Synthesis and antimicrobial screening of certain substituted chalcones and isoxazolines bearing hydroxyl benzofuran

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ABSTRACT 3-Hydroxy Bezofuran Chalcones (2a-g) prepared by the reaction of 2-acetyl-3-hydroxybenzofuran(1) with different aromatic aldehydes in the presence of a strong base, cyclocondensation of 3-Hydroxy benzofuran with hydroxlaminehydrochloride resulted in the formation of various Isoxazolines bearing hydroxyl benzofuran (3a-f). The structures of all the compounds have been established on the basis of analytical and spectral data. All the compounds have screened for antibacterial, while compounds 2a,2c,3a,3b, showed only moderate activity against staphylococcus at 500 mg/ml, compounds 2d, 2f, 3d, 3e, showed promising activity against Candida albicans at 500mg/ml concentration. Keywords: Hydroxy Benzofuran Chalcones, Hydoxylaminehydrochloride, Isoxazolines, Antimicrobial activity.