Effects of Dietary Pyridoxine on Growth and Physiological Responses of *Labeo rohita* Fingerlings Reared in High Water Temperature

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Abstract

The role of dietary pyridoxine (vitamin B6) on the growth and physiological responses of *Labeo rohita* fingerlings reared in a high temperature of 33°C was examined in a 60-day trial. Two hundred and seventy fingerlings (6.71±0.32 g) were randomly distributed into six treatments in triplicate. Five iso-caloric and iso-nitrogenous purified diets were prepared with graded levels of pyridoxine: 0, 10, 50, 100, and 200 mg. The control group was given a diet containing 10 mg pyridoxine and reared at ambient temperature (26°C). Pyridoxine supplementation at 100 or 200 mg/kg diet significantly augmented the specific growth rate but there were no significant (p>0.05) effects of pyridoxine supplementation on the feed conversion ratio. Superoxide-dismutase, catalase, blood glucose, and serum cortisol were significantly lower and acetylcholinesterase (AchE) significantly (p<0.05) higher in the pyridoxine-fed groups. Results indicate that dietary pyridoxine supplementation at the rate of 100 mg/kg diet augments growth and helps lower stress in *L. rohita* fingerlings reared in a high water temperature.