

**STUDY OF ANTIBACTERIAL ACTIVITY OF PISTACIA LENTISCUS ESSENTIAL OIL**DRIS Ibrahim¹, BEKADA Ahmed Mohamed Ali¹, ATTALA Nabila², AIT SAADA Djamel¹

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TYPE OF ARTICLE: CONFERENCE ABSTRACT**ABSTRACT**

The botanic genre *Pistacia* is a group of around fifteen species of shrubs that belong to the *Anacardiaceae* family native to Asia and the Mediterranean. *Pistacia lentiscus* is an abundant species of the *Pistacia* genre encountered in the forest region of the Ouarsenis mountain range (Northwest of Algeria), specifically the national park of Theniet El Had in the Wilaya de Tissemsilt. The species' essential oils could be explored to test their anti-microbial activity, especially against particular bacteria that cause alimentary intoxications. The study was carried out in the Laboratory of Plant Biology at Abdelhamid Ibn Badis University in Mostaganem, Algeria, during 2017. The aim of the current study was to evaluate the anti-bacterial activity of the essential oil of *Pistacia lentiscus* against pathogen bacteria using the disk diffusion methods. The antibiogram is made following the gliosis-environment diffusion method, and makes it possible to determine the bacteria's sensibility to antibiotics. From a young culture (18 to 24 hours), a bacterial suspension is prepared and well homogenized afterward. The opacity must be equivalent to 0.5 McF (McFarland), the O.D being between 0.08 and 0.1 read at 625 nm. The results revealed that the essential oil exhibited strong levels of antibacterial activity against the tested microorganism regarding the MIC values. *Salmonella* had a great sensitivity to the essential oil. The biggest inhibition zones have been obtained for *Salmonella sp*, *Acinetobacter sp*, *Staphylococcus aureus* and *Bacillus sp* (23, 20, 19 and 19 mm, respectively). So, we considered that those microorganisms were more sensitive to that oil. In the same way, *Pseudomonas aeruginosa* has been judged to be more sensitive to the oil than *prot* (16 and 12 mm, respectively). Based on the findings of the present study, novel antibacterial agents could be developed, and it is recommended that the use of *Pistacia lentiscus* be promoted in traditional treatment.

KEYWORDS: *Pistacia lentiscus*, Essential oils, Antimicrobial power, Pathogen bacteria