

FEEDING RATES AND GROWTH OF CARCINONEMERTES ERRANS

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Master of Science in Marine Science

By
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ABSTRACT

Feeding rates of Carcinonemertes errans ranged from 0.0 to 1.5 eggs per worm per day. These rates are similar to those reported by Wickham (1979b). Feeding rates of the Basic Feeding Rate study and those seen in the Feeding Inhibition study were not significantly different to report that feeding inhibition occurs. But more work in this area is needed. Fungal fouling of the crab egg mass seems to be directly related to worm feeding as reported by Wickham (1979a). Worm populations on male, preovipositional females and 3 day ovipositional female crabs were not significantly different. Crab egg development was found to be accelerated in the experimental holding tubes. In situ worm populations were inhibited in growth for the first 40 days after ovipositing occurred in relation to the tube-held worms. C. errans growth curve was similar to that reported by Kuris (1971) for Carcinonemertes epialti and corresponds to the growth in weight seen by Wickham (1979b) for C. errans. Tube-held worms began egg laying 21 days earlier than in situ worms and 30-35 days earlier than reported

by Wickham (1980) for in situ worms. Worms were found to shrink in length and reinfest the crab carapace after worm egg laying. It is suggested that C. errans may be able to survive to reinfest successive crab egg masses. Worms do not take cues from the development stage of the crab egg to time their life cycle.

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