# A Study on the Anti-tumor Pontential of Moringa oleifera (Lam.) Seed Extract using the Chorioallantoic Membrane Assay

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Moringa oleifera (Lam.), locally known as Malunggay, is becoming popular as an alternative cure for various diseases. This study was conducted to determine if M. oleifera crude seed extract is a pro- or anti-angiogenic substance using the Chorioallantoic Membrane (CAM) Assay. One hundred forty-four fertilized chicken eggs with the age 0, 12, 14 and 16 days old were subjected to four treatments- untreated and 0.9% Sodium chloride (NSS) as negative control setups, Vincristine sulfate as positive control and M. oleifera seed extract as the experimental setup. The development of the eyes, heart, embryo and blood vessels during the 12th, 24th and 36th hour observation were noted. Inhibition of embryonic development was observed in embryos treated with M. oleifera seed extract and those treated with Vincristine sulfate. Particular effects noted were inhibited development of the eyes, heart, and embryos and less number of blood vessels. These effects were recorded in the 12-, 14-, and 16-day old eggs. Normal development was observed in the negative control set-ups. There is significant difference in the four parameters with Vincristine sulfate and the M. oleifera seed extract compared to the negative control setups. No significant difference in the four parameters was observed between the experimental setup and the positive control suggesting that the M. oleifera seed extract has an inhibitory effect on the development of the chick embryo and is a potential anti-tumor agent.

**Awards Won:**