

Effect of Concentration and Soaking Time of Sprout Extract as Natural ZPT Against Growth Pepper Cuttings (*Piper nigrum* L.)

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ABSTRACT

*Pepper (*Piper nigrum* L.) is one of the typical spice plants that has high economic value and cannot be substituted for anything else. Poor cultivation techniques, especially in terms of providing planting material, are a problem for pepper cultivation in Indonesia which causes a decrease in pepper plant productivity. The low pepper production in Indonesia is the cause of the difficulty in getting good and quality pepper seeds. Efforts to increase production are not only through land expansion, but also must improve and develop cultivation techniques by vegetative propagation, namely by cuttings. This research was conducted at the Wire House, from January 2022 to April 2022, Jember State Polytechnic. Factorial Randomized Block Design (RAK) consisting of 2 factors, where the first factor is the concentration of bean sprout extract K0 = bean sprout extract 0 ppm (control), K1 = bean sprout extract 21 ppm or 7,5%, K2 = bean sprout extract 42 ppm or 15% and the second factor namely the length of soaking of bean sprout extract P1 = 2 hours, P2 = 3 hours, P3 = 4 hours. Parameters observed were the percentage of shoots, shoot length, number of internodes, shoot diameter and root volume. The results of the observations were tested using (Anova) and if there were significantly different results, further tests were carried out using the Honest Significant Difference (BNJ) level 5%. The results showed that the effect of concentration treatment and soaking time of bean sprout extract had no significant effect on the parameters of bud percentage, shoot length, number of internodes, shoot diameter and root volume of pepper cuttings.*

Keywords: *Pepper cuttings, Concentration, Soaking time*