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RESEARCH REPORTS

Sustainable Aquaculture for a Secure Future

Title: Growth evaluation, sex conversion rate and percent survival of Nile tilapia (*Oreochromis niloticus* L.) fingerlings in earthen ponds

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Abstract: The objective of the study was to assess growth, sex conversion rate and percent survival of Nile tilapia (*Oreochromis niloticus* L.) fingerlings of the GIFT strain reared in twelve 500 m² earthen ponds. Each pond was stocked with size #24 sex-reversed tilapia fingerlings at a density of 4 pcs/m². The kinds of hatching system where the tilapia fry were hatched served as the treatments in this study and were as follows: I – artificial incubation-hatched fry, II – hapa-hatched fry, III – pond-hatched fry and IV – combination of hatched fry by stocking 33.3% from each hatching system. Each treatment was replicated three times. After the pond rearing, analysis of variance indicated no significant differences on the gain in length, gain in weight, specific growth rate, sex conversion rate and survival of tilapia fingerlings among treatments ($P > 0.05$). It is concluded that the hatching systems used in the study had no significant effects on the specific growth rate, gain in length and weight, sex conversion rate and percent survival of tilapia fingerlings. Therefore, any hatching system can be used to produce tilapia fry for pond rearing.

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