

ABSTRAK

PENGARUH PEMBERIAN JENIS DAN DOSIS PUPUK NITROGEN (UREA DAN *CALCIUM AMMONIUM NITRATE*) TERHADAP PRODUKTIVITAS RUMPUT GAMA UMAMI

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Penelitian ini bertujuan untuk mengetahui pengaruh jenis dan dosis penggunaan pupuk nitrogen terhadap produktivitas rumput gama umami meliputi tinggi tanaman, jumlah anakan, produksi segar, produksi bahan kering, dan imbalan daun-batang kondisi segar. Penelitian ini dilaksanakan pada Februari—April 2022. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) metode *split plot design* (rancangan petak terbagi) dengan dua taraf perlakuan yaitu perlakuan utama (*main plot*) berupa jenis-jenis pupuk nitrogen: K1 (pupuk urea); K2 (Pupuk *calcium ammonium nitrate*) dan perlakuan anak petak (*sub plot*) berupa dosis pupuk nitrogen: R0 (0 kg N/ha); R1 (50 kg N/ha); R2 (100 kg N/ha); R3 (150 kg N/ha). Setiap unit perlakuan percobaan berupa lahan petakan berukuran 1,6 x 1,4 m. Setiap unit percobaan diulang sebanyak 3 kali, sehingga terdapat 24 unit percobaan. Data yang diperoleh dianalisis ragam pada taraf 5 % dan dilanjutkan dengan Uji Beda Nyata Terkecil (BNT). Hasil penelitian pada perlakuan jenis pupuk nitrogen hanya berpengaruh nyata terhadap peubah jumlah anakan, serta jenis pupuk nitrogen yang menghasilkan hasil terbaik adalah K1 (Urea). Hasil penelitian pada perlakuan dosis pupuk berpengaruh nyata terhadap tinggi tanaman, produksi segar, dan produksi bahan kering. Dosis pupuk terbaik yaitu pada perlakuan R3, yang menghasilkan tinggi tanaman 247,83 cm, jumlah anakan 24,17, produksi segar 33,97 ton/ha/panen, produksi bahan kering 4,24 ton/ha/panen, dan imbalan daun-batang kondisi segar 0,7.

Kata Kunci: rumput gama umami, produktivitas, pupuk nitrogen

ABSTRACT

THE EFFECT OF TYPE AND DOSAGE OF NITROGEN FERTILIZER (UREA AND CALCIUM AMMONIUM NITRATE) ON GAMA UMAMI GRASS PRODUCTIVITY

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This study aimed to determine the effect of the type and dose of nitrogen fertilizer on the productivity of gama umami grass including plant height, number of tillers, fresh production, dry matter production, and leaf-stem balance fresh condition. This research was carried out in February—April 2022. This study used a completely randomized design (CRD) with a split plot design method with two levels of treatment, namely the main treatment (main plot) in the form of nitrogen fertilizers: K1 (urea fertilizer); K2 (calcium ammonium nitrate fertilizer) and sub-plot treatment in the form of nitrogen fertilizer doses: R0 (0 kg N/ha); R1 (50 kg N/ha); R2 (100 kg N/ha); R3 (150 kg N/ha). Each experimental treatment unit in the form of plots measuring 1.6 x 1.4 m. Each experimental unit was repeated 3 times, so there were 24 experimental units. The data obtained were analyzed for variance at the 5% level and continued with the Least Significant Difference Test (BNT). The results of the study on the treatment of nitrogen fertilizer only had a significant effect on the number of tillers, and the type of nitrogen fertilizer that produced the best results was K1 (Urea). The results of the study on the treatment of fertilizer doses had a significant effect on plant height, fresh production, and dry matter production. The best dose of fertilizer was in the R3 treatment, which resulted in a plant height of 247.83 cm, number of tillers 24.17, fresh production 33.97 tons/ha/harvest, dry matter production 4.24 tons/ha/harvest, and leaf-stem balance fresh condition 0.7.

Keywords: gama umami grass, productivity, nitrogen fertilizer