ABSTRACT

THE ANTI-TELOMERASE EFFECT OF ALKALOID FRACTION OF JARONG (ACHYRANTHES ASPERA LINN) ON MITOTIC ON MYELOMA CELL MICE AS ANTICANCER DRUG

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The aims of this study is to know the effect of alkaloid fraction of Achyranthes Aspera Linn leaves as a anticancer drug by in vitro treatment of myeloma cell mice.

The sample used in this study was myeloma cell mice type P3U1 that divided into three groups which contain of Rosewell Park Memorial Institut (RPMI) 1640, Foetal Bovine Serum (FBS) 10%, and myeloma cell 0,8 ml. The first group that use as a positive control was added with colchicine 100 RPM, where as the second group as a negative control was added with RPMI 1640 and Dimethyl Sulfoxida(DMSO) in three dilution. The third group on treatment group which was also added with DMSO 10%, was devided into four group, each was added with Achyranthes Aspera Linn in the concentration of 1 ppm, 10 ppm, 100 ppm, and 1000 ppm. The sample than was incubated for twenty four hours at 37°C with the concentration of oxygen 95% and carbon monoxide 5%. The chromosome was than stained using Giemsa solution to determine the cleavage phage, and analyse by light microscope in 100x and 400x enlargement, covered with cover glass gived cananda balsam.

The analysis used in this study was one way ANOVA. The result of this study showed that there was a significance differentiation (p<0,05) between control groups and treatment group. Alkaloid fraction of Achyranthes Aspera Linn has an effect to inhibit as an anticancer drug by inhibition the cleavage of the chromosome at metaphase.

Keywords: Achyranthes Aspera Linn, alkaloid, myeloma cell, mitotic, metaphase