ABSTRACT

A series of new diethanolamine derivatives has been synthesized and characterized by FTIR, ^{1}HNMR, ^{13}CNMR spectroscopy and evaluated their antimicrobial and antioxidant activities. All compounds have been tested for*in vitro*antibacterial activity against*Staphylococcus aureus, Escherichia coli,Micrococcus luteus, Pseudomonas aeruginosa, Bacillus subtilis,Pasteurrellamutocida,Rhizopusoryzae and Salmonella typhi*.Among the tested compounds, compounds **2a**, **2b**, **3a** and **4b** have been found to be most potent members, which inhibited most of the pathogens used in the assay. All synthesized derivatives exhibited average FRAP activity and considerably good metal chelating activity. Thermal stability of selected DEA derivativesat RT has been studied by TGA and DSC analysis.