

**WATER CONSUMPTION AND GROWTH OF PECHAY IN KRATKY  
METHOD AT DIFFERENT DEPTH LEVEL OF NUTRIENT  
SOLUTION UNDER SHADED CONDITION**

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## **ABSTRACT**

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Green crops are currently cultivated using a hydroponic method. However, the production cost is quite expensive due to the higher cost of commercial nutrient solutions. The purpose of the thesis study was to explore the possibility of reducing the quantity of nutrient solutions and their impact on the growth of pechay. The study was carried out using a Completely Randomized Design (CRD) with three treatments replicated three times. T1 (2 inches depth), T2 (3 inches depth), and T3 (4 inches depth). The collected data were analyzed using a One-Way Analysis of Variance (ANOVA) at a significance level of 5%. The Least Significant Difference (LSD) test was employed to ascertain the variations between the different treatments. The analysis indicated that the treatments revealed significantly varied in root length with a P-value of 0.0010. Further, the

analysis indicates that there is no statistically significant difference in terms of mean daily water consumption, plant height, number of leaves, breadth of leaves, plant yield, mean daily difference temperature nutrient solution, and mean daily difference pH level, as indicated with P-values of 0.3272, 0.3787, 0.4376, 0.3787, 0.0727, 0.2997, and 0.4029 respectively.

*Keywords: water consumption, growth of pechay, kratky method, different depth level of nutrient solution, hydroponics*