

PHYTOCHEMICAL ANALYSIS AND ANTIBACTERIAL ACTIVITY OF CRUDE EXTRACTS AND EXTRACTED PHENOLS FROM A LITHO-EPIPHYTIC FERN *ARTHROMERIS WALLICHIANA* (SPRENG.) CHING

GAUTAM GANGULY*, BRIJ KUMAR TIWARY* AND RADHANATH MUKHOPADHYAY**

*Department of Botany, Chandernagore Govt. College, Chandernagore, Hooghly-712136

**CAS Department of Botany, Burdwan University, Golapbag-713104

Antibacterial activity of crude extracts and extracted phenols from sporophytic parts of litho-epiphytic fern *Arthromeris wallichiana* (Spreng.) Ching (family Polypodiaceae) were studied in summer and winter seasons against *Bacillus subtilis* AR-2 (Gr +ve) and *Escherichia coli* XL1-Blue (Gr-ve). Both the crude extracts and extracted phenols from sporophytic plant parts showed antibacterial activities. In summer the phenol content is less and in winter the phenol content is maximum. Detailed observations reveal that crude extracts show better antibacterial activity than extracted phenol.

Keywords : Phytochemistry, antibacterial activity, extracted phenol, crude extract, Gr. +ve and Gr-ve bacteria, *Arthromeris wallichiana* (Spreng.) Ching.