

**INFLUENCE OF DENSITY ON THE GROWTH RATE OF GREEN
SNAIL, *TURBO MARMORATUS* L. (MOLLUSCA; GASTROPODA)
IN CAGES**

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ABSTRACT

A grow-out experiment was conducted with *Turbo marmoratus* in an intertidal area. A total of 10, 20, 30, and 40 individuals were put in plastic cages (0.25 m² surface area) placed on a reef flat (three replicates). The initial mean shell diameter for these densities was 9.22, 9.17, 9.14, and 9.31 mm respectively. After 16 weeks they measured 23.46, 22.20, 21.4, and 20.48 mm. Similar cages with a coral rubble substratum were used to rear 30 individuals with three replicates. The initial and final mean shell diameter was 9.21 and 24.53 mm respectively. The variation between replicates for a given density treatment was not significantly different ($P > 0.05$). A pooled t-test showed that the mean cumulative growth was not significantly different ($P > 0.05$) until the 6th week of experiment. After that they were significantly different. The cumulative growth after 16 weeks of experiment for 10, 20, 30 and 40 individuals per cage were 14.24, 13.02, 12.27, and 11.17 mm respectively. This result suggests that there was competition for food. The cumulative growth was higher (15.31 mm after 16 weeks) in the cage filled with coral rubble. It suggests that the addition of coral rubble can increase the carrying capacity of the cage.