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consumers, traditional health practitioners, providers of traditional and herbal medicines and other experts is necessary. More attention needs to be given to research and to training of healthcare providers and consumers in this area.

Keywords

Pharmacovigilance, herbal medicines, safety issues, drug-drug interactions, drug-food interactions,

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THE EFFECTS OF SOME ANTIBIOTICS AND ESSENTIAL OILS ON CONTROLLING OF E.COLI BACTERIA

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Incorrect use of antibiotics caused an increase in drug resistant strains of bacteria [2,4], since study of the antibacterial effects of medicinal plants can be useful method for a sustainable controlling of those bacteria[2]. Some researchers showed that these plants have an antimicrobial effects on E. Coli [3,5]. Therefore the aim of this study was to evaluate the effects of some essential oils on E.coli bacteria. In this study a number of 100 samples froms yolk sac and liver of dead chicken with 7 dayes old were taken. The samples were first enriched in modified trypticase soy broth, containing novobiocin, followed by plating on sorbitol Mac Cankey agar supplemented with Cefixime and potassium tellurite. Consequently the suspected non sorbitol fermenting (NSF) colonies were confirmed by biochemical tests (IMViC) as E. coli, that 20 samples were positive. The antibiogram test of isolated bacteria was performed by disc diffusion method using some botanical and synthetic antibiotic mentioned in table 1. Among antibiotics, the most susceptibility was seen for Nitrofurason and among mentioned essential oils the most susceptibility was seen for Thyme (Table. 1). Likes similar researches [3,5], our results showed that essential oils had an inhibitory effect on E.Coli growth. Some researches reveled that monoterpene compositions stopped the cell division[1]. With recent studies it has been recognized that essential oils due to their oily nature could

be pass across the cytoplasmic membranes and then with disturbance in structure of polysaccharides, organic asides and phospholipids caused disturbance in turnover of microbial agents [1]. Over all, we could be hopeful about the antimicrobial effects of natural compounds to replace them into the synthetic antibiotics.

Keywords: Medicinal plants, Thyme, Disc Diffusion, Nitrofurazone

Table. 1. Growth inhibition halo diameter(mm) for botanic and synthetic antibiotics against E. Coli

Pepper mint	Pennyroyal	Rosemary	Thyme	Streptomycin	Ceftioxime	Kanamycin	Nitrofurazone
2	8	12	26	5	14	15	25

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ANTIBACTERIAL ACTIVITY OF SOME *Satureja* L. ESSENTIAL OILS AGAINST *Pseudomonas aeruginosa*

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Pseudomonas aeruginosa causes a variety of diseases in humans including different infections. According to previous studies, pathogenic strain *P. aeruginosa* shows the greatest resistance treating by essential oils isolated from aromatic plants, due to the hydrophilic cell surface. In this investigation, we used microwell-dilution method in order to analyse antibacterial activity of some *Satureja* L. essential oils against the pathogenic strain *P. aeruginosa* ATCC 9027. Selected essential oils showed the activity in range of MIC/MBC=0.78-25.00/6.25-50.00 µLmL⁻¹, which is very good antimicrobial effects in comparison with the referent antibiotic streptomycin (MIC/MBC=8.00 µLmL⁻¹). Those essential oils could present the real natural source of