

The Antimicrobial Effect of Alkaloids (Harmin, Harmalin) Extracted from Peganum harmala (L) Seeds in the South of Algeria (Bousaada)

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Abstract : This work examines the study of the antimicrobial effect of alkaloids extracted from the seeds of Peganum harmala L (Zygophyllaceae). This natural substance is extracted by using different solvents (aqueous, ethanolic, and hexane). The evaluation of the antimicrobial activity has only dealt with alkaloids. The antimicrobial effect of alkaloids is evaluated on several microorganisms. It has been tested on eight bacterial strains. The extract has been studied by using two yeasts. Finally, three molds have been studied. It should be noted that these agents are characterized by a high frequency of contamination and pathogenicity. Through this study, we note that Staphylococcus aureus, Saccharomyces cerevisiae and E. coli are very sensitive in respect of the ethanol extract. Pseudomonas aerogenosa and Penicillium sp. are resistant to this extract. The other microorganisms are moderately sensitive. The study of the antimicrobial activity of different extracts of the Harmel has shown an optimal activity with the ethanol extract.

Keywords : Peganum harmala L., seeds, alkaloids, bacteria, fungi, yeast, antimicrobial activity

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