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SYNTHESIS OF NEW 3-CYANO-2-PYRIDONES DERIVATIVES

AUTHORS

Fadhila SALHI / UNIVESITY OF TAHRI MOHAMED BECHAR, 12ROUTE DE CAEN, EPRON

PURPOSE OF THE ABSTRACT

A novel methodology for the synthesis of substituted 2-pyridones is reported. In the first part of this work, we prepared the alkene by the condensation of cyclic ketone with ethyl cyanoacetate in a basic medium. The alkene obtained was converted efficiently into the condensation product enamionitrile via dimethylformamide dimethylacetal DMFDMA used in stoichiometric amounts. In the last step of cyclization, We reported the synthesis of a series of new substituted 2-pyridone via condensation between the enamionitrile and various aliphatic, aromatic and heterocyclic primary amines. In addition. The structures of the new compounds obtained were characterized by various spectroscopic methods (IR, ¹H NMR, and ¹³C NMR).

FIGURES

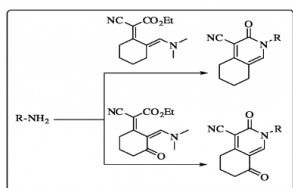


FIGURE 1

Synthesis of 3-cyano-2-pyridones

Synthesis of 3-cyano-2-pyridones

FIGURE 2

KEYWORDS

2-pyridone | enaminonitrile

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