

RINGKASAN

Pakcoy (*Brassica rapa* L.) adalah jenis tanaman sayur-sayuran yang termasuk keluarga *Brassicaceae*. Tumbuhan pakcoy berasal dari China dan telah dibudidayakan setelah abad ke-5 secara luas di China Selatan dan China Pusat serta Taiwan. Salah satu faktor yang mempengaruhi keberhasilan dalam budidaya tanaman sawi pakcoy adalah aplikasi penggunaan pupuk. Salah satunya adalah penggunaan pupuk organik cair dari sayuran yang mampu memberikan nutrisi bagi pertumbuhan tanaman. POC urine kelinci juga salah satu pupuk yang memiliki kadar Nitrogen tinggi (N), Fosfor (P), Kalium (K) yang lebih tinggi (2,1%, 1,1%, dan 0.5%) dibandingkan dengan Urine ternak lainnya.

Penelitian ini dilaksanakan di Kebun Percobaan Fakultas Pertanian Universitas Islam Sumatera Utara, Kelurahan Gedung Johor, Kecamatan Medan Johor, Kota Medan, Provinsi Sumatera Utara dengan ketinggian tempat ± 25 mdpl dan topografi datar. Penelitian ini dilaksanakan pada Bulan November sampai dengan bulan Desember 2022. Penelitian ini bertujuan untuk menguji pengaruh pemberian POC sayuran dan POC urine kelinci terhadap pertumbuhan dan produksi tanaman pakcoy. Penelitian ini menggunakan Rancangan Acak Kelompok (RAK) Faktorial dengan dua faktor perlakuan yaitu POC sayuran dan POC urine kelinci. Faktor pertama yaitu : POC sayuran terdiri dari 4 taraf yaitu : P_0 = kontrol, P_1 = 50 ml/l, P_2 = 100 ml/l dan P_3 = 150 ml/l. Faktor kedua yaitu : POC urine kelinci terdiri dari 4 taraf yaitu : U_0 = kontrol, U_1 = 50 ml/l, U_2 = 100 ml/l dan U_3 = 150 ml/l. Parameter yang diamati adalah tinggi tanaman, jumlah daun, bobot segar tanaman per sampel, bobot segar tanaman per plot dan bobot produksi per plot. Hasil penelitian menunjukkan bahwa pemberian POC sayuran berpengaruh meningkatkan tinggi tanaman dan berat produksi per plot, tetapi tidak berpengaruh terhadap jumlah daun, bobot segar per sampel dan bobot segar per plot. Pemberian POC urine kelinci berpengaruh meningkatkan pertumbuhan tinggi tanaman, jumlah daun, bobot segar per sampel, bobot segar per plot serta bobot produksi per plot.

Kata Kunci : Tanaman Pakcoy, Pupuk Organik Cair Sayuran, Pupuk Organik Cair Urine Kelinci

SUMMARY

Pakcoy (*Brassica rapa* L.) is a type of vegetable plant that belongs to the Brassicaceae family. Pakcoy plants originate from China and have been widely cultivated after the 5th century in South China and Central China and Taiwan. One of the factors that influence success in the cultivation of mustard greens is the application of fertilizer. One of them is the use of liquid organic fertilizer from vegetables which is able to provide nutrients for plant growth. Liquid organic fertilizer made from vegetables contains 3.12% organic C, N : 1.02%, P : 1.98% and K : 0.85%. So it is very good for the growth and development of microorganisms and plants. Rabbit urine POC is also one of the fertilizers that has higher levels of Nitrogen (N), Phosphorus (P), Potassium (K) which are higher (2.1%, 1.1% and 0.5%) compared to the urine of other livestock.

This research was conducted at the Experimental Garden of the Faculty of Agriculture, Islamic University of North Sumatra, Gedung Johor Village, Medan Johor District, Medan City, North Sumatra Province with an altitude of ± 25 meters above sea level and flat topography. This research was conducted from November to December 2022. This study aimed to examine the effect of giving vegetable POC and rabbit urine POC on the growth and production of pakcoy plants. This study used a factorial randomized block design (RBD) with two treatment factors, namely vegetable POC and rabbit urine POC. The first factor was: POC of vegetables consisted of 4 levels, namely: P0 = control, P1 = 50 ml/l, P2 = 100 ml/l and P3 = 150 ml/l. The second factor, namely: POC of rabbit urine consisted of 4 levels, namely: U0 = control, U1 = 50 ml/l, U2 = 100 ml/l and U3 = 150 ml/l. Parameters observed were plant height, number of leaves, plant fresh weight per sample, plant fresh weight per plot and production weight per plot. The results showed that the application of POC for vegetables had an effect on increasing plant height and production weight per plot, but had no effect on the number of leaves, fresh weight per sample and fresh weight per plot. Giving POC rabbit urine has an effect on increasing plant height growth, number of leaves, fresh weight per sample, fresh weight per plot and production weight per plot.

Keywords: Pakcoy Plant, Vegetable Liquid Organic Fertilizer, Rabbit Urine Liquid Organic Fertilizer