

## Assessment of Antimicrobial Efficacy of Commercial Urmia's Honeys

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There are many reports about antibacterial potency of natural honey. These reports are confirmed preventive efficacy of honey on various different kinds of bacteria.

The most important antibacterial factors of honey are phytochemical materials. These substances are derivatives from plants flora of bee culture's region. We designed this study in order to assess the antimicrobial efficacy of honeys produced different regions of Urmia.

This investigation was performed on samples collected from 5 honey production's regions (Marmishoo=1; Nazloo= 2; Ghasemloo valley= 3; Marghevar= 4; Targhevar=5 ). 20 samples were collected from each region. Samples were cultured on blood agar media in order to confidence of lack of previous contamination. Then samples were cultured on standard bacterial culture include: *Staphylococcus aureus* (ATCC25923) , *Escherchia coli* (ATCC25922) , *Pseudomonas aeruginosa* (ATCC27853). Inhibition zone (IZ) and Minimum inhibitory concentration (MIC) were measured for each bacteria after incubation period.

According to results of our experience, Targhevar honey posses more (IZ) and lesser (MIC) in compared to other samples. ( $p<0.05$ )

Difference between samples is thought to be due to existence of special phytochemical substances in plant flora of Targhevar region. These materials should be extracted and collected and used in production medical honey. The selection of special region for bee keeping is very important in process of monofloral medical honey production.

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