

A Comparison Study on Growth Performance and Survival Rate of *Acipenser persicus* Larvae Using Formulated Diets and Live Food

Pourali Foshtomi, Hamidreza^{1*}; Pourkazemi, Mohammad²; Bahmani, Mahmoud³
Yeganeh, Houshang⁴; Nezami, Ahamad⁵

1- Member of Scientific Staff, International Sturgeon Research Institute, Guilan Province, Rasht, Email: pourali_882@yahoo.com

2- Associate Professor, International Sturgeon Research Institute, Guilan Province, Rasht, Email: pkazemi_m@yahoo.com

3- Associate Professor, International Sturgeon Research Institute, Guilan Province, Rasht, Email: mahmoudbahmani@y.mail.com

4- B.Sc. International Sturgeon Research Institute, Guilan Province, Rasht, Email: hooshang.yegane@yahoo.com

5- B.Sc. International Sturgeon Research Institute, Guilan Province, Rasht, Email: nezami141@yahoo.com

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* Coresspond Author

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Abstract

This study was carried out to evaluate the suitability of formulated diets of *Acipenser persicus* larvae in comparison with live food. This experiment was studied in the International Sturgeon Research Institute. Growth and survival rates of *A. persicus* larvae produced from the same female breeder were studied through a period of 40 days. The larvae under study were fed formulated diets (Feed B=diet which was produced in the International Sturgeon Research Institute; Feed C=diet which was imported from France; Feed E=diet which was imported from Belgium) without going through a period of adaptation. The initial weight of larvae (mean±SD) in the experimental group was 121.7±17 mg and their final weight was 1181.4±216 mg.

Fish showed normal distribution in terms of initial weight and length. The significant differences of growth and survival were observed among all experimental groups ($P<0.05$).

The results obtained from the experiment revealed that the control and Feed E diets had a significant effect on growth and survival rates of *A. persicus* larvae. The larvae fed Feed C showed the best feeding and growth indices during a period of 40 days; however the survival rate during 40 days was lower in larvae fed Feed C compared with others. Minimum survival rate belonged to fish fed Feed C (16.5 %), whereas maximum survival rate were reported in the control group. Formulated diets have a poor effect on *A. persicus* larvae feeding.

Keywords: *Acipenser persicus*, Larval rearing, Growth, survival rates, Formulated diets
