



Journal of Applicable Chemistry

2013, 2 (2):137-142

(International Peer Reviewed Journal)



Synthesis, Characterization and Biological studies of some 3,5-diaryl-tetrahydro- N-ethoxycarbonyl-1,4-thiazine-1,1-dioxide

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Received on 20th February and finalized on 22nd February 2013.

ABSTRACT

A series of some new 3, 5-diaryl-tetrahydro-N-ethoxycarbonyl-1, 4-thiazine-1, 1-dioxides has been synthesized from their respective thiazine compounds. The structural assignments are based on their elemental and spectral data. All the synthesized compounds were preliminarily screened for their in vitro antimicrobial activity against Gram positive organisms (Bacillus subtilis, Staphylococcus aureus) and Gram negative organisms (Escherichia coli and Klebsiella pneumonia) and antifungal activity for Aspergillus niger and Aspergillus fumigatus by disc diffusion method. Among the tested compounds, 2c showed the most potent antibacterial and antifungal activities.

Keywords: 1,4-thiazine, N-ethoxycarbonyl thiazine, antibacterial and antifungal activity, acute toxicity studies.
