

ABSTRACT

The Effect of Different Cut Age and Fertilizer Levels on Productivity and Vegetative Growth of Pakchong Grass (*Pennisetum purpureum X P. americanum*)

By

CINDI SETYANINGSIH

This study aims to determine the vegetative productivity of pakchong grass at different cutting ages and fertilized at different levels. This research was conducted from April to August 2021, which is located at the Integrated Field Laboratory, Faculty of Agriculture, University of Lampung. This study used a completely randomized design (CRD) with a factorial pattern of 4 x 3, 4 treatments with 3 replications. The treatments used were P1 = 40 days P2 = 50 days P3 = 60 days P4 = 70 days and for fertilizer application using 3 levels, namely low dose fertilizer J1 = Urea 50 kg/ha, KCL 50 kg/ha, TSP 25 kg/ha , medium-dose fertilizer J2 = Urea 100 kg/ha, KCL 50 kg/ha, TSP = 50 kg/ha, and high-dose fertilizer J3 = Urea 150 kg/ha, KCL 75 kg/ha, TSP 75 kg/ha. The data obtained were analyzed using analysis of variance with the Least Significant Difference (BNT) further test. The results of the further test of Least Significant Difference (BNT) showed that the cutting age with different fertilizer levels had a significant effect ($P < 0.05$) on fresh production with the highest average production at P4 which was 59.822 ton/ha, a very significant effect ($P < 0.01$) on the proportion of leaves and stems with the highest average in P1 which is 0.639, then plant height with the highest average in P4 which is 263.50 cm, and the number of tillers in P4 which is 25 pieces.

Key words : Fertilizer Level, Productivity. Cutting Age

ABSTRAK

PENGARUH UMUR POTONG DAN LEVEL PUPUK YANG BERBEDA TERHADAP PRODUKTIVITAS DAN PERTUMBUHAN VEGETATIF RUMPUT PAKCHONG (*Pennisetum purpureum X P. americanum*)

Oleh

CINDI SETYANINGSIH

Penelitian ini bertujuan untuk mengetahui produktivitas vegetatif rumput pakchong pada umur potong yang berbeda dan dipupuk pada level yang berbeda. Penelitian ini dilaksanakan pada bulan April sampai dengan Agustus 2021 yang berlokasi di Laboratorium Lapang Terpadu, Fakultas Pertanian Universitas Lampung. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) pola faktorial 4 x 3, 4 perlakuan dengan 3 ulangan. Perlakuan yang digunakan yaitu P1 = 40 hari P2 = 50 hari P3 = 60 hari P4 = 70 hari dan untuk pemberian pupuk menggunakan 3 level yaitu pupuk dosis rendah J1 = Urea 50 kg/ha, KCL 50 kg/ha, TSP 25 kg/ha, pupuk dosis sedang J2 = Urea 100 kg/ha, KCL 50 kg/ha, TSP = 50 kg/ha, dan pupuk dosis tinggi J3 = Urea 150 kg/ha, KCL 75 kg/ha, TSP 75 kg/ha. Data yang diperoleh dianalisis menggunakan analisis varians dengan uji lanjut Beda Nyata Terkecil.(BNT). Hasil uji lanjut Beda Nyata Terkecil (BNT) menunjukkan bahwa umur potong dengan level pupuk yang berbeda berpengaruh nyata ($P < 0,05$) terhadap produksi segar dengan rata-rata produksi tertinggi di P4 yaitu 59,822 ton/ha, berpengaruh sangat nyata ($P < 0,01$) pada proporsi daun batang dengan rata-rata tertinggi di P1 yaitu 0,639, lalu tinggi tanamandengan rata-rata tertinggi di P4 yaitu 263,50 cm, dan pada jumlah anakan di P4 yaitu sebanyak 25 buah.

Kata kunci : Level Pupuk, Produktivitas, Umur Potong.