

THE EFFECT OF SEMI PURIFIED BIO-ACTIVE COMPOUNDS FROM INDIGENOUS MEDICINAL PLANTS ON WIL-2 NS CELLS.

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Many naturally occurring agents are known to possess both chemopreventive and chemotherapeutic potential, yet there are no effective drugs in the market to treat most recalcitrant tumours. One plant species of the genus *Commelina* has been traditionally used in herbal medicine for the amelioration of skin ulcers and lumps. The aim of this study was to investigate the effect of semi-purified extracts from *Commelina spp* on the proliferation of Wil-2 NS cells. Acetone extracts were prepared from the stems of *Commelina spp* and further sub-fractionated with n-hexane and dichloromethane to provide fractions F1 and F2, respectively. Both fractions were tested for possible anti-proliferative activity on Wil-2 NS cells. Of the two fractions, F2 was found to be more potent than F1. Results from the trypan blue dye exclusion and crystal violet assays demonstrated a time- and dose-dependent growth suppression of Wil-2 NS cells. Further, acridine orange/ethidium bromide dual stain method showed that the resultant cytotoxicity occurs as a consequence of apoptotic process. These results indicate that *Commelina spp* have anti-proliferative properties against Wil-2NS cells. Further studies are underway to establish the chemical identity of the bio-active compound(s) responsible for these growth suppressive effects.