RINGKASAN

Kubis bunga merupakan salah satu komoditas sayuran yang memiliki nilai komersial dan prospek yang tinggi dalam memenuhi kebutuhan pangan di Indonesia. Produksi kubis bunga di Indonesia mengalami penurunan setiap tahunnya. Penurunan produksi kubis bunga disebabkan karena kurang optimalnya pemanfaatan dan penyerapan unsur hara. Penggunaan pupuk organik cair (POC) urin kelinci sebagai pupuk altternatif, diharapkan dapat mengurangi penggunaan pupuk NPK anorganik. Urin kelinci diketahui mampu berperan sebagai salah satu sumber dari pupuk organik potensial untuk tanaman karena kandungan unsur hara nya sangat lengkap dan relatif lebih tinggi dibandingkan dengan jenis urine hewan ternak lainnya. Penelitian ini bertujuan untuk (1) mengetahui pertumbuhan dan hasil tiga varietas kubis bunga pada pemberian POC kotoran kelinci. (2) mengetahui perbedaan pertumbuhan dan hasil tiga varietas kubis bunga pada pemberian POC kotoran kelinci. (3) mengetahui interaksi antara pengaplikasian POC kotoran kelinci terhadap pertumbuhan dan hasil tanaman kubis bunga. Penelitian ini dilaksanakan pada September 2023 sampai April 2024 di lahan percobaan di Desa Banjarsari Wetan, Kecamatan Sumbang, Kabupaten Banyumas.

Penelitian ini menggunakan Rancangan Acak Kelompok (RAK) dengan dua faktor dan tiga ulangan dengan 12 kombinasi perlakuan. Faktor pertama yaitu varietas kubis bunga dengan tiga macam, yaitu varietas PM 126 F1, varietas Larisa F1, dan varietas Bima 45 F1. Faktor kedua adalah konsentrasi POC kotoran kelinci dengan tiga taraf, yaitu 0 mL/L, 150 mL/L, 300 mL/L. Pemberian urin kelinci dilakukan setiap minggu yaitu sebanyak 40 mL/tanaman minggu ke-1 dan 2, 60 mL/tanaman pada minggu ke-3 dan 4, 80 mL/tanaman pada minggu ke-5 dan 6, serta 100 mL/tanaman pada minggu ke-7 dan 8. Variabel yang diamati terdiri dari tinggi tanaman, jumlah daun, luas daun, panjang akar, volume akar, umur muncul krop, umur panen, bobot segar tanaman, bobot segar bunga (krop), diameter bunga (krop), bobot akar segar, dan bobot akar kering. Analisis data menggunakan sidik ragam (ANOVA) pada taraf 5% untuk mengetahui pengaruh perlakuan. Apabila hasil analisis berpengaruh nyata, dilanjutkan dengan uji *Duncans's Multiple Range Test* (DMRT) pada taraf 5%.

Hasil penelitian menujukan bahwa pemberian POC kotoran kelinci konsentrasi 150 ml/L memberikan hasil tertinggi pada variabel panjang akar, umur panen, bobot segar tanaman, dan bobot akar kering. Pemberian POC kotoran kelinci konsentrasi 300 ml/L memberikan hasil tertinggi pada variabel bobot segar bunga (krop) dan diameter bunga (krop). Varietas Larisa F1 memberikan hasil tertinggi pada variabel jumlah daun 14 HST, panjang akar, volume akar, bobot segar tanaman, bobot segar bunga (krop), diameter bunga (krop), bobot akar segar, dan bobot akar kering. Varietas Bima 45 F1 memberikan hasil tertinggi pada variabel tinggi tanaman 28 HST, 42 HST, luas daun 28 HST, 42 HST, umur muncul bunga (krop), dan umur panen. Varietas PM 126 F1 memberikan hasil tertinggi pada variabel jumlah daun 14 HST, 28 HST. Tidak terdapat interaksi antara varietas kubis bunga dan konsentrasi POC kotoran kelinci terhadap semua variabel pengamatan.

SUMMARY

Flower cabbage is one of the vegetable commodities that has high commercial value and prospects in meeting food needs in Indonesia. Flower cabbage production in Indonesia is declining every year. The decrease in flower cabbage production is caused by less optimal utilization and absorption of nutrients. Using liquid organic fertilizer (LOF) of rabbit urine as an alternative fertilizer is expected to reduce the use of inorganic NPK fertilizer. Rabbit urine is known to be able to act as one of the sources of potential organic fertilizer for plants because its nutrient content is complete and relatively higher than other types of farm animal urine. This study aims to (1) determine the growth and yield of three varieties of flower cabbage in the application of POC of rabbit manure. (2) to determine the difference in growth and yield of three varieties of flower cabbage in the application of POC of rabbit manure. 3) to determine the interaction between the application of POC of rabbit manure and the growth and yield of flower cabbage plants. This research was carried out from September 2023 to April 2024 on an experimental land in Banjarsari Wetan Village, Sumbang District, Banyumas Regency.

This study used a Randomized Block Design (RBD) with two factors and three replicates with 12 treatment combinations. The first factor is the flower cabbage variety with three kinds, namely the PM 126 F1 variety, the Larisa F1 variety, and the Bima 45 F1 variety. The second factor is the concentration of POC in rabbit manure with three levels, namely 0 mL/L, 150 mL/L, and 300 mL/L. Rabbit urine is given every week, namely 40 mL/plant in weeks 1 and 2, 60 mL/plant in weeks 3 and 4, 80 mL/plant in weeks 5 and 6, and 100 mL/plant in weeks 7 and 8. The observed variables consisted of plant height, number of leaves, leaf area, root length, root volume, crop emergence age, harvest age, plant fresh weight, flower fresh weight (crop), flower diameter (crop), fresh root weight, and dry root weight Data analysis used multiple fingerprints (ANOVA) at the level of 5% to determine the effect of treatment. If the results of the analysis have a real effects, continue with the Duncans's Multiple Range Test (DMRT) test at the level of 5%.

The results showed that the administration of POC of rabbit manure at a concentration of 150 ml/L gave the highest results in the variables of root length, harvest age, plant fresh weight, and dry root weight. The administration of POC of rabbit manure at a concentration of 300 ml/L gave the highest results in the variables of fresh weight of flowers (crop) and flower diameter (crop). The Larisa F1 variety gave the highest results in the variables of 14 HST leaf count, root length, root volume, plant fresh weight, flower fresh weight (crop), flower diameter (crop), fresh root weight, and dry root weight. The Bima 45 F1 variety gave the highest yields in the variables of plant height of 28 HST, 42 HST, leaf area 28 HST, 42 HST, flower age (crop), and harvest age. The PM 126 F1 variety gave the highest results in the variable of leaf count 14 HST, and 28 HST. There was no interaction between flower cabbage varieties and rabbit manure POC concentrations on all observed variables.