



RESEARCH PAPER

Antibacterial activity of *Ocimum sanctum* (Tulsi), *Azadirachta indica* (Neem) and *Phyllanthus emblica* (Amla)

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Plant extracts continues the numerous searches for more effective drugs of plant origin which are less toxic and available for low socio-economic population in the treatment of diseases caused by pathogenic bacteria. The potential for developing antibacterial from higher plants appears rewarding as it will result to the development of a phytomedicine to act against microbes. The *Azadirachta indica*, *Ocimum sanctum* and *Phyllanthus emblica* extracts were tested for antibacterial activity by spread plate method against four pathogens *Escherichia. coli*, *Staphylococcus aureus*, *Bacillus subtilis* and *Nessieria flavescenes*,. It was found that gram negative bacteria were largely inhibited by the extract of amlathan that of neem and tulsi. The zone of inhibition was measured which showed that extract of amla was of high antibacterial activity as compared to meem and tulsi. Methanol extracts were more active than the aqueous extract against all the bacteria. The zones of inhibition were ranging from 1- 3.5 cm in diameter. The highest zone of inhibitions (3.5cm) was noted in methanol extract of *P. emblica* against *S. aureus*. The highest yield of methanolic extract was found in *Azadirachta indica* (29.08%). The extract of *Ocimum sanctum* and *Phyllanthus emblica* were most effective against *Escherichia coli* and *Staphylococcus aureus*.

Key words : Antibacterial activity, Plant extract, Zone of inhibition

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