

## Effects of enrichment of *Artemia urmiana* with LC-PUFA on survival and resistance to pH stress in larvae of Angel fish (*Peterophylum scalar*)

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### Abstract

The effects of using n-3 LC-PUFA -enriched *Artemia nauplii* and newly hatched *Artemia* on survival and resistance to pH stress in larvae of angel fish (*Peterophylum scalar*) were examined In tow 20 days period. In the first step of the experiment the larvae with an average weight of  $0.86 \pm 0.03$ mg were fed with tow diets (enriched *Artemia nauplii* and newly hatched *Artemia*) for 20 days. At the end of the first step of the experiment, the significantly ( $p < 0.05$ ) higher survival rate was observed in larvae fed with enriched *Artemia* (90.66%) than the larvae fed with newly hatched *Artemia* (83.66%). In the second step of the experiment the larvae with an average weight of  $20.03 \pm 3.73$ mg were fed only with commercial diet for 20 days. At the end of the second 20<sup>th</sup> days of the experiment, larvae exposed at pH stress (including 5.5, 6.5, 8.8 and 9.5) for 96 hours. The Result showed that the larvae were fed with n-3 LC-PUFA-enriched *Artemia* have a higher significant survival rate than other group in the period of the experiment and pH stress ( $p < 0.05$ ). Therefore, using of n-3 LC-PUFA-enriched *Artemia* recommended for increasing survival rate and the resistance to pH stress.

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