

Abstract

In recent years, many studies have been conducted on the use of natural preservatives, including essential oils and plant extracts. In this study, the antimicrobial effect of sumac essential oil on E. coli was investigated in grilled meat at 4 ° C. After grilling and distributed in designated bags, 10³ bacteria to each thirteen inoculum samples and the rates 0, 0.01, 0.03, 0.06, 0.09, 0.12, 0.15, 0.3, 0.45, 0.6, 0.9, 1.2 and 1.5% essential oils added to each bag Then cultured on days 0, 1, 3, 6, 9, 12, 15 and 18 and after incubation for 24 hours The number of bacteria was determined at 37.5 ° C.

The amount of bacteria in the control sample increased over the duration of the test Also, the percentage of 0.01 and 0.03 upward trend, 0.06 and 0.09 after a slight decline and the percentages of 0.12, 0.15, 0.3, 0.45% have been reduced since the beginning of the experiment and before the 18th day they reached zero. Samples with 0.6, 0.9, 1.2 and 1.5% had no growth at the beginning of the experiment.

By increasing the amount of sumac essential oil of the cemetery, the sample can inhibit the growth of the E. coli bacteria in the grilled minced meat.

Keywords: Escherichia coli, Grilled Minced meat, Sumac Essential oils



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**Study of effect sumac essential oil on *Escherisha coli*
in grilled mincemeat in 4°C**

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