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Synthesis and Antimicrobial Activity of Some New Substituted Coumarin

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ABSTRACT

Coumarins were prepared by heating of 2-hydroxy substituted acetophenone and resorcinol with acetoacetic ester in presence of catalytic amount of 2-methylpiperidine. Characterisation and structural elucidation were done on the basis of chemical, analytical and spectral analysis. The antimicrobial activities of these coumarins were assayed against the test organism E.coli, S.typhi, S.paratyphi, P.vulgaris, S.aureus. All bacterial species used in present investigation are human pathogens. The coumarins were tested against pathogenic bacteria for their antimicrobial activity by using cup plate diffusion method and for determination of minimum inhibitory concentration (MIC) values by serial dilution method.

Keywords: Synthesis, Antimicrobial, Coumarin.