

عنوان مقاله:

Research Article : Culture strategy for production of Indian white prawn, *Fenneropenaeus indicus* in semi-arid conditions using biofloc technology

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خلاصه مقاله:

An experiment was conducted to test efficiency of biofloc technique for production of Indian white prawn, *Fenneropenaeus indicus* in HDPE liner ponds (۳۰۰ m²) for ۹۰ days. There were control (water exchange to maintain transparency at ۴۰-۵۰ cm) and treatment (zero water exchange) ponds and both were triplicated. Soya hull and molasses were added to treatment ponds as carbon sources to induce biofloc formation. Post larvae (PL۲۰) were stocked at the rate of ۵۰/m² and fed with a standard fishmeal based supplementary pellet feed. Physico-chemical parameters of water, microbial and plankton population, immune response, physical quality and shrimp growth were monitored during the period. High growth and survival was observed in treatment ponds compared to control. Heterotrophic bacteria, phytoplankton population and total haemocyte count (THC) were found to be enhanced in treatment ponds. A strong linear relationship ($R^2=0.8758$) was found between growth rate and biofloc content. Shrimp raised through biofloc culture strategy showed better colour and quality compared to control. Biofloc technology is an ideal culture method for biosecure production of white shrimp in semi arid lands

کلمات کلیدی:

Fenneropenaeus indicus, Biofloc technology, Water quality, Plankton, Immune response, Growth

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