

Anti-cancer Activity of Cassava Leaves (*Manihot esculenta* Crantz.) Against Colon Cancer (WiDr) Cells in vitro

Authors : Fatma Zuhrotun Nisa, Aprilina Ratriany, Agus Wijanarka

Abstract : Background: Cassava leaves are widely used by the people of Indonesia as a vegetable and treat various diseases, including anticancer believed as food. However, not much research on the anticancer activity of cassava leaves, especially in colon cancer. Objectives: the aim of this study is to investigate anti-cancer activity of cassava leaves (*Manihot esculenta* C.) against colon cancer (WiDr) cells in vitro. Methods: effect of crude aqueous extract of leaves of cassava and cassava leaves boiled tested in colon cancer cells WiDr. Determination of Anticancer uses the MTT method with parameters such as the percentage of deaths. Results: raw cassava leaf water extract gave IC50 of 63.1 mg / ml. While the water extract of boiled cassava leaves gave IC50 of 79.4 mg/ml. However, there is no difference anticancer activity of raw cassava leaves or cancer (p> 0.05). Conclusion: Cassava leaves contain a variety of compounds that have previously been reported to have anticancer activity. Linamarin, β -carotene, vitamin C, and fiber were thought to affect the IC50 cassava leaf extract against colon cancer cells WiDr.

Keywords : boiled cassava leaves, cassava leaves raw, anticancer activity, colon cancer, IC50

Conference Title : ICNFF 2015 : International Conference on Nutraceuticals and Functional Foods

Conference Location : Jeddah, Saudi Arabia

Conference Dates : January 26-27, 2015