

E2-37 Isolation of an antifungal aza-sugar from *Aspergillus fumigatus*

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Straw and Oyster compost are being used for mushroom cultivation in Sri Lanka. Thermophilic fungi thrives on these mixtures during the process of making mushroom compost. *Aspergillus fumigatus*, isolated from such mushroom compost was grown in yeast-starch liquid medium for 10-14 days. After the filtration of mycelium, filtrate was freeze-dried and extracted into methanol. A novel bis-aza sugar (compound 1) isolated from this methanol extract was characterized using spectroscopic methods. Compound 1 was acetylated to obtain compound 2 during structure elucidation.

Polyhydroxylated piperidines are known to act as glycosidase inhibitors, which makes these molecules active against viruses, bacteria and tumors/cancers. Hence this bis-aza sugar might have interesting biological properties apart from the shown antifungal effect.

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