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## ATTACHMENT, MOVEMENT, AND SURVIVAL OF MICROMALE *ANILOCRA CHROMIS* (ISOPODA: CYMOTHOIDAE) ON ADULT AND JUVENILE BROWN CHROMIS

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Anilocra chromis Williams and Williams selectively parasitizes the Brown Chromis, Chromis multilineatus (Guichenot) in the central and eastern West Indies and the Blue Chromis, C. cyaneus (Poey), in the northern West Indies, never both in any locality, although these fishes occur sympatrically throughout the region. The present work is part of a series of experiments examining the host-parasite relationships of these organisms. Data were obtained using saturation, scuba diving techniques from the NOAA, National Undersea Laboratory System Hydrolab Undersea Habitat, located at Salt River Submarine Canyon, St. Croix, USVI. In this area, A. chromis naturally parasitizes Brown Chromis. Female A. chromis, gravid with developmentally advanced broods, were collected in the field and isopods that were released from these females (called micromales in this paper) were confined in plastic aquarium bags until exposures to hosts were made. Experimentally exposed micromales were host specific to adult Brown Chromis, attaching only at night, and subsequently migrating across the body of the host toward the attachment position of the female isopod. Forty percent of the 45 Brown Chromis were infected with one or more micromales and of those, 28% were infected with two isopods. No more than two isopods settled on a host. Attachment of each isopod is an independent event. Host with experimentally attached micromales were released in the field. Most isopods on these hosts survived only 24-48 hours. Cleaning organisms probably removed these isopods. Isopods infected 40% of the 112 juvenile Brown Chromis, settling near the eyes, and 6% of the 94 Blue Chromis juveniles, attaching near the fins. Attachment occurred only at night. Two isopods infected 13.3% of the infected juvenile Brown Chromis and none of the juvenile Blue Chromis had multiple infections. Host specificity may be more important than predisposition of the host in determining which host will be infected. Experimentally infected juvenile Brown Chromis were not released in the field, but held in plastic bags. Most isopods attached to these fish survived longer than two days probably due to protection from cleaners. Subsequent movement on the host was not observed.

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