Title: Antibacterial Activity of Different Types of Honey Produced by Many Methods

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ABSTRACT

Ten types of citrus honey were used, ripe and unripe honey from the frame directly, fresh honey and after one and 2 years ago. Many types of onion honeys were also tested, fresh and after one and 2 years. Lyophilized onion and citrus honey were tested. Nine pathogenic organisms were tested: E. coli, S. enteritides, L. monocytogenes, B. cereus, B. subtilis, St. aureus, St. MRSA, P. aerogenosa and C. albicans (pathogenic yeast). The well diffusion assay revealed that the development of inhibition zone of growth depended on the type and concentration of honey, as well as the tested pathogen. The most effective honey in a renunciative order was; citrus ripe, citrus 2 years, citrus lyophilized, onion lyophilized and onion 1 year. The MIC of citrus honey ranged from 3 mg/ml for E. coli to 7 mg/ml for B. cereus. For onion honey MIC was 4 mg/ml and 3 mg/ml for E. coli and S. enteritides, respectively, while the highest concentration was 5mg/ml for S. aureus and 8 mg/ml for B. cereus. An antibiotic sensitivity test was carried out to help choose the most effective antibiotic (16 types of antibiotic were tested) against three types of bacteria were compared with honey samples.