## STUDIES ON THE CONTROLLED REARING AND IDEAL RANGE OF ENVIRONMENTAL CONDITIONS REQUIRED FOR THE MASS PRODUCTION OF SELECTED MARINE COPEPODS AS LIVE-FEED FOR MARINE FISH LARVAE

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## Abstract

Copepods are natural food for many species of fishes, invertebrates and their larvae. These are tiny planktonic crustaceans present in almost all kinds of water bodies. Copepods are much superior in nutritional value than most of the popular and common live feeds used in hatchery and need not require any enrichment. Feeding marine fish larvae with copepods increases their survival, growth rates, pigmentation, stress tolerance and reduce deformities when compared to almost all other live feeds. The present study was conducted to evaluate the effect of different salinity, Temperature, pH, photoperiod and tank colour on survival and population growth of *A. spinicauda*. The results showed consistently better population growth within range of 25 and 30 ppt. The extreme limit of salinity for survival of this species was found to be 5 ppt however, without population increase. The present experiment clearly elucidated that at a constant temperature of  $28^{\circ}$ C the population increase was maximum to an extent of 2308 nos /lit on  $12^{th}$  day with the parameters such as pH between 8.0 to 8.3 and 24L: 0D photoperiod and salinity of 30ppt in dark blue colour tank.

Key words: Copepods, Marine fish larvae, Population growth, Mass production