The new transformations of 3-substituted-1,2,4-triazoles

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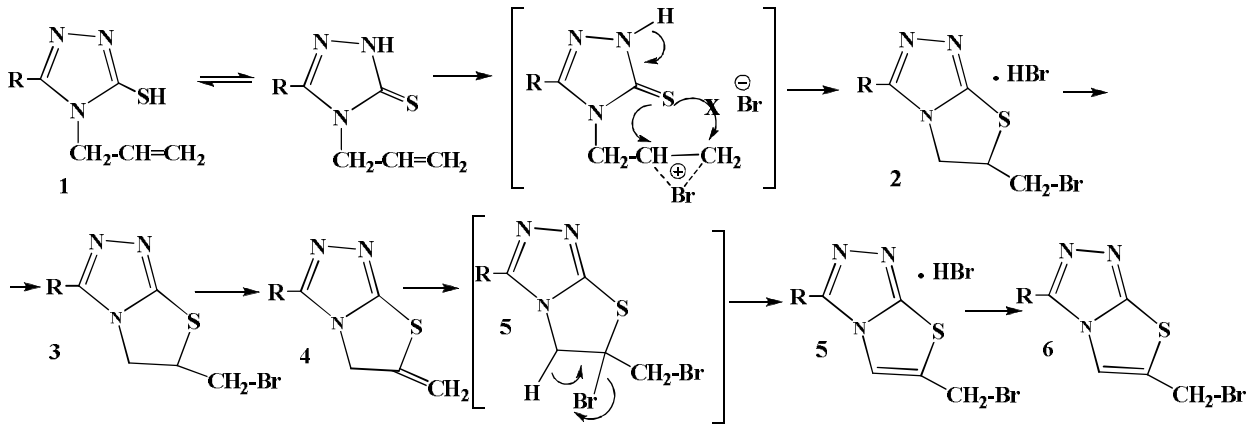
It is known that some of synthetic analogues of heterocyclic compounds widespread in animal and plant world, have shown wide range of bioactivity. In this series of particular interest are derivatives of 1,2,4-triazoles, which mainly are of synthetic origin. Some members of this class exhibit hypotensive effect [1] exhibit antitumor [2], fungicidal [3], antibacterial [4] and other types of activity. We have previously shown that the mercapto derivatives of 1,2,4-triazoles exhibit antioxidant and antiradiation activity and have a stabilizing effect on the membrane of red blood cells [5].Taking into account the fact that heterocombined 1,2,4-triazoles are the drugs acting mainly on the central nervous system (Brotizolam, Triazolam) [6] and thiazoles containing systems are used for treatment of serious infection diseases (Anabactyl, Azlin, Picillin) we intend to synthese the compounds wherein the substituted thiazole ring is condensing with triazoles. To achieve our objectives accomplished bromination of 4-allyl-3-substituted-5-mercapto-1 ,2,4-triazole **1** and found that the resulting formed 6-brommethyl-3-substituted-5,6-dihydrothiazolo[2,3-c]-1,2,4-triazoles **2**. It is shown that the dehydrobromination of compounds **2** with a 5% methanolic potassium hydroxide solution leads uniquely to 6-methylen-3-substituted -5,6-dihydrotiaziolo[2,3-c]-1,2,4-triazoles **3**. In order to obtain new derivatives of heterylcombination1,2,4-triazoles, which containing active bromine atom in allyl group we intended to brominate the compounds **3**. It has been shown that as a result of accession and simultaneous dehydrobromination obtained 6-bromomethyl-3-substituted thiazolo [2,3-c] -1,2,4-triazoles **4**, which can be used as starting compounds in a fine organic synthesis, to produce in particular an optically active nonprotein α-amino acids.



R = Pr, C_6H_5, p-Br-C_6H_4, o-Cl-C_6H_4, C_5H_5N,

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