

PENGARUH KOMBINASI PUPUK NPK DAN POC TERHADAP PERTUMBUHAN DAN HASIL BAWANG MERAH (*Allium ascalonicum* L.)

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ABSTRAK

Bawang merah merupakan salah satu komoditas dalam pertanian yang banyak digunakan oleh masyarakat Indonesia sebagai bahan bumbu pelezat masakan dan sebagai pengobatan herbal. Produktivitas bawang merah di Indonesia dari terjadi peningkatan setiap tahunnya sedangkan di Provinsi Jambi meningkat tidak sebanding dengan produktivitas secara nasional. Rendahnya produktivitas bawang merah di Provinsi Jambi disebabkan oleh beberapa faktor, salah satunya belum tercukupinya unsur hara yang dibutuhkan oleh tanaman yang tersedia di dalam tanah. Untuk mengatasi kendala tersebut diberikan unsur hara makro dan mikro yang lengkap untuk menunjang pertumbuhan dan perkembangan tanaman.

Penelitian ini telah dilaksanakan di lokasi *Teaching and Research Farm* Fakultas Pertanian Universitas Jambi, yang terletak di Desa Mendalo Indah, Kecamatan Jambi Luar Kota, Kabupaten Muaro Jambi. Penelitian ini dilaksanakan pada bulan Februari s/d April 2025. Penelitian ini dilakukan menggunakan Rancangan Acak Kelompok (RAK) dengan satu faktor dan 5 perlakuan. Adapun 5 perlakuan yang dimaksud yaitu p1 = 600 kg NPK + 0 mL. L⁻¹ POC NASA, p2 = 450 kg NPK + 1 mL. L⁻¹ POC NASA, p3 = 300 kg NPK + 2 mL. L⁻¹ POC NASA, p4 = 150 kg NPK + 3 mL. L⁻¹ POC NASA dan p5 = 0 kg NPK + 4 mL. L⁻¹ POC NASA, setiap perlakuan 5 kali ulangan, sehingga didapat 25 satuan percobaan. Setiap bedengan percobaan terdiri dari 30 tanaman, sehingga jumlah tanaman seluruhnya dalam 25 bedengan yaitu 750 tanaman. Tanaman sampel diambil sebanyak 3 tanaman dari setiap bedengan percobaan sehingga terdapat 75 tanaman sampel. Data variabel pengamatan disajikan dalam tabel pengamatan. Untuk melihat pengaruh perlakuan terhadap variabel pengamatan maka dilakukan analisis ragam dan dilanjutkan dengan uji DMRT pada taraf $\alpha = 0,05$.

Hasil penelitian menunjukkan bahwa pemberian berbagai kombinasi pupuk NPK dan POC berpengaruh terhadap tinggi tanaman, jumlah daun, bobot kering umbi per rumpun dan bobot kering per umbi. Kombinasi 300 kg ha⁻¹ NPK + 2 mL L⁻¹ POC NASA memberikan respon terbaik pada pertumbuhan tinggi tanaman, bobot umbi kering per rumpun dan bobot kering per umbi.

Kata Kunci : *Bawang Merah, pupuk NPK, POC NASA*

ABSTRACT

Shallots are one of the agricultural commodities that are widely used by Indonesian people as a seasoning ingredient for cooking and as a herbal medicine. Shallot productivity in Indonesia has increased every year, while in Jambi Province the increase is not comparable to national productivity. The low productivity of shallots in Jambi Province is caused by several factors, one of which is the inadequacy of nutrients needed by plants available in the soil. To overcome these obstacles, complete macro and micro nutrients are provided to support plant growth and development.

This research was conducted at the Teaching and Research Farm location of the Faculty of Agriculture, University of Jambi, located in Mendalo Indah Village, Jambi Luar Kota District. Muaro Jambi Regency. This research was conducted from February to April 2025. This research was conducted using a Randomized Block Design (RAK) with one factor and 5 treatments. The 5 treatments in question are p1 = 600 kg NPK + 0 mL. L⁽⁻¹⁾ POC NASA, p2 = 450 kg NPK + 1 mL. L⁽⁻¹⁾ POC NASA, p3 = 300 kg NPK + 2 mL. L⁽⁻¹⁾ POC NASA, p4 = 150 kg NPK + 3 mL. L⁽⁻¹⁾ POC NASA and p5 = 0 kg NPK + 4 mL. L⁽⁻¹⁾ POC NASA, each treatment was repeated 5 times, so that 25 experimental units were obtained. Each experimental bed consisted of 30 plants, so that the total number of plants in 25 beds was 750 plants. Sample plants were taken as many as 3 plants from each experimental bed so that there were 75 sample plants. Observation variable data are presented in the observation table. To see the effect of treatment on observation variables, analysis of variance was carried out and continued with the DMRT test at the $\alpha = 0.05$ level.

The results of the study showed that the provision of various combinations of NPK and POC fertilizers affected plant height, number of leaves, dry weight of tubers per clump and dry weight per tuber. The combination of 300 kg ha⁻¹ NPK + 2 mL. L⁽⁻¹⁾ POC NASA gave the best response to the growth of plant height, dry weight of tubers per clump and dry weight per tuber.

Kata Kunci : *Shallots, NPK fertilizer, NASA POC*