



**COMPARATIVE STUDY ON THE ANGIOGENIC EFFECT OF THE CRUDE
LEAF EXTRACT OF *Sandoricum koetjape* Merr. (SANTOL) AND
Chrysophyllum cainito Linn. (STAR APPLE) ON THE
CHORIOALLANTOIC MEMBRANE
OF A 10 DAY-OLD DUCK EMBRYO**

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ABSTRACT

Angiogenesis is a normal and important process in the body both during normal and pathological conditions. It literally means the formation of new blood vessels. The study tested two plant samples to determine their angiogenic effects on a 10 day-old duck embryo via chorioallantoic membrane assay. The leaves of Santol (*Sandoricum koetjape* Merr.) and Star Apple (*Chrysophyllum cainito* Linn.) are the plant samples used, wherein 500 grams of each sample are collected. The samples were homogenized and extracted using cheesecloth. Different concentrations of 100 ppm, 200 ppm, and 300 ppm of each plant extract were prepared and administered to the chorioallantoic membrane of the duck embryo. After 48 hours of incubation, the CAM of the duck embryos was harvested and the number of collaterals was counted. The collaterals of the control group were compared to the different plant concentrations of the experimental plants groups. The results showed that both plant exhibited an inhibitory effect because there is a decreased number of collaterals. Compared to both plant, *S. koetjape* has decreased more collaterals than *C. cainito*. Based on statistical analysis 300 ppm of *S. koetjape* has better angiogenic effects than the rest for its leaves contains koetjapic acid that is not present in *C. cainito*.

Key words: Angiogenesis, *Sandoricumkoetjape*, *Chrysophyllumcainito*, Santol, Star apple