



Prof. Mercy Githua

Affiliation: Jomo Kenyatta University of Agriculture and Technology, Department of Chemistry:

Specialization: Natural products Chemistry

Research interests: Extracting Natural phytochemicals with medicinal activities and trying to understand the relationship between their structural formula and their biological activities.

Goal: To enhance the linkage between academia and industry in pharmacology and agricultural sector

Current Research Interest and ongoing projects

Allelopathic, cytotoxic and antimicrobial properties of *Ipomoea hildebrandtii* and *Eucalyptus globulus Labill*

The project focuses on:

1. Evaluating allelopathic, cytotoxic and antimicrobial properties of *Ipomoea hildebrandtii* and *Eucalyptus globulus Labill* on selected microbes.
2. Evaluating allelopathic activity of *Ipomoea hildebrandtii* leaf extract on germination and development of *Datura stramonium* and corn.
3. Determining the pH and the compounds present on different samples of the soils that is 6meters, 3meters away and on the plant growth.

4. Characterizing the compounds extracted from *Ipomoea hildebrandtii* and *Eucalyptus globulus Labill* using GC-MS. FTIR; UV-VIS and NMR
5. Preparation of nano- emulsion from both plants and their products