

**ANTIOXIDANT AND ANTIBACTERIAL EFFECTS OF PETROSELINUM
CRISPUM EXTRACT ON HYPOPHTHALMICHTHYS MOLITRIX
FILLETS DURING REFRIGERATION**

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Fish and fish products are highly perishable foods because of their unsaturated fatty acids, large amount of free amino acids and higher final pH. For this reason, preservatives are used in order to prevent or delay their spoilage during the storage. The purpose of this investigation was to determine the antioxidant and antibacterial activities of parsley extract on shelf-life of air packaged silver carp fillets stored at 4±1°C. Prepared fish fillets were divided into two parts. One part was dipped in distilled water (control) and the other part in parsley extract (1%), and then air packaged and kept at 4±1°C. Microbial (TVC, PTC) and chemical (PV, TBA, TVB-N, FFA) properties were performed over a 15 day period. Parsley extract delayed lipid oxidation significantly (p<0.05) in the treated fillets. In the samples treated with parsley extract, the magnitude of change in TVB-N and FFA were less than the control samples (p<0.05). According to microbial analysis results, treated samples were acceptable till 12 days. The result obtained from this study showed that the shelf life of fillets which dipped in parsley extract, as natural preservative, has extended by 6 days compare to control samples.

Keywords: Silver carp, *Hypophthalmichthys molitrix*, Parsley extract, antioxidant, antibacterial

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