

# **EFFECT OF DIFFERENT LEVELS OF NITROGENOUS FERTILIZER ON GROWTH AND YIELD OF RADISH**

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 T<sub>1</sub> - No fertilizer (Control), T<sub>2</sub>–90 kg N/ha, T<sub>3</sub>–120 kg N/ha, T<sub>4</sub>–180 kg N/ha (Recommended rate), T<sub>5</sub>–210 kg N/ha, T<sub>6</sub>– 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 and diameter of the tuber were recorded in both 210 and 240 kg N/ha. However, application of 210 kg N/ha increased the fresh weight of shoots, total fresh weight of plants, tuber yield per hectare (fresh) 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.

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