Synthesis of Isomeric Substituted 6-acetyl-3-benzoylindolizine-1-carboxylate and 8-acetyl-3-benzoylindolizine-1-carboxylate from substituted 3-acetyl pyridinium bromides and their antimicrobial activity

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ABSTRACT
A series of substituted 6-acetyl-3-benzoylindolizine-1-carboxylates (2a-l) and 8-acetyl-3-benzoylindolizine-1-carboxylate (3a-l) from substituted 3-acetyl pyridinium bromides (1a-f) using 1,3-dipolar cycloaddition methods with electron withdrawing Alkynes. The structures of newly synthesized compounds were characterized by analytical spectral data. The synthesized indolizine derivatives were evaluated for qualitative and quantitative antimicrobial activity. Preliminary pharmacological observations revealed that some of the derivatives shown promising in vitro antibacterial and antifungal activity.

Keywords: Indolizine, Alkynes, Antibacterial activity, Pyridinium bromides, 3-acetylpyridine.