

Review on the synthesis of thiourea-triazine hybrid derivatives and its applications primarily in biological context



Abstract

Thiourea and triazine are heteroatom scaffolds that have been intensively employed for structural modification, particularly in the development of new drugs and the exploration of new applications. Recent advances have initiated the concept of merging these two moieties, maximizing the potential and enhancing the properties. This review is a comprehensive compilation highlighting the various synthesis pathways of the compound comprised of both thiourea and triazine scaffolds expressed in the form of fused triazinethione as well as *mono-*, *bis-*, and *tris-* thiourea-triazine structures. The produced compounds indefinitely showed the potential to be applied to various fields and industries. While this compilation majorly highlighted the biological capabilities of the thiourea-triazine compounds, a glimpse of other material chemistry applications was also included on the basis of the respective compound as documented by precedent literature. Therefore, this review is significant for structural modification in the field of synthetic chemistry for intended applications.

Graphical Abstract



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Q Keywords: Triazinethione heterocyclic fused structure heteroatoms thiourea

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