



## A Comparative Analysis of the Biocidal Activity of Benzothiazole Incorporated Aromatics

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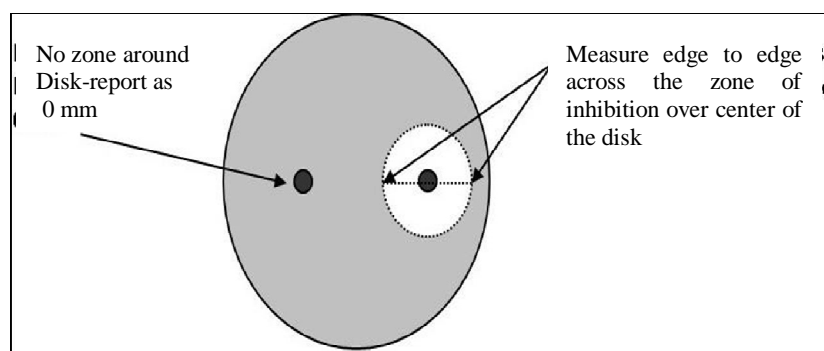
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### ABSTRACT

Heterocyclic chemistry deals with the innovation of inexhaustible source of co-ordination complexes and pharmaceuticals that are found to be promising for future researchers. In the current scenario, compounds are more promising as they are improved versions of previously reported aromatics. But all that matters is the coordinating behavior between the ligands and the metal ion because of which the prominent activities are pronounced. To study the same, in this thematic issue we synthesize heterocyclic complexes of N/S donor ligands (prominently a Benzothiazole moiety). Aromatic heterocycles that bear Nitrogen, Sulphur and Thiazole moiety as a core structure shows biologically interesting activities. The myriad spectrum of antimicrobial and biocidal properties of this trio - combination encourages the chemists to synthesize the novel versions of these therapeutic agents as they exhibits a significant wide range of anti-tumor, antimicrobial, anti-diabetic, anti-inflammatory, anticonvulsant, antiviral, antioxidant, anti-tubercular, anti-malarial, anti-asthmatic, anti-helminthic, photosensitizing, anti-diabetic, diuretic, analgesic and other activities. In this thematic issue, we have synthesized the vacillating versions of Benzothiazole moiety by variation with respect to fatty acid used. Their antimicrobial activities were evaluated and analyzed.

### Graphical Abstract:



Schematic representation for measuring the Zone of Inhibition

**Keywords:** Benzothiazole, Heterocycles, Aromatics, Antimicrobial, Biocidal.