

Abstract

One way to preserve fishery products are using natural preservative, specially herbal extracts. In this study the effect of aqueous of Iranian sumac on the shelf life *Hypophthalmichthys molitrix* filleted is examined during storage at 4°C.

Fishes after filleted and initial preparing, were submerge in the 1, 2/5 and 5% of sumac extract and after packing were in refrerator (4°C). Chemical parameters (pH, TVB-N, PV and TBA) microbiological (TVC and PTC) and sensory evaluation on days 0, 3, 6, 9, 12, 15 and 18 were measured. The pH of immersion treatments were significantly lower than the control (P<0.05) but during storage in all treatment showed a significant increase. Indicator of TVB-N, PV and TBA in 2/5 and 5% was significantly decreased than 1% treatment and control. Microbial test result showed that the total amount of bacterial (TVC) and psychrophilic (PTC) in treatment immersed in sumac extract, had a significant reduction compare to control.

The result of sensory evaluation also showed high sensory scores for immersion in water extract gravel compare to control. Therefore, treatment with 5% aqueous extract gravel for silver carp fillets is recommended.

Keyword: Aqueous extract sumac, Shelf life, *Hypophthalmichthys molitrix*



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**Effect of aqueous extract of Iranian sumac (*Rhus
coriaria L.*) on the shelf life of *Hypophtalmichtys
molitix* fillet during storage at 4° C**

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