

The effects of aqueous and alcoholic Sarh-Hay herb marjoram (*Origanum vulgare* L.) on survival and some blood parameters of common carp infected with *Aeromonas hydrophila*

Mahmood Bahmani¹
Seyyed Mehdi Hosseinfard²
Maryam Ehdaee³

1. International Sturgeon Research Institute, Rasht, Iran
2. Department of Health and Fish Disease, Babol Branch, Islamic Azad University, Babol, Iran
3. M.Sc. of Aquaculture, Science and Research Branch of Gilan, Islamic Azad University, Rasht, Iran

*Corresponding author
Maryamehdaee62@yahoo.com

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Abstract

Aeromonas hydrophila bacteria commonly founded in fresh water throughout the world, which often results diseases in the farmed fish'. Over the past years to combat infectious diseases are extensive used Nty-Byvtyk-Ha been. In contrast to the prevailing global trends and develop green Bzy-Prvry systems use organic herbs as antibiotic treatment is considered. The marjoram plants used in traditional medicine to treat many diseases would-be applicable. The effect of aqueous and alcoholic Sarh-Hay herb marjoram on survival and some blood factors common carp that contaminated with the bacterium *Aeromonas hydrophila* were examined. For this purpose, water and alcoholic Sarh-Hay marjoram plant was prepared and then a number of 150 common carp, with an average weight of 25 ± 100 gr were prepared. After adaptation Mahy-Ha repeated in 3 to 5 groups (n = 10 fish per replicate) were divided. The positive control group intraperitoneally injected with saline in the area and the fish did not receive any Sarh-Hay. A. Negative control in bacteria injected into the $106 \times 5/1$ in the samples was performed by intraperitoneal carp were fed with normal diet. 35 days after the end of the experiment, blood samples were taken and Tst-Hay measure blood factors done. The survival rate during this period was calculated. The results showed that the changes in the hematological Sarh-Hay marjoram plant species infected with the bacteria that the effects of alcohol, particularly methanol Sarh-Hay with more intensity than the aqueous extract was observed.

Keywords: *Aeromonas hydrophila*, herbs, marjoram, blood factors, common carp.