

Review of the PhytoChemical Profile of Gymnosporiya Monta Beneth in Relation to its Medicinal Application

Pallavi Dnyaneshwar Ghate and Ms Nutan.K. Pustode

Student, Maharashtra Institute of Pharmacy, Betala, Maharashtra

Associate Professor, Maharashtra Institute of Pharmacy, Betala, Maharashtra

Abstract: *Gymnosporia Montana* is a medicinal plant long valued in traditional healing systems. This study aimed to investigate its phytochemical profile, pharmacological activities, and ethnobotanical relevance. **Methods:** Phytochemical composition was examined using NMR spectroscopy, GCMS, and HPLC. Pharmacological evaluation included cytotoxic, antimicrobial, antioxidant, and anti-inflammatory assays. Ethnobotanical information was gathered through community interviews and surveys. **Results:** The plant was found to contain key bioactive constituents such as flavonoids, alkaloids, and trapezoids. It demonstrated notable antimicrobial, antioxidant, and anti-inflammatory activity. **Ethnobotanical importance:** *G. Montana* is traditionally used to treat fever, digestive ailments, and to promote wound healing. **Conclusion:** The identified phytochemical and pharmacological properties support the plant's traditional uses. This study enhances scientific understanding of *G. Montana* and highlights its promise for future drug development and ethnopharmacological applications.

Keywords: Ethnobotany, pharmacology, photochemistry, big data analytics, *Gymnosporia montane*, and traditional medicine

