



## **A Facile Synthesis of Piperazine Derivatives and their Pharmacological Profile**

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### **ABSTRACT**

*Some new (2-tert-butylpyrimidin-5-yl)[4-(substituted-2-ylcarbonyl)piperazin-1-yl]methanones **4a-g** and (2-tert-butylpyrimidin-5-yl)[4-(5-substituted-1,3-benzoxazol-2-yl)piperazin-1-yl]methanones **5a-c** has been synthesized using piperazine containing 2-tert-butylpyrimidine as core moiety with different heterocyclic carboxylic acids and 5-substituted-2-(methylsulfanyl)-1,3-benzoxazoles. The newly synthesized compounds were characterized by spectroscopic evidences such as IR, <sup>1</sup>H NMR, mass spectrum and CHN elemental analysis. Preliminary pharmacological observations revealed that some of the derivatives shown promising in vitro antibacterial and anthelmintic activity.*

**Keywords:** Piperazine, pyrimidine, furan, thiophene, HATU, antibacterial activity, anthelmintic activity.

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