Abstract: Aqueous and ethanol extracts of different traditional Malaysian plants (*Polygonum minus*, *Andrographis paniculata*, *Curcuma xanthorrhiza*, *Momordica charantia* and *Strobilanthes crispus*) were evaluated for their antioxidant property, amount of total phenolic content and cytotoxic activity. Antioxidant activity was evaluated by using 1,1-diphenyl-1-picrylhydrazyl (DPPH) and Ferric reducing antioxidant power (FRAP). The results were showed that ethanol extracts contain high antioxidant activities compared to aqueous extract. The finding was exhibited a strong correlation between antioxidant and the content of total phenol. In addition, all the plant extracts were showed non –toxic effects against the human normal lung fibroblast cell line (Hs888Lu). Although traditionally aqueous forms were used, we figured out that ethanol extracts achieved better activity in a different assay.

Keywords: antioxidant; total phinolic content; cytotoxicity; Malaysian plants.

