

INTISARI

Produksi padi di Indonesia dari tahun 2018 hingga 2020 menurun. Produksi hasil dapat ditingkatkan dengan pemupukan. Penelitian ini bertujuan mengetahui pengaruh pupuk organik limbah bulu ayam terhadap pertumbuhan dan hasil tanaman padi Inpari 42 serta mengetahui takaran pupuk organik limbah bulu ayam yang tepat dalam mensubstitusi pupuk anorganik. Penelitian dilaksanakan di Pusat Inovasi Agroteknologi (PIAT) dan Laboratorium Manajemen Tanaman, Universitas Gadjah Mada dari April 2021 hingga Oktober 2021. Penelitian menggunakan Rancangan Acak Lengkap (RAL) satu faktor dengan empat ulangan. Faktor penelitian adalah kombinasi pupuk (P) yaitu tanpa pemupukan (P0), anorganik 100% (P1), pupuk anorganik 75% + pupuk organik limbah bulu ayam 25% (P2), pupuk anorganik 50% + organik limbah bulu ayam 50% (P3), pupuk anorganik 25% + pupuk organik 75% (P4) dan pupuk organik 100% (P5). Hasil penelitian menunjukkan bahwa perlakuan pupuk anorganik 75% + pupuk organik limbah bulu ayam 25% (P2) dan perlakuan pupuk anorganik 50% + pupuk organik limbah bulu ayam 50% (P3) memiliki pertumbuhan lebih baik dibandingkan dengan perlakuan tanpa pemupukan (P0) dan tidak beda nyata dengan perlakuan pupuk anorganik 100% (P1) pada jumlah anakan, bobot tanaman, panjang akar total, luas daun, kandungan klorofil, laju asimilasi bersih, laju pertumbuhan nisbi, bobot daun khas dan komponen hasil. Perlakuan pupuk anorganik 50% + organik limbah bulu ayam 50% (P3) merupakan kombinasi perlakuan terbaik untuk mendukung pertumbuhan dan hasil tanaman padi.

Kata kunci : hasil, padi, pemupukan, pertumbuhan

ABSTRACT

Rice production in Indonesia from 2018 to 2020 continued decrease. To increase production can be done with fertilization. Research aims to know the effect of organic fertilizer from poultry feather wastes on growth and yield of rice Inpari 42 and dosage organic fertilizer from poultry feather wastes can be substitute anorganic fertilizer. Research was conducted in Agrotechnology Innovation Center (PIAT) and Crop Management Production Laboratory, Gadjah Mada University from April to October 2021. Research used Completely Randomized Design (CRD) one factor with four replication. The factor was combinations of fertilizer (P) i.e. without fertilization (P0), anorganic fertilizer 100% (P1), anorganic fertilizer 75% + organic fertilizer from poultry feather wastes 25% (P2), anorganic fertilizer 50% + organic fertilizer from poultry feather wastes 50% (P3), anorganic fertilizer 25% + organic fertilizer from poultry feather wastes 75% (P4) and organic fertilizer from poultry feather wastes 100% (P5). The research results show that treatment anorganic fertilizer 75% + organic fertilizer from poultry feather wastes 25% (P2) and treatment anorganic fertilizer 50% + organic fertilizer from poultry feather wastes 50% (P3) better than without fertilization (P0) and did not different with anorganic fertilizer 100% (P1) on number of tillering, plants weight, total root length, total chlorophyll, specific left weight, net assimilation rate, relative growth rate and yield components. Treatment anorganic fertilizer 50% + organic fertilizer from poultry feather wastes 50% (P3) is the best combination of treatments to maintain growth and rice yields.

Key words : yield, rice, fertilization, growth