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OFF-SEASON MANGO PRODUCTION USING
POTASSIUM NITRATE

FARM PRACTICE

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**OFF-SEASON MANGO PRODUCTION USING
POTASSIUM NITRATE**

**A Farm Practice Report
Submitted to the Faculty of the
Don Severino Agricultural College
Indang , Cavite**

**In Partial Fulfillment
of the Requirements for the Degree of
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(Major in Horticulture)**

by

**EDEN C. DEL ROSARIO
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ABSTRACT

DEL ROSARIO, EDEN C., DON SEVERINO AGRICULTURAL COLLEGE, Indang, Cavite. "Off-season Mango Production Using Potassium Nitrate." Mrs. Analita M. Magsino (Adviser).

This farm practice project was conducted at Bo. Aguado, Trece Martires City from September 28, 1993 to February 12, 1994. It aimed to provide the student with first-hand experience in the off-season production of mango using potassium nitrate and to determine the cost and profitability of the technology.

Three thirty year-old mango trees were sprayed with potassium nitrate at a rate of 10 grams per liter of water. Proper pest and disease prevention and control measures were implemented throughout the duration of the project. Flower development and subsequent fruit set, however, were affected by the occurrence of typhoons and strong winds which prevailed during the second and third month of project implementation.

Twenty (20) royal sized crates (approximately 42 kilos each) of mature green mangoes were harvested from each tree or a total of sixty (60) crates from the three trees. The harvest was sold at a total price of P 56,350.00.

After deducting the total investment in the project amounting to P 34,167.14 from the gross income, a net income of P 22,182.86 was obtained. A value of 64.92% was computed as the measure of project worth.

TABLE OF CONTENTS

	Page
BIOGRAPHICAL DATA	iii
ACKNOWLEDGMENT	iv
ABSTRACT.....	vi
INTRODUCTION	
Importance of the Project	2
Objectives of the Project	2
Time and Place of the Project	2
EXPECTED OUTPUT	3
STRATEGY OF IMPLEMENTATION	
Pre-Internship Training	4
Site Selection	4
Tree Selection	4
Weeding/Underbrushing	4
Preparation of Flower Inducer	4
Spraying of Flower Inducer	5
Control of Pests and Diseases	5
Harvesting	5
Sorting/Grading	6
Packing	6
Marketing	6
COST ESTIMATE OF THE PROJECT.....	7
TIMETABLE OF ACTIVITIES	10

DISCUSSION OF THE PROJECT OUTCOME	11
Actual Cost and Return Analysis.....	13
SUMMARY, CONCLUSION AND RECOMMENDATION	
Summary	16
Conclusion	17
Recommendation	17
APPENDICES	18

LIST OF FIGURES

Figure		Page
1a	Selected 'Pico' mango tree #1	19
1b	Selected 'Pico' mango tree #2	19
1c	Selected 'Pico' mango tree #3	20
2	Samples of Class A and Class B mangoes	21
3	Samples of Class C and Class D mangoes	22

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¹A Farm Practice Report presented to the faculty of the Department of Crop Science, Don Severino Agricultural College, Indang, Cavite in partial fulfillment of the requirements for the degree of Bachelor of Science in Agriculture (BSA), major in Horticulture, under the direct supervision of Mrs. Analita M. Magsino (Adviser).
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INTRODUCTION

One of the most important breakthroughs in Philippine agriculture is the discovery in the early 1970's that certain chemicals can effectively induce the flowering of mango. Potassium nitrate (KNO_3) was discovered an effective flower inducing agent for mango in 1970 and 1971, although first reported in 1974. The event paved the way of eliminating the irregular, sparse and seasonal bearing habits of Philippine mangoes. Introduction of nitrate based foliar sprays, loosely referred to as "flower inducers" is the main stimulus to the growth of the local mango industry.

Spraying with KNO_3 is a more reliable method of inducing off-season trees to flower more uniformly and is much cheaper and easier to use. The spray solution is