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### Screening Potential Endophytic Fungi of *Fusarium oxysporum* Isolated from *Andrographis paniculata* for its Antibacterial Activity

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**Abstract :** The frequent use of antimicrobial agents and antibiotics worldwide has lead to the development of Antibiotic resistance and mutation in Bacterial genes, which leads to a number of infections and diseases. On the contrary, the drugs which were once used to treat the infections are no longer effective against the particular organism since it gains resistance overtime. Numerous studies are made on isolating new and effective antimicrobial agents that could sustain as novel agents. Endophytic fungi produce a number of active biomolecules that has emerged as a recent trend in research. The current study involves the isolation of endophytic fungi from *Andrographis paniculata* and studying the potential uses of their secondary metabolites. Antibacterial well diffusion assay confirms that one among the five selected fungi secretes secondary metabolites that shows significant antibacterial properties. This could pave a way for new therapeutic agents that could be used as potential drugs against the selected bacteria or its infections. The endophytic fungal species with the most activity was characterized as *Fusarium oxisporum* by DNA barcoding.

**Keywords :** Endophytic fungi, metabolites, antimicrobial, DNA barcoding.

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