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Effect of a commercial probiotic on the survival of Nile tilapia *(Oreochromis niloticus)* larvae during the period of yolk sac absorption

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Introduction: The action of probiotics is well known in other cultures, but in aquatic environments many tests should still be done, because the relationship between microorganisms, the environment and fish are very intimate. Probiotics should be an alternative use of antibiotics and, for aquatic animals are now attracting great attention and many products are available.

Objective: The objective of the study was to evaluate the effect of a commercial problem on the survival of Nile tilapia larvae *(Oreochromis niloticus)* during the period of yolk sac absorption.

Materials & Methods: For this, 1500 specimens of tilapia larvae were kept in 15 aquaria with controlled conditions; divided in to 5 treatments, and each treatment had three aquariums with 100 larvae each (n=300). Each treatment was exposed to different levels of inclusion of probiotic in water (0.0, 0.5, 1.0, 1.5 and 2.0 $g.L^{-1}$) during the period of absorption of the yolk sac. The experiment consisted of five treatments distributed entirely at random and characterized by the different levels of probiotic inclusion in the water (*Bacillus subtilis* and *Bacillus cereus* at $4{,}0x10^{11}$ CFU/g). Each treatment had three aquariums with 100 larvae each (n=300). *Bacillus subtilis* 4.0 x 1011 CFU/g and *Bacillus cereus* 4.0x1011 CFU/g were added to the water. Each treatment has three aquariums with 100 larvae each (n=300). Statistically significant difference between the values of the animals exposed to different probiotic levels was detected by ANOVA variance analysis and Tukey test; important difference was taken when $p<0.05$.

Results: The results showed that the survival was higher in larvae treated with 1.5 g.L-1.

Conclusion: Thus, it was concluded that this probiotic exerts influence on the survival of Nile tilapia larvae.

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