RINGKASAN

Mentimun merupakan salah satu pilihan komoditas hortikultura untuk kegiatan usahatani. Peningkatan produksi mentimun dapat dilakukan menggunakan pupuk limbah organik seperti limbah kulit nanas dan air cucian beras. Penelitian bertujuan untuk: 1) mengetahui konsentrasi POC limbah kulit nanas yang terbaik untuk pertumbuhan dan hasil tanaman mentimun; 2) mengetahui konsentrasi POC air cucian beras yang terbaik untuk pertumbuhan dan hasil tanaman mentimun; dan 3) mengetahui pengaruh kombinasi antara POC limbah kulit nanas dan POC air cucian beras yang terbaik untuk pertumbuhan dan hasil tanaman mentimun.

Penelitian dilaksanakan di *screen house* Desa Tambaksogra, Kecamatan Sumbang, Kabupaten Banyumas dan Laboratorium Agronomi dan Hortikultura Fakultas Pertanian, Universitas Jenderal Soedirman, pada bulan Januari sampai Juni 2019. Rancangan percobaan yang digunakan yaitu Rancangan Acak Kelompok Lengkap (RAKL) dengan 2 faktor dan 3 ulangan. Faktor pertama adalah konsentrasi POC limbah kulit nanas yaitu 0, 10, 20, dan 30 ml/l. Faktor kedua adalah konsentrasi POC air cucian beras yaitu 0, 10, 20, dan 30 ml/l.

Hasil penelitian menunjukkan bahwa: 1) konsentrasi 30 ml/l limbah kulit nanas meningkatkan bobot buah per tanaman dibandingkan tanpa perlakuan sebesar 606,02 g : 45,48%, panjang buah 15,99 cm : 9,22%, dan volume buah 163,87 ml : 13,37%; 2) konsentrasi POC air cucian beras tidak meningkatkan pertumbuhan dan hasil tanaman mentimun; dan 3) kombinasi antara konsentrasi POC limbah kulit nanas dan air beras memberikan respon yang sama terhadap pertumbuhan dan hasil tanaman.

SUMMARY

Cucumber is one of the choices of horticultural commodities for farming activities. To increase the production of cucumber can be done by using organic waste fertilizers, such as pineapple peel waste and rice washing water. This research aims: 1) to know the best concentration of liquid organic fertilizer of pineapple peel waste for growth and yield of cucumber; 2) to know the best concentration of liquid organic fertilizer of rice washing water for growth and yield of cucumber; and 3) to know the best combination of concentration of liquid organic fertilizer of pineapple peel waste and liquid organic fertilizer of rice washing water for growth and yield of cucumber.

The research was conducted at screen house located in Tambaksogra Village, Sumbang Sub-district, Banyumas Regency and the Laboratory Agronomy and Horticulture, Faculty of Agriculture, Jenderal Soedirman University, on Januari until June 2019. The experiment design used was Completely Randomized Block Design with 2 factors and 3 replication. The first factor was the concentration of liquid organic fertilizer of pineapple peel waste, namely 0, 10, 20, and 30 ml/l. The second factor was the concentration of liquid organic fertilizer of rice washing water, namely 0, 10, 20, and 30 ml/l.

The results showed that: 1) the concentration 30 ml/l of liquid organic fertilizer of pineapple peel waste increased fruit weight per plant compared to the control treatment of 606,02 g : 45,48%, fruit length 15,99 cm : 9,22%, and fruit volume 163,87 ml : 13,37%; 2) the concentration liquid organic fertilizer of rice washing water did not increased the growth and yield of cucumber plants; and 3) the combination of concentrations liquid organic fertilizer of pineapple peel waste and rice washing water gave the same response to plant growth and yield.