

**MANIPULATION OF LARGE EXTERNAL ISOPODS
(GENUS ANILOCRA) ON BROWN AND
BLUE CHROMIS**

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Purpose: Transfer the large, external isopod *Anilocra* (which occurs under the eye of the brown chromis *Chromis multilineatus*, and the blue chromis *Chromis cyanea*) from infested brown chromis to noninfested brown and blue chromis.

This method is new and has only been previously tested in aquaria (Report No. 79-4)

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Accomplishments: Uninfested brown and blue chromis were collected from an experimental reef at storage depth with quinaldine. Brown chromis infested with isopods were also collected at storage depth with quinaldine from the west wall of the canyon. Fishes were held individually in plastic aquarium bags inside dive bags on the tank rack for no more than 2 hours before transfers. The uninfested fishes were removed from plastic bags in an aquarium. They were then tagged in one or more areas just beneath the scales with an injection of acrylic paint, and held in contact with an isopod from a donor fish in the appropriate location (beneath one eye) until the isopod attached. They were then placed in a plastic bag, suspended in a dive bag for no more than 1 hour, returned to the experimental reef, and released into the field. The donor fishes were released in

the areas in which they were initially collected. In the first 2 days, 15 brown and 13 blue chromis isopod transfers were released in the experimental area. During days four and five, five brown and five blue chromis and four blue and two brown chromis transfers, respectively, were released in the area of the experimental reef. During the final observations at the end of day six, 14 of the brown and 14 of the blue chromis were observed from the 22 brown and blue chromis released.

Transferring isopods between fishes was successfully accomplished during the study. Infested individuals were observed in the field throughout the study. The new method promises to be a very useful device for studying parasitism of marine fishes.