

**APPLICATION OF AB MIX AND BROWN ALGAE EXTRACT  
(*Sargassum* sp) ON THE GROWTH OF LOKANANTA SHALLOT  
PLANTS (*Allium ascalonicum* L.) AXIS HYDROPONIC SYSTEM**

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**ABSTRACT**

Shallots (*Allium ascalonicum* L.) are horticultural plants that have high economic value in Indonesia. The problem experienced in shallot cultivation is land conversion. One way to overcome land conversion is hydroponic cultivation. The purpose of this study was to determine the best concentration of AB Mix and concentration of *Sargassum* sp poc for the growth and yield of shallots. The research method used was field research with a Completely Randomized Design of 2 factors + 1 control. The research data were analyzed using Analysis of Variance (ANOVA) at a level of 5%, and continued with DMRT at a level of 5%. The results showed that there was a significant difference between the treatment and control in plant height parameters (14 HST, 28 HST, and 42 HST) and tuber diameter. The combination of AB Mix and *Sargassum* sp concentration treatments showed better results than the control for plant height at the ages of 14 HST, 28 HST and 56 HST. There was an interaction in the fresh weight of shallot bulbs per clump. AB Mix concentration of 1000 ppm gave the best results on parameters of plant height, number of leaves, fresh weight of tubers, dry weight of tubers and tuber diameter. *Sargassum* sp poc concentration of 3 ml/L gave the best results on parameters of plant height, number of leaves, and fresh weight of tubers.

**Keywords :** *Shallots, Hydroponic axix system, AB Mix Concentration, Liquid sargassum* sp.