

Some Ethno Pharmacological Activities of Engenharia Colebrookia Linda: An Unexplored Plant

Musheerul Hassan¹, Musfirah Anjum², Shiekh Marifatul Haq³,
R.A. Mir⁴ and Huma Habib^{5,#}

¹Department of Life Science, Pacific University, Udaipur, India-313024

²Department of Botany, Mirpur University, Pakistan-10250

³Department of Botany, University of Kashmir, India- 190006

⁴Department of Zoology, Islamia College of Science & Commerce, Srinagar, India-190011

⁵Department of Biochemistry, Islamia College of Science & Commerce, Srinagar, India-190011

E-mail: [#]huma99@gmail.com

Abstract—The aim of the present study was to evaluate the phytochemical, antimicrobial, and antioxidant activities of *Engenharia colebrookia*. The phytochemical analysis revealed the presence of alkaloids, flavonoids, saponins, tannins, triterpenoids, cardiac glycosides, proteins, carbohydrates, lipids and sterols in the methanolic leaf and bark extracts. The antimicrobial activity was conducted using agar well diffusion method. The plant extracts provided good to satisfactory antimicrobial potential. The maximum potential was exhibited by bark extract against i.e., 18.3 ± 0.02 mm and minimum by leaf extract, i.e., 13.3 ± 0.42 mm against the *Pseudomonas aeruginosa*. The antifungal evaluation had revealed that the bark and leaf extracts had satisfactory potential. The highest antifungal activity showed by bark extract against *Aspergillus niger*, i.e., 14.33 ± 0.27 mm and minimum activity showed by leaf extract, i.e., 12.3 ± 0.01 mm against same. The antioxidant evaluation had provided that methanolic leaf and bark extracts exhibited best response to DPPH radical scavenging activity, i.e., 81.81 % and 84.09 % respectively.