THE ANTI-ANGIOGENIC EFFECT OF *Theobroma cacao* L. (CACAO) AND *Coffea arabica* L. (COFFEE) SEED EXTRACT ON THE CHORIOALLANTOIC MEMBRANE OF 10-DAY OLD DUCK EMBRYO

A Special Problem Presented to the Biological Sciences Department College of Science and Computer Studies De La Salle University - Dasmariñas City of Dasmariñas, Cavite

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ABSTRACT

Angiogenesis is the formation of new blood vessels. It is an important process in the human development, normal reproduction, and tissue repair. Its imbalance and disturbance of natural process and its totality, causes numerous diseases and abnormalities. This study generally aims to determine the potential anti-angiogenic effect of the seed crude extract of cacao (*Theobroma cacao*) and coffee (*Coffea arabica*), and Sorafenib – Nexavar, each with 100 ppm concentration on the chorioallantoic membrane (CAM) of a 10-day old duck embryo. These were administered to 8-day old duck embryo and were incubated for two days; CAM was harvested and the collaterals were counted. The result shows that coffee has an anti-angiogenic effect on the vascularisation of the CAM of a 10-day old chick embryo while those exposed to cacao extract did not survive. In conclusion, the anti-angiogenic effect of coffee is higher compared to the angiogenic drug Sorafenib (Nexavar).
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“You are capable of more than you know. Choose a goal that seems right for you and strive to be the best, however hard the path. Aim high. Behave honorably. Prepare to be alone at times, and to endure failure. Persist!

The world needs all you can give.”

- E. O. Wilson