

# **THE EFFECT OF RED ONION EXTRACT ON ROOT GROWTH OF VANILLA (*Vanilla planifolia*) PLANTS FROM DIFFERENT BOOKS**

**Dibimbing oleh Rahmawati, SP. MP**

**Angga Gidion Vendy Agita**  
Program Studi Budidaya Tanaman Perkebunan  
Jurusan Produksi Pertanian

## **ABSTRACT**

Vanilla cuttings are relatively easy to root, but treatment with is still needed in accelerating obtaining uniformity in the development of the root system. Growth regulators that are often used to stimulate root growth generally use the hormone auxin. The objectives of this research were: To determine the effect of giving onion extract on root growth of vanilla cuttings, To determine the effect of using different cutting materials on root growth, To determine the interaction between administration of onion extract and the use of different planting materials on root growth of vanilla cuttings. from February to April 2021 at the Jember State Polytechnic. This study used a factorial randomized block design (RAK) with two factors, namely P and G. The P treatment included P0 (without extract), P1 (shallot extract 45%) P2 (shallot extract 60%) and P4 (shallot extract). 60%). The G treatment includes G1 (one internode) G2 (two internode) and G3 (three internode) with 12 treatment combinations. Further testing uses the BNJ test with a level of 5%. The results showed that the treatment of the number of cutting segments was significantly different to the root growth of the cuttings in the G3 treatment. This treatment provides sufficient food reserves for cutting root growth

**Keywords:** *vanilla, onion extract, auxin, internode*