

RINGKASAN

Budidaya tanaman seledri umumnya menggunakan pupuk anorganik sebagai pupuk utama. Penggunaan pupuk anorganik/kimia yang terlalu banyak secara terus menerus mengakibatkan kualitas tanah semakin menurun. Salah satu cara untuk mengurangi penggunaan pupuk anorganik sehingga menghasilkan tanaman bermutu baik yang ramah lingkungan adalah dengan menggunakan pupuk organik cair. Oleh karena itu, penelitian bertujuan untuk mengetahui pengaruh aplikasi pupuk N, P, K terhadap karakter pertumbuhan dan hasil tanaman seledri, mengetahui pengaruh aplikasi pupuk organik cair urine kelinci terhadap karakter pertumbuhan dan hasil tanaman seledri, dan mengetahui pengaruh aplikasi pupuk N, P, K dan pupuk organik cair urine kelinci terhadap pertumbuhan dan hasil tanaman seledri.

Penelitian dilaksanakan pada bulan Mei sampai Agustus 2020 di *screen house* Grand Kusuma Karagin, Desa Karanggintung, Kecamatan Sumbang, Kabupaten Banyumas, Jawa Tengah dengan ketinggian tempat 225 mdpl. Penelitian menggunakan Rancangan Acak Kelompok Lengkap (RAKL) faktorial. Perlakuan terdiri atas dua faktor, dosis pupuk rekomendasi N, P, K (200 kg Urea/ha, 150 kg SP-36/ha, 200kg KCl/ha) yaitu 50%, 75%, dan 100% rekomendasi dan dosis pupuk organik cair yaitu, pupuk organik cair urine kelinci 150 ml/*polybag*, pupuk organik cair urine kelinci 250 ml/ *polybag*, dan pupuk organik cair urine kelinci 350 ml/ *polybag*. Variabel pengamatan pada penelitian ini adalah panjang tanaman, jumlah daun, panjang akar terpanjang, bobot tajuk segar, bobot tajuk kering, bobot akar segar, bobot akar kering, dan warna daun.

Hasil Penelitian menunjukkan bahwa pemberian pupuk N, P, K 50% menghasilkan pertumbuhan dan hasil yang setara atau bahkan lebih baik dibandingkan dengan N, P, K 100% yaitu menghasilkan panjang tanaman 31,56 cm, bobot tajuk segar tanaman 22,59 g, serta pada bobot akar segar tanaman 6,01 g. Pemberian dosis pupuk organik cair urine kelinci dengan dosis 350 ml/*polybag* mampu memberikan hasil yang tinggi pada variabel jumlah daun 39,98 helai. Pemberian dosis pupuk N, P, K dan pupuk organik cair tidak menunjukkan interaksi pengaruh terhadap karakter pertumbuhan dan hasil tanaman seledri.

SUMMARY

Crop cultivation generally uses inorganic fertilizers as the main fertilizer. Continuous excessive use of chemical might result in a decreased soil quality. One way to reduce the use of inorganic fertilizers so as to produce good quality plants that are environmentally friendly is to use liquid organic fertilizers. The present study aimed to determine the effect of N, P, K fertilizer applications on the growth and yield characters of celery, determine the effect of liquid organic fertilizer derived from rabbit urine on the growth and yield characters of celery, and determine the effect of N, P, K fertilizer applications and liquid organic fertilizer from rabbit urine on the growth and yield of celery.

The research was conducted from May to August 2020 at the Grand Kusuma Karagin screen house, Karanggintung Village, Sumbang District, Banyumas Regency, Central Java with an altitude of 225 masl. The study used a factorial completely randomized block design (RAKL). The treatments consisted of two factors, the recommended fertilizer dosage for N, P, K (200 kg Urea/ha, 150 kg SP-36/ha, 200kg KCl/ha) comprising 50%, 75%, and 100% of the recommended dosage and concentration of liquid organic fertilizer, namely, rabbit urine liquid organic fertilizer 150 ml / polybag, rabbit urine liquid organic fertilizer 250 ml/polybag, and rabbit urine liquid organic fertilizer 350 ml/polybag. The observed variables in this study were plant length, number of the leaves, longest root length, fresh shoot weight, dry shoot weight, fresh root weight, dry root weight, and leaf color.

The results showed that the application of fertilizer N, P, K 50% was equivalent to or even better as compared N, P, K 100% on the plant growth and yield. The application of N, P, K 50% produced a plant length of 31.56 cm, and plant fresh shoot weight of 22.59 g, and fresh root weight of 6.01 g. The concentration of rabbit urine liquid organic fertilizer at a dose of 350 ml/polybag was able to gave high yield on the variable number of leaves 39.98 strands. The doses of N, P, K fertilizers and liquid organic fertilizers have not been able to increase the growth and yield characters of celery.