ABSTRACT

Angiogenesis is a physiological process for the formation of new blood vessels, and is essential in bringing nutrients and oxygen to a malignant tumor whose development in growth is not contained. The study tested the angiogenic potential of *Sponias purpurea* (sineguelas) to the chorioallantoic membrane of a 12-day old duck embryo. The leaf samples were collected and macerated for 48 hours. The mixture that it produced was filtered using a cheesecloth, and its filtrate was concentrated using a rotary evaporator. Various concentrations of 100 ppm, 200 ppm, and 300 ppm of each leaf crude extract were prepared and administered to the CAM of the duck embryo. After two days of incubation, the eggs were observed under a dissecting microscope and the number of collaterals were then counted. Based on the statistical analysis (Kruskal-Wallis Test), the control group, 100 ppm, 200 ppm, and 300 ppm of sineguelas crude leaf had no significant difference. This may be due to the phytochemicals present in the sineguelas, such as: flavonoid and phenols which can affect various steps in angiogenesis.

Keywords: angiogenesis, chorioallontoic membrane, Spondias purpurea, 12-day old duck egg