EFFECT OF PLANTING MEDIA COMPOSITION AND NATURAL GROWTH REGULATORY SUBSTANCES (COMBINATION OF YOUNG COCONUT WATER AND ONION EXTRACT) ON THE GROWTH OF VANILLA CUTTINGS (Vanilla planifolia Andrews.)

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ABSTRACT

Vanilla is a spice plant that has a high economic value. One way to accelerate rooting is the provision of natural growth regulators and the composition of the growing media. This research was conducted with the aim of knowing how the effect of the composition of the growing media and natural growth regulators (a combination of young coconut water and onion extract) on the growth of vanilla cuttings (Vanilla planifolia Andrews.). This research was carried out at the Jember State Polytechnic wire house, Sumbersari - Jember District, from January 2022 to May 2022. The study used a factorial randomized block design with two factors. The first factor is the composition of topsoil planting media: husk charcoal: goat manure which consists of 3 levels, namely: 2:1:1 (M1), 1:2:1 (M2), 1:1:2 (M3). The second factor is a natural growth regulator which consists of 3 levels, namely: Young Coconut Water 300 ml + Shallot Extract 55 ml (P1), Young Coconut Water 400 ml + Shallot Extract 40 ml (P2), Young Coconut Water 500 ml + Shallot Extract 25 ml (P3). The research data were analyzed using the F test with a level of 5% and 1%. If the results are significantly different, a further test is carried out using the BNJ (Real Honest Difference). This study gave results that were not significantly different on the parameters of live percentage, shoot diameter, number of leaves, number of internodes, root length, and wet weight, and significantly different results on shoot height parameters.

Keywords: Vanilla, Growing media, Natural growt regulator