Click Chemistry Approach: Regioselective One-pot Synthesis of Some New 8-Trifluoromethylquinoline Based 1,2,3-Triazoles as Potent Antimicrobial Agents

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ABSTRACT
Three series of 8-trifluoromethylquinoline based 1,2,3-triazoles derivatives (5\(^a\)–c, 6\(^a\)–d and 7\(^a\)–c) were synthesized by multi-step reactions by click chemistry approach. Synthesized compounds were characterized by spectral studies and X-ray analysis. The final compounds were screened for their in-vitro antimicrobial activity by well plate method (zone of inhibition). Compounds 5\(^c\), 6\(^b\), 8\(^b\), 11 and 12 were found to be active against tested microbial strains. The results are summarized in Tables 5 and 6.

KEYWORDS: 8-Trifluoromethylquinoline; 1,2,3-Triazole; Click chemistry; Suzuki coupling; Antimicrobial activity

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