

## EFFECTS OF FISH MANURE IN SOILESS METHOD OF GROWING LEAFY VEGETABLES (AQUAPONICS)

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### ABSTRACT

This study focused on determining the effects of fish manure (waste materials) in soilless method of producing leafy vegetables (lettuce and pechay), with the use of red tilapia breed. Fifteen (15) pieces of lettuce seedlings and pechay seedlings were used as subject of the study. The major findings of the study the growth performance of leafy vegetables, lettuce and pechay, on experimental set – up in terms of weight gain, height, number of leaves, and width of leaves was highly increased. The survival rate of the two leafy vegetables (lettuce and pechay) under the experimental set – up. Lettuce gained total weight of 219 grams with a survival rate of 80%. Pechay gained total weight of 549 grams with a survival rate of 73%. This is supported by the findings of R. Pavlis et al. (2018) Realistically, if less than 70% of your test seed germinated you would be better off starting with fresh seed. If 70 - 90% germinated, the seed should be fine to use, but you should sow it a little thicker than you normally would. Based on the results of the experiment set – up, it proves that the manure of red tilapia is very effective in soilless method of growing leafy vegetables (aquaponics). Based on the above findings of the study, the following conclusion is drawn: As per indicated in the findings, the null hypothesis stating that there is no significance difference in the growth performance of the two leafy vegetables (lettuce and pechay) under the experiment is rejected. Considering the foregoing findings and conclusion drawn from the study, the following recommendations are suggested: It is recommended for every Agricultural Schools to encourage students to pursue Agricultural Courses; It is recommended to all farmers who owned small portion of land to utilize this study and still harvest a good quality crops; and to all landscapers, this study can be utilized to be more innovative in landscaping.

*Keywords: Growth Performance of Leafy Vegetables, Survival Rate, Soilless Method (Aquaponics), Experimental Set - up*