

NAME OF THE THEME: Synthetic organic Chemistry

## An efficient and clean synthesis of *N*-substituted-pyrimidine-4-carbohydrazides

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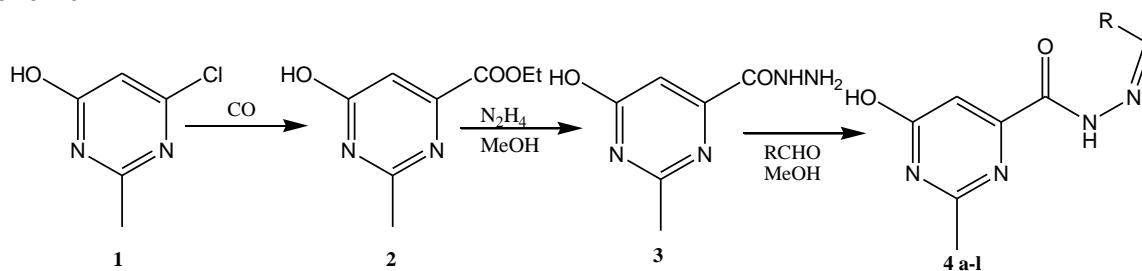
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**Abstract:** Pyrimidines have a long and distinguished history extending from the days of their discovery as important constituents of nucleic acids to their current use in the chemotherapy of AIDS. Alloxan is known for its diabetogenic action in a number of animals<sup>1</sup>. Uracil, thymine and cytosine are the three important constituents of nucleic acids.

6-Chloro-2-methylpyrimidin-4-ol (**1**) reacts with carbon monoxide to give Ethyl-6-hydroxy-2-methylpyrimidine-4-carboxylate (**2**). This ester is converted into hydrazide 6-Hydroxy-2-methylpyrimidine-4-carbohydrazide (**3**) and coupled with different aldehyde to obtain *N*-Arylidene-6-hydroxy-2-methylpyrimidine-4-carbohydrazides (**4**).

### Scheme



**Keywords:** Pyrimidine, Carbohydrazide, hydrazine,

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