

**The morphological growth of larvae, *Saxidomus purpuratus*,
under the different rearing conditions: Density, salinity and
food**

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Various culture conditions, different salinity, larval density and food, were tested to determine the best reproductive success of *Saxidomus purpuratus* for aquaculture from 2000 to 2001 in Korea. Best growth was achieved when three phytoplanktons, *Isochrysis galbana*, *Pavlova gyraus* and *Nonnochrysis oculata* were offered simultaneously. But it was not significant different with the supply of only two phytoplanktons without *Isochrysis galbana*. The optimal rearing larval density was one individual/ml and higher larval densities showed the lower growths. Larvae showed high tolerance to different salinities but the best growth resulted at 30 ppt, which slight lower than natural seawater salinity 33 ppt. Environmental factors, rearing larval density, temperature, salinity and food species, influenced the morphological characteristics of the larvae. The effects of environmental conditions on final length and morphological growth of larvae were analyzed using H-test and Nemenyi test (unequal N). Between the experimental groups, statistically significant differences were found. Under optimum conditions, larvae grew more isometric in shell form (shell length/shell height) and unsuitable conditions lead to more elongated clams. Morphological aspect, ratio of shell length to shell height could be used as a conditional factor to estimate a furthermore growth of bivalve larvae.

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