Effects of injection estradiol-17β on hemetrological indices in juvenile stellate sturgeon (*Acipenser stellatus*)

Hossein Khara[1*]
Bahram Falahatkar[2]
Bahman Meknatkhah[3]
Mina Rahbar[4]
Mohaddeseh Ahmadnezhad[5]

1. Department of Fisheries, Lahijan Branch, Islamic Azad University, Lahijan, Iran
2. Departments of Fisheries, Faculty of Natural Resources, University of Guilan, Someh Sara, Iran
3. YousefPour Fish Hatchery Center, Siahkal, Guilan, Iran
4. Lahijan Branch, Young Researchers Club and Elite, Islamic Azad University, Lahijan, Iran
5. Inland Water Aquaculture Research Center, Bandar Anzali, Iran

[*]**Corresponding author:**
h.khara1974@yahoo.com

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Abstract
In this study, the effect of 17β - estradiol on haematological indices in juvenile stellate sturgeon (*Acipenser stellatus*) was investigated. For this, 120 juvenile stellate sturgeons with an average weight of 40.9 ± 1.1 g were divided to 2 treatments (20 fish/tank). Juvenile stellate sturgeon, *Acipenser stellatus* were intraperitoneally injected with estradiol-17β (E_2; 0 and 5 mg/kg fish). The duration of the experiment was considered for 7 months and at the end of the experiment, 5 fish were randomly sampled for measuring haematological indices including number of red blood cells (RBC), white blood cells (WBC), hemoglobin (Hb), hematocrit (Hct), mean corpuscular haemoglobin (MCH), mean corpuscular volume (MCV) and mean corpuscular hemoglobin concentration (MCHC). Results showed that hematological features of E_2-treated fish showed significant reduction in number of red blood cells, haemoglobin concentration, hematocrit value and mean corpuscular haemoglobin ($P<0.05$), but no significant changes were observed in number of white blood cells, mean corpuscular volume and mean corpuscular haemoglobin concentration ($P>0.05$). These results revealed that the injection of E_2 could cause anaemia in stellate sturgeon

Keywords: *Acipenser stellatus*, 17β- estradiol, Injection, Blood indices.