

## ABSTRACT

Antimicrobial activities of crude leaf extract of two bamboo species, *Dendrocalamus asper* and *Thyrsostachys siamensis*, obtained from different extraction conditions were examined in this research. Although the yield obtained from the two species were not significantly different, *D. backer* showed no antimicrobial effect at the concentration of 200 mg/ml or lower. *T. siamensis* showed promising activity with the optimal MIC value against *Escherichia coli*, *Salmonella spp.*, *Listeria monocytogenes*, *Staphylococcus aureus*, and *Bacillus cereus* as 83.3, 71.7, 50.0, 61.7, 50.0 mg/ml, respectively. *T. siamensis* extract was more sensitive toward gram positive-rod shape bacteria for both MICs and MBCs. Most suitable extraction condition for *T. siamensis* was at 50% ethanol and 10% sample as the best MICs for three strains of bacteria were obtained from this condition. Comparison between commercial bamboo extract product (Japanese) and *T. siamensis* extract showed significantly higher activity ( $p < 0.05$ ) in both inhibitory and bactericidal effects.

