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Sustainable Aquaculture for a Secure Future

Title: Supplemental Feeding for Red Tilapia Culture in Brackishwater

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An experiment was conducted at the Asian Institute of Technology, Thailand, to investigate effects of feeding regimes on growth of sex-reversed Thai red tilapia (*Oreochromis* sp.). There were five different supplemental feeding regimes: 0%, 25%, 50%, 75% and 100% of satiation. Red tilapia fingerlings (33.2-33.4 g size) were stocked at 62.5 fish m⁻³ in fifteen 0.8-m³ net cages suspended in a 200-m² earthen pond and cultured for 90 days. The pond was maintained at 10‰ salinity and fertilized weekly at rates of 4 kg N and 1 kg P ha⁻¹ d⁻¹.

Growth performance of red tilapia was significantly better in feeding treatments than in the non-feeding treatment. Red tilapia growth and average feeding rate increased but FCR and net economic return decreased with increasing percentages of satiation feeding levels from 25% to 100%. Considering low FCR, good growth and yield performance, high economic return and potential for growing to greater size, 50% satiation feeding was the most efficient feeding rate.

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