

Abstract

The aim of this study was to investigate the effect of absorbent pad containing *Carum copticum* seed essential oil on the shelflife of *Oncorhynchus mykiss* fillet during storage in refrigerator (4°C). 10 ml of *Carum copticum* seed essential oil 1.5 % were added to pad and fish fillet in different treatments. Then fillets were packed and stored in a refrigerator (4°C). The chemical (PV, TBA and TVB-N) and microbial parameters (PTC and TVC) were measured on days 0, 3, 6, 9 and 12. The results showed that fillets treated with absorbent pad and *Carum copticum* seed essential oil caused slows the increase process of PV, TBA and TVB-N during storage. The TVC and PTC count of fillets significantly increased during refrigerated storage (P <0.05). But, this increase was less in the treated fillets than the control and increased the shelf life of treated fillets. According to the results of this study, it can be concluded that the *Carum copticum* seed essential oil has antimicrobial and antioxidant properties and it can be use as a natural preservative in fisheries products.

Key words: Absorbent pad, Essential oil, *Carum copticum* seed, *Oncorhynchus mykiss*



University of Zabol

Graduate School

Faculty of Natural Resources

Department of Fisheries

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**Effect of absorbent pad containing *Carum copticum* seed
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during refrigerated storage**

Supervisor:

Dr. A. Alizadeh Doughikollaee

Dr. M. Shahriari

Advisor:

Dr. E. Ahmadifar

By:

T. Bakhtiyari

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