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Studies on the growth of juveniles of *Cynoscion striatus* in the

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Abstract

This paper reports on the studies on growth of juveniles, 20–140 mm in length, of *Cynoscion striatus* in the sea and in aquaria. The monthly growth of these juveniles in the sea was determined by means of the analysis of length-frequency distributions of 5500 individuals throughout the year. Fish in aquaria were measured and weighed every two weeks, and were fed on known amounts of food. The relationship between the length and the weight of fish, and between the length, width and thickness of the otoliths and the length of fish were calculated and were expressed as exponential functions. On the basis of the analysis of length-frequency distributions and of back calculations it was determined that the formation of the first annulus in the otoliths of juveniles of this species occurs in specimens of 45–100 mm in length and of 1.16–10.0 g in weight. In the majority of the individuals the first annual ring was formed at a size of about 70–80 mm. In juveniles of 79–102 mm, at a temperature of 15–22° C, the maintenance requirement was 0.189 g, and the gross efficiency is 0.310 g of shrimp per gram fish per week. The efficiency of food conversion is high, its value being of 18.8%. The increment in length in these juveniles was 2.01 mm per week and the increment in weight was 0.896 g per week.