

Abstract:

Special attention to the use of natural preservatives in foods that have protective, anti-microbial, and Desirable sensory properties can be encouraged for this purpose. In this study, the anti-microbial effects of Bunium persicum Essential oil sand in combination with the Carum copticum Essences on Bacillus cereus bacteria, which is considered to be the cause of food poisoning, were investigated in chicken meat. After recovery of Bacillus cereus in BHI culture, 10^3 bacteria per gram of sterilized meat were inoculated. In addition, concentrations of 0, 0.015, 0.03, 0.06, 0.09% of Bunium persicum and Carum copticum Essences and The combined concentrations are 0.015, 0.03 were added And moved to the refrigerator. The bacterial condition was evaluated on days 0 to 21, Then Data analysis was performed by spss software version 23. According to the Results, The Essences of the Bunium persicum and Carum copticum has a significant inhibitory effect on Bacillus cereus ($P < 0.05$). two way ANOVA showed that from 6 to 21 days, Essences significantly reduced the number of bacteria. The use of a combination of the Essences or in the forms of Hardline system can delay the lag phase and reduce the growth of bacteria.

Keywords: Bacillus cereus, Bunium persicum, Carum copticum, Chicken Meat



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**Investigation of the effects of *Bunium persicum*
Essential oil and in combination with the *Carum*
copticum Essential oils On *Bacillus cereus*
bacteria In chicken meat At 4 ° C**

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