



**ANGIOGENIC EFFECT OF *Sechium edule* Jacq. (Chayote) AND  
*Bougainvillea spectabilis* (Bogambilya) LEAF EXTRACT TO  
THE CHORIOALLANTOIC MEMBRANE OF AN 11-DAY  
OLD *Anas platyrhynchos* (DUCK) EMBRYO**

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### ABSTRACT

The angiogenic effect of *Sechium edule* (Chayote) and *Bougainvillea spectabilis* (Bogambilya) methanolic leaf extracts to the CAM of 11- day old duck (*Anas platyrhynchos*) embryo was evaluated. TLC screening confirmed the presence of phytochemicals such as alkaloids and flavonoids. The two (2) phytochemicals were both present in Bogambilya while only flavonoids in Chayote. Phosphate buffer was used for T<sub>0</sub> (negative control), while T<sub>1</sub> (100ppm), T<sub>2</sub>(200ppm) and T<sub>3</sub> (300ppm) were the formulated treatments of each extract. All treatments of both plants lowered the number of blood vessels formed on the CAM compared to the negative control, which had normal formation of blood vessels. Three (3) treatments (T<sub>1</sub>, T<sub>2</sub> and T<sub>3</sub>) of Chayote had significant difference ( $p < 0.05$ ) to T<sub>0</sub>. On the other hand, two (2) treatments (T<sub>2</sub> and T<sub>3</sub>) of Bogambilya had significant difference ( $p < 0.05$ ) to T<sub>0</sub>. Therefore, the treatments with significant difference to T<sub>0</sub> exhibited an anti-angiogenic effect to the CAM of duck embryo. The most effective treatment of each plant extract could not be identified, since they had no significant differences with each other. This study would serve as a basis for future research concerning angiogenesis and the mentioned plant species.



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