



Effect of New Derivatives of Isoniazid on *Mycobacterium Tuberculosis*

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ABSTRACT

Derivatives of Isoniazid with Cinnamaldehyde, Furfuraldehyde and Acetophenone were synthesized which were characterized by elemental analysis and spectral studies. Effect of newly synthesized compounds was studied against mycobacterium tuberculosis. The antibacterial behaviour of the synthesized compounds clearly reflect that 2 (1-Isonicotinyl 2-furfurylidene Hydrazone) is more potent than the compound 1 (1-Isonicotinyl 2-Cinnamylidene Hydrazone) and 3 (1-Isonicotinyl 2-Methylphenyl ketone hydrazone) and order of the antibacterial potential of resulted new derivatives is in the order 2 > 1 > 3 to inhibit the growth of Mycobacterium Tuberculosis. This work leads to new frontiers in drug industry and many more applications.

Keywords: Isoniazid, Cinnamaldehyde, Mycobacterium, Furfuraldehyde, Acetophenone, Reframpin.
