Synthesis of quinazoline derivatives as potential antimicrobial agents

Mohamed S. Behalo*, Abdelmotaal Abdelmajeid*, Aly A. Aly, Kaouser A. Hebash and Enas A. Mohamed

Chemistry Department, Faculty of Science, Benha University, Benha, P. O. Box 13518. Egypt

Corresponding author: mohamed.behalo@fsc.bu.edu.eg, abdelmotall email

Abstract:

An efficient synthesis of substituted quinazoline derivatives was achieved from the reaction of 2-((1,1-dioxido-3-oxobenzo[d]isothiazol-2(3H)-yl)methyl)-4H-benzo[d][1,3] oxazin-4-one **(3)** as a reactive starting material with variety of nucleophilic reagents. The Structural formula of all derivatives were confirmed and characterized by elemental analysis and spectral data. Some of the synthesized compounds were also screened for their antibacterial and antifungal activities and compared with standard drugs. Most of the tested compounds showed potent to weak antimicrobial activities.

Keywords:

Benzoxazinone, quinazolinone, amino acids, antimicrobial activity.