

A PRELIMINARY STUDY ON THE FREEZING TOLERANCE OF
MILKFISH (Chanos chanos, Forsskal) EMBRYOS

by

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ABSTRACT

Milkfish embryos of blastula and C-shaped stages were tested for cryoprotectant toxicity using DMSO and glycerol at 10%, 12% and 15% concentrations. Survival and hatching as well as the effects of freezing were observed. Glycerol was more toxic than DMSO. Freezing at 4°C resulted in the decrease of hatching, and ice crystal formation killed the embryos during the process of freezing to -80°C. C-shaped embryos had a higher survival and hatching than the blastula stage embryos in the toxicity and cold shock tests.