

## Effects of dietary vitamin E and B<sub>2</sub> on growth parameters in juvenile Ship Sturgeon, *Acipenser nudiventris*

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Received date: 2014.10.02

Reception date: 2015.04.10

### Abstract

This study was conducted to evaluate the effects of dietary vitamins E and B<sub>2</sub> on growth performance of *Acipenser nudiventris* fingerlings. The feeding trial was conducted by a completely randomized design with six treatments. *Acipenser nudiventris* fingerlings with the initial mean weight 30±1.5 g (mean±SD) were fed with five experimental diets for 8 weeks; including diet one supplemented with vitamin E (300 mg/kg), diet 2 supplemented with riboflavin (B<sub>2</sub>) (20mg/kg), diet 3 supplemented with vitamin E (300 mg/kg) and riboflavin (B<sub>2</sub>) (15 mg/kg), diet 4 supplemented with vitamin E (300 mg/kg) and riboflavin (B<sub>2</sub>) (20 mg/kg) and diet 5 supplemented with vitamin E (300 mg/kg) and riboflavin (B<sub>2</sub>) (25 mg/kg). A control group was also used that was fed a diet lacking vitamins E and B<sub>2</sub>. Individual determination of length and weight in fingerlings was carried out at the end of the experiment. Results obtained from this study revealed that FCR, SGR, BWI, GR, condition factor (CF) and final weight improved with increasing levels of dietary vitamins E and B<sub>2</sub>. The highest SGR, BWI, GR, condition factor (CF), and final weight as well the lowest FCR values were recorded in fish fed diet 4 supplemented with vitamin E (300 mg/kg) and riboflavin (B<sub>2</sub>) (20 mg/kg). The results of this study indicated that diet supplemented with vitamins E (300 mg/kg) and riboflavin (B<sub>2</sub>) (20 mg/kg) can enhance growth performance in *Acipenser nudiventris* fingerlings.

**Keywords:** *Acipenser nudiventris*, Growth parameters, Vitamin E, Riboflavin (B<sub>2</sub>).