

ABSTRACT
INFLUENCE OF PLANTING MEDIA AND WATER DEPLETION
FRACTION ON THE GROWTH OF RED SPINACH (*Amaranthus tricolor*
L.) GROWN HYDROPONICALLY

By

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This study aims to determine the effect of growing media and water depletion fraction on the growth of red amaranth (*Amaranthus tricolor* L.), grown hydroponically. The final objective, however, was to determine the time interval of ebb and flow system according to the critical water content. Treatment consisted of factors with three replications. The first factor is the media granule size of 5 mm (M1), carbonized rice husk (M2), and sand (M3). The second factor is the depletion fraction; 0-20% (P1), 0-40% (P2), and 0-60% (P3). The data obtained will be presented in the form of graphs and tables.

The results showed that the depletion fraction of 0-40% was the best results for carbonized rice husk and sand media. For the granular media, the best depletion fraction was 0-20%. Of the overall treatment, however; the carbonized rice husk showed the highest production, while the sand media was the worst.

Keywords: *flood and drain*, planting media, red spinach, water depletion fraction