Synthesis of some novel 1,3,4-thiadiazine containing tetrazolonucleus

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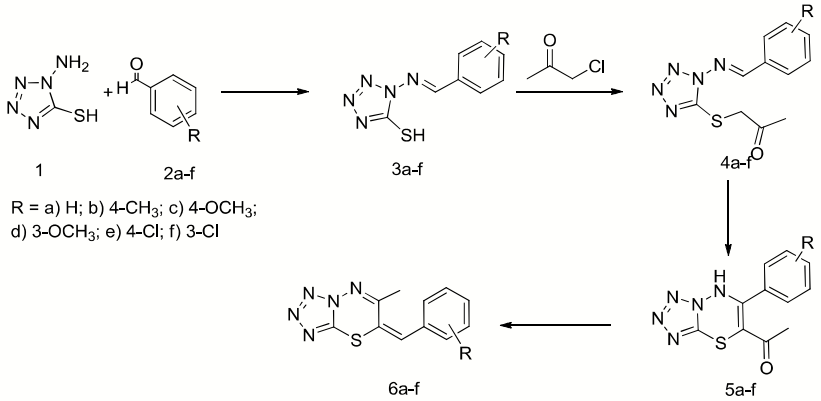
1,3,4-Thiadiazines represent the most widely studied class of compounds among the six theoretically possible thiadiazine isomers; they are of interest in a chemical sense because they are labile compounds which are capable of undergoing intramolecular rearrangements to give thiazole and pyrazole derivatives. Moreover, 1,3,4-thiadiazinesexhibit a broad spectrum of biological activity[1].In addition, tetrazole derivatives have been attracting attention due to their diverse pharmacological properties. For example, Angiotensin II receptor blockers such as losartan[2] and candesartan[3], contain tetrazole ring.In this study we described the synthesis of six novel Tetrazolo[5,1-b][1,3,4]Thiadiazines**(5a–f)** and **(6a-f)** wherein the biologically active 1,3,4-thiadiazine moiety is fused to a potent tetrazol ring across the 2,3-positions (Scheme 1).



Scheme 1.

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