RANGKUMAN

Iqbal Pradana : Uji Efektifitas Pupuk *Trichoderma Sp* Dan Pupuk Organik Cair (POC) Terhadap Pertumbuhan Dan Produksi Tanaman Padi Gogo" Dibimbing oleh Dr.Ir Rahmad Setia Budi, MSc sebagai ketua komisi pembimbing Dr. Ir.Muhammad Rizwan, MP sebagai anggota komisi pembimbing. Tujuan penelitian ini adalah Mengetahui pengaruh terhadap pemberian pupuk *Trichoderma sp* dan pupuk organik cair (POC) terhadap pertumbuhan dan produksi padi gogo dan mengetahui pengaruh perbedaan pupuk *Trichoderma sp* dan pupuk organik cair (POC) terhadap pertumbuhan dan produksi padi gogo. Penelitian ini dilaksanakan di lahan penelitian desa Laut Tador, Kecamatan Sei Suka, Kabupaten Batu Bara, Provinsi Sumatera Utara. Ketinggian tempat ± 25 mdpl dengan tofografi datar Penelitian ini dilaksanakan pada bulan Oktober 2021 s/d selesai. Metode yang digunakan dalam penelitian ini adalah Rancangan Acak Kelompok (RAK) Faktorial sebagai berikut , Menggunakan pupuk *Trichoderma sp* (T) sebagai faktor pertama yang terdiri atas T_0 = Kontrol (Tanpa pemberian pupuk *Trichoderma sp*).T_1 = Pupuk *Trichoderma sp 4 kg/*plot, T_2 = Pupuk *Trichoderma sp* 10 kg/plot. faktor kedua Menggunakan pupuk organik cair (POC), (P) sebagai yang terdiri atas : P_0 = Kontrol (tanpa pemberian pupuk organik cair (POC). P_1 = Pemberian pupuk organik cair plus (POC) 7 ml/L air. P_2 = Pemberian pupuk organik cair (POC) 14 ml/L air. P_3 = Pemberian pupuk organik cair (POC)
21 ml/L air. Hasil penelitian Perlakuan Perlakuan Pupuk organik cair (P) berpengaruh nyata terhadap tinggi tanaman 3 MST berpenagruh nyata terhadap tinggi tanaman, jumlah anakan total per rumpun, produksi perplot dan ketahan penyakit hawar daun pertama 9 MST.Pupuk *Trichoderma sp* (T) berpengaruh nyata tinggi tanaman 3 MST, produksi perplot dan ketahana penyakit hawar daun pertama 9 MST dan 1000 butir sedangkan Interaksi antara pupuk organik cair dan pemberian pupuk *Trichoderma sp* berpengaruh nyata pada parameter pengamatan tinggi tanaman 3 MST, produksi per plot.

Kata Kunci : **Efektifitas Pupuk, *Padi Gogo,* Pupuk *Trichoderma, Pupuk Organik Cair***

SUMMARY

Iqbal Pradana: Testing the Effectiveness of *Trichoderma Sp* Fertilizer and Liquid Organic Fertilizer (POC) on the Growth and Production of Upland Rice Plants "Supervised by Dr.Ir Rahmad Setia Budi, MSc as chairman of the supervisory commission Dr.Ir.Muhammad Rizwan, MP as a member of the supervisory commission. . The purpose of this study was to determine the effect of *Trichoderma sp* fertilizer and liquid organic (POC) fertilizer on the growth and production of upland rice and to determine the effect of differences between *Trichoderma sp* fertilizer and liquid organic (POC) fertilizer on the growth and production of upland rice. This research was conducted in the research area of Laut Tador Village, Sei Suka District, Batu Bara Regency, North Sumatra Province. Altitude ± 25 masl with flat topography. This research was carried out in October 2021 until completion. The method used in this study was a factorial randomized block design (RAK) as follows, using *Trichoderma sp* (T) fertilizer as the first factor consisting of T0 = Control (Without *Trichoderma sp* fertilizer). T1 = tricoderma sp fertilizer 4 kg/plot, T2 = trichoderma sp fertilizer 10 kg/plot. second factor Using liquid organic fertilizer (POC), (P) as consisting of: P0 = Control (without giving liquid organic fertilizer plus (POC). P1 = Application of liquid organic fertilizer (POC) 7 ml/L water. P2 = Provision of liquid organic fertilizer (POC) 14 ml/L water P3 = Provision of liquid organic fertilizer plua (POC) 21 ml/L water Research results Treatment of Liquid organic fertilizer (P) significantly affected plant height 3 WAP had a significant effect on height plants, total tillers per clump, perplot production and resistance to the first leaf blight 9 MST. *Trichoderma sp* (T) fertilizer significantly affected plant height 3 WAP, perplot production and disease resistance of the first leaf blight 9 MST and 1000 grains while the interaction between organic cohesive fertilizers and Fertilizer application had a significant effect on the 3 MST plant height observation parameter, production per plot.

Keywords: Effectiveness of Fertilizer, Upland Rice, Trichoderma Fertilizer, Liquid Organic Fertilizer