Intisari

Upaya peningkatan produksi cabai merah (*Capsicum annum* L.) di Indonesia dapat dilakukan dengan pemanfaatan sumber daya lahan marginal, salah satunya yaitu lahan pasir pantai. Lahan pasir pantai memiliki ciri-ciri yaitu kandungan garam yang dapat memberikan cekaman salinitas dan menyebabkan masalah dalam proses budidaya. Pemberian pupuk kandang sebagai amelioran diharapkan dapat mengatasi cekaman salinitas. Penelitian ini bertujuan untuk menentukan pengaruh salinitas dan pengaruh pupuk kandang terhadap pertumbuhan dan hasil tanaman cabai merah. Penelitian ini dilakukan di Desa Garongan, Panjatan, Kulon Progo, Daerah Istimewa Yogyakarta pada bulan Januari- Juli 2019. Rancangan yang digunakan yaitu Rancangan Acak Kelompok Lengkap (RAKL) dengan 2 faktor dan 3 blok sebagai ulangan. Faktor utama yaitu tingkat cekaman salinitas yang ditunjukan dengan daya hantar listrik tanah yang terdiri atas empat aras yaitu <1 dS/m, 3 dS/m, 5 dS/m dan 7 dS/m. Faktor kedua yaitu jenis pupuk kandang dengan tiga aras yaitu tanpa pupuk kandang, pupuk kandang sapi, dan pupuk kandang ayam.Hasil penelitian menunjukkan bahwa pemberian air salin 7 dS/m dapat menurunkan bobot kering total tanaman, kandungan K^+ dalam jaringan daun, jumlah buah, bobot segar buah per satuandan per tanaman.Pupuk kandang ayam mampu meningkatkan volume akar, luas daun, dan bobot segar daun serta mempercepat umur berbunga, namun belum memberikan hasil yang signifikan. Terdapat interaksi antara pupuk kandang dengan tingkat salinitas yaitu pupuk kandang dapat menurunkan rasio Na^+/K^+ pada cabai merah yang diberikan air salin 7 dS/m, mempertahankan bobot kering akar 3 MSPT ketika cabai merah diberikan air salin 3,5, dan 7 dS/m; meningkatkan bobot kering tajuk 3 MSPT ketika cabai merah diberikan air salin 7 dS/m; serta mempertahankan rasio akar/tajuk 3 dan 7 MSPT saat cabai merah diberikan air salin 7 dS/m.

Kata Kunci: amelioran, cabai merah, lahan marginal, pupuk kandang, salinitas.

Abstract

Increasing of red chili (Capsicum annum L.*) production in Indonesia can be doneby utilizing marginal land, such of coastal sandy land. The coastal land has characteristics that are salt content which may cause salinity stress and cause problems in cultivation process. Giving manure as ameliorant is expected to overcome the salinity stress. This study aims to determine effect of salinity and manure on growth and yield of red chili plants. This research was conducted in Garongan Village, Panjatan, Kulon Progo, Special Region of Yogyakarta from January to July 2019. Design used was a Randomized Complete Block Design (RCBD) with 2 factors and 3 blocks as replications. Main factor was the level of salinity by the addition of sea salt consisting of four levels of electrical conductivity power, they are<1 dS/m, 3 dS/m, 5 dS/m and 7 dS/m. The second factor was type of manure, consisted of three levels is without manure, cow manure, and chicken manure. The results showed that 7 dS/m treatment could reduce total plant dry weight, K^+ content in leaf tissue, number of fruits, fresh weight of fruit per unit and per plant. Then, chicken manure could increase root volume, leaf area, and fresh weight of leaves and acceleratedflowering age but had not given significant results. There was an interaction between manure and salinity level, namely manure can reduce the Na^+/K^+ ratio in red chillies that are given 7 dS/m treatment, maintain dry weight roots at 3 weeks after transplanting when red chillies are given saline water 3.5, and 7 dS/m; increase the dry weight of the canopy 3 weeks after transplanting when red chili were given 7 dS/m saline water; and maintain a root/ canopy ratio of 3 and 7 weeks after transplanting when red chili were given 7 dS/m of saline water*

Keywords: ameliorant, manure, marginal land, red chili, salinity