



Journal of Applicable Chemistry

2014, 3 (4): 1432-1439





Synthesis and Antibacterial Activity of Novel Quinoxaline-5-Carboxamide Derivatives

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Accepted on 3rd June 2014

ABSTRACT

Quinoxaline-based molecules have been disclosed as the antibacterial and antiprotozoal properties. The present paper describes the synthesis and antibacterial activity of sixteen new quinoxaline-5-carboxamide derivatives (5a-5p) from commercially available methyl 2, 3-diamino benzoate as staring material. The quinoxaline carboxamides (5a-5p) have been screened against four bacterial strains such Escherichia coli, Pseudomonas aeruginosa, Staphylococcus aureus and Streptococcus pyogenes. In general, it is observed that within the quinoxaline-5-carboxamides 5a-5p, compounds incorporated with Fluoro substituent phenyl groups, cyclic and aliphatic chain exhibited excellent antibacterial activity while the remaining compounds displayed moderate antibacterial activity.

Keywords: Quinoxaline-5-carboxamide, Synthesis, Antibacterial activity.

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