

INVESTIGATION OF ANTICANCER PROPERTIES
OF
Aloe vera (ALOE), *Coccinia grandis* (IVY GOURD),
Vernonia cinerea (LITTLE IRONWEED), ON DLD-1
COLON CARCINOMA
IN VITRO

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Abstract

Plant derived components have attracted attention as an alternative source to battle several diseases including cancer. Traditional medicine in Sri Lanka is one of the major treatment systems for many diseases followed by our ancestors. In this study, *in vitro* anticancer properties of *Coccinia grandis*, *Vernonia cinerea*, and *Aloe vera* plants on DLD-1 cancer cell line were investigated. The study was conducted to determine the anticancer properties of *Aloe vera*, *Coccinia grandis* and *Vernonia cinerea* plants on colon cancer cells *in vitro*. The crude plant leaf extracts of three plants were tested for their cytotoxicity on Vero-76 normal epithelial cell line and DLD-1 human colorectal adenocarcinoma cell line. The cytotoxicity was evaluated by performing MTT assay. In the present study, toxic effect of crude extracts was identified using Vero-76 normal cell line and anticancer properties were identified using DLD-1 cancer cell line. Out of three plant extracts tested, only *Vernonia cinerea* crude extract has a significant anticancer property on DLD-1 carcinoma ($P < 0.05$). Therefore, *Vernonia cinerea* crude extract was identified as a source of having anticancer property on DLD-1 colon cancer cell line.