THE EFFECT OF CHARCOAL HUSK GROWING MEDIA COMPOSITION AND SHOOT PRUNING TIMING ON THE GROWTH AND YIELD OF OKRA (Abelmoschus esculentus L.)

By : Rahajeng Natasya Supervised by : Darban Haryanto and Maryana

ABSTRACT

Okra is a horticultural plant rich in benefits, but its productivity remains low. Improving okra production can be achieved through the intensification of cultivation techniques, specifically by using charcoal husk as a planting media and pruning the shoots. This study aims to determine the composition of the planting media in terms of the ratio of soil to charcoal husk and the timing of shoot pruning on the growth and yield of okra (Abelmoschus esculentus). The research was conducted using a two-factor Randomized Complete Design (RCD). The first factor was the composition of the planting media with three levels: a 1:1 ratio of soil to charcoal husk, a 1:2 ratio, and a 1:3 ratio. The second factor was the timing of shoot pruning with four levels: no pruning, pruning at 14 days after planting (DAP), pruning at 21 DAP, and pruning at 28 DAP. Data were analyzed using Analysis of Variance (ANOVA) at a 5% significance level. The results showed that the combination of a 1:2 and 1:3 planting media without pruning produced the highest fruit weight per plant at the third harvest. The 1:3 planting media provided the best results for plant height at 10 DAP and 20 DAP, stem diameter at 10, 20, and 30 DAP, fruit length, number of fruits per plant, fruit weight per plant, and harvest index. The treatment without pruning yielded the best results for plant height at 10, 20, 30, and 40 DAP, number of fruits per plant, fruit weight per plant, and harvest index.

Keyword : okra, charcoal husk, shoot pruning