



COMPARATIVE ANTI-ANGIOGENIC EFFECTS OF *Sansevieria trifasciata* Prain (SNAKE PLANT) CRUDE LEAF AND ROOT EXTRACTS ON THE CHORIOALLANTOIC MEMBRANE (CAM) OF 10-DAY OLD *Anas luzonica* Linn. (DUCK)



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NICOLE RIAN B. ENCLONA

REIANNE KEITHS D. RODIL

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ABSTRACT

Angiogenesis is a normal process in the body characterized by the formation of new blood vessels from existing vasculature. Abnormal angiogenesis is the cause of many diseases. The study evaluated the effects of different concentrations of *Sansevieria trifasciata* Prain leaf and root crude extracts on the angiogenesis of 10-day old duck. 1 kilogram of the *S. trifasciata* leaves and roots were used in preparing the solution for 100ppm (T1), 200ppm (T2), and 300ppm (T3) experimental root and leaf treatments. These were administered on the chorioallantoic membrane (CAM) of 10-day old duck. After 48 hours, the collaterals on the CAM were counted and compared with the control group and with each of the experimental groups. The result of the conducted experiment, when compared to the control eggs showed a significant decrease in collateral blood vessels which means that *S. trifasciata* leaf and root crude extracts suppressed angiogenesis. The synergistic effect of the known phytochemicals present in *S. trifasciata* based on recent studies, such as saponin, alkaloids, phenols, and tannin can affect various steps in angiogenesis. These were defined to be possibly responsible for *S. trifasciata* extract's anti-angiogenic activity. However, the extract from *S. trifasciata* leaf was shown to be more effective than that of the roots.

Keywords: *Anti-Angiogenesis, angiogenesis inhibitor, alkaloids, saponin, phenols, tannin*



source of strength, courage and wisdom to fulfill their study, and for continuously showering spiritual grace and blessings.

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