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**Comparison between antibacterial effect of *Teucrium polium* plant and common antibiotics on the bacteria causing urinary tract infections****Samira Shahba**

Islamic Azad University, Iran

**Background & Aim:** The present investigation was conducted to study the antibacterial effect of aqueous, ethanolic and ethyl acetate extracts of *Teucrium polium* plant on the bacteria isolated from urine samples of those with UTI and to compare it with the effect of commonly used antibiotics in treating UTIs.

**Materials & Methods:** The antibiotic resistance of 147 strains of bacteria causing UTIs to the antibiotics selected through Kirby-Bauer Disk Diffusion Method was determined. In the meantime, the aqueous, ethanolic and ethyl acetate extracts of *Teucrium polium* plant were prepared. The antibacterial activity of these extracts was examined using disk diffusion method. Finally, Minimum Inhibitory Concentration (MIC) and Minimum Bactericidal Concentration (MBC) of antibacterial were determined using serial dilution method.

**Results:** *Teucrium polium* extracts were merely effective in enterococcus and *Pseudomonas* bacteria. In general, the MIC rate of aqueous extract in enterococcus was 1.25-5 mg/ml. The MIC rate of ethanolic extract for enterococcus was calculated as 10 mg/ml. The MIC of aqueous and ethyl acetate extracts for *Pseudomonas* bacteria were achieved as 5 and 20 mg/ml, respectively. The MBC contents of aqueous and ethyl acetate extracts of *Teucrium* for *Pseudomonas* bacteria were 10 mg/ml in aqueous and 20 mg/ml in ethyl acetate extracts. The MBC content of extracts for enterococcus bacteria were 10 mg/ml in aqueous extract and 20 mg/ml in ethanolic extract.

**Conclusion:** *Teucrium polium* extract can be effective in some bacteria causing urinary tract infection, especially enterococcus.

**Biography**

Samira Shahba has completed her MSc in Microbiology from Islamic Azad University, Iran. She has worked on her thesis in Research Center for Infectious Diseases and Tropical Medicine of Zahedan University of Medical Sciences. She had worked on autoimmune diseases in the Rheumatology Research Center of Tehran University of Medical Sciences for one year and has been a Member of Iran University of Medical Sciences.

samira62sh@yahoo.com

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