

A Comparative Study of the Antimicrobial Properties of the Phenolic Extracts from "*Citrullus Colocythis*" Growing in Oued Souf

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Abstract

The aim of this study was to analyze the qualitative and quantitative phytochemicals, assess the properties of antibacterial in the laboratory and identify biologically active compounds in extracts *Citrullus Colocythis* Collected from

ElOued in the region Hassani and Hamraya.

A quantitative, quantitative, and in vitro quantitative qualitative analysis was performed using standard procedures. Biologically active compounds were analyzed.

Through the results, we deduce that: The phenolic extract for the region of Hassani was better than Hamraya region where it was estimated at (328.75 mg EAG / g) and amount of flavonoids in plant phenol extract is estimated at (328,75mg ER/g) for the region of Hassani was better than Hamraya region wich was estimated at (220,312 mg ER / g).

It can be argued that the high rate of flavonoids in the phenolic extract of *Citrullus Colocythis* of region of hassani is responsible for this activity.

The result of the study of the effectiveness of antibacterial *Escherichia coli* where we recorded a very effective inhibitory ability at the extract for the region Hassani estimated at 18 mm at the largest concentration.

In light of the encouraging results obtained with plant extracts, the qualifications

of the plant can be estimated as a therapeutic plant containing inhibitors for the growth of some harmful bacteria. Its use as a natural antibiotic due to the rich presence of secondary metabolites.

Key words: *Citrullus Colocythis*, polyphenols, antibacterial