## ABSTRACT

*Cinnamomum zeylanicum* exhibits numerous beneficial medicinal effects when tested *in vitro* as well as *in vivo*. In this work, *Cinnamomum zeylanicum* was extracted using three solvents of different polarity such as methanol, ethanol, and acetone. The phytochemical screening of these 3 extracts showed presence of constituents such as glycosides, saponins, flavonoids, tannins, terpenoids, and alkaloids were used to screen Antimicrobial activity of bark extract *Cinnamomum zeylanicum* against gram positive bacteria such as -*Streptococcus pyogenes*, *Staphylococcus aureus*, *Bacillus cereus*, and *Enterococcus faecalis* and the gram negative bacteria such as *Escherichia coli*, *Salmonella bongori*, and *Pseudomonas aeruginosa.* The acetone extract of *Cinnamomum zeylanicum* showed zones of inhibition for all bacterial strains at 1500 mg/ml concentration in comparison to methanol and ethanol extract which did not have zones of inhibition for certain strains. In DPPH and ABTS methods, methanol extract of *Cinnamomum zeylanicum* exhibited significant free radical scavenging activity. Ethanol extract exhibited highest Total Phenolic Content (TPC) 551.67 mgGAE/g compared to methanol and acetone whereas the acetone extract of *Cinnamomum zeylanicum* exhibited the highest Total Flavanoid Content (TFC) of 634.2 mgQE/g. In an anti-diabetic study, methanol extract of *Cinnamomum zeylanicum* (500 mg/kg) treated animals showed a significant anti-diabetic activity from the first week of drug administration. The individual or synergistic activity of the phytoconstituents of the plant maybe the contributing effect of the anti-diabetic activity.