



**Synthesis and Antibacterial Activity of Novel
N-Alkylbenzoxazol-2-ones Derivatives**

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Accepted on 16th February 2016

ABSTRACT

The synthesis of N-Alkylbenzoxazol-2-ones derivatives 4a-j was prepared in three steps from commercially available 2-amino-phenol 1. The structures of these compounds were established on the basis of the spectroscopic techniques like ¹H NMR, mass and IR data. Compounds 4a-j were screened in-vitro at a concentration of 100 µg/mL for antibacterial activity against two Gram-positive (Staphylococcus aureus and Staphylococcus pyogenes) and two Gram-negative strains (Escherichia coli and Pseudomonas aeruginosa) with reference to the standard drug ciprofloxacin (100 µg/disc). Compounds 4f and 4g exhibited excellent activity and the compounds 4a, 4b, 4c, 4i and 4j showed good antibacterial activity while the compounds 4d and 4e showed moderate antibacterial activity.

Keywords: Synthesis, 2-amino-phenol, N-alkylbenzoxazol-2-ones, Antibacterial activity.
