Synthesis, Characterization and Antibacterial Activity of Some New Oxazepine compounds

Abstract

Four new 1,3-oxazepine compounds have been prepared by cycloaddition of synthesized bis-Schiff bases with maleic anhydride in toluene. The Schiff bases were prepared by the condensation of ethylene diamine with two equivalents of some aldehydes. The structure of the oxazepines were confirmed via elemental analysis,FT-IR and, 1H-NMR spectra. The compounds were screened for their antibacterial activity against gram negative bacteria (Escherichia coli) and gram positive (Staphylococcus aureus). The results showed that the examined compounds exhibited varied antibacterial activity in comparison with the standard drugs.