



University of Zabol
Graduate school
Faculty of Natural resources
Department of fisheries

The Thesis Submitted for the Degree of M.Sc
Of Fish products processing

Title :

**Effect of dietary containing *Artemisia sieberi* on the quality of
Common carp fillet during storage in the refrigerator**

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Abstract :

The aim of this study was to evaluate the effect of Artemisia extract on the quality of common carp fillets during storage in a refrigerator. For this purpose, fish with a weighing average of 100 grams were distributed in fiberglass ponds with a density of 10 fish and fed with 0, 1.0, 2, and 3.0 percent extract of Artemisia leaves during 9 weeks. At the end of the period, blood samples were collected and immune parameters (lysozyme, immunoglobulin, total protein and serum complexes), antioxidant enzymes (catalase, superoxide dismutase and glutathione reductase) were measured. Then fish fillets and chemical parameters including pH of nitrogen beds, antibiotic and peroxide, microbial (total bacteria and bacteria on days 1, 2, 6, 9 and 12) were investigated. The results showed that the rate Nitrogenous levels (TVB-N) and TBA and peroxide value (PV) increased significantly with storage life ($P < 0.05$). Microbiotic results (PTC, TVC) showed that treatment Artemisia extract had lower bacterial load than control ($P < 0.05$), and the lowest and highest bacterial load was observed in 3.0 and 1.0 of Artemisia extract, respectively.

Therefore, it can be concluded that the best quality and shelf-life in the treatment containing 3.0 of the extract of Artemisia was observed.

Key words: Artemisia extract, common carp, antioxidant