

Examination of two liquid Celmanax and powder Celmanax prebiotics on growth parameters, feed efficiency and body composition of stellate sturgeon (*Acipenser stellatus*) juvenile

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Abstract

The purpose of this study was to evaluate the effect of two commercial liquid Celmanax and powder Celmanax prebiotics on growth parameters, feed performances and body composition of stellate sturgeon juvenile (*A. stellatus*) with initial body weight average of 34 ± 0.64 gr. For these purposes, a number of 450 stellate sturgeon juvenile were stocked in abundance of 50 fish per 9 tanks with capacity 1500 liters in a completely random design were fed the experimental diets for 60 days. Liquid Celmanax and powder Celmanax prebiotics were added to the basic diet at the level of 1 g.kg^{-1} with two experimental treatments and a control that was devoid of prebiotic which contain triplicates. The results showed that there were no significant differences in growth performances and feed efficiency among treatments compared with the control group ($p > 0.05$). However, the highest amount of indices recorded in the treatment containing liquid Celmanax prebiotic. Also, the highest crude protein ($64.18 \pm 0.94\%$) and the lowest crude lipid carcasses ($20.52 \pm 0.49\%$) were observed in the control group ($p < 0.05$). Finally, the results of these study indicated that the use of liquid and powdery Celmanax prebiotics at the level of 1 g/kg each of both they cannot improve the growth performance and carcass composition of *A. stellatus* Juvenile.

Keywords: Celmanax prebiotic, Growth performance, Body composition, *A. stellatus*.