

Antibacterial and antifungal activities and phytochemical evaluation of melia azedarach

Anwarullah Ayarkhail

Sarhad University of Science and Information Technology, Pakistan

The purpose of the current study was to investigate the antibacterial and antifungal activity of the ethanolic and aqueous extracts of Melia azedarach Linn leaves. The extracts were tested against six bacterial strains including Pseudomonas aeruginosa, E. coli, Staphylococcus epidermidis, Staphylococcus aureus, Bacillus subtilis, Enterococcus and Salmonella respectively; and three fungal species including Candida albicans, Terebrum and Brivicalous. Three concentrations, i.e. 100mg/ml, 150mg/ml and 200mg/ml of both aqueous and ethanolic extracts were tested using Agar Disk Diffusion Method. All the tested

concentration showed that Melia azedarach leaf extracts were effective against the tested pathogenic microorganisms. A concentration of 200mg/ml of both the extracts was more effective compared to 100mg/ml and 150mg/ml. Phytochemical screening revealed the presence of alkaloid, mucilage, saponin, tannins, phenols, starch, polyphenol, fat and oil. The investigation suggested that Melia azedarach Linn leaves can be considered as a good medicinal and biological active agent. However, further study is needed to see the biologically active constituents of leaves and other parts.

Received Date: April 13, 2022; **Accepted date:** April 16, 2022; **Published date:** June 30, 2022