



## ETHNOBOTANICAL STUDY AND PHYTOCHEMICAL INVESTIGATION OF *Myrtus communis* L. IN THE REGION OF TIZI-OUZOU.

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### Introduction & Objectives:

Some medicinal and aromatic plants have great importance in the world, especially in the Mediterranean region. They have been used in the treatment of various diseases plus in the food industry. In this context, our present work was carried out on an ethnobotanical study in order to know the various therapeutic uses of a species belonging to the family of myrtaceae "*Myrtus communis* L." in the wilaya of Tizi-Ouzou. Finally, we are interested in the phytochemical study.

### Methodology (Material and methods):

An ethnobotanical survey was carried out among the local population, of different categories of age, sex, professional situation and level of education in the study station. This study was completed by phytochemical tests that were performed on the fruit extracts to detect some bioactive compounds to the therapeutic virtues. Followed by the essays of condensed tannins (CT) and hydrolysable tannins (HT) that were performed by the vanillin method and is based on the ferric chloride reaction respectively.

### Results and Discussion:

The results have been shown that this spices is involved in the treatment of diseases of the digestive system (16.4%), respiratory and bronchial system (14.7%) and cardiovascular (13.8%). The phytochemical screening allowed us to conclude that our extract is highly rich in tannins, terpene and cardiac glycoside. On the other hand, it is moderately rich in flavonoids and polyphenols. Finally, we recorded a significant variation and difference between the tannin contents. Although the highest content was recorded for the CT followed by the HT.

### Conclusion:

From these results, we found that the fruits of common myrtle are rich in phenolic compounds, which offered benefits to consumers and an important place in traditional medicine in the Tizi-Ouzou region.

**Keywords:** *Myrtus communis* L., ethnobotanical study, therapeutic uses, phytochemical study, condensed tannins, hydrolysable tannins.

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