Growth of Pepper (*Piper nigrum* L.) Cuttings by Giving IBA and Leaf Fertilizer

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ABSTRACT

Pepper is one of the plantation crops with demand increasing every year. The aim of this research was to determine the interaction between giving IBA and the dose of foliar fertilizer on the growth of cuttings, to find out the real difference between the combination of treatment and control, to determine the right concentration of IBA and the right dose of foliar fertilizer for the growth of pepper cuttings. The research method used a Completely Randomized Design (CRD). The first factor is IBA with three levels, namely 2000 ppm, 3000 ppm and 4000 ppm. Second factor Growmore with three levels, namely 100 ml/plant, 200 ml/plant and 300 ml/plant as well as control. Analysis uses the Orthogonal Contrast Test followed by the DMRT test at 5% level and then the Variety Print. The results showed that there was an interaction between the combination of treatments on the growth of pepper cuttings. Combination of 3000 ppm IBA treatment and Growmore 200 ml/plant was significantly better than the control treatment in terms of the percentage of live cuttings, shoot emergence time, number of leaves at 60 and 90 HST, leaf area, shoot length, number of shoots, number of roots, root length, root volume and fresh root weight. IBA 3000 ppm is the right concentration to increase the time for shoot emergence, the number of leaves at 60 and 90 DAP and the number of roots in pepper plant cuttings. Growmore 200 ml/plant is the right dose to increase the number of leaves and the number of roots in pepper plant cuttings.

Keywords: Pepper cuttings, IBA, foliar fertilizer