

**Growth and Yield of Shallots (*Allium ascalonicum* L.) Hydroponically
Floating Rafts at Various Concentrations of AB Mix Nutrients and Cutting
Bulbs Seeds**

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ABSTRACT

Efforts to increase the production of shallot plants are with a hydroponic system. Floating raft hydroponics can overcome uncontrolled environmental conditions and demand that continues to increase along with the increase in population in Indonesia. This study aims to determine the best concentration of AB mix and tuber cutting on the growth and yield of shallot plants. The research was conducted from November to January 2023 at Losta Farm, Griya Taman Asri, Sleman. The experimental design is a split plot design. The nutrient concentrations of AB Mix (AB Mix vegetables up to 30 DAP and AB Mix Tuber 31 DAP until harvest) as the main plot consisted of 600 & 1000 ppm, 800 & 1200 ppm and 1000 & 1400 ppm. Cutting tubers as a sub-plot consists of without cutting, cutting ¼ part and cutting 1/3 part. The data obtained from the study were analyzed using analysis of variance (ANOVA), if there is a significant difference then the analysis of the data obtained will be continued with the Duncan's Multiple Range Test (DMRT) at a test level of 5%. The results showed that there was an interaction on the parameter number of leaves 14 DAP. The AB Mix concentration treatment had a significant effect on the parameters of plant height at 14 DAP, number of leaves 28 and 42 DAP, tuber diameter, tuber fresh weight and tuber dry weight. The tuber cutting treatment had a significant effect on the plant height parameters 14 DAP.

Keywords : Shallots, Floating Raft Hydroponics, AB mix, Cutting Bulbs