Antibacterial activity in marine algae Eucheuma denticulatum against Staphylococcus aureus and Streptococcus pyogenes

ABSTRACT

The in vitro antibacterial activities of seaweed belong to Euchema denticulatum extract showed inhibitory activity only on gram positive organisms tested including Staphylococcus aureus and Streptococcus pyogenes, which were expressed in terms of minimum inhibitory concentration and minimum bactericidal concentration test. Thus, gram negative pathogens tested including Escherichia coli, Klebsiella pneumoniae and Pseudomonas aeruginosa showed resistant phenotypic pattern to both extracts. Results of the present study confirmed the potential use of seaweed extract as a source of antibacterial compounds.

Keyword: Seaweed; Antimicrobial resistance; Infectious disease; Disc diffusion; Minimal inhibitory concentrations; Minimal bactericidal concentrations; Malaysia