

**Treatment of Vitamin Variant and Concentration on In Vitro Red dragon
Fruit (*Hylocereus costaricensis* L.) Growth.**

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ABSTRACT

Red dragon fruit is a crop that have high economic value and good benefit for human health. The multiplication of red dragon fruit using plant tissue isolation method. This research was aimed for knowing the interaction between the effect of given type and concentration of vitamin treatment on in vitro red dragon fruit planlet growth, also to determine the right vitamin for red dragon fruit growth. The method that was used in this research was Complete Randomized Design with 2 factors. The first factor is the type of vitamin, which were Glisin, Tripton, and Thiamin. The second factor is the concentration of vitamin at 2 mg/L, 4 mg/L, and 6 mg/L. Every combination had been repeated 3 times. The data from this research was analyzed by using ANOVA (Analisis of Varian) on 5% standard and if there were significant data found, there will be advanced test with Duncan's Multiple Range Test (DMRT) on 5% standard. The result of this research showed that there is interaction between glisin at 4 mg/L treatment on root length (1,32 cm), glisin treatment produce red dragon fruit with the most root (2,44) compared to thiamin/ glisin concentration at 2 mg/L produce the highest yield (0,06 g), 4 mg/L tripton produce the highest planlet (2,28 cm) and also 6 mg/L thiamin on the highest live percentage of planlet (89,26 %)

Keywords : vitamin, red dragon fruit, in vitro