

ANTIANGIOGENIC EFFECT IN CHORIOALLANTOIC MEMBRANE (CAM) OF 10-DAY OLD DUCK EMBRYO OF ANTHOCYANIN-RICH EXTRACT FROM Syzygium curanii L. (LIPOTE) FRUIT

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ABSTRACT

The aim of this study is to identify the effect on the chorioallantoic membrane (CAM) of 10-day old duck of anthocyanin extract from S. curanii (lipote). Lipote fruits were collected from a forest of Nagcarlan, Laguna. Extraction of the anthocyanin from the fruit was done by homogenizing the deseeded lipote fruits. It was soaked for 24 hours inside the refrigerator. After which, the homogenate was filtered with cheesecloth and filtrate was centrifuge at 3000 rpm. The supernate was purified with use of rotary evaporator. It was further purified with the use of Column Chromatography with XAD-7HP resin to remove unwanted contents of the extract. Different concentrations of the anthocyanin were prepared. Moreover, forty-five duck eggs were purchased from a store at Kadiwa, Dasmariñas, Cavite. It was then incubated until its tenth day. It was found out that anthocyanin inhibits the formation of unnecessary blood vessels and is dosage-dependant. In 10 mg/ml of anthocyanin extract, the blood vessel branching decreased by 26.80 % while in 20 mg/ml of the extract, it decreased by 53.59% and decreased by 66.13% in 40 mg/ml of the same extract. The result revealed that there is a significant difference (P < 0.05) in the percent decrease of blood vessels in negative control treated with phosphate buffer and quercetin, Treatment 2 with 20mg/ml and treatment 3 with 40mg/ml of anthocyanin. Quercetin was already proven to have antiangiogenic effect and treatment 2 as well as the treatment 3 shows significant difference to quercetin therefore this 20mg/ml and 40 mg/ml can actually decrease the formation of the blood vessels.

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and its percentage decrease compared with phosphate

buffer.

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