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Antibacterial activity of tannins isolated from a medicinal plant : *Marrubium vulgare* L of northeastern algerian

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Marrubium vulgare L. is a very widespread in the Mediterranean basin and used for its therapeutic virtues. Our goal is to check the specificity of this plant on its antiseptic and antimicrobial activity of its tannins. The extraction of tannins by the method of Sowunmi *and al.* (2000) allowed to obtain a very important yield equal to 11,44 %. The isolated compounds were separated by thin-layer chromatography TLC (Silica gel 60 F254, aluminium-appui, Merck) and their antibacterial activity was studied by disc diffusion method Bauer and al (1966), against bacterial strains responsible for certain infectious diseases was determined *in vitro* with concentrations used (Pure tannins, tannins ½, tannins ¼) on medium Mueller-Hinton and Sabouraud. Comparisons testing with antibiotic rifampin (5 μg) were also included in the trials.

The results showed a tannic extract is composed of four compounds with similar front-end reports ranging between 0,47 and 0,88. Antibacterial test with isolated tannic extracts indicate that the inhibition of the growth of bacteria varies with the nature of the bacterial species, the concentration of the extract and the culture medium used. A significant antibacterial effect was observed with the strains considered among the most resistant to antibiotics such as *Staphylococcus aureus* and *Pseudomonas aeruginosa* 7244. In general, the areas of inhibitions are included between 4 and 8 mm for *Pseudomonas* 7244, 8 to 14 mm for *Staphylococcus aureus*, 10-16 mm for *Pseudomonas* 7244 and between 2 to 12 mm for *Staphylococcus aureus* on Sabouraud medium. The Inhibition zones far exceed those caused by the antibiotic rifampin.

Keywords: Antibacterial activity, Tannins, Marrubium vulgare L., Bacterial strains