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Screening, identification and antimicrobial activity of mycoparasitic fungus (*Aspergillus* sp.) from Philippine Aglibut sweet tamarind

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Due to the increasing resistance of pathogenic microorganisms, *Aspergillus* sp. isolated from Aglibut sweet tamarind's bark of Pampanga State Agricultural University was evaluated for potential mycoparasitism and antimicrobial activity. The micrograph obtained from Scanning Electron Microscopy (SEM) Analysis reveals that *Aspergillus* sp. is a potential mycoparasite; further, its identity was 99% which was confirmed through 18s rDNA of its ITS1 forward and ITS4 reverse sequences by Polymerase Chain Reaction (PCR) Amplification and Sequencing. Moreover, Thin-layer Chromatography (TLC) was used to identify the bioactive compounds of *Aspergillus* sp. The chemical groups such as a Glycosidic flavonoid, Alkaloid, and Anthrones were also present which can express the desired activity. Complete Randomized Design (CRD) was carried out with the following treatments; T1 (suspensions), - control (DMSO) and + control (streptomycin for bacteria: ketoconazole for fungus). Paper-disc Diffusion confirms that the suspensions of *Aspergillus* sp. have significant antimicrobial potential as shown in the zones of inhibition in S. aureus and S. cerevisiae but with lower activity in *E. coli*. Thus, *Aspergillus* sp. is a potential mycoparasite and source of new drugs and drug products.

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