

**Salinity tolerance of the angelwing clam,
Pholas orientalis larvae**

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by

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Abstract

Pholas orientalis, locally known as “diwal” is one of the commercially important bivalves in the Philippines due to its delicate and sweet taste. An experiment was conducted to determine the salinity tolerance of the 24 hour old larvae of this clam when reared in different salinity levels of 25, 30, 35 and 40 ppt. The experiment lasted for 15 days at a rearing temperature of 25° C - 27° C. Determination of survival rates and water change were done twice every week. The data gathered were then analyzed using one way ANOVA.

Results showed that survival rates were significantly high at salinities of 30-35 ppt and were significantly low at salinity levels of 25 and 40 ppt. It was also observed that there was an increasing trend of mortality with prolonged exposure to different salinity levels. This could be attributed to the limited osmoregulatory capabilities of the larvae. When reared at low salinity levels, larvae were faced with the danger of too much water entry which eventually led to death. Meanwhile, when reared at high salinity levels, the larvae died due to outward movement of water which resulted to dehydration. Information on the salinity levels that could be tolerated by diwal larvae will be an important factor in the development of larval rearing techniques for successful hatchery operations. The juveniles or seeds produced in the hatchery could be used to restock the depleted resources in the wild.