ABSTRACT

Antimicrobial effectiveness test of Avocado Leaves (Persea americana) against Streptococcus pyogenes

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Introduction: Streptococcus pyogenes is a common bacteria in development country. This bacteria could easily transferred by droplet and the patient could be carrier. Streptococcus pyogenes also could lead to some complication, such as scarlet fever, rheumatic fever, and acute glomerulonephritis. Medication against this bacteria is antibiotic such as penicillin and erythromicin, but now a day the resistance of penicillin and erythromicin are increase. Due to their virulence and resistancy, we wanted to have new antibacterial drug against Streptococcus pyogenes. We hoped Avocado Leaves (Persea americana) that evidently had antibacterial activity in Bacillus subtilis, Escherichia coli, Salmonella typhi, Staphylococcus aureus, Pseudomonas aeruginosa, and Candida albicans, could also inhibited and killed Streptococcus pyogenes.

Methods: Is an experimental laboratory research, tested in vitro using dilution method

Results: MIC (Minimum Inhibitory Concentration) in this research couldn’t be measure because of the color of the extract. MBC (Minimum Bactericidal Concentration) from extract Persea americana against Streptococcus pyogenes is 357 mg/ml. No colony grew in plate K1, T1, and T2. There was 283 in T3 and 11.20 in T4.

Conclusion: There was antibacterial activity from avocado leaves (Persea americana) against Streptococcus pyogenes.

Keywords: Streptococcus pyogenes, Persea americana, Dilution metod, MBC, MIC