

COMPARATIVE STUDY ON THE ANTI-TUMOR EFFECT OF Vitis vinifera (GRAPES) AND Morus spp. (MULBERRY) **CRUDE EXTRACTS ON SKIN TUMOR-INDUCED ALBINO MICE**



In Partial Fulfilment of the Requirements for the Degree of Bachelor of Science Major in Human Biology

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March 2012

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ABSTRACT

The anti-tumor effect of Vitis vinifera (Grapes) and of morus spp. (Mulberry) crude extracts on skin tumor-induced albino mice was the focus of the study. The study aimed to determine which crude extracts had the highest potential in inhibiting cancer proliferation. Crude extracts of grapes and mulberries were extracted using rotary evaporation and were divided into three different concentrations: 50%, 75% and 100%. In six week's time, induction of tumor was done by the use of carcinogenic chemicals such as benzene as the initiator, cyclohexanone and chloroform as the promoters through brushing method. Histopathological analysis was conducted to verify the growth of tumor that was induced. Negative control group treated with only carcinogenic chemicals showed indications of tumor proliferation after the histopathological interpretation and tumor growth criteria were established: loss of basal polarity, sebaceous gland hyperplasia, interstitial edema, fibrosis and modules. Administration of treatment was done in one week's time by the same brushing method. All three concentrations under grapes crude extracts were able to inhibit three out of the five criteria of tumor growth; while in mulberry crude extracts, only the 100% concentrations elicited the highest inhibitory potential. Thus, grapes crude extracts are more effective than the mulberry crude extracts in terms of inhibitory potential.

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