

Growth Inhibitory and Apoptosis Inducing Effects of Crude Methanolic Extracts of *Commelina* Species Through Modulation of Apoptosis Regulatory Genes in Wil-2 NS and Jurkat T Cancer Cell Lines.

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Extracts of *Commelina* species used in our study, although not extensively documented, are frequently used in traditional medicine for the treatment of ailments such as skin ulcers and skin lumps. In this study, we investigated the effects of crude methanolic extracts of *Commelina* (CMEC) on cell proliferation and the induction of apoptosis in cultured Wil-2 NS and Jurkat T cancer cell lines. CMEC inhibited cell proliferation and decreased cell viability in a time and dose-dependent manner, as determined by the Coulter counter and trypan blue dye exclusion assay, respectively. Other results revealed that CMEC induced classical morphological changes associated with apoptosis and modulated the expression levels of apoptosis regulatory genes, such as, *bax*, *bcl-2* and *p53*, as demonstrated by Western blot analysis and RT-PCR. Taken together, the data strongly suggest that the crude extracts of *Commelina* species contain bioactive compounds that may be beneficial in the treatment of cancerous growths and this apparent anti-neoplastic activity is a consequence of dysregulated expression of apoptosis-responsive genes.