RINGKASAN

Lahan pasir pantai dapat digunakan sebagai alternatif pengembangan tanaman untuk mengatasi rendahnya produksi akibat penggunaan lahan pertanian produktif ke penggunaan non pertanian seperti perumahan dan industri. Budidaya tanaman bawang merah di lahan pasir pantai dihadapkan pada kendala berupa kemampuan memegang dan menyimpan air yang rendah, infiltrasi dan evaporasi tinggi, kesuburan tanah dan efisiensi penggunaan air rendah. Pemberian pembenah tanah berupa tanah lempung dan pupuk kandang serta pupuk nitrogen dapat meningkatkan hasil bawang merah di lahan pasir pantai. Penelitian ini bertujuan untuk 1) menentukan interval fertigasi yang optimum bagi pertumbuhan dan hasil bawang merah di lahan pasir pantai, 2) menentukan jenis pembenah tanah yang memberikan pengaruh terbaik terhadap pertumbuhan dan hasil tanaman bawang merah dilahan pasir pantai, 3) menentukan kombinasi teknologi yang dapat meningkatkan pertumbuhan dan hasil tanaman bawang merah sebagai pengaruh interaksi interval fertigasi dan jenis pembenah tanah di lahan pasir pantai.

Penelitian dilaksanakan di lahan pasir pantai Jetis, Desa Banjarsari, Kecamatan Nusawungu, Kabupaten Cilacap, dari Mei sampai September 2016. Penelitian ini menggunakan Rancangan Acak Kelompok Lengkap (RAKL) dengan 12 perlakuan dan 3 ulangan. Perlakuan yang diberikan yaitu interval fertigasi: 7 hari, 14 hari, 21 hari dan jenis pembenah tanah: tanpa pembenah, tanah lempung, pupuk kandang ayam dan sapi , campuran pupuk kandang ayam dan sapi dan lempung. Data dianalisis dengan uji F dilanjutkan dengan DMRT 5 %. Hasil penelitian menunjukkan bahwa interval fertigasi 7 hari memberikan hasil terbaik pada jumlah akar. Interval fertigasi 7 hari sekali menghasilkan hasil segar umbi 9,59 t/ha. Pembenah tanah campuran antara lempung dan pupuk kandang memberikan hasil terbaik pada bobot daun segar, bobot daun kering, bobot tanaman segar, bobot umbi segar dan bobot umbi kering. Pembenah tanah campuran antara lempung dan pupuk kandang menghasilkan hasil segar umbi 10,14 t/ha. Tidak ada interaksi yang terjadi antara perlakuan interval fertigasi dengan perlakuan jenis pembenah tanah.

SUMMARY

Coastal sandy soil farming can be used as an alternative of crop development to overcome the low production due to the use of productive agricultural land to non-agricultural uses, such as residential and industrial. Shallot cultivation on coastal sandy soil farming is confronted with obstacles in the form of the ability to hold and store low water, high infiltration and evaporation, soil fertility and efficiency of low water use. Adding soil conditioner in the form of clay and manure as well as nitrogen fertilizer can increase the yield of shallot in coastal sandy soil farming. This research aimed to determine the optimum interval fertigation for growth and yield of Shallot in Coastal Sandy Land, determine the type of soil conditioner that gives the best effect on the growth and yield of Shallot in Coastal Sandy Land, determine the combination of technologies that can increase the growth and yield of Shallot as the effect of interaction fertigation intervals and the type of soil in Coastal Sandy Land.

This research was conducted at Jetis coastal sandy land, Banjarsari village, Nusawungu subdistricts, Cilacap regency, from May to September 2016. This research used Completed Randomised Block Design with 12 treatments and 3 replications. Given treatment were fertigation interval: 7 days, 14 days, 21 days and the type of soil conditioner: without conditioner, clay soil, manure cow and chicken , mixture of manure cow and chicken and clay. Data were analyzed by F test, then tested further by DMRT 5%. The result showed that 7 days fertigation interval gave a better result in number of root. Fertigation interval of 7 days produce fresh tuber yield 9.59 t / ha. Mixture soil conditioner between clay soil and manure gave the best results on the weight of fresh leaves,the weigh of dry leaf , the weight of the fresh plant, weight of fresh tuber and weight of dry tuber. Mixture soil conditioner between clay soil and manure produce fresh tuber yield 10.14 t / ha. There was no interaction between interval fertigation treatment with soil conditioner types treatment.