

THE EFFECT OF CONCENTRATION OF PGPR (*Plant Growth Promoting Rhizobacteria*) SUGAR CANE ROOTS ON THE GROWTH OF SUGAR CANE IN THE GROWTH PHASE BULULAWANG VARIETY AND N XI-4T

Dibimbing oleh Ir. Triono Bambang Irawan, MP

Muhamad Firman Fatahillah

Program Studi Budidaya Tanaman Perkebunan
Jurusan Produksi Pertanian

ABSTRAK

This study aims to determine the effect of sugarcane root PGPR concentration on the growth of sugarcane varieties. Bululawang and NXI 4 T. Pene This research was conducted from December 2021 to April 2022 at the Jember State Polytechnic. This study used a factorial randomized block design (RAK) with two factors, namely K and V. The first factor was the concentration of PGPR (K), and the second factor was the variety. sugarcane (V). In the first factor (K) there are K0 (PGPR 0 ml/liter), K1 (PGPR 50 ml/liter), K2 (PGPR 100 ml/liter), and K3 (PGPR 150 ml/liter), and in the second factor (V) there are V1 (Bululawang variety) and V2 (Varietyas NXI 4 T), with 8 treatment combinations K0 V1 (PGPR 0 ml/Liter + Sugarcane Bululawang variety), K0 V2 (PGPR 0 ml/Liter + Sugarcane variety N XI-4 T), K1 V1 (PGPR 50 ml/Liter + Sugarcane Bululawang variety), K1 V2 n (PGPR 50 ml/Liter + Sugarcane variety N XI-4 T), K2 V1 (PGPR 100 ml/liter + Sugarcane Bululawang variety), K2 V2 (PGPR 100 ml/liter + Sugarcane variety N XI-4 T), K3 V1 (PGPR 150 ml/liter + Sugarcane Bululawang variety), K3 V2 (PGPR 150 ml/liter + Sugarcane variety N XI- 4T). Testing the data obtained from observations using the 5% f test and if there is a significant difference in each treatment, it will be continued using the 5% level BNT test. The results obtained based on the K factor variance table (PGPR concentration) give results that are not significantly different at high parameters. plants, stem diameter, number of tillers, and number of leaves, as well as factor (V) of plant variety gave insignificantly different results on the parameters of plant height, stem diameter, number of tillers, and number of leaves

Keywords: *Sugarcane, PGPR concentration, Bululawang variety and NXI 4 T*