

ANTIMICROBIAL ACTIVITY OF THYME HONEY FROM MOROCCO AGAINST PATHOGENIC BACTERIA

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Abstract

Apitherapy or therapy with bee products as honey is an old tradition and complementary medicine since ancient times. This study was aimed at determining the susceptibility of 5 bacteria potential pathogens belonging to Gram positive and Gram negative bacteria to Moroccan thymus honey (*Thymus satureioides*) from Ijoukak region which is a rural commune in Al Haouz Province of the Marrakech-Tensift-EIHaouz region of Morocco.

The Gram positive bacteria tested were *Staphylococcus aureus*, and *Bacillus subtilis*, and the Gram negative bacteria were: *Escherichia coli*, *Salmonella enterica* and *Pseudomonas aeruginosa*. The effect of honey on these pathogens was evaluated at 20%, 40%, 60%, 80% and 100% w/v concentrations and tested by performing well Diffusion assay with measuring the average zone of inhibition.

All the honey samples tested showed strong definite antibacterial activity against these organisms, especially against *Stapylococcus aureus* which was more sensitive and shows the maximum inhibition zone.

The excellent antibacterial activity of thyme honey against bacterial isolates indicates the usefulness of honey in clinical practice against bacterial infection and it can be considered as an alternative candidate in the management of resistant bacteria pathogens.

Key words: Moroccan thyme honey, Antimicrobial activity, Agar well diffusion.