

EFFECT OF EXTRACTION PROCEDURE ON THE INHIBITION OF SANTONICA PLANT AGAINST SPECTRUM OF ISOLATED BACTERIA .

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ABSTRACT

The study showed that the Santonica (*Artemisia herbaalba*) plant had considerable inhibition activity against some of positive gram and negative isolated bacteria. Ethyl acetate, Ethanol 80% and Hexan as well as the distal water were used as solvents to the active materials in this plant. The aim of this study was identify the ability of these solvents to extract the active materials in this plant which had effect the inhibition ability against these bacteria by using the disc diffusion procedure. The study showed that the extraction procedure followed had clear effect on inhibition ability of Santonica against these bacteria. In time that the supported paper disc with the alcohol extraction from plant to compose a clear zone of diameter 11.45 and 7 and 6.55 mm. When positioned in plates were seeded by white *Staphylococcus aureus*, *Pseudomonas aeruginosa* and *Bacillus cereus* respectively. While this disc failed in occurring any inhibition for the same bacteria when it saturated by aqueous extraction for the same plant. Also the study has showed that the ethyl acetate extract for Santonica succeeded in occurring clear inhibition against the tested bacteria, the clear zone diameter which supported by ethyl acetate was 11, 12, 12, 11.76 and 12 mm. When positioned in plates were seeded with white *Staphylococcus aureus*, *Pseudomonas aeruginosa*, *Bacillus cereus*, golden *Staphylococcus aureus* and *Salmonella typhimurium* respectively, while the *E. coli* has showed ability to resist this extraction. The hexane extractions of the same plant didn't show any clear effect against the tested bacteria, except for *E. coli* and golden *Staphylococcus aureus*.