

ABSTRACT

Novi Nurdinasari. 2018. The Comparison of Huks Charcoal and Without Growing Media on the Results of Ground Water Spinach Plants (*Ipomoea reaptans* Poir) Using the NFT (*Nutrient Flm Technique*) Hydroponics System. Supervised by Dr. Hj. Mia Nurkanti, M.Kes. and Cita Tresnawati, M.Pd.

The aim of this research is to determine the comparison of huks charcoal and without growing media on the results of ground water spinach plants (*Ipomoea reaptans* Poir) using the NFT (*Nutrient Flm Technique*) hydroponics system. The experiment was conducted from 15 July to 4 August 2018 at Jatiendah Village, Cilengkrang District, Bandung Regency, West Java. Based on the data obtained by the Jatiendah Village stated that Village is a hilly area and consists of land that has a height of 700meters above sea level. Air temperature ranges from 19⁰C-23⁰C. Average rainfall is 2500 mm/year and moderate humidity ranges between 60%-98%. The experiment was prepared based on a Completely Randomized Design (RAL) with 2 treatments in the form of husk charcoal and without growing media with 16 repetitions of each treatment. The samples studied were water spinach plants stored without planting media and those using huks charcoal in the NFT hydroponics system were 32 samples from both treatments. The results showed that without growing media using the NFT (*Nutrient Film Technique*) hydroponic system gave better results and influence measured from the final weight of spinach plants at harvest time compared between husk charcoal media. This is because the root system of water spinach plants gets a direct flow of nutrient solutions that make the plant get the maximum nutritional needs and grow faster.