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Synthesis and Antitubercular Activity of Some *N'*-Substituted benzoyl-4-(2,5-dimethyl-1*H*-pyrrolyl) benzohydrazide Derivatives

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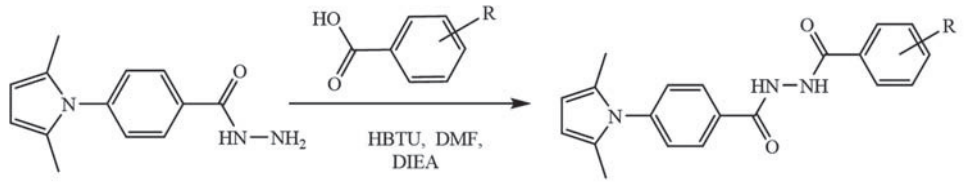
ABSTRACT Some new substituted dimethylpyrrolyl benzohydrazide derivatives have been synthesized as new antitubercular agents. Dimethylpyrrolyl benzohydrazide derivatives **4(a-j)** were synthesized by the reaction of 4-(2,5-dimethyl-1*H*-pyrrol-1-yl)benzohydrazide **(3)** with substituted benzoic acids in *N', N'*-dimethyl formamide using 2-(1*H*-benzotriazol-1-yl)-1,1,3,3-tetramethyluronium hexafluorophosphate, an amide coupling agent and *N',N'*-Diisopropylethylamine as a catalyst. All the newly synthesized compounds **4(a-j)** were screened for *in vitro* antitubercular activity against *Mycobacterium tuberculosis* $H_{37}Rv$ and compounds have exhibited significant minimum inhibitory concentration values.



KEYWORDS 4-(2,5-Dimethyl-1*H*-pyrrol-1-yl)benzohydrazides, 2-(1*H*-Benzotriazol-1-yl)-1,1,3,3-tetramethyluronium hexafluorophosphate, *N',N'*-Diisopropylethylamine, *Mycobacterium tuberculosis* $H_{37}Rv$, Antitubercular activity.