Effect of dietary medicinal plants on some biochemical hematological parameters of sterlet (*Acipenser ruthenus*)

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Abstract

In this study sterlet fish weighing 250 ± 10g & 4 groups of 3 replicates of healthy fish were divided into 10 segments. Medicinal plants essence *Saturgea hortensis*, *Mentha longifolia*, *Zataria multiflora* More than one percent was added to the daily ration for a month. At the end of testing during a month one month, the amount of blood from the tail fin of each fish took 2ml. According to fish fed *Zataria multiflora*, increased HDL and cholesterol levels were observed compared to other groups. The highest TG were also obtained in fish fed *Mentha longifolia*. The lowest amount of total protein belongs to the control group and in other groups receiving the of medicinal plants essence, this factor has improved and the increase of this factor in the group receiving the of *Satureja hortensis* and *Mentha longifolia* with the control group is significant ($P<0.05$). Most of the Alb changes were from the *Mentha longifolia* essence group. The results of other blood parameters showed that Alb, cholesterol, HDL and TG levels in experimental groups did not significantly differ between the control and other groups ($P>0.05$). This study showed that up to 1% medicinal plants in the diet of sterlet had no negative impact on the blood factors of fish.

Keywords: albumin, blood factors, medicinal plants, sterlet (*Acipenser ruthenus*)