

Phytochemical screening and antibacterial study of two medicinal plants *Teucrium capitatum* L and *Silene vulgaris* as a part of ethnobotanical study of the region of El Hajeb (central Morocco)

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ABSTRACT:

Objective: This study was performed to screen phytochemical and antibacterial activity of two different plants *Teucrium capitatum* L and *Silene vulgaris*, which were chosen after an ethnobotanical study to determine the close relationship between plant species and describe the different types of conditions affecting the population

Methods: A phytochemical screening was performed for the detection of alkaloids, carbohydrates, flavonoids, phenolic compounds, resin, saponins, steroids, tannins, terpenoids, proteins, cardiac glycosides, reducing sugars and proteins. Antibacterial activity was performed against *Staphylococcus aureus*, *Proteus mirabilis*, *Escherichia coli*, *Pseudomonas putida*, *Pseudomonas arueginosa*.

Results: Ethnobotanical study revealed that the disease dermatitis and gastrointestinal infection tract are most common in the study area In addition, the results showed that the two plants are used for both diseases. These two selected plants were screened for the presence of different chemical components ; the plant *Teucrium capitatum* L showed a highly significant inhibitory effect against *Staphylococcus aureus* ori S and ori R (gram +), while the plant *Silene vulgaris* has no anti-microbial activity.

Conclusion: *Teucrium capitatum* L may act as an anti-microbial agent. The results are promising and encouraging because there is a strong co-relation between: active compounds / antibacterial activity.

Keywords:

Teucrium capitatum L, ethnobotany phytochemical, activity, antibacterial