The Cytotoxic Effects that Are Created by Different Aspects of Pulverized Moringa oleifera on HeLa Cells

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The purpose of this experiment was to examine the cytotoxic effects of Moringa oleifera on human epithelial cells. The pH of the plant will also be held in account with its cytotoxicity. With this experiment, individuals are able to conclude if the plant is able to inhibit or limit the growth of the HeLa cells. The results revealed that certain parts of the tree was able to inhibit and limit the growth of the HeLa cells. The procedures of the project are listed as the following: 1) Collect and pulverize samples. 2) Place samples in flasks and run in autoclave. 3) Centrifuge. 4) Create serial dilutions for 1N HCl. 5) Dilute and transfer into 24-Well plates. 6) Store for 24 hours. 7) Create dye using Thiazolyl Blue Tetrazolium Bromine. 8) Add to each well, incubate and mix in solubilization buffer. 9) Transfer each sample onto a 96-Well plate. 10) Conduct spectrophotometry. Data: A spreadsheet with the light absorbency of each sample measured in nanometers, the pH of the parts of the Moringa Oleifera, 1N HCl and DMEM media used, and the ANOVA statistical analysis results. Pictures of the 96-well plates before and after incubation were also included. In conclusion, this experiment involved the different aspects of M. oleifera reacting to HeLa cells. The results of this experiment were based upon whether or not the cells will inhibit growth or limit the growth. Data from the spectrophotometry results were used to perform the ANOVA test. The test revealed a p-value of 0.000, which also means that the null hypothesis is rejected. Both alternative hypotheses were accepted which stated that the plant will limit and inhibit the growth of the cells. The pH of the plant was also taken into account due to its acidity levels.

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