Poster Presentation 3

P3-08

Antifungal Activity of Philippine Endemic Plants Leaf Extracts on Fungal Growth and Spore Germination of *Aspergillus niger*

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Aspergillus niger is a filamentous fungi known to cause the disease called black mold. Black mold is a ubiquitous occurrence on certain fruits and vegetables. In this study, the researchers wished to test the antifungal activity of the leaf extracts of the following endemic plants: Premna odorata Blanco, Petersianthus quadrialatus Merr, and Shorea astylosa Foxw., against the fungus Aspergillus niger. The leaf extracts that were obtained through ethanolic extraction were subjected to a rotary evaporator to obtain the pure extract. The pure leaf extracts of each endemic plant were diluted with distilled into 50% concentrations. Observations were done in 7 days for the colony growth and 6 hours for spore germination. Results revealed that the Yakal extract exhibited the most inhibition on colony growth with a mean growth of 0.54 cm and on spore germination among extracts with a mean value of 8.72%. The Alagao extract, however, showed no significant difference from the distilled water on colony growth and on spore germination. Since the Yakal extract showed the most antifungal potential among the leaf extracts, it is recommended to decrease its concentration to further test its maximum antifungal capability. However, since the Alagao and the Toog extract showed the least, and moderate potentials respectively, it is recommended to increase their concentrations to determine their effectivity.

Keywords: Mycology, Antifungal, Premna odorata, Petersianthus quadrialatus, Shorea astylosa, Aspergillus niger, Experimental, Davao City, Philippines