DESIGN AND FABRICATION OF

A PORTABLE MANUALLY

POWERED GARDEN ROW WEEDER

BY

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TABLE OF CONTENTS

		PAGES
Title Page	.....	i
Table of Contents	.....	ii
Approval Page	.....	iii
Declaration	.....	iv
Dedication	.....	v]^2
Acknowledgement	.....	vi
Abstract	.....	vii

CHAPTER 1 - INTRODUCTION

1.1 Introduction --------- --------- 1 - 4

1,2 Man as a Source of Power

1.3 Adaptation of Implements to man

1.4 Project objectives

1.5 Project Justification

CHAPTER 2 REVIEW OF LITERATURES --------- 5 - 9

2.1 Definition of Some terms

2.2 Disadvantages of Weeds

2.3 Weed Control in the Garden

2.4 Assessment of existing manually powered weeders

2.41 Local Hoes

2.42 National Centre for Agricultural Mechanisation (NCAM) Improved Weeding Hoe

2.43 Wheel Weeder designed by John Hold Agricultural Engineers Limited Zaria.

2.44 NCAM Hand wheel hoe

2.45 Imported manual weeder

2.3 Deductions

CHAPTER 3 DESIGN AND CONSTRUCTIONAL DEVELOPMENT OF GARDEN ROW WEEDER --------- 10 - 16

3.1 Attempt to know the size of the Garden weeder

3.11 Spacing

3.12 Time of Weeding and height of weeds

3.13 Parts of the designed garden row weeder

3.21 The wheel

3.22 The Frame

3.23 The Handle

3.24 The soil tearer (wedge)

3.25 The spikes

3.26 Shaft

3.30 Dynamic analysis

3.31 Deformation of Soil/weeds with wedge action

3.32 Forces acting on a wedge

3.4 Plates of Photographs

CHAPTER 4 - TESTING AND RESULTS ANALYSIS ---------- 17 - 22

4.1 Testing of the Fabricated weeder methodology

4.2 Results and Results analysis

4.3 Weeding using manual hoe (Results and Analysis)

4.4 Discussion of Results and Conclusion

4.5 Recommendations

Economy ---------- 23

References ---------- 24

APPENDIX ---------- 25 - 50

Calculations

Tables

Nutritional content in vegetables per 100g edible part.

Traditional plant and row spacing for Vegetables

Impact factor for chain derives

Bearing pressure for chain links

Correction factors C_i for chain links

Correction factors C_2 for chain links

Approximate Weight and bearing area in case of Simple Chain

Chain dimensions, measuring loads and breaking loads of base chain

Deep groove ball bearing

Calculation factor dynamic load

D R A W I N G S

AGRICULTURAL ENGINEERING DEPARTMENT,

FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA

A PROJECT REPORT

ON

DESIGN AND FABRICATION OF A PORTABLE MANNUALLY POWERED GARDEN ROW WEEDER

BY

SHIRU JONATHAN JACOB

SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS

FOR THE DEGREE OF BACHELOR OF ENGINEERING (AGRIC.)

APPROVED

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DECLARATION

I do hereby declare that the work presented in this thesis for the award of Bachelor of Agricultural Engineering has not been presented partially or wholly for any other degree nor is it concurrently being submitted for any other degree.

_____

CO-ORDINATOR SIGN DATE

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SUPERVISOR SIGN DATE

D E D I C A T I O N

This project is dedicated to the following people:

1. My Lord and Saviour Jesus Christ

2. My parents Mr. & Mrs. Jacob Shiru.

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A B S T R A C T

Weeding can be done using Chemicals (Herbicides), mechanically (motorized or manual powered) and hand pulling of weeds. The purpose is to provide a good environment for crop performance. A mannually powered garden row weeder was designed, fabricated and tested.

The Weeding Index(e) was found to be 74.53%, efficiency of cutting blade 88.00% and field capacity was 0.0166 ha/hr.