

A Study of Chlorophyll (Chl) of some medicinal plants- Its antibacterial and antioxidant activities

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From National Conference on Natural Products as therapeutics, Medical Microbiology, Nanobiology and System biology: Current Scenario & Emerging Trends, 'NATCON-2014'.

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18-19 September 2014.

American J of Bio-pharm Biochem and Life Sci 2014 September, Vol. 4 (Suppl 1): P 75

ABSTRACT

Chlorophyll is a chorin pigment, which is structurally similar to and produced through the same metabolic pathway as other porphyrin pigments such as heme. At the center of the chorin ring is a magnesium ion. In the present study, the chlorophyll was extracted from the leaves of some medicinal plants and characterized by UV-Visible spectroscopy, Thin layer Chromatography and column chromatography. The Antibacterial and antioxidant activity of chlorophyll was studied. The antimicrobial activity of chlorophyll extracts was evaluated with antibiotic susceptible and resistant microorganisms. Chlorophyll extracts from the following plants were utilized: *Melothira Maderaspatana*, *clitoria ternatea*, *Boerhavia Diffusa*, *Pongamia Pinnata*, *Aegle Marm*, *phyllathus fraternus*, *Mimosa pudica*, *Pisonia grandis* and *Acalypha indica*. The antibacterial activity of extracts of medicinal plants was tested against *Escherichia coli*, *Pseudomonas aeruginosa*, *Vibrio cholera*, *proteus vulgaris*, *Pseudomonas fluorescens*. The results showed that the remarkable inhibition of the bacterial growth was shown against the tested organisms.