Production and use of copepods in marine fish larviculture

Batch and continuous cultures of the harpacticoid copepod Tisbe holothuriae have been run for numerous generations in the laboratory at the North Sea Centre and the harvested nauplii used as food in preliminary trials with first-feeding turbot (Psetta maxima syn. Scophthalmus maximus). The naupliar swimming behaviour in terms of vertical distribution in a typical fish larval tank and the use of T. holothuriae nauplii as live food for first-feeding turbot larvae were investigated. It was possible to cultivate harpacticoid copepods in shallow trays or in continuous bioreactors with large area substratum. Two such systems were compared in terms of area productivity and the use of ammonia excretion as a means for controlling feeding of the copepods was investigated. Finally, the potential benefits of the use of copepods as live food for marine fish larvae are discussed. (C) 1997 Elsevier Science B.V