RINGKASAN

Tanaman pare (*Momordica charantia* L.) merupakan salah satu komoditas hortikultura yang memiliki prospek yang baik dalam pemasaran. Hal ini terkait dengan manfaat buah pare sehingga akan meningkatkan permintaan buah pare. Saat ini, budidaya tanaman pare masih menggunakan pupuk anorganik yang dapat merusak dan menurunkan produktivitas tanah. Oleh karena itu, perlu diupayakan budidaya tanaman pare secara organik dengan menggunakan pupuk organik cair urin kelinci. Pengaruh dosis pupuk organik cair urin kelinci dilakukan terhadap tiga varietas tanaman pare yaitu Lipa F1, Broco F1, dan Raden F1. Tujuan penelitian ini adalah mengkaji (1) pengaruh dosis pupuk organik cair urin kelinci dan dosis optimalnya terhadap pertumbuhan dan hasil tanaman pare, (2) respon tiga varietas tanaman pare dan varietas yang terbaik terhadap pertumbuhan dan hasil tanaman pare, (3) pengaruh interaksi antara dosis pupuk organik cair urin kelinci dan tiga varietas tanaman pare terhadap pertumbuhan dan hasil tanaman pare.

Penelitian berupa percobaan polibag yang dilakukan di *Screen House*, Fakultas Pertanian, Universitas Jenderal Soedirman dengan ketinggian tempat 110 meter diatas permukaan laut (mdpl) pada bulan Desember 2020 sampai Maret 2021. Penelitian berupa percobaan polibag menggunakan Rancangan Petak Terbagi (*Split Plot Design*) dengan menggunakan dua faktor percobaan. Sebagai petak utama adalah varietas tanaman pare yaitu Lipa F1, Broco F1, dan Raden F1. Sebagai anak petak adalah dosis pupuk organik cair urin kelinci yaitu 0 ml/tanaman, 40 ml/tanaman, dan 80 ml/tanaman. Kedua faktor dikombinasikan menjadi 9 kombinasi perlakuan yang diulang sebanyak 3 kali sehingga diperoleh 27 unit percobaan. Setiap unit percobaan terdapat 3 tanaman. Variabel yang diamati yaitu panjang tanaman, jumlah daun, luas daun, diameter batang, umur berbunga,umur panen, bobot buah pertanaman, bobot setiap buah, diameter buah, panjang buah, dan volume buah. Data yang diperoleh dianalisis menggunakan ANOVA, apabila terdapat keragaman dilanjutkan dengan *Duncan's Multiple Range Test* pada taraf kesalahan 5%.

Pemberian pupuk organik cair urin kelinci 40 ml/tanaman dan 80 ml/tanaman belum mampu meningkatkan pertumbuhan dan hasil tanaman pare, yang menunjukkan hasil penelitian pemberian pupuk organik cair urin kelinci tidak konsisten pada tanaman yang berbeda. Tiga varietas tanaman pare dapat dibedakan berdasarkan panjang tanaman dan jumlah daun, varietas Lipa F1 adalah varietas dengan tanaman terpanjang dan jumlah daun terbanyak diikuti varietas Broco F1 yang tidak berbeda dengan Raden F1. Tidak terdapat pengaruh interaksi antara pemberian dosis pupuk organik cair urin kelinci dan tiga varietas tanaman pare terhadap pertumbuhan dan hasil tanaman pare, yang menunjukkan ketidaktergantungan pengaruh dua faktor tersebut.

Kata kunci : pare, pupuk organik cair urin kelinci, varietas, pertumbuhan dan hasil.

SUMMARY

Bitter gourd (Momordica charantia L.) is a horticultural commodity that has good prospects in marketing. This is related to the benefits of bitter gourd so that it will increase the demand for bitter gour. Currently, bitter gourd cultivation still uses inorganic fertilizers which can damage and reduce soil productivity. Therefore, it is necessary to cultivate bitter gourd organically by using liquid organic fertilizer of rabbit urine. The effect of the dose of liquid organic fertilizer on rabbit urine was carried out on three varieties of bitter gourd, namely Lipa F1, Broco F1, and Raden F1. The purpose of this study was to examine (1) the effect of the dose of liquid organic fertilizer of rabbit urine and its optimal dose on the growth and yield of bitter gourd, (2) the response of the three varieties of bitter gourd and the best varieties on the growth and yield of bitter gourd, (3) the effect of interaction between doses of liquid organic fertilizer of rabbit urine and three varieties of bitter gourd on the growth and yield of bitter gourd.

The research was in the form of a polybag experiment conducted at the Screen House, Faculty of Agriculture, Jenderal Sudirman University with an altitude of 110 meters above sea level (masl) from December 2020 to March 2021. The research was a polybag experiment using a Split Plot Design using two experimental factors. As the main plot, bitter gourd varieties were Lipa F1, Broco F1, and Raden F1. As a sub-plot, the dose of liquid organic fertilizer for rabbit urine was 0 ml/plant, 40 ml/plant, and 80 ml/plant. The two factors were combined into 9 treatment combinations which were repeated 3 times to obtain 27 experimental units. Each experimental unit contained 3 plants. The variables observed were plant length, number of leaves, leaf area, stem diameter, flowering age, harvest age, weight of fruit planted, weight of each fruit, fruit diameter, fruit length, and fruit volume. The data obtained were analyzed using ANOVA, if there was diversity, it was continued with Duncan's Multiple Range Test at an error level of 5%.

The application of liquid organic fertilizer of rabbit urine at 40 ml/plant and 80 ml/plant has not been able to increase the growth and yield of bitter gourd plants, which shows that the results of research on giving liquid organic fertilizer to rabbit urine are inconsistent in different plants. Three varieties of bitter gourd can be distinguished based on plant length and number of leaves, the Lipa F1 variety is the variety with the longest plant and the highest number of leaves followed by the Broco F1 variety which is not different from Raden F1. There was no interaction effect between the dose of liquid organic fertilizer of rabbit urine and three varieties of bitter gourd on the growth and yield of bitter gourd, which indicated that the effect of these two factors was independent.

Keywords : bitter gourd, rabbit urine liquid organic fertilizer, variety, growth and yield.