

Fajar Zainolloh. NPM 220311100151. Pengaruh Konsentrasi Pupuk Organik Cair Kandang Sapi Terhadap Pertumbuhan dan Hasil Bawang Merah Varietas Batu Ijo. Di bawah Bimbingan **Erick Yuhardi, S, P., MP.** dan **Ir. Sinar Suryawati, M. Si.**

ABSTRAK

Bawang merah (*Allium ascalonicum* L.) termasuk komoditas hortikultura unggulan yang memiliki nilai ekonomi tinggi. Bawang merah juga mempunyai peran penting dalam memenuhi kebutuhan pangan bagi masyarakat Indonesia. Penelitian ini bertujuan untuk mengetahui pengaruh berbagai konsentrasi Pupuk Organik Cair (POC) kandang sapi terhadap pertumbuhan dan hasil bawang merah varietas Batu Ijo (*Allium ascalonicum* L.) serta menentukan konsentrasi yang paling efektif. Penelitian dilaksanakan pada Oktober–Desember 2025 di Desa Sanah Tenga, Kecamatan Pasean, Kabupaten Pamekasan menggunakan Rancangan Acak Kelompok (RAK) nonfaktorial dengan lima perlakuan konsentrasi POC (0, 5, 10, 15, dan 20 ml/100 ml air) dan empat ulangan. Parameter yang diamati meliputi tinggi tanaman, jumlah daun, jumlah umbi, diameter umbi, panjang akar, berat basah, berat kering, dan berat umbi per rumpun. Data dianalisis menggunakan ANOVA taraf 5% dan dilanjutkan uji DMRT apabila berbeda nyata. Hasil penelitian menunjukkan bahwa pemberian POC kandang sapi hanya berpengaruh nyata terhadap tinggi tanaman pada umur 28 HST. Perlakuan P3 (15 ml/100 ml air) menghasilkan tinggi tanaman tertinggi sebesar 35,69 cm, sedangkan P4 (20 ml/100 ml air) cenderung memberikan nilai rata-rata tertinggi pada sebagian besar parameter pertumbuhan dan hasil. Tidak berpengaruh nyatanya sebagian besar parameter diduga disebabkan oleh tingginya curah hujan yang menyebabkan pencucian unsur hara.

Kata Kunci: *Bawang merah, Konsentrasi, Pupuk Organik Cair kandang sapi, Pertumbuhan tanaman.*

Fajar Zainolloh. NPM 220311100151. *The Effect of Liquid Organic Fertilizer Concentration Derived from Cow Manure on the Growth and Yield of 'Batu Ijo' Variety Shallots. Under the Supervision of Erick Yuhardi, S, P., MP. and Ir. Sinar Suryawati, M. Si.*

ABSTRACT

Shallots (*Allium ascalonicum* L.) are a leading horticultural commodity with high economic value. They also play a crucial role in meeting the food needs of the Indonesian population. This study aimed to determine the effect of different concentrations of cow manure-based Liquid Organic Fertilizer (LOF) on the growth and yield of Batu Ijo shallot (*Allium ascalonicum* L.) and to identify the most effective concentration. The study was conducted from October to December 2025 in Sanah Tenga Village, Pasean District, Pamekasan Regency, using a non-factorial Randomized Complete Block Design (RCBD) with five LOF concentrations (0, 5, 10, 15, and 20 mL/100 mL of water) and four replications. The observed parameters included plant height, number of leaves, number of bulbs, bulb diameter, root length, fresh weight, dry weight, and bulb weight per clump. Data were analyzed using Analysis of Variance (ANOVA) at the 5% significance level, followed by Duncan's Multiple Range Test (DMRT) when significant differences were found. The results showed that the application of cow manure-based LOF significantly affected plant height only at 28 days after planting (DAP). Treatment P3 (15 mL/100 mL of water) produced the tallest plants (35.69 cm), while treatment P4 (20 mL/100 mL of water) tended to produce the highest average values for most growth and yield parameters. The lack of significant effects on most parameters was presumably due to high rainfall, which caused nutrient leaching.

Keywords: Shallot, Concentration, Cow Manure-Based Liquid Organic Fertilizer, Plant Growth.