World Academy of Science, Engineering and Technology
International Journal of Biomedical and Biological Engineering
Vol:8, No:12, 2014

The Antimicrobrial 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 antimicrobrial 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 cerievisae 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
Conference Title : ICBBE 2014 : International Conference on Bioinformatics and Biomedical Engineering
Conference Location : Istanbul, Türkiye
Conference Dates : December 05-06, 2014

Open Science Index, Biomedical and Biological Engineering Vol:8, No:12, 2014 publications.waset.org/abstracts/1737/pdf