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Condensation of 2-chloronicotinaldehydes and aminocrotonoates: A Facile Synthesis of pyridinyl-1,4-dihydropyridine dicarboxylates

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Abstract: 2-Chloropyridine compounds found wide application in both pharmaceutical and agrochemical fields. For example, 2-chloro-pyridine-3-ylacetic acid derivatives have antagonist properties on prostaglandin D2 receptors. Further, dihydropyridines displayed various pharmacological properties such as anti-hypertensive, anti-helmintic, anti-cancer, anti-fungal, anti-bacterial, anti-malarial, anti-psychotic agents and anti-inflammatory activities. As part of our research work on novel heterocycles, we have prepared 2-chloronicotinaldehydes as per our earlier reported method. The present research work describes the preparation of series of dihydropyridines by the condensation of 2-chloronicotinaldehydes with aminocrotonoates (**Scheme**). All the prepared compounds are unknown and characterized by spectroscopy.

Scheme

Keywords: pyridinyl-1,4-dihydropyridine dicarboxylates, 2-chloronicotinaldehydes, aminocrotonoates, facile synthesis, heterocycles

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