

## Effect of *Eucalyptus* extract against *E. coli* O104:H4 in the minced meat of trout

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One of the most important bacteria which is transmitted through the use of marine products, is *E. coli* O104:H4 bacteria. The main reason for this contamination is the poor maintenance of water at unhealthy conditions. Therefore, the use of a preservative with antibacterial property in marine products is essential. Hence, in the present study, the antibacterial effect of hydro-methanolic extract of *Eucalyptus* against *E. coli* in the trout minced meat during the storage period in the refrigerator was investigated. The behaviour of *Escherichia coli* at 500 and 1000 ppm of *Eucalyptus* extract were noted. It was found that *Eucalyptus* extract at a concentration of 1000 ppm could reduce the growth rate of *E. coli* bacteria below the allowed limit from the 8<sup>th</sup> day until the end of the maintenance period. According to the results, *Eucalyptus* hydro-methanolic extract with a concentration of 1000 ppm can be used as a natural anti-bacterial agent in the fishery products.

**Keywords:**

*Eucalyptus*, Hydro-methanolic, Minced meat, trout, *E. coli*.