

A Review on the Antimicrobial Potential and Phytochemical Profiling of Berberis Lyceum Constituents

Yelmame Vinod Bhaurao¹ and Dr. Krishan Pal²

¹Research Scholar, Department of Botany

²Research Guide, Department of Botany

Sunrise University, Alwar, Rajasthan

Abstract: *Berberis lyceum*, a medicinal shrub belonging to the Berberidaceae family, has been traditionally used in South Asian folk medicine for its therapeutic properties. Its bioactive compounds, primarily alkaloids such as berberine, oxyacanthine, palmatine, and berbamine, have shown significant antimicrobial potential against a wide range of bacterial, fungal, and protozoal pathogens. This review summarizes the phytochemical composition of *Berberis lyceum* and highlights its antimicrobial activity, emphasizing the synergistic effects of its alkaloids. Additionally, the role of secondary metabolites in enhancing the plant's therapeutic efficacy and potential applications in modern pharmacology are discussed.

Keywords: Berberis Lyceum, Antimicrobial Activity, Phytochemical Profiling