

N,1-diphenyl-4,5-dihydro-1H-1,2,4-triazol-3-Amine Derivatives: Synthesis, Characterization & in-vitro Antimicrobial-antioxidant Studies

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Abstract—A new series of 1,2,4-Triazole was designed, synthesized and characterized as remarkable antimicrobial and antioxidant agents. The triazoles 4(a-k) were synthesized from the cyclization reaction of Schiff bases 3(a-k) with phenyl hydrazine under the KOH/EtOH medium. The intermediates 3(a-k) were prepared by the condensation reactions of 2(a-k) with N-phenylurea using methanol as the solvent under the acidic medium. The structures of the intermediates 3(a-k) and final heterocycles 4(a-k) have been fully characterized through their spectral parameters.