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Synthesis, and *In Vitro* Antimycobacterial Activity of Some (Z)-3-((2-((Z)-Arylideneamino) Phenyl)Imino) Isoindolin-1-One Derivatives

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SUMMARY*. The aim was to synthesize, characterize, and evaluate phthalide-containing Schiff base compounds for their potential antitubercular activity. These synthesized compounds were identified and characterized by using IR, NMR, Mass spectroscopy, and elemental analytical methods. The synthesized compounds were screened for their antimycobacterial activity against** ***Mycobacterium tuberculosis **H37Rvby** ***in-vitro*** **microplate Alamar blue assay (MABA) method. The synthesized compound (2a-2e) showed antimycobacterial activity. The result indicated that the compounds (2e & 2f) with minimal inhibitory concentrations (MIC) value of 12.5 μg/mL and these compounds containing electron-withdrawing groups (Cl & NO_2) were more active than compounds (2a-2d) with MIC value of 25 μg/mL containing electron releasing groups (H, OCH_3, OH, CH_3). All the compounds exhibited less antimycobacterialactivity than reference drugs (Pyrazinamide 3.125 μg/mL, Streptomycin 6.25 μg/mL, and Ciprofloxacin 3.125 μg/mL.**

RESUMEN. El ojetivo fue sintetizar, caracterizar y evaluar compuestos de base de Schiff que contienen ftalida por su potencial actividad antituberculosa. Estos compuestos sintetizados se identificaron y caracterizaron mediante el uso de IR, RMN, espectroscopia de masas y métodos analíticos elementales. Los compuestos sintetizados se analizaron para determinar su actividad antimicobacteriana contra *Mycobacterium tuberculosis* H37Rv mediante el método de ensayo de azul de Alamar (MABA) en microplaca in vitro. El compuesto sintetizado (2a-2e) mostró actividad antimicobacteriana. El resultado indicó que los compuestos (2e y 2f) con un valor de concentraciones inhibidoras mínimas (MIC) de 12,5 μg/mL y estos compuestos que contenían grupos aceptores de electrones (Cl y NO_2) eran más activos que los compuestos (2a-2d) con un valor de MIC de 25 μg. /mL que contiene grupos liberadores de electrones (H, OCH^3, OH, CH^3). Todos los compuestos mostraron menos actividad antimicobacteriana que los fármacos de referencia (pirazinamida 3,125 μg/mL, estreptomicina 6,25 μg/mLy ciprofloxacina 3,125 μg/mL).

KEYWORDS: antitubercular activity, *Mycobacterium tuberculosis*, phthalimide derivatives, Schiff base.

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