Chemical composition and antibacterial activity of essential Oil from the seeds of *Pistacia terebinthus* grown in Tunisia

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*Pistacia terebinthus* L. (Anacardiaceae) is one of the 20 *Pistacia* species widely distributed in the Mediterranean region and Asia. It is reputed for its several biological activities. The purpose of this investigation was to analyze the composition of *Pistacia terebinthus* seed essential oil and to evaluate its antibacterial activity.

*Pistacia terebinthus* seeds were submitted to hydrodistillation in a Clevenger apparatus. Their essential oil composition was analysed by gas chromatography coupled to mass spectrometry (GC-MS). We tested also its biological activity against some microorganisms: *Escherichia Coli* ATCC 25922, *Staphylococcus aureus* ATCC 29213 and *Bacillus cereus* ATCC 11778 using disc diffusion method.

Results showed that the most abundant volatile compound of *Pistacia terebinthus seed* essential oil was β-pinene with a percentage of 38.28 %. Furthermore, monoterpenic hydrocarbons accounting for 84.66 % of total volatiles constituted the prominent chemical class of this volatile oil. Respective amounts of oxygenated monoterpenes and sesquiterpenes were of 6.58 and 3.29 %. Moreover, the antibacterial assay showed that *Pistacia terebinthus* seed essential oil was moderately active against the tested microorganisms due probably to its low amount of oxygenated monoterpenes.

**Keywords:** *Pistacia terebinthus*, essential oil, chemical composition, monoterpenes, antibacterial activity