



Antimicrobial and Anti-inflammatory Screening of Four Indian Medicinal Plants

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SUMMARY. Inflammatory diseases including different types of rheumatic diseases are very common throughout the world. The greatest disadvantage in the presently available potent synthetic drugs lies in their side effects, toxicity and reappearance of the symptoms after discontinuation. Hence search for new antimicrobial and anti-inflammatory agents are needed. Antimicrobial study was done by agar disc diffusion method against 5 Gram positive, 7 Gram negative and 3 fungal strains and acute anti-inflammatory activity was studied by carrageenan induced paw edema in rats. Plants screened were *Aristolochia indica*, *Argemone mexicana*, *Alpinia speciosa* and *Gymnema sylvestre*. Methanolic extract of these plants were studied at 200 mg/kg and 400 mg/kg dose level. The results were compared with standard drug indomethacin. All the plant extracts showed better antibacterial activity than antifungal activity. The Gram positive bacteria were more susceptible than Gram negative bacteria. *Argemone mexicana* gave more antimicrobial and anti-inflammatory activity than the other three plants.

KEY WORDS: Antimicrobial, Anti-inflammatory, Agar disc diffusion, carrageenan, *Aristolochia indica*, *Argemone mexicana*, *Alpinia speciosa*, *Gymnema sylvestre*.

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