

## Comparative Studies on the Antimicrobial Activity of Herbal Plants against Some Human Bacterial Pathogens

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A major part of the total population in world still uses traditional medicine obtained from plant resources with an estimation of WHO that as many as 80% of world population living in rural areas used herbal traditional medicines as their primary health care. In recent years this interest to evaluate the properties and uses of medicinal plants are getting growing interests now. Plants possessing antibacterial activity for various diseases are being studied by various methods to evaluate their antibacterial property. Different solvent extracts (water, acetone, chloroform and ethanol) of seeds, gum, bark and leaves of various plants were subjected to in vitro antibacterial activity assay against human bacterial pathogens by using agar diffusion method. Based on common use and ethno botanical knowledge, an attempt has been made to assess the antibacterial properties of selected medicinal plants viz *Trachyspermum ammi* (seeds), *Ferula asafoetida* (oleogum), *Crataeva religiosa* (bark) and *Justicia adhatoda* (leaves) and more for potential antibacterial activity against some important bacterial strains, namely *Staphylococcus aureus*, *Escherichia coli*, *Pseudomonas aeruginosa* and *Streptococcus pyogenes*. The plant extract of water is more active against human bacterial pathogens. The highest antibacterial activity was found in the extracts of seeds of *Trachyspermum ammi*.

### **KEY WORDS:**

Medicinal plants, Human pathogens, Diffusion method and antibacterial activity