
English Summary

THE INVESTIGATION ON ANTI-MUTAGENIC AND ANTIOXIDANT ACTIVITY OF *SCHIMA WALLICHII* KORT. LEAVES

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An investigation on antimutagenic and antioxidant activity of the butanol fraction of *Schima wallichii* Korth leaves has been carried out. The experiment of an *in vivo* antimutagenic activity using a micronucleus test showed that butanol fraction used orally decreased the frequency of micronucleated polychromatic cell erythrocytes (MNPCE) from the bonemarrow smears of Swiss-Webster male mice elevated by cyclophosphamide at a dose of 50 mg/kg intraperitoneally. The butanol fraction at a dose of 300 mg/kg decreased the frequency of MNPCE by 10,5% while at a dose of 600 mg/kg decreased by 38,27%.

An *in vitro* antioxidant activity using nitroblue tetrazolium (NBT) method showed that butanol fraction inhibited the reduction of NBT by superoxide generated by the xanthine oxidase system. The inhibition by butanol fraction at a concentration of 200 µg/ml was 68,66% while at a concentration of 400 µg/ml was 94,37%.

The result indicated that the butanol fraction had antimutagenic and antioxidant activities.

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djp, as, ch, s

EFFECTS OF EXPIRED AMPICILLIN PRODUCT ON THE GROWTH OF *E. COLI* IN VITRO

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The purpose of the study is to determine the correlation between the length of expiration date of ampicillin products and the potency to inhibit *E. coli* growth, compared to the standard ampicillin.

Using dilution method, Minimal Inhibition Concentration (MIC) and Minimal Bactericidal Concentration (MBC) of several different expired ampicillin products against *E. coli* are determined.

The results indicate that MIC and MBC of the expired ampicillins are lower than the standard ampicillin. The longer the expiration date of ampicillin have been passed the smaller the potential against the growth of *E. coli*.

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rh, sr, ko

RESISTANCE OF *M. TUBERCULOSIS* TO THE PURE AND THE GENERIC ANTITUBERCULOSIS DRUGS IN THE DEPARTMENT OF CLINICAL PATHOLOGY, FACULTY OF MEDICINE PADJADJARAN UNIVERSITY/ DR. HASAN SADIKIN GENERAL HOSPITAL, BANDUNG

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The inappropriate treatment of tuberculosis may result in drug resistance that is more difficult to treat. Proper treatment should be based on susceptibility test; but this test is not easily performed and also expensive. So it is necessary to find cheaper and easier obtainable reagent and method.

A comparative study on the susceptibility test on 50 isolated of *M. tuberculosis* using pure and generic antituberculosis drugs as media was carried out in the Department of Clinical Pathology, Faculty of Medicine, Padjadjaran University/ Hasan Sadikin General Hospital.

This study revealed that the result was not significantly different ($p > 0,05$) and both methods have a 100% accuracy.

Generic antituberculosis drugs can be used for the susceptibility test of *M. tuberculosis*.

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hs, is, ms, ips

