

PHYTOCHEMICAL STUDY AND ANTIBACTERIAL ACTIVITY OF DIFFERENT EXTRACTS OF *Pistacia lentiscus* L COLLECTED FROM DAHRA REGION WEST OF ALGERIA

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ABSTRACT

The purpose of this study was to investigate the phytochemical proprieties, antioxidant and antibacterial activities of different extracts of *Pistacia lentiscus* on two pathogenic bacteria. The concentration of total phenols was analyzed using Folin-Ciocalteu's method. Extracts of plant were evaluated for their antimicrobial activities against *Staphylococcus aureus* and *Esherichia coli* using the agar disk diffusion method and the minimal inhibitory concentration.

The phytochemical study revealed the presence of major bioactive chemical constituents in different extracts of *P. lentiscus* (flavonoids, alkaloids, saponins, tannins, terpenoids, glycosides and steroids). Results showed that this plant has antioxydant activity and high quantity of total phenols and flavonoids. Antibacterial activity of the aerial parts of *P. lentiscus* against tested bacteria has shown that Gram-negative strains were more resistant compared to the Gram- positive ones. We can conclude that *Pistacia lentiscus* from Dahra region under investigation can be a potential source of useful drugs.

Keywords: *Pistacia lentiscus*; Phytochemicals; total phenol; Flavonoids; Antibacterial activity.