

**EVALUATION OF NUTRIENT CONTENT IN LIQUID ORGANIC
FERTILIZER FROM PASPALUM AND SWEET POTATO LEAVES**

BY

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**A PROJECT REPORT SUBMITTED TO THE DEPARTMENT OF
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DECLARATION

I declare that the work in this dissertation has been done by me in the Department of Chemistry, Busitema University, under the supervision of Dr. KAMOGA OMAR. The information derived from the literature has been duly acknowledged in the text and a list of references provided. No part of this study was previously presented for another degree or diploma at any University.

Signature

Date

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ACHIENG CHRISTINE

This research project Report has been submitted with approval of the supervisor.

Signature

Date

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DEDICATION

This project is dedicated to my beloved Mum Ms.Bulage Stella and my dearest uncles Mr.Wairagala Joseph, Mr. Wairagala John and Mr. Niola John including my grandmother Ms Naikesa Petalina who have struggled to educate me up to this level and for their effort rendered in this project and their encouragement.

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Table4.1.1: Table showing PH of LOF

Table4.1. 2: Table showing percentage composition of nutrients in LOF

LIST OF ABBREVIATIONS

LOF: Liquid Organic Fertilizer

AAS: Atomic Absorption Spectroscopy

ABSTRACT

The research was carried out to evaluate the percentage concentration of magnesium, calcium and nitrogen from liquid organic fertilizer made from sweet potato leaves and paspalum grass. Sweet potatoes and paspalum are common plants found in all communities of Uganda. These are well known to contain plant nutrient in large quantities. The liquid organic fertilizer was made by mixing 5kg of plant material, 1kg of ash and 5litres of water and the materials were left in a closed container for 28days.

From the study, it was found out that liquid organic from sweet potatoes and paspalum contain higher concentration of nitrogen, followed by calcium and magnesium had the lowest percentage.

The percentage concentrations of these three plant nutrients were lower than the nutrients supplied by inorganic fertilizers like CAN and NPK.

The result of this study therefore show that these two plants contain essential nutrients needed by plants and could be promising sources for making liquid organic fertilizer needed for plant growth.

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