

PRELIMINARY RESULTS ON THE USE OF ECAPSULATED CYSTS, NAUPLII AND ENRICHED ARTEMIA NAUPLII IN STARRY STURGEON (*ACIPENSER STELLATUS*) FEEDING

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Abstract

Fish with high economic value require an intake of live natural food to supplement the deficiency of enzymes in the digestive tract and ensure the nutritional requirements characteristic of the early life stages of fish. Internationally, numerous studies have been carried out on the topic of feeding fish with decapsulated Artemia cysts which recorded very good results and aimed to reduce the material costs required for hatching. Many other studies highlight the advantages of bioencapsulation with nutrients of Artemia nauplii, but there are also studies that have shown that feeding fish with enriched nauplii does not bring significant differences in growth results and survivability of fish in the first stages of life. The present experiment aims to establish the advantages and disadvantages of feeding starry sturgeon in three variants, with decapsulated cysts (V1), nauplii (V2), and enriched Artemia nauplii (V3). The final results for the average body mass values of the fish were higher in the V3 variant compared to V2 and V1, as well as the survival rate (with values of 69.47%, 67.18%, 63.36%), but in the V1 variant water pollution with nitrogen compounds and feeding costs were lower than in the experimental variants V2 and V3, being beneficial for recirculating aquaculture systems.

Key words: *starry sturgeon, feeding, decapsulated cysts, Artemia nauplii, enriched Artemia nauplii*