GROWTH AND PRODUCTION OF CUCUMBER (Cucumis sativus L) ON VARIOUS PLANTING MEDIA AND TIME PRUNING WITH SUBSTRATE HYDROPONIC SYSTEMS

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ABSTRACT

This study aims to determine the type of growing media and the right time for pruning shoots to give the best effect on growth and yield of cucumber (Cucumis sativus L) using hydroponic substrates. The research was carried out from June to August 2022 at the Practical Farm of the UPN "Veteran" Yogyakarta Faculty of Agriculture located in Wedomartani, Ngemplak, Sleman, Yogyakarta. The research method used an environmental design RAKL (Completely Randomized Block Design) with two factors which was repeated three times. The first factor was the planting medium, namely husk charcoal, cocopeat, and a combination of husk charcoal and cocopeat (1:1). The second factor is the pruning time, namely pruning 15 DAP, 20 DAP, and 25 DAP. The hydroponic system used is a drip irrigation substrate system. The data obtained was processed by Analysis of Variance (ANOVA), followed by the Duncan Multiple Range Test (DMRT) at a test level of 5%. The best treatment combination was the M3P2 treatment for the number of flowers, number of fruit planted, and fruit weight planted. The treatment of husk charcoal + cocopeat (M3) growing media gave the best results on the parameters of number of leaves, number of flowers, and fruit diameter. Pruning treatment at 20 DAP gave the best results on the parameters of number of leaves, time of flower emergence, fruit diameter, and fruit length.

Key words: cucumber, drip irrigation, husk charcoal, cocopeat, pruning time