

GROWTH RESPONSE OF RED DRAGON FRUIT (*Hylocereus polyrhizus* (Weber) Britton & Rose) TO THE SOURCE OF STEK MATERIALS AND MATERIALS OF LIQUID ORGANIC FERTILIZER

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ABSTRACT

Dragon fruit is a horticultural plant that is in demand in the food and beverage industry because it has health benefits. The study aimed to determine the best source of cuttings and liquid organic fertilizer on the growth of red dragon fruit. The research was conducted at Bhumee Organic, Dusun Jongkang, Kalurahan Sariharjo, Kapanewon Ngaglik, Sleman Regency, Yogyakarta Special Region in August - October 2024. The research method was a field experiment with a factorial completely randomized design (CRD) arranged using two factors. The first factor is the source of cutting material (shoot, middle stem, and lower stem) and the second factor is the type of liquid organic fertilizer (pineapple peel and watermelon peel, rabbit urine, cow urine, and banana stem). Data were analyzed using Analysis of Variance (ANOVA) at the 5% significance level. To determine the differences between treatments, it was further tested using Duncan Multiple Range Test (DMRT) at 5% significance level. The results showed that there was an interaction between the treatment of the source of cuttings material and the type of liquid organic fertilizer on the number of shoots 5 weeks after the treatment of the middle stem and cow urine and the root volume of the root treatment of the lower stem and rabbit urine. The treatment of the best source of cuttings material in the length of shoots 7 weeks after planting is the middle stem, the length of shoots 9 weeks after planting is the shoots and middle stem, and the fresh weight of plants is the middle stem and rootstock. The best liquid organic fertilizer treatment on the percentage of life is pineapple peel and watermelon peel, rabbit urine, and cow urine.

Keywords: *red dragon fruit, source of cutting material, liquid organic fertilizer*