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## Required amounts of medium and fertilizer for potted culture of zucchini

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### ABSTRACT

In Japan, zucchini culture has yet to get underway, and the current costs of zucchini can be attributed to damage from soil-borne disease and the unstable yields due to seasonal change of female flowers. Eradication of these problems will lead to stable supply and a consequent price reduction of zucchini fruits. We previously clarified the efficacy of potted culture as a new culture method for zucchini, but potted culture can be burdensome as the weak water and nutrient retention capacity of the medium warrants its regular replacement. To solve this problem, in this study, we investigated the blend ratio for mixing rice husk charcoal with peat and the amount of fertilizer required for potted culture of zucchini. Results revealed no significant differences in the length of the largest leaf, total number of flowers, number of female flowers, and the ratio of female flowers to total flowers with different blend ratios of rice husk charcoal to peat. However, the number of harvested fruits increased with higher ratios of rice husk charcoal to peat and was highest at 80:20. The length of the largest leaf increased with increased amounts of fertilizer, with the best response was at 200 g. No significant differences were noted between the ratio of female flowers to total flowers in any treatments. In addition, the number of harvested fruits was highest with 160 g and 200 g of fertilizer. Taken together, the optimal blend ratio of rice husk charcoal to peat is 80:20, and the optimal amount of fertilizer with this ratio is 160 g.

### KEYWORDS

Zucchini; Rice Husk Charcoal; Peat; Potted Culture; Fertilizer

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