

Phytochemical Screening and Anti-bacterial Activity of *Nymphaea ouchali* Burm.f

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The present study was conducted with the objective of evaluating anti-microbial activity of the plant *Nymphaea ouchali* Burm.f. The aim of the study is to assess the antimicrobial activity and to determine the zone of inhibition of extract on some bacterial strains. In the present study aqueous extract of rhizome and flowers of *Nymphaea ouchali* Burm.f was evaluated for antimicrobial activity against medically important bacterial strains. The anti microbial activity was determined in the extract using agar diffusion method against two Gram positive – *Staphylococcus aureus* MTCC 121, *Streptococcus mutans* MTCC 916; and three Gram Negative – *Klebsiella pneumoniae* MTCC 530, *Escherichia coli* MTCC 1671 and *Proteus vulgaris* MTCC 426 human pathogenic bacteria. Zone of inhibition of extract were compared with that of standard (Streptomycin S 25) for anti-bacterial activity. The maximum spectrum of activity was observed against *Staphylococcus aureus* with zone of inhibition 14mm. The extract contained important phyto constituents such as carbohydrates, flavanoids tannins and alkaloids. These phyto constituents are quantitatively determined by Anthrone method, Aluminium chloride method, Broadhurst et al 1978, and Evans 1996 method respectively. Result showed the presence of tannins 41mg/100g, Flavanoids 38mg/100g, carbohydrate 68mg/100g and Alkaloids 51 mg/100g in the *Nymphaea ouchali* extract. The present study claimed *Nymphaea ouchali* extract has inhibitory activity against *Staphylococcus aureus*, *Escheria coli*, *Proteus vulgaris*, *Streptococcus mutans* and *Klebsiella pneumoniae*

Key Words : *Nymphaea ouchali*, anti microbial activity, Phytoconstituents