

ANTICANCER PROPERTIES IN EXTRACT AND ETHYL ACETATE FRACTION OF *ACALYPHA INDICA* LINN. IN LNCAP PROSTATE CANCER CELL LINE

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ABSTRACT

Cancer prevalence has developed significantly and caused more than 7 million deaths in worldwide. Among all cancer disease, prostate cancer has a high prevalence and therefore novel cancer drug was urgently needed and currently become the target of cancer research. In Indonesia, *Acalypha indica* Linn. empirically use as traditional medicine and believes has toxic effect, antibacterial, and antioxidant properties. Hence, in this study we investigated the anticancer potential properties of *Acalypha indica* Linn. *A. indica* herbs were extracted using ethanol and fractionated using ethyl acetate, *n*-hexane, and water. The anticancer activity of extract and fractions of *A. indica* was investigated by MTT assay in prostate cancer cell line (LNCaP). Extract of *A. indica* showed inhibition in LNCaP cell proliferation after 24 hour treatment. Moreover, ethyl acetate fraction observed as the most active fraction then *n*-hexane and water fractions. Result of this study showed that *A. indica* has potential as an anticancer and further investigation is needed.

Keywords: Cell proliferation, MTT, *Acalypha indica*, anticancer, LNCaP, Indonesia.

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