

**EFFECTS OF DIFFERENT LEVELS OF NITROGEN
FERTILIZER ON GROWTH, YIELD AND QUALITY OF
RADISH (*Raphanus sativus* L)**



BY

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ABSTRACT

An experiment was conducted to study the effect of different levels of nitrogen on growth and yield of radish in the Crop Farm, Faculty of Agriculture, Eastern University, Sri Lanka during the period October to November 2017. Radish variety 'Beeralu' was used for this study.

This experiment was laid out in Complete Block Design and consisted of six treatments and five replications. The treatments were T₁ - No fertilizer (Control), T₂- 90 kg N/ha, T₃-120 kg N/ha, T₄-180 kg N/ha (Recommended rate), T₅-210 kg N/ha, T₆ - 240 kg N/ha. Agronomic practices were carried out as per Department of Agriculture. Samplings were done at fortnight intervals

At 45 days after planting (DAP), the highest plant height, number of leaves, LAI, diameter of the tuber and total fresh weight were recorded in both 210 and 240 kg N/ha. However, application of 210 kg N/ha increased the yield per hectare and dry weight of tuber/plant.

Application of nitrogen increased the tuber weight/ha up to 210 kg N/ha. An increase in nitrogen level from 0 kg N/ha to 210 kg N/ha increased the yield by four folds. A further increase from 210 kg N/ha to 240 kg N/ha decreased yield by 11.5%.

The results suggest that yield could be increased by four folds by increasing the nitrogen from 0 to 210 kg N/ha and a further increase in nitrogen will decrease the yield.

TABLE OF CONTENTS

ABSTARCT.....	i
ACKNOWLEDGEMENT.....	ii
TABLE OF CONTENTS	iii
LIST OF TABLE	vi
LIST OF FIGURES	vii
ABBREVIATIONS.....	viii
CHAPTER 1 INTRODUCTION.....	1
CHAPTER 2 REVIEW OF LITERATURE	6
2.1 Introduction.....	6
2.1.1 Botanical Classification of radish	7
2.1.2 Nutritional composition	7
2.1.3 Uses	9
2.1.4 Climatic requirement.....	10
2.1.5 Varieties	11
2.2 Effects of nutrients.....	11
2.2.1 Effects on nitrogen	12
2.2.1.1 Effects on vegetative growth.....	14
2.2.1.2 Effects on yield component.....	15
2.2.2 Effects of Phosphorus	15
2.2.2.1 Effects on vegetative growth.....	16
2.2.2.2 Effects on yield component.....	16
2.2.3 Effect of Potassium	17
2.2.3.1 Effects on vegetative growth.....	17
2.2.3.2 Effects on yield component.....	18
2.2.4 Other nutrients.....	18
2.2.4.1 Sulfur.....	18
2.2.4.2 Zinc.....	19
2.2.4.3 Copper	19

2.2.4.4 Boron	19
2.3 Other management practices	20
2.3.1 Irrigation	20
2.3.2 Effect on spacing or plant density	20
CHAPTER 3 MATERIALS AND METHODS.....	22
3.1 Location and soil	22
3.2 Climate	22
3.3 Species and Variety	22
3.4 Experiment	23
3.4.1 Experimental Design	23
3.5 Agronomic practices	24
3.5.1 Preparation of pots	24
3.5.2 Planting of seeds	24
3.6 Cultural practice	25
3.6.1 Gap filling	25
3.6.2 Watering	25
3.6.3 Fertilizer application	25
3.6.4 Weeding	25
3.6.5 Pest and disease	26
3.7 Growth parameters	26
3.7.1 Plant height	26
3.7.2 Number of leaves	26
3.7.3 Leaf area index	27
3.7.4 Chlorophyll content	27
3.7.5 Weight of plants	27
3.8 Yield	28
3.8.1 Tuber weight	28
3.8.2 Diameter of tuber	28
3.8.3 Length of tuber	28

3.9 Statistical Analysis	28
CHAPTER 4 RESULTS AND DISCUSSION.....	29
4.1 Effects of different levels of nitrogen on plant height	29
4.2 Number of leaves per plant	29
4.3 Leaf Area Index.....	31
4.4 Chlorophyll content.....	32
4.5 Length of tuber	33
4.6 Diameter of the tuber	34
4.7 Fresh weight of shoot.....	35
4.8 Total fresh weight of plants.....	36
4.9 Yield.....	37
4.9.1 Fresh weight of tuber per ha.....	37
4.9.2 Dry weight of tubers/ plant.....	38
CHAPTER 05 CONCLUTIONS	40
SUGGESTION FOR FUTURE STUDIES	41
REFFERENCES	42