

RINGKASAN

Bawang merah merupakan salah satu komoditas hortikultura yang hampir setiap hari dikonsumsi masyarakat. Permintaan bawang merah pun terus meningkat, namun belum diimbangi dengan peningkatan produksi bawang merah. Kualitas bawang merah yang dihasilkan pun masih rendah. Bawang merah dapat mengalami penyusutan bobot sebesar 25-40% saat pengeringan dan 17% selama penyimpanan. Unsur kalium merupakan unsur yang berperan penting dalam peningkatan kualitas bawang merah. Unsur kalium berperan dalam metabolisme karbohidrat, aktivitas enzim, regulasi osmotik, efisiensi penggunaan air, serapan unsur nitrogen, sintesis protein, dan translokasi asimilat. Penambahan pupuk kalium cair plus diharapkan dapat meningkatkan kualitas bawang merah.

Penelitian dilaksanakan di lahan pasir pantai yang terletak di Desa Karanganyar Kecamatan Adipala, Kabupaten Cilacap. Letak lahan tersebut berada pada ketinggian 10 meter di atas permukaan laut dengan suhu berkisar 23-30° C. Luas lahan yang digunakan sekitar 50 m². Kegiatan penelitian dilaksanakan pada bulan Juni sampai September 2021. Penelitian ini menggunakan percobaan non faktorial Rancangan Acak Kelompok (RAK) dengan empat perlakuan dan sepuluh ulangan. Data hasil percobaan yang diperoleh dianalisis dengan uji F. Jika terdapat perbedaan di antara perlakuan, dilakukan uji lanjutan dengan Uji Jarak Berganda Duncan (*Duncan's Multiple Range Test DMRT*) dengan taraf kesalahan 5%. Variabel yang diamati adalah tinggi tanaman, jumlah daun, jumlah umbi, bobot segar total, bobot kering askip total, diameter umbi, kekerasan umbi, dan hasil tanaman/ petak.

Hasil dari penelitian ini menunjukkan bahwa penambahan pupuk kalium cair plus tidak berpengaruh nyata pada tinggi tanaman, jumlah daun, jumlah umbi, bobot segar total, bobot kering askip total, diameter umbi, dan hasil tanaman/ petak, akan tetapi signifikan berpengaruh pada kekerasan umbi bawang merah. Pada penambahan pupuk kalium sebesar 1 ml/l kekerasan umbi mengalami peningkatan. Tingkat kekerasan umbi bawang merah mengalami penurunan pada penambahan pupuk kalium cair plus sebesar 1,5 ml/l, 2 ml/l serta tanaman kontrol.

SUMMARY

Shallots are one of the horticultural commodities that are consumed by the community almost every day. The demand for shallots continues to increase, but has not been matched by an increase in shallot production. The quality of the shallots produced is still low. Shallots can decrease in weight loss ca 25-40% during drying and 17% during storage. Potassium is an element that plays an important role in improving the quality of shallots. Potassium plays a role in carbohydrate metabolism, enzyme activity, osmotic regulation, efficient use of water, nitrogen uptake, protein synthesis, and assimilate translocation. The addition of plus liquid potassium fertilizer is expected to improve the quality of shallots.

The research was carried out on land located in Adipala District, Cilacap Regency. The research area has an area of 50 m². The location of the land is at an altitude of 10 meters above sea level with temperatures ranging from 23-30° C. The study was carried out from June 2021 to September 2021. This study used a non-factorial randomized block design experiment with four treatments and ten replications. The experimental data obtained were analyzed by the F test. If there was a difference between the treatments, a further test was carried out using Duncan's Multiple Range Test (DMRT) with an error rate of 5%. The variables observed were plant height, number of leaves, number of tubers, total fresh weight, total askip dry weight, tuber diameter, tuber hardness, and crop yield/plot.

The results of this study showed that the addition of plus liquid potassium fertilizer had no significant effect on plant height, number of leaves, number of tubers, total fresh weight, total askip dry weight, tuber diameter, and crop yield/plot, but significantly affected the hardness of shallot tubers. With the addition of 1 ml/l of plus liquid potassium fertilizer, the hardness of the tubers increased. The hardness level of shallot tubers decreased with the addition of 1,5 ml/l, 2 ml/l plus liquid potassium fertilizer and control plants.