Evaluation of lysozyme enzyme activity in culturing Beluga (*Huso huso*, Linnaeus, 1758) during two warm and cool seasons Gholamreza Khozein^{1*}, Hojatollah Jafaryan², Mohammad Farhangi³, Seyed Mostafa Aghilinejad⁴

- 1,2,3- Fisheries Group Department of Fisheries, Faculty of Agriculture and Natural Resources, University of Gonbad-e Kavous, Gonbad-e kavous, Golestan
- 4- Sturgeon Management of Golestan Province, Golestan, Iran

*Corrsponding author g-mail:gholamreza.kHozein@gmail.com

Abstract

This experiment was conducted to evaluate the lysozyme activity as an indicator of the innate immune system on 2-3 year's old great Sturgeon fishes cultured in freshwater ponds during the yearlong period in coid and warm seasons. *H. huso* individuals were anesthetized with Clove extract and 2-3 ml of blood was sampled from 120 fish specimens were apparently healthy by the caudal venous. Lysozyme activity was measured by Turbidimetric assay by using a suspension of *Micrococcus lyzodeikticus* bacterium as a substrate. Results of the present study no significant difference was shown between lysozyme activities in different seasons (p> 0.05). **Keywords:** Beluga, Lysozyme, Immunity, Seasonal variation.