

Abstract

Guava (*Psidium guajava*) is a famous fruit in Thailand, which its leave has been used as a traditional herb for long time. Guava leaf has been considered interesting since it is used in folk medicine as remedies for many diseases, especially diarrhea. The aim of this study was to examine the antibacterial activities of guava leaf extracts against 5 food spoilage bacteria and pathogens (*Bacillus cereus*, *Staphylococcus aureus*, *Escherichia coli*, *Listeria monocytogenes* and *Salmonella typhimurium*). Moreover, the influence of extraction was considered as types of solvents (ethanol and methanol), concentrations of solvent (50, 70 and 90%), ratio of guava leaf: solvent (1:4, 1:5 and 1:6) and concentration of guava leaf extract used (50, 75 and 100%). The antimicrobial activity was tested by using disc diffusion method. The inhibition zones were recorded in centimeters. The extracts of *P. guajava* leaves were highly inhibit against the gram-positive bacteria as *S. aureus*, *B. cereus* and *L.monocytogenes* and virtually inactive against the gram-negative bacteria as *E. coli* and *S. typhimurium*. The extraction with 70% ethanol at ratio of 1:4 showed higher antimicrobial activity, against these bacteria compared to methanol extracts and water boiling extract.