



**Greener and Efficient Synthesis of Some Novel substituted Azitidinones With 4-Amino Pyridine via Heterogenous catalyst**

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**ABSTRACT**

*A new series of (3-chloro-2-oxo-4-substituted-Aryl-N-pyridine-4-yl-azetidinone)  $\beta$ -lactams (3a-3j) were synthesized via heterogeneous catalysed reaction between 4-amino-pyridine and substituted aromatic benzaldehyde as a starting material by conventional method in two steps. All the synthesized compounds (3a-3j) were screened for their antibacterial and antifungal activities against some selected bacteria and fungi. The structure of all the synthesized compounds were confirmed by chemical and spectral analysis such as IR, <sup>1</sup>H NMR, <sup>13</sup>C NMR and FAB-Mass.*

**Keywords:** Heterogeneous catalyst, Conventional green Synthesis, 4-Aminopyridine, Azitidinone, Antimicrobial.

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