Efficient Synthesis of Benzothiazolyl Thioureas Based Thiazoline Heterocycles

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Abstract : 2-Aminobenzothiazoles are highly biologically active compounds, as many important applications are associated with this nucleus. They serve as precursors for the synthesis of thioureas. Benzothiazolyl thioureas are exceptionally versatile building blocks towards the synthesis of a wide variety of heterocyclic systems, which also possess extensive range of bioactivities. These thioureas were converted into five-membered heterocycles with imino moiety like N-[3-(2-Benzothiazolyl)-4-methylthiazol-2(3H)-ylidene] benzamides by base-catalyzed cyclization of corresponding thioureas with 2-bromoacetone and triethylamine in good yields.

Keywords : N-[3-(2-Benzothiazolyl)-4-methylthiazol-2(3H)-ylidene]benzamides, 1-(substitutedbenzo[d] thiazol-2-yl)-3-aroylthioureas, 2-aminobenzothiazoles, antibacterial activities

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