

**Oxygen Requirement of Sea Cucumber
(*Bohadschia marmorata*)**

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ABSTRACT

The oxygen consumption of juvenile sea cucumber *Bohadschia marmorata* was studied in the laboratory. The effects of temperature and body weight on oxygen consumption rate (OCR) were determined by measuring the dissolved oxygen levels using closed bottle respiratory method. Mean weight specific OCR of *B. marmorata* juveniles was low ($9 \pm 4 \mu\text{gO}_2 \text{ h}^{-1} \text{ g}^{-1}$). The OCR decreased with time from 16.9 ± 9.1 to $6.09 \pm 3.86 \mu\text{gO}_2 \text{ h}^{-1} \text{ g}^{-1}$ rapidly declining in the first two hours then, more gradually thereafter ($R^2 = -0.92$). Factors such as temperature and size affect OCR. Oxygen consumption rate tends to increase with increasing temperature. Bigger animals have low OCR levels than smaller ones ($R^2 = 0.32$).