Synthesis of a New Series of Heterocyclic Scaffolds for Medicinal Purposes

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Abstract

A new series of substituted 8-fluro-4H-pyrimido[2,1-b] [1,3]benzothiazole-4-ones, substituted 7-methyl-4H-isoxazolo[2,3-a]pyrimidin-4-ones, and substituted 2-methyl-5,6,7,8-tetrahydro-9H-isoxazolo[2,3-a]pyridopyrimidin-9-ones, compounds I–VII, have been prepared for possible use in medicinal application. The preparation followed condensation of ß-keto esters with 2-aminopyridine derivatives, in the presence of polyphosphoric acid. The same technique has also been used to prepare diazepine compounds, VIII–X, by condensation of a γ-keto ester with 2-aminopyridine derivatives. Details of synthetic procedures are shown. The new compounds have been characterized by elemental analysis, GC–MS, FT-IR and NMR spectrometry. Bioactivity of these compounds has been investigated.

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