

**THE EFFECTIVENESS OF NATURAL GROWTH REGULATORS AND
TYPES OF GROWING MEDIA ON THE SUCCESS OF PINEAPPLE
(*Ananas comosus* (L) Merrill) PROPAGATION USING CROWN SHOOT
CUTTINGS**

By : Martania Sri Ayu Manik

Supervised by : Maryana

ABSTRACT

Pineapple (*Ananas comosus* (L.) Merrill) is one of the horticultural plants classified as a tropical fruit plant that has many benefits. One of the constraints in the development of pineapple cultivation that causes production fluctuations is the limited availability of ready-to-plant seedlings both in terms of quantity and quality. Pineapple plant propagation can be done using pineapple crown cuttings. The purpose of this research is to determine the influence of natural growth regulators and the best type of growing media on the growth of pineapple seedlings. The experimental method used a Completely Randomized Design (CRD) with two factors. The first factor was natural growth regulators consisting of 4 levels: Z1 = Red onion extract, Z2 = bean sprout extract, Z3 = Aloe vera gel, Z4 = young coconut water. The second factor was the type of growing media consisting of 4 levels: M1 = compost: rice husk charcoal: sand (2:1:2), M2 = compost: rice husk charcoal: soil (2:1:1), M3 = soil: sand: compost (1:2:1), M4 = soil: sand: rice husk charcoal (2:1:2). Each treatment was repeated 3 times. The data obtained were analyzed using Analysis of Variance at the 5% significance level and further tested using Duncan Multiple Range Test (DMRT) at the 5% significance level. The observation results showed that the combination treatment of natural PGRs young coconut water and the type of growing media soil: sand: rice husk charcoal (2:1:2) significantly performed better in terms of shoot emergence, shoot height, and leaf count compared to other combinations.

Keywords: Pineapple Crown Cuttings, Natural Growth Regulators, Growing Media