**DEROCHEILOCARIS TYPICUS PENNAK & ZINN (MYSTACOCARIDA) REVISITED**

BY

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**INTRODUCTION AND ACKNOWLEDGMENTS**

It has been over twenty years since the first species of the subclass Mystacocarida, *Derocheilocaris typicus*, was described by Pennak & Zinn (1943). Since then two other species, *D. remanei* Delamare Deboutteville & Chappuis, 1951, and *D. galvarini* Dahl, 1952, have been discovered. Subsequent attention has been given to *D. galvarini* by Noodt (1961), and several publications have been devoted to the morphology and development of *D. remanei* (see Delamare Deboutteville, 1960). There has been, however, no further original research on *D. typicus* other than a correction of some points in the original description (Armstrong, 1949) and a recent description of portions of its skeletomusculature (Hessler, 1964). This paucity of information stands in spite of the fact that *D. typicus* is a very abundant organism within easy reach of numerous scientific institutions. The present paper is an attempt to fill this gap.

Although the original description of *Derocheilocaris typicus* was a detailed one, in many respects it was inaccurate because of the limited material available at the time, necessitating a brief redescription of the adult external morphology. Furthermore, we have been able to find a complete series of larval stages, and these will be described in detail. The known geographic range, which is much greater than that first described by Pennak & Zinn, will be mentioned. Finally, a comparison will be made to *Derocheilocaris remanei*.

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**ADULT EXTERNAL MORPHOLOGY**

Because the original description is essentially correct, we will list here only additions and corrections to that description, primarily in the form of re-illustrations (figs. 1, 2).
Anterior portion of cephalon (fig. 1B) with a pair of anterolateral and a pair of lateral lobes, each broadly rounded at their limiting notches (medial angles of anterolateral lobes not acute); lateral lobes each with one marginal seta; anterolateral lobes each with two marginal setae.

Caudal rami (figs. 1E, F): the "three small equidistant processes" (Pennak & Zinn, 1943: 5) on medioventral edge are in reality the ventral edge of comb rows located on medial surface.

First antenna (fig. 2A): segment three with eight setae (not seven); segment four with five setae (not three); segment five with eight setae (not four); segment six with five setae (not four); segment eight with four terminal setae (not three to five).

Second antenna (fig. 2B): segment two of exopod with one seta (not zero); protopod with two small and one long seta on ventromedial surface (not just one long); no aesthetes.