

**THE EFFECT OF USING SOME TYPES OF NATURAL GROWTH
REGULATING SUBSTANCES ON GROWTH OF INTERNODES
NUMBER OF PEPPER CUTTINGS (*Piper nigrum* L.)**

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ABSTRACT

Pepper is included in the category of spice plants that have high economic value. The purpose of this study was to determine the best number of internodes and the right type of natural growth regulator for the growth of pepper plant cuttings. The research be carried out in February - April 2023 at the paranet house located at the Yogyakarta "Veteran" National Development University Faculty of Agriculture using a Completely Randomized Design (CRD) of two treatment factors. The first factor was the type of natural growth regulator, namely coconut water, onion extract, and bean sprout extract, while the second factor was the number of segments of the pepper plant, 1, 2, and 3 segments. The results showed that there was an interaction between the types of natural growth regulators and the number of cuttings. The growth regulator of young coconut water with the number of cuttings of 3 segments is able to increase the percentage of survival and speed up the emergence of shoots. Natural growth regulators in young coconut water are able to increase the percentage of survival, accelerate the emergence of shoots, increase the number of roots, root volume, shoot dry weight, and root dry weight on pepper cuttings. Cuttings with 3 nodes can increase the survival rate, accelerate the emergence of shoots, increase the number of leaves, root length, and shoot dry weight of pepper cuttings.

Keywords : *Piper Nigrum* L., *cuttings*, *coconut water*, *shallot*, *bean sprout*