



ChemTech

International Journal of ChemTech Research

CODEN (USA): IJCRGG, ISSN: 0974-4290, ISSN(Online):2455-9555
Vol.10 No.9, pp 83-92, 2017

Synthesis, characterization and anti microbial screening of novel 1*H*-2,4-triazole 2,4,5-tri aryl imidazole derivatives

Samraj Sridharan*¹, Natarajan Sabarinathan¹,
Susaimanickam Arul Antony²

¹Department of Synthetic chemistry, R&D Orchid Chemicals and Pharmaceutical Ltd, Sozhanganallur, Chennai 600 119, India.

²PG & Research Department of Chemistry, Presidency college, Chennai 600 005, India

Abstract : A multi component synthesis of novel desired 1*H*-2,4 triazole triphenyl imidazole is described. Cyclization of benzil with appropriate aromatic aldehydes in the presence of ammonium acetate and amino triazole yields 1*H*-2,4 triazole 2-substituted phenyl - 4,5-diphenyl imidazole afforded the title compounds. The newly synthesised compounds have been established on the basis of their physical and spectral data. All the newly synthesised heterocycles have been screened for antimicrobial activities. Among all the synthesized compounds, the compound IA-12 exhibited better anti-microbial activity against bacterial strains *Staphylococcus aureus*, *Pseudomonas aeruginosa* and fungal strain *Candida albicans*.

Keywords : 1*H*-2,4 triazole 2,4,5-trisubstituted imidazoles, Multi-component reactions, *In vitro* antimicrobial activity.

Samraj Sridharan *et al* /International Journal of ChemTech Research, 2017,10(9): 83-92.
