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Synthesis, Characterization, Biological Activity of 5-Bromo-benzofuran-2-carboxylic acid (Substituted-benzylidene)-hydrazides and their Derivatives

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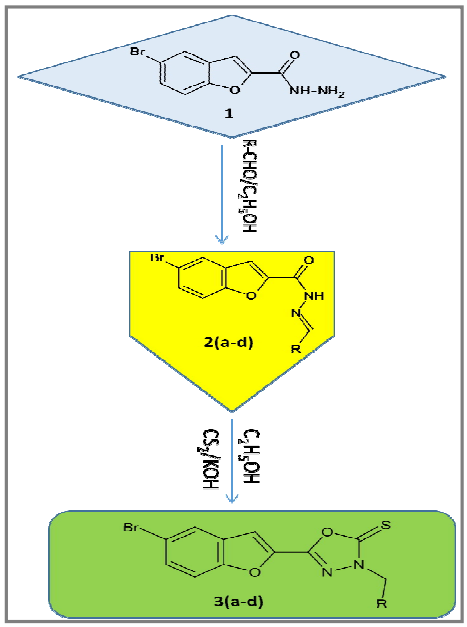
ABSTRACT

*In continuation of our research work in the laboratory, we have synthesized new 5-Bromo benzofuranyl Schiff bases and their derivatives. The previously synthesized key compound 5-Bromo -benzofuran-2-carboxylic acid hydrazide **1** was treated with benzaldehyde/substituted benzaldehyde in ethanol to get 5-Bromo-benzofuran-2-carboxylic acid (substituted-benzylidene)-hydrazides **2(a-d)**, these newly formed Schiff bases were treated with potassium hydroxide and carbon disulphide in ethanol to form various respective 3-(Substituted-benzyl)-5-(5-Bromo-benzofuran-2-yl)-3H-[1,3,4]oxadiazole-2-thiones **3(a-d)**. The newly formed compounds were in agreement with the spectral and analytical data and screened for their biological activity.*

Graphical Abstract



Keywords: Benzofuran,benzylidene, Oxadiazole, Thiones, Biological activity.