EXPERIMENTAL TRANSFERS OF FEMALE <u>ANILOCRA</u> <u>CHROMIS</u> ON BROWN AND BLUE CHROMIS AT HYDROLAB HABITAT, ST. CROIX

Lucy Bunkley Williams and Ernest H. Williams, Jr.

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EXPERIMENTAL TRANSFERS OF FEMALE <u>ANILOCRA</u> <u>CHROMIS</u> (ISOPODA: CYMOTHOIDAE) ON BROWN AND BLUE CHROMIS AT HYDROLAB HABITAT, ST. CROIX

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<u>Anilocra chromis</u> Williams and Williams selectively parasitizes the brown chromis, <u>Chromis multilineatus</u> (Guichenot), in the northeastern West Indies and the blue chromis, <u>C. cyaneus</u> (Poey), in the northwestern West Indies, never both at the same location, although these fishes occur sympatrically throughout the West Indies. To test host suitability, <u>A. chromis</u> naturally infecting brown chromis were transferred to 42 previously uninfected blue chromis that were tagged and then released at their original site of capture at Salt River Submarine Canyon, St. Croix, U.S. Virgin Islands. <u>Anilocra chromis</u> were better able to survive on brown chromis than on blue chromis. Blue chromis reacted violently to the presence of this isopod whereas brown chromis did not. Brown chromis seemed to be behaviorally predisposed to infection by this parasite. This predisposition may determine which species of chromis is parasitized in a geographic area. This work was supported by 2 grants and 2 service contracts from NOAA, and conducted at the Hydrolab Habitat site.