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## Green synthesis of Novel 2,4,6-Tri S[(5-Substituted)-2,4-Dithio Biureto] -1,3,5-Triazines

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## ABSTRACT

Recently in this laboratory a new route for the synthesis of 2,4,6-tris[(5-substituted)-2,4-dithiobiureto]-1,3,5-triazines was developed to increase the yield of products by maintaining the purity of them and at the same time, the time span required for the completion of reactions was also decreases. These are ecofriendly reactions. Novel green synthesis of 2,4,6-tris[(5-substituted)-2,4-dithiobiureto]-1,3,5-triazines (Va-e) was successfullycarriedoutbyinteracting2,4,6-tris[substitutedthiocarbamido]-1,3,5-triazines (IIIae) with various isothiocynates in 1:3 molar ratio in ethanol-acetone medium. Firstly cyanuryl chloride (I) was treated with various thiourea (IIa-e) in 1:3 molar ratio in ethanol-acetone medium for the isolation of (IIIa-e). During the synthesis two parameters of green chemistry are maintained. The justification and identification of the structure of these newly synthesized compounds had been established on the basis of chemical characteristics, elemental analysis and through spectral data.

Keywords: Green synthesis, cyanuryl chloride, 1,3,5-triazine, acetone-ethanol.