Effect of Stocking Density on Growth and Survival of Sub-Adult Tench (*Tinca tinca* Linnaeus 1758)

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Abstract

Three hundred and fifty-nine (359) sub-adult tench were allocated to twelve tanks to investigate the effect of stocking density on survival and growth. The experimental population consisted of two weight groups (small = 11.27-11.36 g and large = 15.38-15.44 g) and two initial stocking densities (1.4 kg/m<sup>3</sup> and 2.5 kg/m<sup>3</sup>). The experiment lasted seven months (217 days). The total lack of deformities in the caudal peduncle in all groups and the low incidence of mortality indicate that sub-adult tench cultured in a water recirculation system perform well when stocked at a relatively high stocking density (2.5 kg/m<sup>3</sup>) and fed 1.0% of their body weight per day. By the end of the experiment, the weight of the best-performing groups increased 83-90% and confirmed the hypothesis that high densities favor the growth and survival of sub-adult tench reared in artificial tanks in a water recirculation system.

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