Original Article

Antibacterial Effect of Methanolic Extraction of Polygonum *Bistorta on Some Bacteria*

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Abstract

Background and Objective: Because of increased resistance to antibiotics, side effects of chemical drugs and importance of medicinal plants, we aimed to assess the antibacterial effects of methanolic extract of the Polygonumbistorta plant on the *E. coli (ATCC 15224)*, *Ps. aeruginosa (ATCC 25619)*, *B. subtilis (ATCC 6633)* and *Stap. Aureus (ATCC 25923)*.

Material and Methods: After preparing the extract, its antibacterial effect was assessed via gel diffusion method, using disk / well diffusion methods to determine MIC and MBC

Results: MIC of methanolic extract was 78 µg/ml for E. coli, 63×10^3 µg/ml for Pseudomonas aeruginosa, 39 µg/ml for Bacillus subtilis and 31×10^2 µg/ml for Staphylococcus aureus

Conclusion: In spite of resistance of gram-negative bacteria to chemical agents, polygonum bistorta methanolic extract could inhibit the growth of E.coli and P. aeruginosa.

Key words: Antibacterial, Bistorta, Escherichia Coli, Pseudomonas Aeruginosa

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