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Abstract
Some of the new 1,2,4-triazolothiadiazole derivatives (2-9) have been synthesized starting from the interaction between 4-amino-3-(pyrid-4yl)-5- mercapto-1,2,4-triazole(1) and α, α,β-, bifunctional compounds, such as tri ethylphosphite, trifluoroacetamide, cyanamide, isolthiocyante, carbon disulfide and/or fluorinated aromatic aldehydes in different conditions. The new semi-drugs 5-substituted amino-4-amino-3-(pyrid-4y)1,2,4-triazoles(10a,10b) were also obtained from treatment of compound1 with 4-fluoroaniline and sulfadrug as sulfathiazole. Structure of the products have been established on the basis of their elemental analysis and spectral (UV, IR, 1HNAR, 13Cnmr and mass) data. The novel molecules synthesized were evaluated for their anti-inflammatory and antimicrobial behavior in comparison with Indomethacin (Anti-inflammatory), Nalidexic acid (bacteria) and Nystain (fungi) as antibiotics, Where the compounds 3,7b and 9exhibited higher activities.

Author Keywords
Fused triazolothiadiazoles; Pharmacological properties; Synthesis

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