IJARSCT
International Journal of Advanced Research in Science, Communication and Technology
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429
Volume 5, Issue 3, June 2025
Impact Factor: 7.67

Phytochemical Analysis and Anti-microbial Activity of Leaves Extract of *Simarouba gluaca* DC

Kavimandan Bhushan Rameshrao
Department of Biochemistry
Moolji Jaitha College (Autonomous), Jalgaon (M. S.), India.
bhushankavimandan@gmail.com

Abstract: *Simarouba gluaca* DC *has a long history in herbal medicine in many countries including India. The leaves, fruit pulp and seeds of the plant are known to possess the medicinal properties such as analgesic, antibacterial, antidysenteric, antileukemic, antimalarial, antimicrobial, antitumorous, and antiviral activities. Very less work has been done in India regarding phytochemicals present in Simarouba gluaca* DC. *So the current research work aims to analyse phytochemicals present, and to study and antimicrobial activity of the leaves extracts. Young and healthy leaves were air dried in shed and powdered. The powder was extracted using different solvent as n-hexane, water and methanol. Phytochemical analysis carried out for all three extracts had shown presence of secondary metabolites like alkaloids, flavonoids, phenolic compounds, saponin, alkaloids and tannins. Further, antimicrobial activity was carried out using bore-well method against the pathogenic bacteria like E. coli and fungi like Aspergillus niger. The results were obtained in methanolic extract against E. coli.*

Keywords: Simarouba gluaca, anti-microbial activity, phytochemical analysis

DOI: 10.48175/IJARSCT-27546