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Synthesis and Estimation of Novel Heterocyclic Compounds with its Biological Properties

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Abstract: Chalcones were synthesized by the condensation product of DHA in combination with aromatic aldehydes in presence of strong base. It was found that the synthesized chalcones were having prominent role in modern coordination chemistry. The chalcone synthesized by base catalyzed condensation of 3-acetyl-6-methyl-2H-pyran-2,4-(3H) dione (DHA) with different aromatic aldehyde. These chalcones were used for synthesis of derivatives i.e. flavones. The synthesized compounds were characterized by IR, ¹HNMR and mass spectral analysis. The derivatives were further used for the estimation of its biological properties. It was found that the derivative possesses efficient antimicrobial properties. From the study it was found that the synthesized compounds are efficient for further research work.

Keywords: Chalcone, Flavone, IR, HNMR, Mass Spectroscopy, Biological Properties

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