

Preliminary study on synergistic combinations of raw honey with gentamicin against Gram-negative bacteria *Escherichia coli* and *Pseudomonas aeruginosa* of veterinary origin

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ABSTRACT

Objective: To search for further synergistic combinations of gentamicin and raw honey that might have potential in treating wounds.

Methods: The antibacterial activity and synergistic interaction of raw honey and gentamicin was assessed by using agar well diffusion method. Two Gram-negative (*Escherichia coli* ATCC 25922 and *Pseudomonas aeruginosa* ATCC 2154) bacteria were selected for antibacterial activity assay. The cultures of bacteria were maintained in their appropriate agar slants at 4 °C throughout the study and used as stock cultures.

Results: Raw honey and gentamicin interacted synergistically to inhibit *Escherichia coli* and *Pseudomonas aeruginosa*.

Conclusions: These results suggest that combinations of raw honey and gentamicin have therapeutic benefits in prophylaxis of infections caused by multidrug-resistant Gram-negative bacilli.

Keywords: Honey Gentamicin *Pseudomonas aeruginosa* *Escherichia coli*