

ABSTRACT

An 8 week feeding experiment was performed to estimate the effect of L-ascorbic acid (AA) dosage on growth and liver tissue of *Labeo rohita*. Ascorbic acid was supplemented accordingly 0, 500, 1000, and 1500 mg/Kg diet, after one week period of acclimatization each AA supplemented diet was fed for 8 weeks to triplicate groups of *rohu* having initial body weight 15 ± 17 g. Selective growth parameters and liver ascorbate monitored at the end of every week.

After the 8 weeks of experiment, fish fed on the AA supplemented diet had significantly higher ($p < 0.05$) mean weight gain, percentage weight gain, higher specific growth rate and feed conversion efficiency than the group of fish fed on diet without AA. Fish fed on 1500mg/Kg ascorbic acid showed maximum growth than other groups like 0,500 and 1000mg/Kg of feed. Fish fed on basal diet show some signs of ascorbic acid deficiency like erratic movement, scoliosis etc. Data obtained from liver ascorbate concentration represent overall significant dietary intake of ascorbic acid with feed. Data obtain from present study show that ascorbic acid is essential for *Labeo rohita* growth performance as well as to prevent ascorbic acid deficiency signs and for batter health status.