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## RESEARCH REPORTS

Sustainable Aquaculture for a Secure Future

**Title:** Effect of Stocking Sizes on the Yield and Survival of Nile Tilapia (*Oreochromis niloticus* L.) On-Grown in Ponds

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**Abstract:** In the grow-out phase, twelve (12) 500m<sup>2</sup> ponds were used in the study to determine the growth, yield and survival of Nile tilapia (*Oreochromis niloticus* L.) in ponds. The treatments consisted of the following: I- direct stocking at size #22; II- stocking at size #14; and III- stocking at size #10. The various treatments and replicates were assigned randomly in the ponds following a completely randomized design.

Treatment III gave the highest extrapolated fish yield (3,799 kg ha<sup>-1</sup>) followed by Treatment II (3,065 kg ha<sup>-1</sup>) then Treatment I (2,738 kg ha<sup>-1</sup>). Analysis of variance on fish yield showed significant difference between Treatments I and III ( $P < 0.05$ ). Specific growth rate likewise significantly differed among treatments ( $P < 0.01$ ).

Survival rate of Nile tilapia was also significantly affected by stocking size of fingerlings. Higher survival rate was obtained with bigger size fingerlings.

This abstract is excerpted from the original paper, which was a proceeding of the Sixth International Symposium on Tilapia in Aquaculture.

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