

A PROSPECTIVE STUDY OF HONEY WITH SPECIAL REFERENCE TO ITS ANTIBACTERIAL ACTIVITY

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ABSTRACT

Background: Honey is a [sweet](#) food made by [bees](#) foraging [nectar](#) from flowers. The variety produced by [honey bees](#) by the [genus](#) *Apis cerana indica* is the one most commonly referred by most of the [beekeepers](#) and that honey is consumed by people in India. Many natural products like medicinal plants producing non-antibiotic drugs having antibacterial potentiality. Beside these products of some medicinal plants, the antibacterial activity of honey against many different life threatening bacteria has been reported.

Materials & Methods: The antibacterial activity of Bharat multi floral pasteurised honey obtained from Bharat Unani Pharmacy (Bharat honey co), Hyderabad, Andhra Pradesh, India was tested and evaluated against the bacterial strains of *Pseudomonas aeruginosa*, *Escherichia coli* and *Staphylococcus aureus* by using agar-well diffusion method.

Results: It was observed that zone of inhibition was indirectly proportional with the dilution of honey as the dilution was less, the zone of inhibition was more in all 3 organisms tested. *P. aeruginosa*, *Esch.coli* and *S. aureus* were the most sensitive to undiluted honey samples tested with an average zone of inhibition of 39.96, 30.1 and 28.2 mm respectively.

Conclusions: The exact explanation for the antibacterial activity of honey is not known, but it is clear that the higher the concentration of honey the greater its usefulness as an antibacterial agent. Well documented clinical trials and researches are going on honey and nanotechnology which may provide promising results on therapeutic use of honey in the future.

KEYWORDS: Honey, Antibacterial Activity, Well Diffusion, *Pseudomonas aeruginosa*, *Escherichia Coli*, *Staphylococcus aureus*