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**Effects of singular or combined administration of formic acid and *Pediococcus acidilactici* on growth indices and resistance to salinity in common carp fingerling (*Cyprinus carpio*)**

**F. Heshmatfar<sup>1</sup>, \*R. Safari<sup>1</sup>, A. Shabani<sup>1</sup>, S.H. Hoseinifar<sup>1</sup> and H. Ghafari<sup>2</sup>**

<sup>1</sup>Gorgan University of Agricultural Sciences and Natural Resources,

<sup>2</sup>National Institute of Fisheries Research

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**Abstract**

In this experiment, effects of singular or combined administration of formic acid and *Pediococcus acidilactici* on growth indices and resistance to salinity in common carp fingerling (*Cyprinus carpio*) were investigated. For this purpose, 228 fish with average weight of  $5.5 \pm 0.5$  gr, were fed supplemented diets for 8 weeks using experimental diet including probiotic (0.1%), formic acid (0.3%), combination of probiotic and formic acid and a control group with 3 replicates. At the end of feeding trial, growth indices and resistance to salinity were evaluated. Significant differences ( $P \leq 0.05$ ) were observed in final weight and weight gain in fish fed combined probiotic and formic acid as compared with singular probiotic and control group. SGR and survival percentage showed no significant difference between treatments ( $P \geq 0.05$ ). The least FCR were observed in fish fed combined probiotic and formic acid ( $P < 0.05$ ). The results of this experiment showed suitable effect of using probiotic and formic acid especially in combination form on growth and resistance to salinity in Common carp.

**Keywords:** *Cyprinus carpio*, Formic acid, Growth, Organic acid, Probiotic, Salinity