Study the effect of adding the green tea (*Camelliasinensis*) powder to diet of *cyprinuscarpio* and its influens on blood factors and some immune system factors for *cyprinuscarpio*

ShokufehRanjbar[1]
MojganKhodadadi[2]

1. M.Sc. Student of Fisheries, Ahvaz Branch, Islamic Azad University, Ahvaz, Iran
2. Associated Professor, Ahvaz Branch, Islamic Azad University, Ahvaz, Iran

***Corresponding author:**
mjkhodadadi@gmail.com

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Abstract

In this investigation the effects of *Camellia sinensis* as a phytobiotic on the blood factors of the *Cyprinuscarpio* was examined. For this purpose 360 juvenile *Cyprinuscarpio* with the average weight of 22±1g were selected and after being adapted to the environment, the fish were stored in 12 tanks (30 fish in each tank). The *Camellia sinensis* was added to the diet in three levels 1.5% (treatment 2) 3% (treatment 3) and 5% (treatment 4) and the diet without *Camellia sinensis* was used for the control group (treatment 1). Each treatment repeated 3 times a day. The fish were fed 3% of their weight. At the end of the 45 day treatment period, 15 fish were randomly selected from each treatment and their blood sample was taken from the caudal vein. The hematology factors including differential red blood cells, white blood cells, hematocrit and hemoglobulin had significant difference white compare to other treatments (P<0/05), and maximum amount of them in 1.5% treatment was equal to 7.95±1.19, 43.73±4.78 and 6.74±0.74, respectively. However, amount of white blood cells was not affected by experimental factors (P>0.05) and minimum of it (1.68±0.21) was related to 5% green tea treatment. In general, that prescribing *Camellia sinensis* at 1.5% level orally stimulates some non-specific blood and immune factors and it can be used as the immunity stimulant for the juvenile *Cyprinuscarpio*.

Keywords: *Camellia sinensis*, *Cyprinuscarpio*, Blood factor, Hemathology