



Synthesis, Antibacterial and Antifungal Activity of Flavanones and Chalcones Derived From 2-Hydroxy-Acetonaphthone

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ABSTRACT

Eleven new flavanones **1a-1k** and three new chalcones **1l-n** were prepared from commercially available 2-Hydroxy-acetonaphthone. All the newly synthesized compounds were characterized by ¹H NMR, MS and IR data. These compounds were screened for their antibacterial and antifungal activity against Gram-positive (*Bacillus subtilis* and *Staphylococcus aureus*), Gram-negative (*Escherichia coli* and *Salmonella typhii*), *Aspergillus niger* and *Candida albicans* organisms by measuring zone of inhibition. Among the synthesized flavanones and chalcones **1c**, **1d**, **1e**, **1f**, **1k**, **1l** and **1m** compounds bearing substitutions such as fluorine, trifluoromethyl, trifluoromethoxy, di-fluoro and pyridine ring has shown good activity against all the tested bacteria and fungal strains.

Keywords: Flavanones, Chalcones, 2-Hydroxy-Acetonaphthone, Synthesis, Anti-bacterial activity.
