

## Abstract

The aim of present study was to investigate the effects of gelatin (4%) edible coating and composition gelatin (4%) edible coating and *Zataria multiflora* Boiss essential oil (2.0 and 4.0 percent) on silver carp fillet quality during refrigerated storage. Treatments of this included: Fillets without coating and EO (treatment A), Fillets with gelatin (4%) edible coating (treatment B), Fillets immersed by gelatin (4%) edible coating and *Zataria multiflora* Boiss essential oil (2.0 percent) (treatment C) and Fillets immersed by gelatin (4%) edible coating and *Zataria multiflora* Boiss essential oil (4.0 percent) (treatment D). Chemical and microbial analysis and sensory evaluation was carried out on days 0, 3, 6, 9, 12, 15, 18 and 21 in tropical. During storage at 4°C, the pH of all treated and untreated samples increased significantly ( $P < 0.05$ ). The pH increment was lower in (treatment C and D) at end of the storage period. The results showed that with prolongation of refrigerated storage, content TVB-N, TBA and PV significantly increased but content TBA and PV of day after 15 decreased. Microbiological studies showed longer shelf life for treated sample as compared to control sample and highest shelf life was observed in (treatment C and D). According to sensory analysis results, treatments C and D had longer shelf life in comparison to control sample.

**Keywords:** Edible coating, *Zataria multiflora*, silver carp, shelf life, gelatin



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