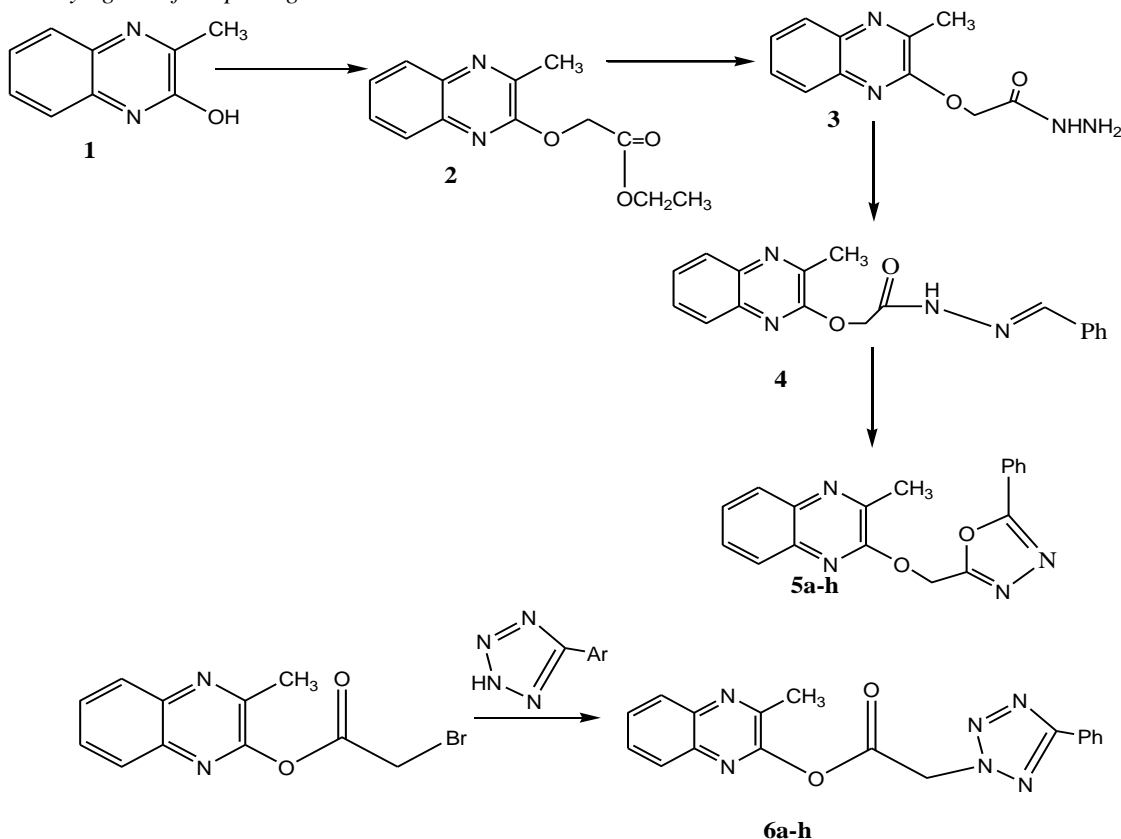


A New Facile and Efficient Synthesis of 2-((5-aryl-1, 3, 4-oxadiazol-2-yl) methoxy)-3-methyl quinoxaline and 2-methyl-quinoxaline-3yl-5 aryl-2H-tetrazole-2-carboxylate Derivatives

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Abstract: Tetrazoles are heterocyclic compounds containing five-membered ring of four nitrogen and one carbon atom. Due to the presence of four nitrogen atoms, it shows acidic nature. They undergo electrophilic as well as nucleophilic substitution reactions. They act as pharmacophore for the carboxylate group, which increases their utility. Tetrazoles are Angiotensin-II blockers. Tetrazoles and its derivatives show antibacterial, antiviral, antituberculous, and antifungal activity. Taking into account the importance of quinoxalines, tetrazoles and 1, 3, 4 oxadiazoles to both medicinal and heterocyclic chemistry, 2-((5-aryl-1, 3, 4-oxadiazol-2-yl) methoxy)-3-methyl quinoxaline and 2-methyl-quinoxaline-3yl-5 aryl-2H-tetrazole-2-carboxylate derivatives are synthesized from *N*-Arylidene-2-((3-methylquinoxalin-2-yl)oxy) acetohydrazide. The structures of the synthesized compounds were confirmed by ¹H NMR, ¹³C NMR and Mass spectral data. They have been screened for their antibacterial activity against four pathogenic strains.



Keywords: Synthesis, Tetrazoles, acidic nature