

ABSTRAK

PENGARUH DOSIS DAN FREKUENSI PEMBERIAN PUPUK UREA TERHADAP MORFOLOGI RUMPUT PAKCHONG *(Pennisetum purpureum cv. Thailand)*

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Penelitian ini bertujuan untuk mengetahui kombinasi dosis dan frekuensi pemberian pupuk urea yang paling optimal dalam meningkatkan produktivitas rumput pakchong. Penelitian ini dilaksanakan pada Februari- April 2025 bertempat di Laboratorium Lapang Terpadu, Fakultas Pertanian, Universitas Lampung. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) pola faktorial (3x3), dengan 3 ulangan sehingga terdapat 27 petak percobaan. Perlakuan dalam penelitian ini adalah: faktor I (dosis pupuk urea) terdiri atas 100 kg N/ha, 150 kg N/ha dan 200 kg N/ha. Faktor II (frekuensi pemberian pupuk urea) terdiri atas umur 16 hari (1x), 16 hari dan 32 hari (2x) dan 16 hari, 32 hari dan 48 hari (3x). Variabel yang diamati yaitu tinggi rumput, jumlah daun, rasio daun dan batang dan luas permukaan daun. Data yang diperoleh dianalisis menggunakan analisis ragam Anova (*Analysis of Variance*) dan uji lanjut BNT. Hasil dari penelitian ini menunjukkan bahwa perlakuan pemberian pupuk urea dengan dosis pupuk dan frekuensi berpengaruh nyata ($P < 0,05$) terhadap luas daun dan jumlah daun. Hasil BNT menunjukkan bahwa perlakuan A1F3 (30,27 cm²/daun) nyata dengan perlakuan A1F1 (21,93 cm²/daun), A1F2 (24,20 cm²/daun), A2F1 (32,60 cm²/daun) dan A2F2 (35,87 cm²/daun) pada parameter luas daun rumput pakchong. Hasil uji BNT menunjukkan bahwa perlakuan A1F1 (354,9 helai/petak) nyata dengan perlakuan A1F2 (420,1 helai/petak) dan A1F3 (421,3 helai/petak) pada parameter jumlah daun rumput pakchong.

Kata kunci : Dosis pupuk urea, Frekuensi pemberian pupuk urea, Rumput pakchong, Morfologi rumput pakchong, Pupuk urea.

ABSTRACT

EFFECT OF DOSAGE AND FREQUENCY OF UREA FERTILIZER APPLICATION ON THE MORPHOLOGY OF PAKCHONG GRASS (*Pennisetum purpureum* cv. Thailand)

By

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This study aimed to determine the optimal combination of urea fertilizer dosage and frequency for increasing pakchong grass productivity. The study was conducted from February to April 2025 at the Integrated Field Laboratory, Faculty of Agriculture, University of Lampung. A completely randomized design (CRD) was used in this study, with three replications, resulting in 27 experimental plots. The treatments were: factor I (urea fertilizer dosage) consisted of 100 kg N/ha, 150 kg N/ha, and 200 kg N/ha. Factor II (urea fertilizer frequency) consisted of 16 days (once), 16 days and 32 days (twice), and 16 days, 32 days, and 48 days (three times). Observed variables were grass height, number of leaves, leaf-to-stem ratio, and leaf surface area. Data were analyzed using Analysis of Variance (ANOVA) and a follow-up LSD test. The results of this study indicate that urea fertilizer treatment, including fertilizer dosage and frequency, had a significant effect ($P < 0.05$) on leaf area and leaf number. The BNT results showed that the A1F3 treatment ($30.27 \text{ cm}^2/\text{leaf}$) significantly outperformed the A1F1 ($21.93 \text{ cm}^2/\text{leaf}$), A1F2 ($24.20 \text{ cm}^2/\text{leaf}$), A2F1 ($32.60 \text{ cm}^2/\text{leaf}$), and A2F2 ($35.87 \text{ cm}^2/\text{leaf}$) treatments on pakchong grass leaf area. The BNT test results showed that the A1F1 treatment (354.9 leaves/plot) significantly outperformed the A1F2 (420.1 leaves/plot) and A1F3 (421.3 leaves/plot) treatments on pakchong grass leaf number.

Keywords: Urea fertilizer dosage, Frequency of urea fertilizer application, Pakchong grass, Morphology of Pakchong grass, Urea fertilizer.