



**PENGARUH SUPLEMENTASI EKSTRAK DAUN *ANNONA MURICATA* TERHADAP DERAJAT PREMALIGNANSI KANKER HATI TIKUS *SPRAGUE DAWLEY* YANG DIINDUKSI *7,12-DIMETHYLBENZ( $\alpha$ )ANTHRACENE***

*THE EFFECT OF ANNONA MURICATA LEAVES EXTRACT SUPPLEMENTATION ON THE DEGREE OF LIVER CANCER PREMALIGNANCY OF SPRAGUE DAWLEY RATS INDUCED BY 7,12-DIMETHYLBENZ( $\alpha$ )ANTHRACENE*

**LAPORAN AKHIR HASIL PENELITIAN  
KARYA TULIS ILMIAH**

**Disusun untuk memenuhi sebagian persyaratan  
guna mencapai gelar sarjana strata-1 kedokteran umum**

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*The effect of Annona muricata leaf extract supplement towards the premalignancy degree of Sprague Dawley rats liver cancer induced with 7,12 dimethylbenz(a)anthracene*

**ABSTRACT**

**Background:** *the liver cancer rank as the fifth most common cancer and approximately 694.000 deaths caused by liver cancer, so that liver cancer ranks third in the world as a cause of death. 7,12 DMBA can be used to induce liver cancer in rats. Annona muricata is one of the traditional crops that are cytotoxicity against some types of cancer cells and has been widely used as anticancer. This study aims to look at the effect of Annona muricata leaf extract supplements against the premalignancy degree of rat liver cancer induced with 7,12 DMBA.*

**Method:** *Experimental research using post test only with control group design was carried out ten strains of Sprague Dawley rats which were divide into two groups. Group 1 and group 2 were given intra gastric 7,12 DMBA twice a week with dose of 20 mg/kgBW for 5 weeks. Group 2, after induction is completed, were given Annona muricata leaf extract dose of 200 mg/kgBW through a gastricsonde every day for 8 weeks. At the end of the treatment, liver tissue retrieval was performed and histopathologic preparations were made and then the microscopic evaluation was performed on the histopathological picture of the liver tissue. Results were analyxed with Mann-Whitney hypothesis test.*

**Result:** *Histopathological observation indicated a change in the precancerous stage in both groups, on the first group an image of 57,8% mild premalignancy was obtained, while the second group 28,9% mild premalignancy was acquired. The results showed histopathological picture of the liver tissue group2 (treatment) differed significantly with the control group (Mann-Whitney  $p= 0,005$ )*

**Conclusion:** *There is influence of supplementation with Annona muricata leaf extract towards premalignancy degrees of rat liver cancer induced with 7,12 DMBA*

**Keywords:** *Liver cancer, Annona muricata, 7,12 DMBA*