

## EFFECTS OF THE ESSENTIAL OILS OF IRANIAN MEICINAL PLANTS ON THE GROWTH OF SOME PATHOGENIC BACTERIA

H. Aroiee 1\*, M. Mohsenzadeh 2, R. Rezaian Doloei 3, S. Mosapor, H. Karimzadeh and Noghteh Atf Co. 4

1 Department of Food Hygiene and Technology,  
Ferdowsi university of Mashhad, Mashhad-Iran

2 Department of Horticulture, Ferdowsi university of Mashhad, Mashhad-Iran

3 Department of Agriculture, Azad university of Mashhad, Mashhad, Iran

4 Noghtehatf@hotmail.com

### ABSTRACT

The antimicrobial activities of the essential oils of four different medicinal plants (cumin, thyme, mint and fennel) were investigated on *Escherichia coli*, *Klebsiella pneumonia*, *Proteus vulgaris*, and *Pseudomonas aeruginosa*. The antimicrobial activity of the essential oils was evaluated by disc diffusion method. The results showed that the most effective oils were thyme (*Thymus vulgaris* L.) and peppermint (*Mintae piperita*). The use of these essential oils, should be considered in the food preservation.

**Keywords:** Essential oil, *Escherichia coli*, *Proteus vulgaris*, *Klebsiella pneumoniae*, *Pseudomonas aeruginosa*, Antibacterial activity



Download full text