

Evaluation of antimicrobial activity of *Lippia citrodora* Kunth. arial part

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Background and Aims: Human were able to know the properties of various herbal drugs and how to use them. Antimicrobial effects of some of these plants such as Verbenaceae family has been explained, therefore one of the plant of this family, *Lippia citrodora* Kunth, arial part was selected. The objective of the present study was to assess the in vitro antimicrobial activity of *Lippia citrodora* Kunth arial part extracts.

Methods: Herbal sample was collected from Lattaki, Syria and several fraction of extract of arial parts was prepared using mixtures of organic solvents with different polarities by using percolation method. Antimicrobial activity of this fractions was studied using well-plate method and MIC method. Volatile oil was collected using hydro distillation apparatus and antimicrobial activity was studied by diffusion disc method.

Results: Results showed that none of the plant arial part extracts has any antimicrobial effect on microorganisms examined, but the volatile oil of arial part of the plant have antimicrobial activity against *Staphylococcus aureus*, *Escherichia coli* and *Salmonella entertidies*.

Conclusions: It seems the plant extracts has no chemicals with antimicrobial activities or the amount of the antimicrobial chemicals are rare.

Keywords: *Lippia citrodora*; Antimicrobial activity; Plant extract