

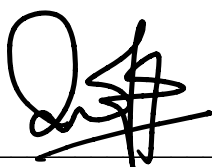
**THE STUDY OF RED SPINACH GROWTH PERFORMANCE
IN DIFFERENT GROWING MEDIUM
USING HYDROPONIC SYSTEM**

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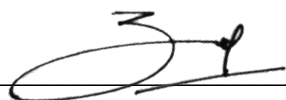
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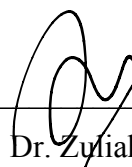
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ABSTRACT

THE STUDY OF RED SPINACH GROWTH PERFORMANCE IN DIFFERENT GROWING MEDIUM USING HYDROPONIC SYSTEM

Nutrient uptakes play an important role on enhancing the crop. In this study, the chemical composition of cocopeat, biochar, calcined eggshells and raw eggshells were determined by using ICP-OES and FTIR analyses and the effect of different growing medium treatment on the growth performance of height, number of leaves, and fresh weight of red spinach were investigated. The study was conducted in a nursery by using hydroponic system. Biochar, calcined eggshell, raw eggshell were added to soilless growing medium containing cocopeat with the composition of T1: cocopeat(100%), T2: cocopeat (50%) : biochar (35%) : calcined eggshell (15%), T3: cocopeat (100%) biochar (35%) : raw eggshell (15%) respectively. The result showed that T1 treatment (cocopeat 100%) showed higher rate on plant growth performance in term of height (22.08 cm) and fresh weight (14.87 g) compared to T2 and T3 due to high moisture content (24.98 g) that more porous and also plentiful of nutrients content.

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