STUDIES ON THE DIFFERENT EFFECTS OF SUBSTANCES USED AGAINST ADHESIVENESS OF FISH EGGS IN THE RECIRCULATING AQUACULTURE SYSTEM

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Abstract

An important stage in artificial reproduction in fish of the families Acipenseridae and Cyprinidae is the elimination of adhesiveness of egg process. International studies recommended a variety of substances used against adhesiveness of eggs but do not differentiate the major advantages and disadvantages of their use. The present experiment aimed to determine the effects of de-adhesion with mineral silt, talcum and tannin. The final results regarding the effect of the substances used for de-adhesion on embryogenesis were determined by qualitative assessments, and the fungal infestation was quantitatively quantified by the percentages of fish eggs infested with Saprolegnia sp. in relation to the fertilization percentages. The present work emphasizes that the use of tannin for de-adhesion of fish eggs (B3) not only provides medium-good transparency in embryogenesis, but also reduces the risk of fungal infestation by 12.55% compared to de-adhesion with silt (B1), 13,56% with talcum (B2), with comparable fertilization percentages of 87% in B1, 86.9% in B2 and 89.4% in B3, which recommends it for deadhesing of eggs and reducing fungal attacks in aquaculture.

Key words: *substances for fish eggs deadhesion, embryogenesis, saprolegniosis, mineral silt, talcum, tannin*