

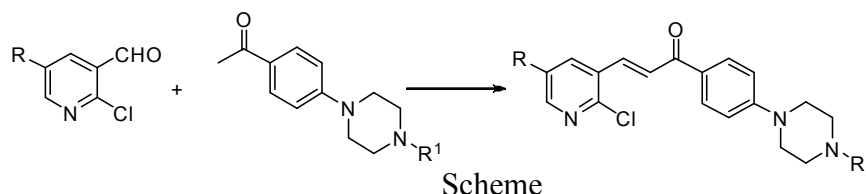
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Condensation of 2-chloronicotinaldehydes and phenylethanones: Convenient synthesis of 2-chloropyridinylchalcones

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Abstract: Chalcones are open-chain flavonoids in which two aromatic rings are joined by a three-carbon α,β -unsaturated carbonyl system. The enone functionality present in chalcone is responsible for various pharmacological activities. Chalcones have been reported to have various pharmacological properties such as anti-helmintic, anti-cancer, anti-fungal, anti-bacterial, anti-malarial, anti-psychotic agents and anti-inflammatory activities. 2-Chloronicotinaldehydes are an important synthons and have been utilized for the preparation of various heterocyclic compounds. The present research work describes the preparation of series of 2-chloropyridinylchalcones by the condensation of nicotinaldehydes with phenylethanones in the presence of base (**Scheme**). All the prepared compounds are unknown and characterized by spectroscopy.



Keywords: 2-chloropyridinylchalcones, 2-chloronicotinaldehydes, phenylethanones, convenient synthesis, heterocycles

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