

Studies, Synthesis and Antimicrobial Activity of 6-Methyl-4-(3-Phenyl-Pyridine-4-Yl-Methanone-1-H-Pyrazol)-2-Thio-N-Substituted Phenyl Pyrimide-5-Carboxamide.

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ABSTRACT

Pyrimidine derivatives are most useful compounds among all the heterocyclic compounds for medicines and other various applications. Some newer pyrimidine derivatives eg. 6-methyl-4-(3-phenyl-pyridin-4-yl-methanone-1-H-pyrazol)-2-thio-N-substituted phenyl pyrimide-5-carboxamide (III a-j) have been synthesized by one pot synthesis from 3-phenyl-1-(pyridin-4-ylcarbonyl)-1-H-pyrazole-4-carbaldehyde, substituted aceto- acetanilide and urea/thiourea in acidic medium. The reactions were carried out based on well known name reaction Biginelli reaction (Aldehyde, diketo compound and urea/ thiourea). The synthesized compounds (III a-j) have been purified by column chromatography and characterized by spectroscopic technique like IR, ¹H NMR and mass spectroscopy. Preparation methods for preparation of newer aldehyde 3-phenyl-1-(pyridin-4-ylcarbonyl)-1H-pyrazole-4-carbaldehyde newer dihydropyridine derivatives (III a-j) and Solvent system/ methods for the column chromatography have been discussed in this paper with physical properties of compounds compounds (III a-j) .