

2nd International Conference and Exhibition on Pharmacognosy, Phytochemistry & Natural Products

August 25-27, 2014 DoubleTree by Hilton Beijing, China

Bioactivity of Sudanese crude bee honey and honey extracts

Mahasin Wadi

King Saud University, Saudi Arabia

Introduction: Honey was widely used in folk medicine throughout the world. Honey has been used to treat a number of clinical conditions: Treatment of burns, wounds, peptic ulcers, gastritis, eye infection and sore throat. Honey has a well-established usage as wound dressing in ancient and traditional medicine. Honey was found to be effective in the treatment of various wound infection due to its antibacterial and antifungal activity.

Method: Crude unprocessed 15 bee honey obtained from different localities in Sudan were tested against five standard bacterial strains; *Bacillus subtilis*, NCTC 8236; *Staphylococcus aureus* NCTC 6447, representing Gram-positive bacteria, and *Escherichia coli*, NCTC 8196; *Klebsiella pneumonia* NCTC9633; and *Pseudomonas aeruginosa*, NCTC 6750, representing Gram-negative bacteria. Ethyl acetate extract of the same samples and convention used antibiotics were subjected to antibacterial activity on the same batches of microorganisms.

Results: All honey samples exerted inhibitory effects on both Gram-positive and Gram-negative organisms as indicated by the growth inhibition zone. The five antibiotics tested were ampicillin, cephadrine, chloramphenicol, gentamicin and oxytetracycline. The ethylacetate fraction exerted an inhibitory effect towards the test micro-organisms. On the other hand, the aqueous residue showed no activity.

Biography

Mahasin Wadi received her BS from Cairo University, Egypt. She worked at the central research laboratory Khartoum, Sudan. She completed her PhD from AL Neelain University, Faculty of Medical Laboratory Sciences 2010 Khartoum, Sudan. She worked in the area of Bee Honey as a natural product antimicrobial. She has published a numbers of papers in reputed journals and participated in many internationals and national conferences. She issued a patent research about the antimicrobial activity of Sudanese honey. She has been awarded certificate of prestigious author for the *Journal of Bacteriology & Parasitology* 2011 and also a medal for participating in workshop at King Saud University Saudi Arabia 2011. She is active member of many associations and served as a reviewer for many journals of repute.

mahasinwadi@yahoo.com