BEHAVIOR PATTERN OF HATCHERY-PRODUCED SEA CUCUMBER *Bohadschia marmorata* (Jaeger, 1833) JUVENILES UPON RELEASE

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ABSTRACT

This study reports on the behavior of hatchery-reared *Bohadschia marmorata* juveniles upon release in two different microhabitat types within TINMR: a bare sand patch (TALISAY) and a sea grass vegetated area (BANAGO) during high tide and low tide. Percentage of burrowed juveniles, burying rates, traveled distances, speeds, and direction of movement were determined hourly over a 3-hr period. Results show that more than half of the juveniles released at the vegetated microhabitat displayed burrowing behavior at both tidal conditions. The mean percentage of burrowed individuals differed significantly with tides and its interaction with the microhabitat. Juveniles released at barren microhabitat yielded the highest burying rates (9 animals hr^{-1}) and percentage of burrowed individuals. Coarse sand substrates with poor organic matter content induced mobility of *Bohadschia marmorata*. Results from the release experiments suggest that sea grass beds may be a potential release site for tropical species like *Bohadschia marmorata*.

Keywords: *Bohadschia marmorata*, burrowing behavior, burying rate, rate of movement, TINMR