

Synthesis and Antimicrobial Activity of Some New 5-Arylazothiazole, Pyrazolo[1,5-a]pyrimidine, [1,2,4]triazolo[4,3-a]pyrimidine and Pyrimido[1,2-a]benzimidazole Derivatives Containing the thiazole Moiety

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Abstract

1-(2-(4,5-Dihydro-3-(4-methyl-2-phenylthiazol-5-yl)-5-phenylpyrazol-1-yl)-4-substituted thiazol-5-yl)-2-phenyldiazene were synthesized from hydrazonoyl halides and 3-(4-methyl-2-phenyl-1,3-thiazol-5-yl)-5-phenyl-4,5-dihydro-1*H*-pyrazole-1-carbothioamide in ethanolic triethylamine. Also, pyrazolo[5,1-a]pyrimidines, 2,3,6-trisubstituted pyridines, and pyrazolo[3,4-d]pyridazines were obtained from sodium salt of 3-hydroxy-1-(4-methyl-2-phenylthiazol-5-yl)prop-2-en-1-one and different heterocyclic amines. All structures of the newly synthesized compounds were elucidated by elemental analysis, spectral data, and alternative synthetic route whenever possible. The newly synthesized compounds were tested towards different microorganisms.

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