COMPARATIVE STUDY ON ANGIOGENIC EFFECTS OF *Sechium edule* (Jacq) Sw. (CHAYOTE) AND *Lagenaria siceraria* (Molina) Standl. (BOTTLE GOURD) FRUIT CRUDE EXTRACTS ON THE CAM OF A 10-DAY OLD CHICK EMBRYO

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ABSTRACT

Angiogenesis is characterized as the process of growth of blood vessels in a body of an organism that is normally balanced but when disturbed causes different chronic diseases such as cancer and heart ailments. The study tested two plant samples on their angiogenic potentials and their effects were compared on the chorioallantoic membrane of a 10-day old chick embryo. *Sechium edule* (chayote) and *Lagenaria siceraria* (bottle gourd) samples were collected corresponding to 500 grams each. The samples were homogenized and extracted using cheesecloth. Increasing concentrations of 100 ppm, 200 ppm and 300 ppm of each plant extract were prepared and administered on the Chorioallantoic membrane (CAM) of the chick embryo. After 48 hours, the CAM of the chick embryos was harvested and the number of collaterals was counted. The collaterals of the control group were compared with the different experimental groups of different concentrations. Results showed that both plants exhibited an inhibitory effect due to the decrease on the number of collaterals. Comparing the two plants, *L. siceraria* decreased more collaterals than *S. edule*. Based on statistical analysis, it was found that the 100 ppm concentrations of *L. siceraria* and *S. edule* had no significant difference in comparison with the control. All other concentrations had a significant difference over the control. Furthermore, there was no significant difference between the concentrations of the two plant samples.

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