



## Synthesis, Characterization and Antimicrobial Screening of 5-Bromo-Benzofuranyl Aryl Triazoles

H. M. Naveena Kumari<sup>1</sup>, Manjunatha Harihara Mathada<sup>1</sup>,  
Shivakumar Hugar<sup>2</sup> and K. M. Basavaraja<sup>1\*</sup>

1. Department of Chemistry/Industrial Chemistry, Vijayanagara  
Sri Krishnadevaraya University, Ballari-583105, **INDIA**

2. BLDE College, Bijapur, **INDIA**

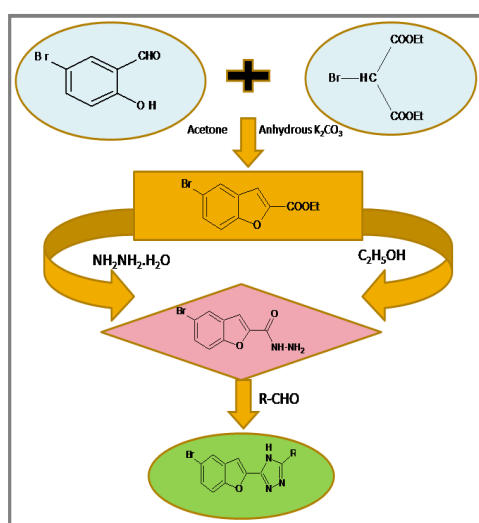
Email: [hm.naveenakumari@gmail.com](mailto:hm.naveenakumari@gmail.com), [kmbasavaraja@gmail.com](mailto:kmbasavaraja@gmail.com)

Accepted on 21<sup>st</sup> June, 2019

### ABSTRACT

The key intermediate 5-bromosalicylaldehyde was prepared by brominating salicylaldehyde. The benzofuran ring was constructed by treating 5-bromosalicylaldehyde with diethylbromomalonate in the presence of anhydrous acetone and anhydrous potassium carbonate to obtain 2-ethyl-5-bromo benzofuran carboxylate (**1**). The obtained ester (**1**) was converted into corresponding hydrazide (**2**) by treating with hydrazine hydrate, which was then converted into bezofuranyl aryl triazoles (**3**). All the compounds synthesized during the present investigation were in agreement with the assigned structure, which were supported by spectral and analytical data. The compounds synthesized were screened for their anti bacterial and antifungal activity, some of them have shown appreciable activity.

### Graphical Abstract



**Keywords:** Benzofuran, Triazoles, Antibacterial, Antifungal activity.