

Title Preliminary Study of Antimicrobial Activities on Mangosteen
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Abstract

To investigate medicinal properties from Thai fruit as natural antimicrobial agents, Mangosteens were selected to screen for antimicrobial activities. Fresh extracts and oil extracts of Mangosteen in this study were tested against food poisoning bacterium: *Bacillus cereus*, *Salmonella typhi* and *Staphylococcus aureus* by using Agar Diffusion Method. Screening for antimicrobial activities of Mangosteens was performed in duplication. Oil extract from the outer peel, the inner peel and flesh of mangosteen showed antimicrobial activities against *Bacillus cereus* and *Staphylococcus aureus*. Only *Salmonella typhi* showed no antimicrobial activity. In addition, it was found that mangosteen fresh extract showed no antimicrobial activities, but oil extract showed high activity. The negative control test, 95% ethanol without peel, showed no inhibitory effect on microbial activity. Potential of outer peel, inner peel, and flesh of mangosteen as antimicrobial agent have been concluded. The process development on Mangosteen waste utilization as natural drug has been suggested.