smithsonian Libraries

Sponsored by Biodiversity Heritage Library

Copyright & Reuse Copyright Status: In copyright. Digitized with the permission of the rights holder. Rights Holder: Biological Society of Washington License: <u>http://creativecommons.org/licenses/by-nc-sa/3.0/</u> Rights: <u>https://biodiversitylibrary.org/permissions</u>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at https://www.biodiversitylibrary.org.