

Antibacterial Activity and Anti-inflammatory Activity Vitex Negundo (Nirgudi) Plant Extract

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Abstract: *Vitexnegundo* is commonly known as Nirgundi. It belongs to family Verbenaceae. Its plant is branched, deciduous shrub found in all parts of India. Nirgundi possess various medicinal properties. It is also well known to possess antibacterial properties. The aim of present work is to evaluate the antibacterial property of Nirgundi plant parts. The methanol extract of Nirgundi stem, leaves and flowers were investigated against *Escherichia coli* and *Staphylococcus aureus*. It was reported in the study that the methanol extract of Nirgundi plant parts possess potent antibacterial property compared with the Streptomycin as a standard. Therefore, it is suggested to develop alternative antimicrobial drugs for the treatment of infectious diseases and Nirgundi plant parts can be used more and more for commercial purpose. The present study was undertaken to assess the anti-inflammatory effect of ethanolic extract of *Vitexnegundo* roots in rats. The anti-inflammatory action was studied by Plethysmometer method. The ethanolic extract of *Vitexnegundo* roots was screened for phytochemical analysis and revealed the presence of all components. The adult rats were divided into four groups of six each and maintained under ideal laboratory conditions. Group I was taken as control and group II treated with the standard drug Indomethacin (10 mg/kg), the ethanolic extract of *Vitexnegundo* root 200 mg/kg and 400 mg/kg were fed to group III and IV. It is observed that the ethanolic extract of *Vitexnegundo* roots shows considerable anti-inflammatory effect by using carrageenan induced rat paw edema method. The higher dose groups of *Vitexnegundo* root extract (400 mg/kg) were revealed more activity than their corresponding lower dose

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