Effects of anionic detergent (shampoo) on hematologic parameters of *Acipenser nudiventris*

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Abstract

Detergents are of the major pollutants of aquatic biological resource and environment .This investigation study the effects of anionic detergent on the blood factors of 120 farmed yearling SHAPE sturgeon, with an average weight of 2/5 ± 6/31 gr during short-term exposure at concentrations of 0, 5, 10 and 15 mgr in 12 aquarium of 100 liter.This study was done in spring of 1391 at the International Sturgeon Research Institute of doctor Dadman. To determine the percentage of leukocytes, RBC, WBC, hemoglobin and hematocrit, 2 Ml of blood from fish tail vein was taken at hours of 12, 24, 48, 72 and 96 for review the effect of exposure time. The results showed that the blood parameters of Hemoglobin, hematocrit, neutrophils, eosinophils and monocytes increased with increasing detergent concentration and exposure time from 24 hours to 96 hours, but the in white blood cells and lymphocytes significantly decreased. Results showed significant difference between treatment and control ($P<0.05$).Therefore, to deal with fish blood contaminants are introduced into their environment changes. With increasing detergent concentration, the fish exposed to contaminants and decline of dissolved oxygen of water, fish more activity and oxygen deficiency in the blood occurs increasing of hemoglobin and decrease in safety. There for the factors of Fish blood to deal with pollutants witch introduced into their environment will change.

Keywords: Sturgeon, Anionic detergent (shampoo), Hematologic parameters, *Acipenser nudiventris.*