SYNTHESIS, REACTIONS AND SPECTRAL CHARACTERIZATION OF NOVEL THIENOPYRAZOLE DERIVATIVES

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Abstract:

4-Amino-3-methyl-1-phenyl-1H-thieno[2,3-c]pyrazole-5-carboxamide has been synthesized by an innovative method. The aminoamide derivative was gently refluxed with chloroacetyl chloride under neat conditions followed by neutralization with sodium carbonate solution to afford the chloromethyl pyrimidinone compound. The chloromethyl pyrimidinone derivative was converted to the thiol derivative by the reaction with thiourea in ethanol. The thiol compound was alkylated with α-halocompounds such as ethyl chloroacetate, chloroacetone, phenacyl bromide and 2-chloro-4,6-dimethylnicotinonitrile to afford the corresponding S-alkylated compounds. The chemical structures of the newly synthesized compounds were elucidated on the basis of elemental and spectral analyses containing FT-IR, 1H-NMR, and mass spectroscopy.

Keywords:

Thienopyrazole Thienopyrimidinone dimethylnicotinonitrile chloromethyl pyrimidinone aminoamide

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