Synthesis and Evaluation of Demethoxyviridin Derivatives as Potential Antimicrobials

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The *in vitro* antibacterial and antifungal activities of demethoxyviridin and some synthetic analogues were evaluated by the agar diffusion method. The minimum inhibitory concentrations (MIC) of the active compounds were also determined by the agar dilution method. Demethoxyviridin (**1**) showed moderate antibacterial activity against most of the strains tested. 1α-Hydroxydemethoxyviridin (**3**) showed antibacterial activity and the most potent *in vitro* antifungal activity with MIC of 20 μg/ml (0.062 mM) against *Aspergillus niger*, *A. fumigatus*, *A. flavus*, *A. parasiticus*, *Fusarium solani*, *F. graminarum*, *Geotrichum candidum* whereas 5′-methylfuro-(4′,3′,2′-4,5,6)androst-5-ene-3,17-dione (**7**) exhibited very weak antifungal activity against *Candida albicans* only.

Key words: Demethoxyviridin, *Nodulisporium hinnuleum*, Antimicrobial Activity, MIC