

Abstract

Psidium guajava Linn leaf was extracted successively with hexane, ethylacetate and methanol another crude extract of aqueous methanol was also carried out. The extracts were tested in vitro for activity against standard strains microbes and clinical isolates. The zones of inhibition, minimum inhibitory concentration (MIC), minimum bactericidal concentration (MBC) and minimum fungicidal concentration (MFC) were determined. The in vitro antimicrobial screening revealed that the extract exhibited varying activity against different microbes with zones of inhibition ranging from 14-35mm, MIC ranging from 1.25 - 10mg/ml, and MBC/MFC of 2.5-20mg/ml for the sensitive organisms at the tested concentrations. The highest activity was an MIC of 1.25 mg/ml and MBC of 2.5mg/ml. None of the extract exhibited activity against fungi isolates except the standard strains of *Candida albicans*. The activities observed could be due to the presence of some of the secondary metabolites like, Tannins, saponins, terpenes and flavonoids which were detected and have previously been reported in the plant.

Keywords: *Psidium guajava* extracts, phytoconstituents, antimicrobial, MIC, MBC, MFC