IN VITRO ANTIANGIOGENESIS ACTIVITY OF STANDARDIZED EXTRACTS OF
Piper sarmentosum Roxb

Khalid Hussain, Zhari Ismail, Amirin Sadikun, Pazilah Ibrahim, Amin Malik
School of Pharmaceutical Science, Universiti Sains Malaysia, Minden Campus Pulau Penang-
11800. Malaysia. Phone and Fax 006046563443.
email: hussain_761@yahoo.com

ABSTRACT

This study was undertaken to investigate the antiangiogenesis activity of standardized
extracts/fractions of the leaf of Piper sarmentosum, using rat aorta model. The pulverized leaf was
extracted sequentially and methanol extract was further fractionated with hexane, chloroform and
ethylacetate. Both extracts and fractions were standardized by reverse phase HPLC with UV
detection at 260 nm, using two markers, sarmentine and sarmentosine. Chloroform and methanol
extracts have exhibited antiangiogenesis activity of 100% and 20% respectively. Antiangiogenesis
activity of hexane and chloroform fractions was found to be 10% and 90% respectively, while
ethylacetate fraction was found to be inactive. The analysis of most active extract and fraction has
exhibited different profile by HPLC on the basis of amides. This study indicates that chloroform
extract and fraction have promising antiangiogenesis activity and have potential for diseases
involving angiogenesis.

Keywords: antiangiogenesis activity, Piper sarmentosum Roxb.
REFERENCES


