

## RINGKASAN

Penelitian ini bertujuan untuk: mengetahui dosis pupuk kotoran ayam terbaik, konsentrasi pupuk organik cair (POC) air leri terbaik, dan pengaruh kombinasi terhadap pertumbuhan dan hasil tanaman pakcoy (*Brassica chinensis* L.) Penelitian dilaksanakan pada bulan Mei sampai Juli 2019, di rumah plastik Desa Melung Kecamatan Kedungbanteng Kabupaten Banyumas. Penelitian menggunakan Rancangan Acak Kelompok Lengkap (RAKL) faktorial yang terdiri dari dua faktor yaitu dosis pupuk kotoran ayam dan konsentrasi pupuk organik cair air leri. Macam dosis yang digunakan yaitu tanpa pemberian pupuk kotoran ayam (D0), dosis 15 ton/ ha (D1), dan 30 ton/ha (D2). Adapun konsentrasi POC air leri yang digunakan yaitu tanpa pemberian POC air leri (P0), konsentrasi 30 ml/liter (P1), konsentrasi 60 ml/liter (P2), dan konsentrasi 90 ml.liter (P3). Variable yang diamati meliputi tinggi tanaman, jumlah daun, luas daun, bobot tanaman segar, bobot tajuk segar, bobot akar segar, bobot tanaman kering, bobot tajuk kering, dan bobot akar kering.

Hasil penelitian menunjukkan bahwa pemberian pupuk kotoran ayam dengan dosis 30 ton/ha (D2) memiliki pengaruh nyata terhadap variabel tinggi tanaman, jumlah daun, luas daun, bobot tanaman segar, bobot tajuk segar, dan bobot tajuk kering. Sedangkan pada dosis 15 ton/ha (D1) memberikan pengaruh nyata terhadap bobot akar segar, bobot tanaman kering dan bobot akar kering. Pemberian POC air leri tidak memberikan pengaruh yang nyata pada semua variable pengamatan.

## SUMMARY

*This study aimed to: determine the best dose of chicken manure fertilizer, the best concentration of liquid organic fertilizer (LOF) of rice washing water, and the effect of combination of treatments on the growth and yield of pakcoy (*Brassica chinensis* L.) plants. The study was conducted from May to July 2019, in the plastic house of Melung Village, Kedungbanteng District, Banyumas Regency. The study used a factorial Complete Randomized Block Design (RCBD) consisting of two factors: the dose of chicken manure fertilizer and the concentration of liquid organic fertilizer of rice washing water. The types rates of chicken manure were without chicken manure (D0), 15 tons / ha (D1), and 30 tons / ha (D2). The concentration of LOF compared without LOF (P0), 30 ml /L (P1), 60 ml /L (P2), and 90 ml/L (P3). Variables observed included plant height, number of leaves, leaf area, fresh plant weight, fresh crown weight, fresh root weight, dry plant weight, dry crown weight, and dry root weight.*

*The results showed that the application of chicken manure fertilizer with a dose of 30 tons / ha (D2) had a significant effect on plant height variabel, number of leaves, leaf area, weight of fresh plants, weight of fresh canopy, and weight of dry crowns. Whereas at a dose of 15 tons / ha (D1) thr chicken manure had a significant effect on fresh root weight, dry plant weight and dry root weight. The application of POC of rice waste water did not have a significant effect on all observed variables.*