

RINGKASAN

Pengelolaan lahan pasir pantai melalui pemupukan sangat penting agar diperoleh unsur hara esensial yang dibutuhkan tanaman. Salah satu jenis pupuk yang mengandung unsur hara makro dan mikro yaitu pupuk organik cair. Konsentrasi dan interval pemberian pupuk organik cair yang optimal dalam meningkatkan hasil produksi bawang merah. Penelitian ini bertujuan untuk: 1) menentukan pengaruh pemberian konsentrasi pupuk organik cair NASA yang berbeda terhadap pertumbuhan dan hasil tanaman bawang merah, 2) menentukan pengaruh interval pemupukan yang berbeda terhadap pertumbuhan dan hasil tanaman bawang merah, 3) menentukan interaksi antara konsentrasi pupuk organik cair NASA dan interval pemupukan terhadap pertumbuhan dan hasil tanaman bawang merah. Penelitian ini dilaksanakan di lahan pasir pantai Desa Banjarsari, Kecamatan Nusawungu, Kabupaten Cilacap pada bulan Oktober sampai Desember 2018. Rancangan penelitian yang digunakan yaitu Rancangan Acak Kelompok Lengkap (RAKL) dengan 2 faktor dan 3 ulangan. Faktor pertama yaitu konsentrasi pemberian pupuk organik cair yang terdiri dari 3 taraf yaitu 0 ml liter⁻¹, 5 ml liter⁻¹ dan 10 ml liter⁻¹. Faktor kedua yaitu interval pemberian pupuk organik cair (POC) yang terdiri dari 3 taraf, yaitu 5 hari sekali, 10 hari sekali dan 15 hari sekali. Variabel yang diamati meliputi tinggi tanaman (cm), jumlah daun (helai/tan), panjang daun (cm), luas daun (cm²), kadar kehijauan daun, panjang akar (cm), jumlah akar (helai/tan), bobot akar segar (g/tan), bobot akar kering (g/tan), bobot daun segar (g/tan), bobot daun kering (g/tan), bobot tanaman segar (g/tan), bobot tanaman kering (g/tan), jumlah umbi (buah), bobot umbi segar (g/tan), bobot umbi kering (g/tan), diameter umbi (cm), hasil umbi segar (t/ha). Hasil penelitian menunjukkan bahwa pemberian pupuk organik cair NASA dengan konsentrasi 10 ml liter⁻¹ memberikan hasil paling baik pada bobot tanaman segar, bobot umbi segar dan hasil umbi segar. Interval pemberian pupuk organik cair Nasa tidak mempengaruhi pertumbuhan dan hasil bawang merah. Tidak terjadi interaksi antara konsentrasi dan interval pemberian pupuk organik cair Nasa pada semua variabel pengamatan.

Kata kunci: bawang merah, pasir, konsentrasi, interval.

SUMMARY

Management of coastal sandy land through fertilization is very important in order to obtain essential nutrients needed by plants. One type of fertilizer containing macro and micro nutrients is liquid organic fertilizer. The concentration and interval in giving liquid organic fertilizer is optimal in increasing the production of shallots. The purpose of this research is to: 1) determine the effect of giving different concentrations of NASA liquid organic fertilizer to the growth and yield of shallots, 2) determine the effect of different fertilization intervals on the growth and yield of shallots, 3) determine the interaction between the concentration of NASA liquid organic fertilizer and fertilization intervals on the growth and yield of shallots. This research was carried out in the sandy land of Banjarsari Village, Nusawungu District, Cilacap Regency from October to December 2018. The study design used Randomized Completely Blok Design with 2 factors and 3 replications. The first factor was the concentration of NASA liquid organic fertilizer which consisted of three levels, there is 0 ml liter⁻¹, 5 ml liter⁻¹, 10 ml liter⁻¹. The second factor is the interval of giving liquid organic fertilizer which consists of 3 levels, namely once every 5 days, once every 10 days and once every 15 days. Variables observed included plant height, leaf number, leaf length, leaf area, leaf greenness, root length, root number, fresh and dry root weight, fresh and dry leaf weight, fresh and dry plant weight, number of bulbs, weight of fresh and dry bulbs, bulbs diameter, fresh bulbs yield. The results showed that the giving of NASA liquid organic fertilizer with a concentration of 10 ml liter⁻¹ gave the best results on the weight of fresh plants, the weight of fresh bulbs and the fresh bulbs yield. The interval for giving NASA liquid organic fertilizer has not been able to increase the growth and yield of shallots. There was no interaction between concentration and interval in giving NASA liquid organic fertilizer on all observation variables.

Keyword: shallots, sandy land, concentration, interval.