

## ABSTRACT

### ISOLATION AND PURIFICATION OF ANGIOGENESIS INHIBITOR FROM FLEMINGIA MACROPHYLLA

*Flemingia macrophylla* a plant native to Southeast Asia was investigated to isolate an angiogenesis inhibitor from its roots. An aqueous extract from the roots proved to exert a prominent inhibitory effect on Bovine Cardiopulmonary artery endothelial cells (CPAE) in endothelial cell culture assay. The inhibitory effect was concentration dependent. The different parts of the root were investigated for the presence of the angiogenesis inhibitor. Extracts from both the periderm (bark) and the vascular tissue (wood) of the root inhibited the Bovine (CPAE) cells, but the periderm had the highest concentration of the inhibitor compared to the other tissue of the root. The root extract proved to have an activity against bovine (CPAE) but had no activity against human prostate cancer cells (LNCaP). High Performance Liquid Chromatography was used to isolate the fraction of the root extract that exerted the inhibitory activity. Subsequent trials were done to study the characteristics of the inhibitor using the carbohydrate and protein assays, U.V.-visible spectrophotometry and mass spectrometry.

Samer Samir Qutob  
August 2004