

## **Antibacterial Activity of Ethanolic and Aqueous Extracts of Punica Granatum L. Bark**

**Authors :** H. Kadi, A. Moussaoui, A. Medah, N. Benayahia, Nahal Bouderra

**Abstract :** For thousands of years, Punica granatum L. has been used in traditional medicine all over the world and predate the introduction of antibacterial drugs. The aim of the present study was to investigate the antibacterial activity of aqueous and ethanolic extracts of Punica granatum L. bark obtained by decoction and maceration. The different extracts of Punica granatum L. (Lythraceae) bark have been tested for antibacterial activity against Gram-positive bacteria (Staphylococcus aureus, Bacillus stearothermophilus) and Gram-negative bacteria (Escherichia coli, Pseudomonas aeruginosa) by disc diffusion method. The ethanolic macerate extract showed the strong in vitro antibacterial activity against Pseudomonas aeruginosa with zone inhibition of 24.4 mm. However, the results tests by disc diffusion method revealed the effectiveness of ethanolic decoctate against Gram-positive bacteria (Staphylococcus aureus and Bacillus stearothermophilus) with diameter zone of inhibition varying with 21.1mm and 23.75 mm respectively.

**Keywords :** Punica granatum L. bark, antibacterial activity, maceration, decoction

**Conference Title :** ICABE 2015 : International Conference on Applied Biology and Ecology

**Conference Location :** Jeddah, Saudi Arabia

**Conference Dates :** January 26-27, 2015