APPLICATION OF NATURAL GROWTH REGULATORS AND PLANTING MEDIA COMPOSITION IN THE GROWTH OF GRAPE (*VITIS VINIFERA* L.) CUTTINGS

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ABSTRACT

Propagating grape plants through cuttings has problems, the lack of root and shoots growth. Using natural plant growth regulators (PGR) and appropriate planting media composition can stimulate the growth of grape stems. This research aims to obtain natural PGR types and planting media compositions that are suitable for growing grape cuttings. The research method was a field experiment using a Completely Randomized Design (CRD) with 2 factors and 3 replications. The first factor, types of natural PGR, M1 = red onion extract, M2 = young coconut water, and M3 = green bean sprout extract. The second factor, the composition of the planting medium, P1 = goat manure fertilizer:soil = 2:1, P2 = goat manure fertilizer:soil = 1:2, and P3 = goat manure fertilizer:husk charcoal 1:2 and P4 = goat manure:soil: husk charcoal = 1:1:1. The results showed an interaction between the two treatments on the fresh weight of shoots and roots and root volume. Shallot extract showed the best results in number of shoots, shoot length, and number of leaves at 4, 6, 8, and 10 WAP, number of roots, root length, dry weight of shoots and roots, and survival percentage. Goat manure fertilizer : soil: husk charcoal 1:1:1 showed the best results on shoot and root dry weight.

Keywords: cuttings, grape, planting media compotition, natural plant grow regulator