

RINGKASAN

Penelitian ini dilaksanakan di Desa Dalu 10 B, Kecamatan Tanjung Morawa, Kabupaten Deli Serdang, Provinsi Sumatera Utara. Pada ketinggian ± 35 mdpl. Penelitian ini dilaksanakan bulan April sampai dengan bulan September 2022. Penelitian ini bertujuan untuk mengetahui Pengaruh pemberian Pupuk Organik Cair pada system tanaman jajar legowo terhadap pertumbuhan dan produksi tanaman padi varietas inpari 32. Penelitian ini menggunakan model Rancangan Acak Kelompok (RAK) faktorial dengan 2 faktor perlakuan, Faktor I sistem tanam jajar legowo dengan 3 taraf perlakuan yaitu : S_0 = Jajar Legowo 2:1, S_1 = Jajar Legowo 3:1 dan S_2 = Jajar Legowo 4:1. Faktor II pemberian pupuk organik cair dengan 4 taraf perlakuan yaitu : D_0 = tanpa perlakuan, D_1 = 30 ml/l air, D_2 = 60 ml/l air dan D_3 = 90 ml/l air. Parameter yang diamati adalah tinggi tanaman, jumlah anakan per rumpun, jumlah anakan produktif, panjang malai dan produksi gabah per plot.

Hasil penelitian menunjukkan sistem tanaman jajar legowo dengan jarak tanam yang berbeda berpengaruh meningkatkan pertumbuhan dan produksi tanaman padi sawah. Pemberian pupuk organik cair melalui daun berpengaruh meningkatkan pertumbuhan dan produksi pada tanaman padi. Interaksi antara system jarak tanam jajar legowo dengan pupuk organik cair tidak berpengaruh nyata dalam meningkatkan pertumbuhan dan produksi pada tanaman padi.

Kata Kunci : Oryza sativa, Sistem Tanam Jajar Legowo, Pupuk Organik Cair

SUMMARY

This research was carried out in Dalu 10 B Village, Tanjung Morawa District, Deli Serdang Regency, North Sumatra Province. At an altitude of ± 35 meters above sea level. This research was conducted from April to September 2022. This research aims to determine the effect of applying liquid organic fertilizer to the Jajar Legowo plant system on the growth and production of the Inpari 32 variety of rice plants. This research uses a factorial Randomized Block Design (RAK) model with 2 factors. treatment, Factor I is the Jajar Legowo planting system with 3 levels of treatment, namely: S0 = Jajar Legowo 2:1, S1 = Jajar Legowo 3:1 and S2 = Jajar Legowo 4:1. Factor II provides liquid organic fertilizer with 4 levels of treatment, namely: D0 = no treatment, D1 = 30 ml/l water, D2 = 60 ml/l water and D3 = 90 ml/l water. The parameters observed were plant height, number of tillers per hill, number of productive tillers, panicle length and grain production per plot.

The results of the research show that the Jajar Legowo plant system with different planting distances has the effect of increasing the growth and production of lowland rice plants. Providing liquid organic fertilizer through the leaves has the effect of increasing growth and production in rice plants. The interaction between the Jajar Legowo plant spacing system and liquid organic fertilizer did not have a significant effect on increasing growth and production of rice plants.

Keywords: *Oryza sativa*, Jajar Legowo Planting System, Liquid Organic Fertilizer