

Screening of *Entada pursaetha* (DC) seed kernels and *Wagatea spicata* (Dalzell) roots on cancer cell lines for cytotoxic activity.

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Cancer is a disease in which some of the body's cells grow uncontrollably and spread to other parts of the body. Though chemotherapy is a successful therapy for various types of cancers, there are many severe side effects of the same. To overcome this problem, the discovery of anticancer agents from natural sources is the need of the day. The aim of present study was to screen the methanol, ethyl acetate and acetone extracts of *Entada pursaetha* seed kernel and *Wagatea spicata* root for anticancer activity on the Colo 205, MCF-7, B16F10 cell lines by MTT [3-(4,5-dimethylthiazol-2yl)-2,5-diphenyltetrazolium bromide] assay. The extracts have also been tested on normal mouse fibroblast cells L929. Final results were analysed using GraphPad prism 10.1.2. *Entada pursaetha* acetone extract (EPA) showed the most promising 85.47%, 86.03% and 89.64% inhibition with concentrations of 10 μ g/mL, 30 μ g/mL and 100 μ g/ml respectively with 40.46 μ g/mL IC₅₀ against colo 205 cell line while, *Wagatea spicata* acetone extract (WSA) showed 32.76 μ g/mL IC₅₀ and cell inhibition was 82.05%, 83.28% and 85.37% with concentrations of 10 μ g/mL, 30 μ g/mL and 100 μ g/mL, respectively. Against MCF-7 cell line methanol extract of *E. pursaetha* (EPM) and *W. spicata* (WSM) showed maximum cell inhibition 68.17% (10 μ g/mL), 68.68% (30 μ g/mL), 70.96% (100 μ g/mL) and 70.73% (10 μ g/mL), 71.04% (30 μ g/mL), 73.81% (100 μ g/mL) respectively with IC₅₀ >100. Against the B16F10 cell line, all extracts of both plants showed moderate percentage cell inhibition. All extracts showed minimal toxicity against normal mouse fibroblast cells L929.

Keywords: African dream herb, Vakeri mul, MTT assay