



Synthesis and Antibacterial Activity of Some Novel Hydrazone Derivatives of Anacardic acid Linked with 1, 4-Disubstituted 1,2,3-Triazole Ring.

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Accepted on 14th July 2016

ABSTRACT

The synthesis of the hydrazone derivatives was accomplished in five steps from anacardic acid (as starting material) utilizing greener solvents/green reagents. Some of the highlights of the synthesis involves (i) methylation reaction using dimethyl carbonate as greener reagent (ii) mild bromination reaction utilizing TCT /DMF complex / NaBr (iii) one pot click reaction using ionic liquid (iv) synthesis of hydrazone derivatives under solvent free conditions. The structures of newly synthesized derivatives **7a-g** were determined by spectroscopic techniques like ¹H NMR, mass and IR spectral data. Antibacterial activity screening results revealed that hydrazone derivatives **7a**, **7b** and **7e** with R = 4-OMe, 3, 4, 5-OMe and 2,5-F exhibited good antibacterial activity against Gram positive (viz., *S.aureus* and *B. subtilus*) and Gram negative strains (viz., *E.Coli* and *P.Aeruginosa*).

Keywords: Anacardic acid, Click reaction, Green conditions, 1, 2, 3-Triazole ring, Antibacterial activity.
