ANTIBACTERIAL ACTIVITY OF AQUEOUS EXTRACT OF ARTEMISIA MONOSPERMA AGAINST SOME PATHOGENIC BACTERIAL SPECIES

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Abstract - Artemisia monosperma, is a perennial fragrant plant which grows widely and wildly in the Arabian deserts. The leaves of the plant are taken in folk medicine by certain women of Jordan for abortion induction. In order to reveal the nutritional and medicinal value of the Artemisia monosperma, and to summarize scientific evidence that supports the folk medicine claim, the following conclusions can be arrived at, from the data presented in this Thesis in relation to the bioactive properties of folk medicine as antibacterial agent and by clarifying several things; A significant decrease in the growth of Streptococcus pyogenes (G^+), Staphylococcus aureus(G^+), Bacillus subtilis(G^+), Pseudomonas aeruginosa(G^-), E.coli (G^-) and Salmonella typhi (G^-) occurred when these bacteria were grown in vitro in the presence of the aqueous extract of Artemisia monosperma. Different antibacterial effects of Artemisia monospermawere detected; hence, all of the Artemisia monosperma caused the formation of growth inhibition zones appeared. Different values of minimum inhibitory concentration (MIC) were observed when these bacteria were exposed in vitro to the aqueous extract of Artemisia monosperma. Different values of minimum bactericidal concentrations (MBC) were observed when these bacteria were exposed in vitro to the aqueous extract of Artemisia monosperma. Some damage in bacterial cell wall and decreasing in number of cells was observed when these bacteria were exposed in vitro to the aqueous extract of Artemisia monosperma.