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

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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-thiadiazines exhibit a broad spectrum of biological activity. 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, 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](image)

References: