

ABSTRACT

Aromatic and medicinal plants are an important source of antimicrobial molecules, especially in volatile extracts. The genus *Thymus* is considered among the richest general in secondary metabolites. In this context, this work examines on the study of the extraction of the organic compound by steam soxhlet of a species endemic *Thymus numidicus* from Bouira. These naturals' substances are recovered by different solvents; aqueous, ethanolic, and methanolic. On the other hand, the determination of the antimicrobial activity of this organic compound is executed. The antimicrobial activity was tested by agar diffusion technique and calculation of the minimum inhibitory concentrations (MIC). It has been tested on six bacterial strains; *Escherichia coli*, *Pseudomonas fluorescens*, *Staphylococcus aureus*, *Aspergillus fumigatus*, *Candida albicans* and *Aspergillus niger*. It should be noted that these agents are characterized by a high frequency of contamination and pathogenicity. Through this study, we note that these microorganisms are very sensitive of these extracts. So, the study of the antimicrobial activity of different extracts; organic and aqueous of *Thymus numidicus* showed a very good antimicrobial activity of these substances.