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Synthesis and Antimicrobial Activities of Novel 6-Benzyloxy-7-Methoxyquinazolin-4(3h)-Ones

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ABSTRACT

Novel 6-benzyloxy-7- methoxyquinazolin-4(3H)-ones (8a-j) synthesized from 4-(benzyloxy)-5-methoxy-2-nitrobenzamide (6) using tin chloride, where in reduction followed by cyclization took place in methanol. 4-benzyloxy-5-methoxy-2-nitrobenzamide (6) prepared from 4-benzyloxy-5-methoxy-2-nitrobenzoic acid (5) in the presence of Tetrahydrofuran- water combination and sodium hydroxide. All the synthesized compounds were characterized basing on their spectral and analytical data. These molecules synthesized were tested for their antimicrobial activities in two Gram-positive bacteria (Staphylococcus aureus, Bacillus subtillis) and two Gram-negative bacteria (Echerichia coli and Pseudomonas aeuroginosa), two fungi (Aspergillus Niger and Aspergillus fumigatus) strains using Cup plate method.

Keywords: Antimicrobial activity, 4-benzyloxy-5-methoxy-2-nitrobenzamide, tin chloride, aliphatic aldehydes.