

APPLICATION OF TYPES NUTRITION AND SEEDLING AGE ON THE GROWTH AND YIELD OF PAKCHOY (*Brassica rapa* L.) PLANTS USING NFT HYDROPONIC SYSTEM

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ABSTRACT

Pakcoy mustard greens (*Brassica rapa* L.) is a plant from the *Brassicaceae* family which is very popular because it contains protein, fat, Ca, P, Fe, Vitamins A, B, C, E and K which are good for health. The problem that arises is that agricultural land is increasingly narrowing, causing the need for pak choy production to not be met optimally. The application of NFT (Nutrient Film Technique) hydroponics is one solution to overcome this problem. The research aims to determine the most appropriate type of nutrition and seed age for the growth and yield of pakcoy plants using the NFT hydroponic system. The research was carried out from April to May 2024 at CV.Goodplant Hydroponics Jalan Raya Kadisoka, Purwomartani Village, Kapanewon Kalasan, Sleman Regency. The research method used was a field experiment arranged in a comprehensive plot plan (*Split Plot*). Parameters observed include plant height, number of leaves, leaf area, root volume, plant fresh weight, economic fresh weight, harvest index. The data obtained were explained using ANOVA at 5% level and tested using the 5% BNT test. The results of the study showed that there was no interaction between the types of nutritional treatment and seedling age for all parameters. The AB-Mix vegetable nutritional treatment was not significantly different from the AB-Mix pakchoy nutritional treatment in all parameters. Treatment of seedlings aged 12 HSS and 14 HSS gave equally good results in plant height at 4 MST, root volume, economic fresh weight, and harvest index.

Keywords: *Hydroponic, AB-Mix nutrition, Seed age*