The Effect of ZPT Concentration and Planting Media Composition on the Growth of One-Piece Cuttings in Pepper Plants (Pipper nigrum. L.)

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ABSTRACT

This study aims to determine the effect of the ZPT concentration test and the composition of planting media on the cuttings of one segment of pepper (Pipper nigrum. L.). This research was conducted in Agronomy Land, Department of Agricultural Production, State Polytechnic of Jember, conducted experimentally and used factorial randomized block design (RBD) with 2 kinds of factors. The first factor is the Zpt Growtone concentration of 0 g /1 liter of water (A0), 15 g /1 liter of water (A1), 30 g /1 liter of water (A2), and 45 g /1 liter of water (A3). The second factor is the composition of planting media top soil + sand (B1), top soil + sand + manure (B2), and top soil + sand + manure + husk charcoal (B3) ratio (1: 1: 1). Each combination was repeated 3 times, each treatment unit consisting of 10 cuttings so that 120 polybags were needed. So all 360 polybags are needed. The observation parameters used were percentage of live cuttings, percentage of finished cuttings, shoot height, number of internodes, number of roots, and root length. The results showed that the Growtone ZPT concentration had a significant effect on the root length parameter at 16 WAP at a concentration of 30 g / 1L. The composition of the planting medium Top soil + sand + manure (1: 1: 1) has a significant effect on the number of roots aged 16 MST on pepper seeds.

Keywords: Pepper, cuttings, ZPT Growtone, Media planting